



GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Medium-Sized Project

TYPE OF TRUST FUND: Special Climate Change Fund

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PART I: PROJECT INFORMATION

Project Title: Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas			
Country(ies):	Albania, Algeria, Libya, Montenegro, Morocco and Tunisia.	GEF Project ID: ¹	9670
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01507
Other Executing Partner(s):	UN Environment MAP, PAP RAC, Plan Blue, GWP Med. (regional) Secretariat of State to the Minister for Energy, Mines and Sustainable Development (Morocco), Ministry of Sustainable development and tourism (Montenegro)	Submission Date:	November 14, 2017
GEF Focal Area (s):	Climate Change Adaptation	Project Duration (Months)	30
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of Parent Program	[if applicable]	Agency Fee (\$)	95,000

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
Objective 2	Strengthen institutional and technical capacities for effective climate change adaptation	SCCF-A	680,000	4,275,799
Objective 3	Integrate climate change adaptation into relevant, policies, plans and associated processes	SCCF-A	320,000	616,095
Total project costs			1,000,000	4,891,894

B. PROJECT DESCRIPTION SUMMARY

Project Objective: To assist countries to increase the resilience of the Mediterranean marine and coastal areas to the impacts of climate change with the view to influencing wider development processes in the region.

Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co-financing
Component 1: Stakeholder engagement, and enhanced capacity building and cooperation.	TA	Outcome 1: Stakeholder engagement on climate change adaptation is strengthened and partnerships are enhanced.	Output 1.1: In at least two priority coastal hotspots areas, a gender-sensitive climate risk assessment implemented through a stakeholder led process to provide	SCCF-A	300,000	1,740,326

¹ Project ID number remains the same as the assigned PIF number.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#) and [CBIT programming directions](#).

³ Financing type can be either investment or technical assistance.

			<p>sufficient basis for building coastal resilience to climate change and sustainability.</p> <p><u>Output 1.2:</u> Key stakeholders, policy makers and relevant actors (at least 200, from local to national level) in 2 priority coastal areas (involved, through participatory method “Climagine”), convened to find solutions for building coastal resilience and sustainability.</p> <p><u>Output 1.3:</u> Technical experts and decision makers (at least 50) from all project countries trained on potential ecosystem-based adaptation solutions based on the climate risk and vulnerability assessment in coastal management.</p> <p><u>Output 1.4:</u> Sub-regional workshops/trainings delivered to International Finance Institutions, banking, insurance, private sectors in low-laying coastal areas to enhance the use of coastal climate risk and vulnerability assessments in investment decisions.</p>			
Component 2: Development of best practices for enhanced sustainability and	TA	Outcome 2: Adaptation-mainstreamed into ICZM strategies and coastal plans.	<u>Output 2.1:</u> Costed and measurable national ICZM and adaptation strategies / coastal plans for 2	SCCF-A	310,000	2,404,379

climate resilience in the coastal zone.			<p>priority coastal areas developed through participatory process and ready to be implemented.</p> <p><u>Output 2.2:</u> For at least two priority coastal areas, reports produced of the main legal, policy and institutional barriers and opportunities for implementing the adaptation solutions identified under Component 1.</p>			
Component 3: Access to existing and emerging finance mechanisms relevant to climate change adaptation, including international and domestic instruments.	TA	<p>Outcome 3.1: Public spending relative to climate adaptation in the coastal zone prioritized and national resources mobilized.</p> <p>Outcome 3.2: Facilitated access to international climate change adaptation financing.</p>	<p><u>Output 3.1:</u> Methodological guidelines developed on preparing a financing plan for climate change adaptation in coastal areas comprising domestic, international and private sector investment.</p> <p><u>Output 3.2:</u> In at least two countries, proposals to access international financing support for climate change adaptation in coastal zone developed.</p>	SCCF-A	150,000	485,000
Component 4: Knowledge, management, project coordination and influencing.	TA	Outcome 4: Strengthened science-policy interface, accessibility of related knowledge and enhanced regional climate information.	<u>Output 4.1:</u> A regional meeting to share information and knowledge on the findings and outputs of the adaptation planning processes with a view to replication, and to agree on an adaptation-relevant Monitoring and Evaluation framework to be applied in the MedProgramme.	SCCF-A	160,000	262,189

			<p><u>Output 4.2:</u> 1 glossy and eye-catching brochure and 1 scientific assessment report on environmental and climate risks in hotspot areas in the Mediterranean region, based on prepared reports and summaries for decision-maker.</p> <p><u>Output 4.3:</u> Project learning presented at one major forum in the Mediterranean region in end of year 2, in order to strengthen the uptake of lessons learned in the MedProgramme, and other relevant initiatives such as the Union for Mediterranean Climate Change Expert Group and others</p>			
			Subtotal		920,000	4,891,894
			Project Management Cost (PMC) ⁴	(select)	80,000	0
			Total project costs		1,000,000	4,891,894

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount (\$)
Recipient Governments	Montenegro	Grant	1,200,000
Recipient Governments	Morocco	Grant	900,000
Others	Priority Actions Programme Regional Activity Centre (PAP/RAC)	Grant	1,140,000
Others	Plan Bleu Regional Activity Centre (Plan Bleu)	Grant	1,131,894
CSO	Global Water Partnership – Mediterranean (GWP Med)	In cash	170,000
CSO	Global Water Partnership – Mediterranean (GWP Med)	Grant	350,000
Total Co-financing			4,891,894

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

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

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee ^{a)} (b) ²	Total (c)=a+b
UNEP	SCCF-A	Albania, Algeria, Libya, Montenegro, Morocco and Tunisia.	Climate Change	(select as applicable)	1,000,000	95,000	1,095,000
Total Grant Resources					1,000,000	95,000	1,095,000

a) Refer to the Fee Policy for GEF Partner Agencies

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁵

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	<i>metric tons</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

⁵ Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? NO

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/CBIT Trust Fund) in Annex D.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF⁶

A.1. *Project Description*. Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area⁷ strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

Changes to project components, outcomes and outputs:

Country consultations have not taken place yet, these are due in Q1 2018. Some changes to the output plan may be expected following these consultations.

A slight revision to the wording in Outcome 3.2 from “Effective access to international climate change adaptation financing.” which was the original language that appears in the PIF to “Facilitated access to international climate change adaptation financing”.

This change was made to better reflect the role that the project can realistically play in assisting countries to prepare high quality proposals. The final decision on financing these proposals is however beyond the project’s control. In addition, the co-financing of the project has been updated since the PIF to better reflect the commitments of the countries and the organization involved in the project.

In addition, the sequence of output 2.1 and 2.2 were switched from the original PIF – output 2.1 is now 2.2 and visa versa, recognizing that developing a coastal plan was an important primary step towards then identifying legal and policy barriers and implementing adaptation solutions.

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed

The following paragraphs are providing an update to the adaptation problem, root causes and barriers analysis provide in the PIF.

Climate change problem

The Mediterranean Sea has been identified as one of the main climate change global hotspots (i.e. the areas most responsive to climate change). The recent Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) (2013-2014), considers the Region as “highly vulnerable to climate change”⁸, also mentioning that it “will suffer multiple stresses and systemic failures due to climate changes”. Physical changes in the Mediterranean climate have been widely observed and such trends are projected to continue in the future. Different sub-regions of the Mediterranean will witness different changes to their climate. On average however for the whole Region, estimates mentioned in the IPCC AR5 for the medium-low emissions scenario (RCP 4.5) and for the period 2081-2100 compared to 1986-2005

⁶ For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter “NA” after the respective question.

⁷ For biodiversity projects, in addition to explaining the project’s consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving..

⁸C, Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Chapter 21.5.1.2. Hotspots

include an increase in surface mean air temperature of 2-4°C, 10-20% decreases in mean annual precipitation, increased risk of desertification, soil degradation, an increase in duration and intensity of droughts and floods, summer heat-waves and heavy precipitation events, changes in species composition, increase of alien species, habitat losses and agricultural and forests production losses. Trends of decreasing precipitation and discharge are consistent with increasing salinity in the Mediterranean Sea, indicating a trend toward increased freshwater deficits. Sea level rise in the Mediterranean Sea involves local as well as global contributions. Thus, multi-decadal regional projections involve larger uncertainties than those for the global ocean. A rise of 0.4-0.5m is projected for most of the Mediterranean under IPCC AR5's medium-low emission scenario RCP 4.5. The effect of sea level rise due to global warming is more important in most of the Mediterranean Sea where, due to the small tidal range, coastal infrastructure and coastal communities are located closer to mean sea level. In addition vertical land movements caused by tectonic as well as other causes pose additional risks for such areas.

Climate change hazards are coupled with existing socio-economic processes associated with growing bio-geographical vulnerability and exposure in coastal areas of the Mediterranean region. One of the primary climate change impacts is on water resources and availability for the main economic sectors and dependent ecosystems. Situations of water scarcity in combination with expected climate change-related phenomena will lead to reduced runoff and groundwater recharge and consequently to diminished water quality and quantity in some countries. Lower precipitation and increasing temperatures in the southern and eastern Mediterranean will exacerbate aridness, land degradation and desertification. Sea-level rise and storm-related floods will make low-lying zones and coastal activities increasingly vulnerable to submersion and beaches vulnerable to erosion. Mediterranean coasts are highly urbanized, and due to the high predominance of summer tourism, most of the tourist facilities tend to locate as close to the sea as possible. Rising sea level may endanger a high portion of the coastal facilities including adjacent infrastructure. Loss of coastal and marine habitats and ecosystems are also largely implied. Economic loss due to decreased tourism will significantly impact the region and especially women as their traditional and cultural gender roles heavily rely on steady water access. This will be exacerbated by the impact of climate change and will affect education, traditional gender roles, sanitation, etc.

Threats to natural and managed resources in the Mediterranean coastal areas, and effects of climate change.

Freshwater resources: The Mediterranean region is vulnerable to water scarcity and drought, in particular countries in the South and East, and even in the North. A growing percentage of water production is non-sustainable, which leads to an over-exploitation of groundwater resources. A reduction in precipitation and structural water shortages, is expected to affect 60 million people already from 2025⁹. Water resources in the Mediterranean are distributed unevenly within the region: with 71% located in the North, 9% in the South and 20% in the Near East, which means that different regions of the Mediterranean are affected to varying degrees.

The changes in climate patterns will result in various physical impacts on water resources, since water is involved in all components of the climate system, and affects different aspects of human well-being from agricultural productivity and irrigation supply to flood and drought control, municipal and industrial water supply, ecosystem's protection and energy use.

Most countries on the Southern and Eastern shores of the Mediterranean are already considered as facing chronic scarcity of water resources. This situation is expected to worsen in the future due to increased demand for water coupled with the projected impacts of climate change, which include declines in average rainfall and in total runoff, and depletion of groundwater resources. Coastal aquifers will also become threatened by salinization due to rising sea levels, and by overexploitation which decreases their resilience to saline intrusion.

Moreover, despite a predicted decrease in average precipitation, models foresee that Mediterranean summers will be characterized by an increase in frequency of extreme daily precipitation. This tendency can lead to longer dry periods, interrupted by extreme intense precipitation, enhancing the risk of floods. The Joint Research Center Projection of Economic impacts of climate change in Sectors of the European Union based on bottom-up Analysis (JRC PESETA II)

⁹ Lionello P, Malanotte-Rizzoli P, Boscolo R (eds) (2006) Mediterranean climate variability. Elsevier, Amsterdam.

Project “Climate Impacts in Europe”¹⁰, estimates that even in the 2°C scenario direct economic damages from river flooding in Southern Europe will increase from 0,67 to 1,19 billion euros per year in the 2080s.

The rapidly growing agriculture and non-agricultural water needs of many countries in the region area can generally not be met by further exploitation of water resources except through either the development of major and, at times, controversial water development infrastructure, expensive and energy-hungry desalination facilities or the reallocation of water resources from other uses, primarily agriculture as the main water user.. This could bring major social and political change and risk exacerbating existing inequalities and regional tensions. Thus, increasing water efficiency should be in the focus through application of Integrated Water Resources Management (IWRM) approaches, including with due consideration of environmental needs and sustainability of ecosystems services.

Terrestrial systems: Over the past 15 years, the Mediterranean region has seen a dramatic increased risk of fires in terrestrial coastal ecosystems in Mediterranean countries, especially in the North, due to climate change.

Changes in land use together with climate change result in an increased risk of forest fires. Higher temperatures, increasing heatwaves in combination with reduced rainfall and more severe droughts, are expected to lead to increased mean fire-weather indices and length of the fire season, including areas in which fires were not prevalent until now.

The Forest fires under climate, social and economic changes in Europe (FUME) project, the Mediterranean and other fire-affected areas of the world”) uses appropriate mathematical procedures to relate climate and fires, while controlling for the possible interference of other factors in this relationship, revealed a significant and positive relationship between climate and fires during the last three decades for the various Mediterranean regions in southern Europe.

The JRC PESETA II Project “Climate Impacts in Europe”, estimates that even in the 2°C scenario average annual burnt area from forest fires in Southern Europe will increase from 361 to 526 thousand hectares per year in the 2080s.

Coastal systems and low-lying areas: Coastal zones, arguably the most appealing assets of the Mediterranean, are already exposed to significant pressures from land-based and marine pollution, urban development, fishing, aquaculture, tourism, damming, extraction of materials, and marine biological invasions. Climate change, and especially the major driver of sea level rise, is expected to significantly increase these pressures. In particular, many coastal systems are already experiencing, and many more will experience increased inundations and storm flooding, accelerated coastal erosion, seawater contamination of fresh groundwater, displacement of coastal lowlands and wetlands, encroachment of tidal waters into estuaries and river systems, possible loss of nesting beaches. More frequent and severe weather and climatic events will further enhance these phenomena, while in the longer term, changes in wind and wave patterns could interfere with sediment transport leading to greater erosion or accretion.

Coastal erosion will lead over time to the inland migration of the beaches of the Mediterranean with soft sedimentary coasts being more vulnerable than harder, rocky coastlines. River deltas, due to their particular topography, are particularly vulnerable to the impacts of erosion and inundation. Damming of rivers upstream no longer allows the normal circulation of sediment, which cannot reach the delta to consolidate it.

At the local scale, possible impacts from sea level rise are also determined by other non-climatic factors such as the subsidence of coastal land, subsurface resource extraction, and tectonic movements.

The JRC PESETA II Project “Climate Impacts in Europe”, estimates that even in the 2°C scenario the average annual costs from sea floods damage in Southern Europe will increase from 163 to 903 million in the 2080s.

Ocean systems: The Mediterranean Sea is among the richest in biodiversity of global importance, rich with endemism and autochthonous species. At the same time, it has unique marine features that make this region particularly vulnerable to climate change. The overall extent of water exchange is restricted due to the narrow connections with the Atlantic Ocean, the Red Sea and the Black Sea. In addition, due to the relatively small size of the basin, seawater in the Mediterranean can more easily heat up and evaporate, combined with hot, dry summers and low inflow from rivers.

¹⁰ JRC, 2014. Climate Impacts in Europe. The JRC PESETA II Project. JRC Scientific and Policy Reports, EUR 26586EN.

Increases in sea temperatures will alter distribution of species and foster the spread of warm water species into the Mediterranean, thus promoting the displacement of ecotypes and shifts in ecosystem functioning and ultimately lead to loss of species. The IPCC AR5 identified the Mediterranean Sea as one of the semi-enclosed seas with projected high rates of local extinction because land boundaries will make it difficult for species to move laterally to escape waters that may be too warm. Additionally, periods of extreme increased seawater temperatures during heatwaves will contribute to mortality events that affect many invertebrate species as well as Posidonia meadows.

Another threat to Mediterranean marine ecosystems is ocean acidification; the phenomenon of shifting the chemical balance of seawater to a more acidic state (lower pH) due to increased CO₂ concentrations in the sea because of increased CO₂ concentrations in the atmosphere. Acidification is currently occurring at a geologically unprecedented rate, subjecting marine organisms to additional environmental stresses. According to the project Mediterranean Sea Acidification in a changing climate (MedSEA), the acidity of Northwestern Mediterranean seawater has increased by 10% since 1995 and if current CO₂ emission rates continue, it will increase another 30% by 2050 and 150% by 2100. Several planktonic organisms are affected by acidification with possible negative impacts on fish populations. Moreover, acidification also threatens iconic and invaluable Mediterranean ecosystem-building species (such as sea grass meadows, Coralligene reefs and Vermetid snail reefs) which create rich key habitats and homes to thousands of species, and also protect shores from erosion as well as offer a source of food and natural products to society.

Food security and food production systems: Agriculture absorbs over 80% and 60% of total water demand in the African and European countries surrounding the Mediterranean Sea, respectively. The general decrease in soil moisture and water availability in general, and the increase in the frequency and intensity of droughts as a result of climate variability and change in the Mediterranean will increase the existing water-related stresses and have strong negative effects on crops and agriculture in general. The increased need for irrigation will be constrained by reduced runoff, reduced recharge of aquifers, and competition from other sectors, in particular human settlements and energy.

Beyond the availability of water resources, agricultural production in the Mediterranean will be affected by temperature increases. A large negative sensitivity of crop yields to extreme daytime temperatures around 30°C has been documented by numerous studies, characteristically for wheat in the Mediterranean. A warmer and drier climate is projected to shift vegetation and agricultural zones northward e.g., by 75 km for 2090–2099 relative to 2000–2009 in a 4°C world in Middle East and North Africa¹¹.

Additional pressures, considering the region's very long coastline, will occur due to soil loss, coastal erosion and seawater intrusion in coastal aquifers which are a result of sea level rise. Additionally, the negative impacts of agricultural fertilizers will be greater under climate change: higher concentrations of nitrates in warmer receiving watercourses will lead to adverse impacts on water quality.

Moreover, studies have shown food quality is being affected by climate change and that growing wheat, rice, barley or potato in high CO₂ concentrations reduces the protein content by 10–14%¹², while some crops may also show reduced mineral and micronutrient concentrations. Furthermore, some pest outbreaks are attributed to climate change. Rising temperatures and changes in precipitation patterns, undermine the natural regulation of pests and diseases, while increasing the ranges of various pests.

Regarding the quantification of possible impacts of climate change to the agricultural sector, the IPCC AR5 Working Group 2 (WG2) Report, under future scenarios, projects yield impacts for wheat, maize and soybean of -22% to 0% in the North of the Mediterranean and -27% to +5% in the South. The World Bank's "Turn down the heat" report estimates that crop yields in Middle East and North Africa will eventually decline by 30% in the 1.5–2°C warming scenario and up to 60% in the 3–4°C one. Legumes and maize crops are expected to be worst affected in both areas as they are grown during the summer period. The JRC PESETA II Project "Climate Impacts in Europe", estimates that

¹¹ World Bank. 2014. Turn Down the Heat: Confronting the New Climate Normal. Washington, DC: World Bank.

¹² Implications of climate change for agricultural productivity in the early twenty-first century, Philos Trans R Soc Lond B Biol Sci. 2010 Sep 27; 365(1554): 2973–2989. doi: 10.1098/rstb.2010.0158

even in the 2°C scenario, in Southern Europe the average agriculture yields will decrease by 18% and the cropland that will be affected by drought will increase by 1400%

Livestock production in the Mediterranean region will also be affected by climate change through various pathways, including changes in the quantity and quality of available feeds, changes in the length of the grazing season, additional heat stress, reduced drinking water availability and changes in livestock diseases and disease vectors.

Fish diversity and fishing catches in the Mediterranean are already vulnerable as fisheries are already overfished or fully exploited. Because of climate change, they will be further affected due to increases in salinity and seawater temperatures that will induce migration towards higher latitudes or deeper waters, and due to the spread of invasive species which may outcompeted or replace native ones. As a result, species that are commercially important in some areas may no longer be available in the near future and markets may have to explore other target species rather than those currently sold. Climate change can also influence where aquaculture is possible, which species are raised, and the efficiency of the production.

Human Settlements, Industry, and Infrastructure:

Urban areas: More than a third of the population of Mediterranean countries live in coastal zones. This is more evident in Northern African and Middle Eastern countries where coastal cities have traditionally been particularly important due to the aridity of inland regions. As coastal populations and assets in coastal areas continue to grow, exposure to climate change-related hazards –and especially those associated with sea-level rise- is also increasing. Rapid growth of cities leads to highly vulnerable urban communities living in informal settlements, many of which often lack essential infrastructure and services and hence are less able to adapt to the additional stress from extreme weather events e.g flooding. The key expected impacts of climate change in coastal urban areas include:

- Inland flooding, especially threatening settlements with inadequate infrastructure on flood plains or along river banks.
- Coastal flooding and storm surges in low-lying and unprotected coastal zones.
- Heatwaves, exacerbated by the urban heat island effect, with vulnerability higher among urban populations of infants, older age groups, expectant mothers, people with chronic diseases.
- Wind storms with higher intensity and other extreme events threatening substandard buildings and infrastructure.
- Water shortages and drought especially in settlements lacking piped water.
- Enhanced air pollution due to changes in urban meteorological regimes.
- Other geo-hydrological hazards, such as salt water intrusion and landslides.

Several coastal cities in North African and Middle Eastern countries are highly exposed to such hazards and especially sea-level rise, due to their low-lying topographies.

A study¹³ has found that in terms of the percentage of urban area lost to one meter of sea-level rise, highly vulnerable countries are Egypt (5.5%), Libya (5.4%), and Tunisia (4.5%). They also estimated that Egypt and Tunisia have 9.3% and 4.9% of their population respectively exposed to a 1-meter sea-level rise. One other study¹⁴ suggested that, in the absence of adaptation, 1.97 million people in Egypt could be affected by a sea-level rise of 0.54m and 1.82 million people in Morocco could be affected by a sea-level rise of 0.44 m with 2.6°C global warming compared to 1990 levels. Another study¹⁵ identified Egypt, Tunisia, Morocco, and Libya as among the most vulnerable African countries in terms of total population affected by sea-level rise under scenarios of 0.42–1.26 meters in sea-level rise by 2100, assuming no adaptation.

¹³ Dasgupta, S., Laplante, B., Meisner, C., Wheeler, D., and Yan, J. (2009). “The Impact of Sea-level Rise on Developing Countries: A Comparative Analysis.” *Climatic Change*, 93(3-4), 379–88.

¹⁴ Brown S, Nicholls RJ, Vafeidis A, Hinkel J, and Watkiss P (2011). The Impacts and Economic Costs of Sea-Level Rise in Europe and the Costs and Benefits of Adaptation. Summary of Results from the EC RTD ClimateCost Project. In Watkiss, P (Editor), 2011. The ClimateCost Project. Final Report. Volume 1: Europe. Published by the Stockholm Environment Institute, Sweden, 2011.

¹⁵ Hinkel, J., Brown, S., Exner, L., Nicholls, R.J., Vafeidis, A.T., and Kebede, A.S. (2012). “Sea-level Rise Impacts on Africa and the Effects of Mitigation and Adaptation: An Application of DIVA.” *Regional Environmental Change*, 12(1), 207–24.

Tourism: The Mediterranean is the world's most popular touristic destination with about half of the region's tourists visiting its coastal zones. Climate change is expected to have a wide range of negative consequences for tourism in the region, including heat waves, spread of diseases, drought, the associated risk of fires, increased growth/ population of organisms such as algae and jellyfish. Sea level rise and coastal erosion will lead to loss of beaches and other natural attractions, as well as of infrastructure relevant to tourism activities. In general, climatic conditions for outdoor tourist activities are expected to deteriorate in summer.

As a result, an increased variation of the distribution of tourists, rather than the volume of tourism should be expected. It is likely that climate change will cause a shift in the choice of tourist destinations towards greater latitudes and altitudes. In addition, the occurrence of a shift in the tourism season is likely, with an increase in the influx of tourists to the coast in the months when the air and water temperature will not be too hot, thus shifting from the hot summer months to the spring and autumn months.

However, there is considerable uncertainty about how tourists will respond to the effects of climate change and therefore overall vulnerability of coastal tourism is hard to assess.

Transportation: Port infrastructure, but also coastal roads, railways, and airports, are expected to be at risk mainly due to temporary and permanent flooding arising from sea-level rise, high winds and storm surges. Negative impacts are also expected from large waves generated by storm surges and floods/landslides especially in the Northern Adriatic¹⁶. These phenomena are likely to cause damage to infrastructure, interruptions and bottlenecks in the flow of products through ports. In general, port infrastructure will experience disruption of "just in time" delivery of goods; welfare losses; increased cost for reparation and maintenance. Increasing wind speeds present numerous challenges to the berthing of ships, and the operation of harbor equipment. Changes in water temperature and water quality can lead to invasive species causing damage to wooden structures, and the fouling of ships and harbor facilities.

Road and rail transport networks located on the coast can be negatively affected by sea level rise (and sea storms) causing increased risks of inundation and erosion, leading to disruptions in the transport of goods and in the mobility of local communities. Moreover, increased inspections and repairs may become necessary due to erosion of transport structures caused by inundation and saline intrusion.

Energy: Climate change impacts are projected to also affect energy systems, especially thermal and hydro electricity production, distribution infrastructure, as well as electricity demand.

Thermal power plants can face risks due to increased air temperatures that reduce thermal conversion efficiency and to decreased water availability (and increased temperatures) necessary for the cooling of the plants. Extreme weather events may affect not only power plants but also the transmission and distribution systems and their overall reliability potentially leading to power outages. The projected overall decrease in precipitation and river runoff and/or increased seasonality due to climate change, will also affect hydropower generation.

Energy demand for heating and cooling will be strongly by affected by climate change as a result of increasing temperatures, with decreasing demand for heating and increasing for cooling respectively. The JRC PESETA II Project "Climate Impacts in Europe", estimates that in the Reference (business-as-usual) scenario, while energy demand in the EU as a whole will decrease by 13% by 2080, in Southern Europe it will increase by 8%. In that context, Water-Energy-Food-Ecosystem Nexus approaches may provide integrated tools for addressing also climate change challenges.

Human Health, Well-Being, and Security:

Human health: The main driver of climate-related direct effects on human health is heat-related mortality and morbidity (due to cardiovascular and respiratory causes) and additional heat stress during heatwaves, as well as deaths and injuries due to extreme weather events. Observations in various Mediterranean countries^{17 18} mentioned in showed that the

¹⁶ Lionello P. (Ed.), 2012. The Climate of the Mediterranean Region. From the Past to the Future, Amsterdam: Elsevier.

¹⁷ Navarra, A., Tubiana, L. (eds.), 2013 a. Regional Assessment of Climate Change in the Mediterranean. Volume 1: Air, Sea and Precipitation and Water. Springer Verlag, ed.

percentage increase of mortality associated with 1 degree increase of apparent temperature ranged from 0.1% to 8.0%. Concerning heatwaves, the increase in mortality is high: total deaths from natural causes increased by 14%, deaths from cardiovascular problems by 22% and respiratory problems by 32% during heatwaves events. According to recent studies¹⁹, for 2040–2069 and under the IPCC Special Report on Emissions Scenarios (SRES A1B) warming scenario, the number of days characterized by high thermal discomfort in North Africa is projected to increase by approximately 35 days, from approximately 100 days in the base period of 1961–1990. The JRC PESETA II Project “Climate Impacts in Europe”, estimates that even in the 2°C scenario, the impact of heat-related events will lead to 65% additional deaths (14,000) per year in Southern Europe by 2080.

Additionally, climate change is expected to affect public health via changes in biological and ecological processes that influence the transmission of several infectious diseases. Countries in North Africa and Middle East are experiencing a resurgence of several vector-borne and viral diseases that had previously been in decline. Scientific evidence indicates that changes in climatic factors can affect the incidence of vector-borne diseases in the Middle East and North Africa (MENA) region such as malaria, leishmaniasis and schistosomiasis.

Human security: Climate change could act as a threat multiplier in the Mediterranean region, predominantly in countries outside of the European Union (EU), by placing additional pressure on already scarce resources (especially water and land), reinforcing preexisting threats as political instability, poverty, and unemployment particularly affecting youth and women, and overstressing societies’ adaptive capacities. However, currently there exists no scientific consensus on the primary causes, mechanisms, links, and interventions between climate change and conflicts and insecurity²⁰.

Climate change poses significant challenges to Mediterranean countries and is expected to worsen already critical situations in the region. Essential resources like fresh water, agricultural production and fish provisions may become endangered while coastal communities, ecosystems and infrastructure will be challenged by increased physical risks. More importantly, human lives may become endangered and health risks increased in a warmer climate. The development of an adaptation strategy for the Mediterranean region should provide answers to these risks, reduce the exposure of the society and the ecosystems and increase the overall resilience of the Mediterranean marine and coastal areas. The Mediterranean countries need to turn the challenges they face under a changing climate into opportunities to increase their resilience by addressing the reasons that have so far led many environmental parameters into almost critical status.

The problem addressed and the solution proposed by the SCCF project

The problem that this Special Climate Change Fund (SCCF) project seeks to address is that ecosystems and communities in marine and coastal areas in the Mediterranean are increasingly affected by climate change and climate variability impacts. This problem is compounded by the fact that government authorities currently have limited technical capacity, knowledge and financial resources for adaptation. In addition, the access, coordination and efficient management of related financial resources within the region is limited.

There is therefore a need to implement a project that: i) strengthens engagement and partnerships between stakeholders; ii) builds capacity of policy makers and relevant actors; iii) mainstreams climate change adaptation into Integrated Coastal Zone Management (ICZM) strategies and plans; iv) assists mobilizing public and private finance for adaptation in the region; and v) enhances regional knowledge on adaptation and climate information.

The proposed solution is to build capacity of countries in the Mediterranean region to better plan, coordinate and mainstream climate change adaptation into ICZM strategies and coastal plans, with a view of influencing wider development processes in the region.

¹⁸ Navarra, A., Tubiana, L. (eds.), 2013 b. Regional Assessment of Climate Change in the Mediterranean. Volume 2: Agriculture, Forests and Ecosystem Services and People. Springer Verlag. ed.

¹⁹ Giannakopoulos, C., Kostopoulou, E., Hadjinicolaou, P., Hatzaki, M., Karali, A., Lelieveld, J., and Lange, M.A. (2013). “Impacts of Climate Change Over the Eastern Mediterranean and Middle East Region Using the Hadley Centre PRECIS RCM.” *Advances in Meteorology, Climatology and Atmospheric Physics*, Springer-Verlag Berlin Heidelberg.

²⁰ Gemenne, F., Barnett, J., Adger, W.N., and Dabelko, G.D. (2014). “Climate and Security: Evidence, Emerging Risks, and a New Agenda.” *Climatic Change*, 123(1).

However, there are several **barriers** to achieving this preferred solution. These barriers include: i) weak institutional and technical capacity of government stakeholders; ii) no clear coordination mechanism between countries to manage coastal areas and resources; iii) limited access to financial resources to implement adaptation and iv) lack of scientific assessments and information on climate risks in the region.

The SCCF project will overcome these barriers by: i) training regional decision makers, non – government stakeholders and national and local government to identify adaptation solutions based on climate risk and vulnerability assessments; ii) developing coastal adaptation plans for 2 priority hotspot areas; iii) developing guidelines and proposals to facilitate access to financing for adaptation in coastal areas; and iv) convening regional meetings to share information and knowledge on the findings and lessons learned from the project.

2) The baseline scenario or any associated baseline projects

The following section provides an update of baseline scenario provided in the PIF together with a rationale for the selection of the two coastal priority areas and associated baseline projects

The Mediterranean Countries that will participate in the proposed SCCF project are contracting parties to the Barcelona Convention and have made certain efforts to translate the major requirements of the United Nations Framework Convention on Climate Change (UNFCCC) into their respective national legal and policy frameworks. However, none of the countries have made consistent progress towards integrating adaptation in coastal zone management plans and policies yet. A short summary of these are presented below. These descriptions have been updated since the submission of the PIF to reflect the latest developments in the countries, except as noted where no new information was identified.

Albania: announced in 2017 its commitment to prepare the legal framework for a climate protection programme by 2018 to fill the policy gap on climate change. At present, climate change is addressed in key policy documents including: the National Strategy for Development and Integration 2014 – 2020; the Albanian Strategy for Health Adaptation into the Climate Change Context; and the Action Plan for Reducing Vulnerability to Climate Change in Albanian Agricultural Systems.

Algeria: the legal framework for addressing climate change in Algeria is based on Law No. 04-09 relative to Renewable Energy Promotion in the Framework of Sustainable Development (2004) and the updated National Plan of Actions for the Environment and Sustainable Development which establish the country's environmental programs over the period 2016 – 2020. Algeria intends to finalize in 2017 its National Adaptation Plan which will replace the National Plan of Action and Adaptation to Climate Change (2003 – 2013).

Libya: to date, Libya does not have any climate change related laws, adaptation policies or strategies. Since the preparation of the PIF, there have been no major updates on the baseline situation in Libya regarding climate change and adaptation.

Montenegro: In 2015, Montenegro adopted a National Climate Change Strategy by 2030 (including a comprehensive action plan) and the following year laid the foundations for addressing climate change in its legal framework by establishing a National Strategy with Action Plan for transposition, implementation and enforcement of the EU acquis on Environment and Climate Change 2016-2020. At the same time, climate change considerations are fully integrated in its National Strategy on Sustainable Development to 2030. Furthermore, a Technology Needs Assessment (TNA) for Climate Change Mitigation and Adaptation for Montenegro National Strategy and Action Plan was published in 2012, describing a set of activities that prioritize technologies for climate change mitigation and adaptation.

Morocco: In 2009, Morocco released its National Plan against Global Warming, designed to reduce greenhouse gas emissions through the development and diversification of clean energy sources and the implementation of adaptation measures that rely mainly on its Strategy for Water and the Green Morocco Plan for Agriculture. A wide range of adaptation tools have been incorporated in Morocco's sectoral adaptation strategies, such as in the water sector, agriculture, forestry, protection of biodiversity and the fight against desertification, housing, fisheries and coastal management, health and tourism. On a broader scale, Morocco's adoption in 2012 of the National Charter for

Environment and Sustainable Development allowed the country to redouble its efforts to protect the environment and promote sustainable development. A Framework Law was enacted in 2014 that gives a legal basis to the Charter and explicitly mentions the fight against climate change and calls for strengthening capacities to promote adaptation to climate change. Morocco also adopted in 2016 a National Plan for Climate Change Adaptation and has initiated its implementation in three regions: Souss Massa, Béni Mellal-Khénifra and Drâa Tafilalet. In the same year that Morocco organized and hosted the Climate Change COP (COP22), they submitted their nationally determined contribution, NDC, where they pledges a 42% reduction in emissions by 2030. Most recently in 2017, Morocco adopted its National Strategy on Sustainable Development to move the country towards a green and inclusive economy, recognizing climate change and adaptation as priority considerations of the Strategy.

Tunisia: An initial National Adaptation Strategy was developed from 2005 to 2007 in the framework of Tunisian–German bilateral cooperation between the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Tunisian Ministry for Agriculture and Water Resources. Again, with the support of GIZ, the National Strategy on Climate Change was initiated in 2011 and published in 2012, with the goal of integrating climate change in the country’s development strategies. The strategy lists a series of adaptation and mitigation measures to be implemented in various sectors of the economy. It should also be noted that the Tunisian Constitution (2014) refers to climate change and the environment, guaranteeing the rights of its citizens to live in a safe environment and participate to the fight against climate change.

Regional baseline scenario

The Mediterranean countries, members to the Barcelona Convention, endorsed in 2016 the Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas (RCCAF), developed by UN Environment/ Mediterranean Action Plan (MAP) in the context of the GEF-funded Integration of Climatic Variability and Change into National Strategies to Implement the ICZM Protocol in the Mediterranean (ClimVar & ICZM – 2010-2015) project (GEF ID 3990). The main objective of the Framework is to define a regional strategic approach to increase the resilience of the Mediterranean marine and coastal natural and socioeconomic systems to the impacts of climate change, assisting policy makers and stakeholders at all levels across the Mediterranean in the development and implementation of coherent and effective policies and measures. The Framework is meant to be a structured outline that is offered to facilitate the identification of strategic objectives, strategic directions and priorities for adapting to climate change by policy makers and stakeholders in the Mediterranean region.

Another key political framework in the Region is provided by the Union for the Mediterranean (UfM). The UfM Secretariat has prepared a study on climate finance in the Mediterranean (funded by the European Commission) to provide a clear overview of the funding flows for climate action in the region, which will be presented at the UNFCCC COP23, to be held in Bonn in November 2017. Furthermore, a UfM Climate Change Expert Group brings together governments, donors and regional stakeholders to enhance regional dialogue and catalyze the identification, support and development of specific projects and initiatives, both in mitigation and adaptation. Of relevance is also the UfM’s Water Agenda, mandated at the UfM Ministerial Meeting on Water (April 2017, Malta), which will develop through a long-term Work Programme equipped with a Financial Strategy to support its implementation. Climate Change Adaptation is among the key thematic areas of the UfM Water Agenda. The UfM also promotes and has labelled regional projects of some relevance to climate finance, including the GWP-Med/OECD “Governance & Financing for the Mediterranean Water Sector” regional project, supported by Sida. The aim of the project is to diagnose key governance bottlenecks to mobilize financing for the Mediterranean water sector, including by the private sector, and to support the development of consensual action plans based on international good practices.

The GEF-funded Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership - 2009 – 2015) (GEF ID 2600) and Integration of Climatic Variability and Change into National Strategies to Implement the ICZM Protocol in the Mediterranean (ClimVar & ICZM) projects (2010 – 2015), were a collective effort of the Barcelona Convention and other leading organizations (regional, international, non-governmental, etc...) and countries sharing the Mediterranean Sea, towards the protection of the marine and coastal environment of the Mediterranean. The two projects have been instrumental to support the ratification of the ICZM protocol in the region as well as to the development of the National Strategy for Integrated Coastal Zone Management in specific countries, such as Montenegro, Algeria and Croatia. The projects directly supported the national ICZM plans by setting the objectives for

the protection and sustainable use of the coast and its resources. In the assessment of the status of these resources, climate change was evaluated among a full set of environmental and socio-economic factors used to establish a set of priority actions. This included those aimed at the preservation of natural and cultural resources, infrastructure for pollution prevention and remediation, enhancement of spatial planning systems, green economic development and increased human and institutional capacities for ICZM.

The SCCF project builds on the results achieved by the MedPartnership and ClimVar & ICZM projects by mainstreaming consideration of climate resilience and adaptation into implementing the ICZM strategy of Montenegro and Morocco by: 1) building the enabling capacity and awareness environment for increasing resilience and adaptive capacity of marine and coastal natural and socioeconomic systems to the impacts of climate change; 2) integrating climate change adaptation measures into national policies, strategies and planning; 3) promoting access to existing and emerging finance mechanisms relevant to climate change adaptation; and 4) influencing the wider Mediterranean policy processes through its knowledge management strategy.

Selection of the national priority coastal areas

Given limited funds, the country level outputs will be delivered in in two countries: Montenegro and Morocco.

These countries – representing the Adriatic and Southern Mediterranean sub regions – have ratified the ICZM Protocol, have established a solid institutional, policy and legal framework for ICZM, and hence have the capacities to effectively implement climate change adaptation strategies in coastal planning and management activities.

The selection of the 2 priority areas/countries for implementation of on-the-ground activities in this project was based on the following considerations:

1. Focus on project countries that have ratified the ICZM Protocol;
2. Identify one area in both the Adriatic and the Southern Mediterranean sub-regions.

Only three countries among those that participate to the SCCF project have ratified the ICZM Protocol: Albania, Montenegro and Morocco. Given the advanced stage of ICZM planning in Montenegro, the decision was taken to prepare the coastal plan in Montenegro for the Adriatic sub-region and in Morocco for the southern sub-region.

Montenegro

Montenegro is one of the most advanced Mediterranean country in ICZM Protocol implementation. The country ratified the ICZM Protocol in 2011, with the adoption of the Law on ratification of the ICZM Protocol. Montenegro – with the assistance of the GEF through the MedPartnership, PAP/RAC and MAP – developed and adopted a National ICZM Strategy in 2015²¹. During the preparation of the Strategy, the responsibilities of the existing National Council for Sustainable Development and Climate Change were expanded to include ICZM. Today the country has the national Council for Sustainable Development, Climate Change and ICZM. These activities, together with the MAP Coastal Area Management Programme (CAMP)²² for Montenegro secured strong support of the national government during preparation of the spatial plan for the coast. Due to these circumstances, PAP/RAC and Montenegro today have rather extensive and updated data and information about the coast, which is a basis for smooth continuation of the planning activities.

The National ICZM Strategy recognized the need to enhance knowledge and awareness related to adaptation to climate change. Among priority actions, the Strategy identified the need to:

- implement pilot projects for adaptation to climate change impacts;
- strengthen capacities for adaptation to climate change impacts.

²¹ PAP/RAC, 2015. National strategy for integrated coastal zone management for Montenegro

²² PAP/RAC, CAMP, 2013. Vulnerability Assessment of the Narrow Coastal Zone Summary.

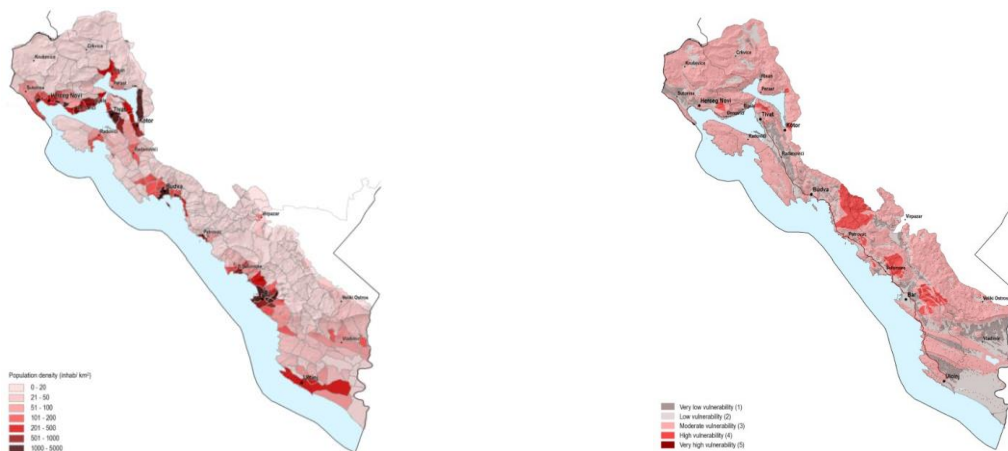
Within these priority actions, the following activities were identified in the National ICZM strategy:

- pilot adaptation project in a selected location or in one of the coastal municipalities so that:
 1. Operational programme is developed for implementing climate change adaptation measures proposed within the assessment of the possible impacts of flooding caused by sea level rise (SLR); cost-benefit analysis and cost assessment in case of non-implementation of adaptation measures is conducted;
 2. Climate change adaptation measures for the observed location are incorporated into spatial planning documentation and strategic documents;
 3. Workshops for experts and interested public on climate change impacts and related coastal risks, as well as on suitable climate change adaptation measures are organized.
- assess possible impacts of flooding caused by SLR and small torrent flows;
- organize workshops to exchange knowledge on suitable examples of climate change adaptation;
- raise awareness of all the stakeholders in tourism on the need to protect the coastal zone from damages caused by floods, droughts, forest fires, strong rains, storms, coastal erosion and high waves activities as a consequence of climate change.

Some of these priorities identified within the Strategy are to be met by the project in the development of the coastal plans. In addition to the coastal plan, Climagine is to be implemented in the selected area. Climagine is a participatory approach, providing tools and a methodology, developed by Plan Bleu during the previous GEF ClimVar & ICZM project (2010-2015) and applied in a joint manner with PAP/RAC in Sibenik-Knin County (Croatia) and Kerkennah archipelago (Tunisia). Climagine is to be used to raise the awareness of a wide group of relevant stakeholders, to disseminate knowledge and to build adaptation planning capacities. Finally, implementing Climagine along with the development of the Coastal Plan will capture local knowledge and build ownership, which represents key foundations for the implementation of the Plan, its recommendations, actions and measures.

During the finalization of the ClimVar & ICZM project, the GEF, MAP, PAP/RAC and Plan Bleu National Focal Points were requested to identify priority areas for the adaptation planning activities in Montenegro. Regional and country stakeholders agreed that the coastal hotspot in which to base the national activities should follow the findings of the ClimVar & ICZM project vulnerability assessments to sea-level rise and storm surges²³.

The above prioritization process resulted in the SCCF project prioritizing the development of a coastal plan for the Kotor Bay area in Montenegro. Besides being highly vulnerable to coastal flooding, Kotor bay area has the highest population density, as presented in Figure 1. According to the climate change vulnerability model, droughts, forest fires and stormy winds have the biggest impact in the areas of Herceg Novi and Budva municipalities and southern part of the Montenegrin coast. Heavy rains have the biggest impact in the parts of Kotor municipality and in Budva's hinterland. Additionally, several areas within the Kotor Bay have been recognized as highly vulnerable to sea level rise (Figures 1 and 2). Finally, Kotor bay is also the area with the highest levels of sea pollution (Figure 3 and 4).



²³ Plan Bleu (Satta, A. et al.): Application of a Multi-Scale Coastal Risk Index at Regional and Local Scale in the Mediterranean, 2015

Figure 1: Population distribution by settlements

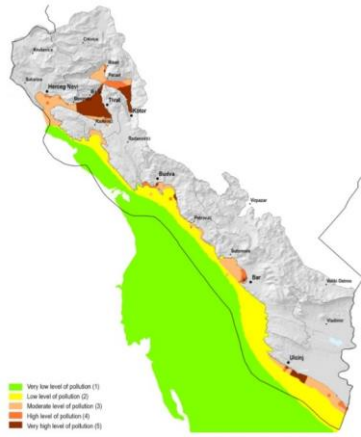


Figure 3: Total pollution / the extent to which the Sea is endangered (max. value)

Figure 2: Groundwater vulnerability



Figure 4: Cumulative vulnerability of the sea (average value)

As a follow up to initial consultations had with Montenegro, and during country consultations in Q1 2018, the selection of the coastal hotspot that will be the basis of an adaptation planning exercise will be validated with all country stakeholders.

Morocco – province of Tetouan

Morocco ratified the ICZM Protocol in 2012 and adopted the Coastal Law in 2015. In 2010 Morocco published the Guidelines for the Environment, Sustainable Development and Climate Change which served as a basis for numerous activities related to sustainable coastal development in recent years. Finally, in November 2016, Morocco hosted in Marrakesh the UNFCCC Conference of the Parties (COP) 22 and secured high visibility of the national endeavours towards mitigation and adaptation to climate change. These actions demonstrated a remarkable political will, and placed the country in a favorable position to benefit from the support of international partners to progress towards adaptation. In addition, Morocco has already carried out several ICZM projects, including a Coastal Area Management Plan for the Central Rif with the support of PAP/RAC (2008 – 2010)²⁴ and the ICZM project with the support of GEF/WB (2015 – still in progress), and a large database is now available that can be used for future studies.

As a response to the needs assessment performed during finalization of the ClimVar & ICZM project, Moroccan representatives requested support in several activities including the development of the Coastal plans for Tanger, Tétouan and Oriental Rif areas.

During the GEF ClimVar&ICZM project (2013-2015), a Multi-Scale Coastal Risk Index (CRI-Med) was applied at Regional and national levels (Figure 5) and a Local Scale Coastal Risk Index (CRI-LS) was applied in Tétouan coastal zone (Figure 5).

²⁴ Secrétariat d'Etat auprès du Ministère de l'Énergie, des Mines, de l'Eau et de l'Environnement/Direction de la Surveillance et de la Prévention des Risques, PAP/RAC, 2010, Gestion intégrée de la Zone Côtière du Rif Central, rapport de synthèse final.



Figure 5: Coastal risk map for Morocco coastline

According to Figure 5, there are two areas which are the most at risk (considering coastal hazards, vulnerability and forcing) due to climate change: the province of Tetouan (Figure 6) and the areas of Nador and of Berkane in Oriental Rif. It should be mentioned that the World Bank launched a € 5 million project in 2012 for the implementation of pilot ICZM actions for the Rif Oriental Region, which includes the Nador and Saïdia areas. Considering this information, the choice of Tetouan province for the elaboration of a coastal plan appears to be more relevant.

According to the last administrative division, the province of Tetouan consists of 2 municipalities and two rural circles grouping 8 caïdats and 20 rural communes. According to the results of the 2014 general population and housing census, the population of the province of Tetouan is of 550,374 inhabitants, representing 15.5% of the population of the Tanger-Tetouan -Al Hoceïma region and 1.6% of the national population²⁵.

The province of Tetouan is characterized by numerous rivers, the main ones being the Oued Martil, Oued Laou and Oued Amsa. However, the rapid increase in demand for water, related to the demographic and economic development needs, led to a growing usage of both underground and superficial waters. Having in mind that water is essential for many purposes (drinking water, agriculture, industry, etc.), its preservation is essential. Human activities and natural life dependent on it²⁶.

The Tetouan coast stretches over 45 km along the northwestern Mediterranean coast of Morocco, between Fnideq village in the north and Ras Mazari headland in the south. In ecological terms, the coast of Tetouan is very rich in diverse natural ecosystems (beaches, dunes, wetlands, forests, floodplains, etc.). In addition, it is a very dynamic area from a socio-economic point of view, one of the most urbanized areas, and one of the most interesting areas for the development of tourism in Morocco. This coast, where new marinas and ports are located, is experiencing strong economic activity (tourism, agriculture, fishing and trade), and significant population growth²⁶. In 1982 the urban population accounted for 63.79% of the total population, it rose to 71.21% in 1994 and to 72.13% in 2004. This trend is thus on the one hand in the mass migration of the rural population towards the urban centers and on the other in the extension of urban perimeters.

The shoreline is composed of two beaches separated by the Cabo Negro promontory (Figure 7). Tetouan coast is one of the Mediterranean coastal areas that has been the most rapidly and densely urbanized in Morocco. Unfortunately, development has been expanded without any integrated vision or long-term planning. Highly developed sections of the coast coupled with the high-energy, swell-dominated nature of the near shore makes it increasingly vulnerable to coastal

²⁵ Direction générale de la région de Tanger-Tetouan, 2015, Monographie provinciale de Tétouan.

²⁶ Niaizi S., 2007, Evaluation des impacts des changements climatiques et de l'élévation du niveau de la mer sur le littoral de Tétouan (Méditerranée occidentale du Maroc): Vulnérabilité et Adaptation. UNIVERSITÉ MOHAMMED V – AGDAL FACULTÉ DES SCIENCES Rabat.

erosion, storm surges and extreme weather events²⁷. Being a dynamic and resilient system, the coastline responded with adjustments where and when possible, but more often with a retreat when the sand failure was not able to adjust. As a consequence, the coastline is now so heavily "artificialized" that it is no longer possible for the beaches and the adjacent wetlands to migrate upwards or adapt to any new conditions imposed by the future sea-level rise.

The Tetouan coastline has already been the subject of many studies, especially regarding its past and recent evolution in response to natural and anthropogenic forcing²⁶. All studies revealed a more or less significant erosion trend of the shoreline in the last decades. The drivers of change are multiple, including damming, sand mining, linear urbanization and construction of ports and marinas. Over 95% of the coastal dunes have been destroyed by housing and tourism infrastructure. The short-term sedimentary evolution of the shoreline was analyzed by El Mrini in 2011²⁷, using digital elevation models obtained from three successive surveys conducted during the stormy period of February and March 2008. Results showed that seasonal beach changes were not very significant; the most important variations were recorded after storms. The type and mobility of beaches were a function of their curvature and distance from headlands, exposure to waves, grain size and sediment supply. Morphological changes were shown to be faster and more excessive in reflective beaches located north of the Cabo Negro promontory; moreover, these beaches have a greater tendency for erosion. Historical shoreline positions for Tetouan coast, captured from multirate aerial photographs for the period 1958 to 2003^{26 28} and 1958-2007²⁷ showed an erosive trend of the shoreline. Eroded beaches represent 70% of the coastline, while the accretion areas account for only 14%. The overall coastline retreat is on average 80 meters in the north and 45 meters in the south coast. Average erosion rates are -1.8 m / year in the northern coast (between M'diq and Fnideq) and -1.0 m/yr in the southern sector (Cabo Negro to Azla)^{26 28}.

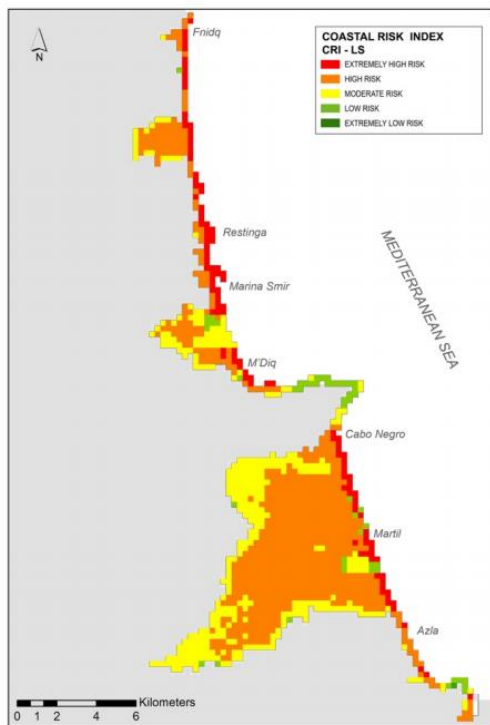


Figure 6: Coastal risk map for Tetouan

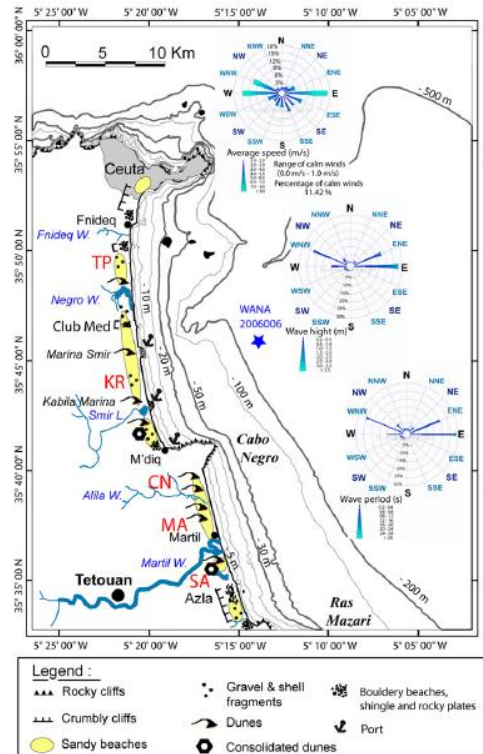


Figure 7: Geomorphologic features of Teto

The Tetouan province is an important economic hub and at the same time a highly vulnerable area for climate change and a highly urbanized zone. Therefore taking into account the information provided in the above mentioned sources,

²⁷ Evaluation des impacts des changements climatiques et de l'élévation du niveau de la mer sur le littoral de Tétouan (Méditerranée occidentale du Maroc) : Vulnérabilité et adaptation, 2011 - Faculté des Sciences Agdal, Rabat - Doctorat d'Etat.

²⁸ UNEP/MAP (Snoussi, M.): Regional experience on assessing impacts of climate variability and change in the Mediterranean area (GEF eligible countries), 2011

the Tetouan province appears to be the most relevant zone to prepare a coastal plan in the framework of this SCCF project.

Similarly to Montenegro, as a follow up to initial consultations held with Morocco thus far, the selection of the coastal hotspot that will be the basis of an adaptation planning exercise will be validated during planned consultations in Q1 2018 with the country stakeholders

Baseline projects

The SCCF-financed project will build on several projects and programmes that are currently being implemented at national level in Morocco and Montenegro. The project will be informed by and can positively influence these ongoing initiatives in the two countries.

The SCCF project can furthermore engage privately funded coastal tourism investment projects to ensure that planned activities duly consider climate adaptation strategies in coastal areas, especially in Montenegro.

Montenegro

Tourism continues to increase along Montenegro's coast, prompting private investors to construct new hotels, residences, and other hospitality facilities to cater to coastal visitors that are important drivers of economic development in the country. Private investors, however, may not be fully aware of the projected impacts of climate change in the Mediterranean, and the SCCF project represents an opportunity to engage with these actors and build their knowledge on integrating climate change considerations and adaptation strategies in the design and management of their tourist facilities. The following private sector investment projects are on the horizon for the Montenegrin coast and are developed in a coordinated manner through the Ministry of Sustainable Development and Tourism:

- The project Portonovi Montenegro involves the construction of an exclusive lifestyle resort located in Kumbor, Herceg Novi, with a budget of US\$ 756 million. Implementation period: 2013 – 2018.
- The project Mamula Island is focused on the restoration of a fortress that will be transformed into a first class hotel while preserving the cultural, natural and historic heritage of the area, with a budget of US\$ 17 million. Implementation period: 2013 – 2018.
- The project Lustica Bay will result in the construction of hotels, residential buildings, marinas, golf courses, a school, and other related service facilities, for a budget of US\$ 1.28 billion. Implementation period: 2013 – 2025.
- The project Touristic valorization of the properties of the HTP Ulcinjska Rivijera ad Ulcinj (a Montenegrin-based company) will involve numerous activities to enhance tourism facilities of the company, for a budget of US\$ 37 million, of which nearly US\$ 19 million between 2017 - 2019. Implementation period: 2017 – 2027.

In addition, the SCCF project will collaborate and partner with the project entitled '**Climate Change Adaptation in Flood Risk Management for Western Balkans**' (CCAWB II) (2016 – 2018). Funded by GIZ who have provided a total of US\$ 2.3 million to Montenegro and four other Western Balkan countries to build their capacity to adapt to climate change impacts, especially in relation to the risks of flooding and droughts in the Drin River Basin. In Montenegro, flood management plans have been prepared for several municipalities and local capacities have been built to help ensure their effective implementation. At the same time, precipitation and stream gauging networks in Montenegro have been extended to measure real-time data for transboundary flood forecasting. Together, these tools will ensure that floods are predicted and warnings issued to protect human lives in flood prone areas. The SCCF project will seek collaboration with the GIZ project by engaging the relevant national authorities of Montenegro to provide guidelines on how to mainstream climate change adaptation considerations into flood management plans related to the coastal areas. The SCCF project will engage the stakeholders of the GIZ project in the development of the climate risk assessments, as well as in the trainings on potential ecosystem-based adaptation solutions based on the climate risk and vulnerability assessment in coastal management.

Morocco

Morocco has launched its National Strategy for Sustainable Development (2016-2030), aiming at transforming the country's sustainable development policy into concrete actions. The Strategy recognizes climate change as a transversal challenge that will be considered in actions dedicated to economic development, infrastructure, sectoral plans (e.g., the Green Morocco Plan on agriculture) and poverty reduction, amongst others. Morocco has estimated the global cost of the five-year plan at nearly US\$ 10 million and at present has committed US\$ 3 million to activities in this context.

Furthermore, Morocco established in 2016 a National Competence Centre for Climate Change Mitigation and Adaptation (4C Maroc) through a technical collaboration project with GIZ valued at US\$ 2.3 million. In addition to establishing the legal and institutional framework for the competence centre, the project will also support the creation of a national greenhouse gas inventory to facilitate Morocco's reporting for the UNFCCC, capacity building for the country's banking and finance sectors on accessing climate finance mechanisms, capacity building for national and regional actors on strategies for achieving Morocco's Nationally Determined Contributions to the UNFCCC, and centralization of all relevant knowledge tools and databases relative to climate change in Morocco.

Morocco is at the same time moving towards the operationalization of its Coastline Law with a number of initiatives on coastal zone planning and management that will address climate adaptation in coastal zones, amongst other issues, including the following:

- The development of a National Plan for the Coast by 2030, a US\$ 365,000 initiative financed by the Moroccan government to prevent degradation and ensure an integrated planning approach to the coast and its sources
- Strengthening participatory coastal management for the reduction of marine litter in the regions: Tanger-Tétouan-El Hociema and Rabat-Sale-Kenitra, each with US\$ 165,000 in funding from the European Union in the context of the SWIM-H2020 SM Project (Sustainable Water Integrated Management and Horizon 2020 Support Mechanism 2016-2019).

The EU-funded "ClimaSouth" project (2013 – 2018) supports climate change mitigation and adaptation in nine South Mediterranean countries: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia. The overall objective is to assist partner countries' transition towards low carbon economies while building climate resilience, thus protecting the foundation and exploiting opportunities for economic development and employment in the region. The project has a global budget of USD 5.8 million. The SCCF project will support ClimaSouth by engaging and involving its main stakeholders in the training on potential ecosystem-based adaptation solutions based on the climate risk and vulnerability assessment in coastal management and in the development of the costed and measurable ICZM and adaptation plan in the province of Tetouan.

The UfM-labeled GWP-Med/OECD "Governance & Financing for the Mediterranean Water Sector" project (2013 – 2017) aims to diagnose key governance and capacity building obstacles to mobilizing financing through public-private partnerships (PPP) for the Mediterranean water sector, and to support the development of consensual action plans based on international good practices. In particular, the project focused on assessing the opportunities and institutional and regulatory challenges arising from PPPs, when policy-makers use them as a tool to manage water resources and finance services effectively, sustainably and affordably. Seven countries participated in the project, a new phase is under development – Albania, Egypt, Jordan, Lebanon, Morocco, Palestine and Tunisia – and the project had a global budget of around USD 3 million. The SCCF project will synergize with UfM by engaging the Moroccan stakeholders from the Governance & Financing for the Mediterranean Water Sector in the workshops/trainings to enhance the use of coastal climate risk and vulnerability assessments in investment decisions which will be delivered by the SCCF project.

The EU-funded Sustainable '**Water Integrated Management and Horizon 2020 Support Mechanism (SWIM-H2020 SM)**' project (2016 – 2020) is composed of regional activities to promote the role of green banking in supporting investments in the water sector, particularly with the involvement of private banks. The project brings together seven countries – Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, and Tunisia – and has a global budget of 6.2 million euros (USD 7.2 million). The SCCF project will build on the Horizon 2020 initiative to identify IFI and national financial institutions in Morocco to be engaged in the providing information workshops/trainings delivered to enhance the use of coastal climate risk and vulnerability assessments in investment decisions.

In addition the SCCF project will work collaboratively with the initiative entitled ‘**African Package for Climate-Resilient Ocean Economies**’ (2017 – 2020) that will initially focus on Morocco’s Ceinture Bleue programme which is dedicated to fisheries, aquaculture and ocean observation systems. The Ceinture Bleue programme includes a strong south-south cooperation element, particularly for ocean mapping and observations, with activities planned for both Mediterranean and Atlantic coasts. A total of US\$ 154 million in financing for Morocco is being provided by the World Bank, the African Development Bank and FAO. The SCCF project will engage the relevant stakeholders in the trainings on potential ecosystem-based adaptation solutions based on the climate risk and vulnerability assessment in coastal management to be applied to the fisheries and aquaculture sectors.

3) The proposed alternative scenario

Following detailed country consultations due in Q1 2018, this section will be further developed to include country-specific information on the methodology for executing Components 1 and 2 of the project.

The proposed alternative scenario is based around the main following outcomes:

1. The enabling capacity and awareness environment for increasing resilience and adaptive capacity of marine and coastal natural and socioeconomic systems to the impacts of climate change are built;
2. Climate change adaptation measures are integrated into national policies, strategies and planning;
3. Access to existing and emerging finance mechanisms relevant to climate change adaptation are promoted;
4. The wider Mediterranean policy processes are influenced through the SCCF project’s knowledge management strategy.

The following paragraphs briefly detail how these objectives will be met through the implementation of the expected outputs and activities of the project.

Component 1: Stakeholder engagement, and enhanced capacity building and cooperation

Outcome 1 - Stakeholder engagement on climate change adaptation is strengthened and partnerships are enhanced.

Output 1.1: A gender-sensitive climate risk assessment implemented through a stakeholder led process to provide sufficient basis for building coastal resilience to climate change and sustainability.

The activities under this output will entail using the recognized participatory approach “Climagine” to undertake climate risk assessments in two pilot areas in Morocco and Montenegro. Climagine is a tool developed by Plan Bleu/RAC that provides a framework for stakeholders to discuss and co-develop recommendations on integrating climate change adaptation in ICZM strategy implementation at the level of a coastal administrative unit (municipality, county, willaya, governorate etc.). Climagine builds on a participatory stakeholder-driven planning approach (Imagine), used in participatory planning in the Mediterranean region since 2000. The steps of the “Climagine” process are set forth in Figure 8 below.

Climagine has been tested in two pilot areas in Croatia and Tunisia and will be further structured/ developed through lessons learned from the proposed SCCF project. Lessons learnt will be codified in a methodological guide to be developed for the broader Mediterranean region. The methodology will ensure that gender considerations and the role of women are adequately reflected in climate risk assessments.

Additionally, one climate risk assessment workshop will be conducted in each of the two priority coastal hotspots areas. Stakeholders invited to participate in the workshop(s) will represent the main social and economic sectors in the two targeted coastal zones, including national and local decision makers. The organizer will ensure that gender is considered in the workshop design and that women are adequately represented in the stakeholder group. During the workshop, stakeholders will be able to identify the geographical areas and social issues or economic activities most exposed to climate change impacts/risks

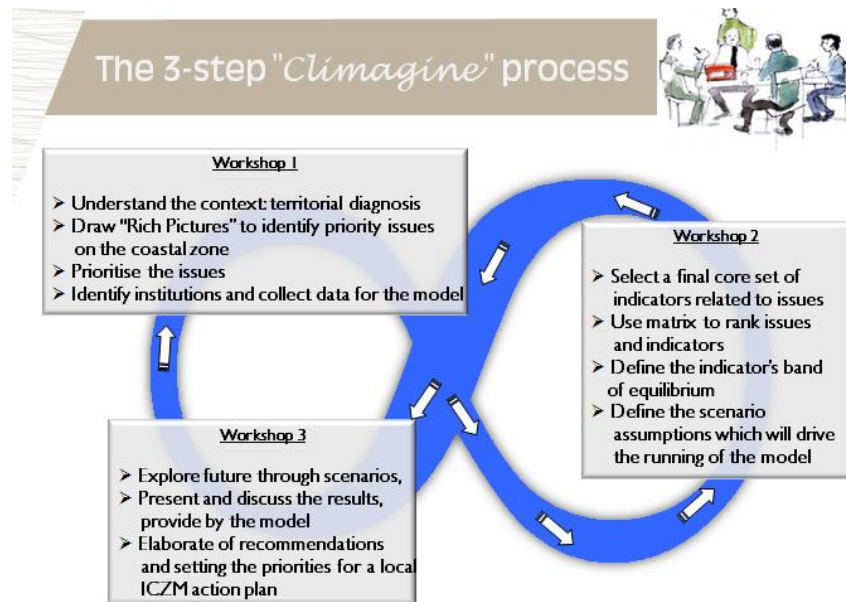


Figure 8 Steps of the "Climagine" participatory approach for climate risk assessment

Output 1.2: Key stakeholders, policy makers and relevant actors (from local to national levels) in 2 priority coastal areas (involved, through the participatory method "Climagine") convened to find solutions for building coastal resilience and sustainability.

Based on the outcomes of the first Climagine workshop (output 1.1), the stakeholders will discuss and identify potential adaptation solutions to enhance coastal resilience, including for example raising awareness among coastal populations about climate change adaptation, protection of coastal ecosystems through Ecosystem based Adaptation approaches, as well as non-nature-based solutions will be identified and studied with the participants to provide solutions to risks identified during the risk assessment workshop. Economic analytical methods during the workshop will be used to compare and prioritize adaptation solutions/ options.

Output 1.3: Technical experts and decision makers from all project countries trained on potential ecosystem-based adaptation solutions based on the climate risk and vulnerability assessment in coastal management.

A training module will be developed to inform and train coastal managers on Ecosystem-based Adaptation solutions. Using examples derived from the workshop on solutions for building coastal resilience and sustainability (Output 1.2), coastal managers will be trained on undertaking a cost-benefit analyses of alternative nature based solutions to deal with climate change impacts and coastal risks.

Output 1.4: Sub-regional workshops/trainings delivered to International Finance Institutions, banking, insurance, private sectors in low-lying coastal areas to enhance the use of coastal climate risk and vulnerability assessments in investment decisions.

Sub-regional workshops and training events aimed at enhancing resilience of coastal zones will be delivered to institutions in the financial sector. These workshops will be prepared in collaboration with experienced financial institutions or networks of financial institutions at national level, which will be identified and engaged through an analysis of existing national capacities. In addition, links with the UN Environment – Finance Initiative (UNEP FI) will be explored further in order to strengthen the content and convening power of this project using UNEP FI networks and experience.

The series of workshop will target relevant stakeholders to discuss the development of climate risk adaptation strategies for the priority coastal area, in particular, the application of the ICZM protocol under the legal framework provided by the Barcelona Convention. The workshops will focus attention on the establishment of zones in the coast where

construction is prohibited. The legal basis for this ‘no regret’ measure – commonly known as a setback zone is set forth in the ICZM Protocol for the Mediterranean Sea and applies to the Protocol’s contracting parties (10 countries and the EU). The financial institutions such as, particularly banking and insurance companies can enforce these through their credit and insurance operations.

Climate risk management training and awareness modules and methodological guidelines will be developed on the basis of findings from Outputs 1.1, 1.2 and 1.3.

This output will collaborate with finance institution networks involved in climate change adaptation, for example the European Financing Institutions Working Group on Adaptation to Climate Change (EFIWGACC). This group represents a partnership of financing sector in Europe, and in July 2016, this Group produced guidance for integrating climate resilience into project development and implementation. This guidance was developed by a large number of institutions encompassing financing institutions, expert agencies and consultancies. The SCCF project will work in a collaborative manner with EFIWGACC, in order to benefit from the experience of the working group and create synergies with the projects that will be developed under this framework.

Component 2. Development of best practices for enhanced sustainability and climate resilience in the coastal zone.

Outcome 2 - Adaptation-mainstreamed into ICZM strategies and coastal plans.

The methodology for developing the coastal plans that mainstream adaptation for 2 priority coastal areas will be defined during country consultations in early 2018, and will be based on baseline planning processes and experiences to date.

Output 2.1: Costed and measurable national ICZM and adaptation strategies / coastal plans for 2 priority coastal areas developed through participatory process and ready to be implemented.

Development of the Coastal Plans for 2 priority coastal areas, with special focus on adaptation, will be guided by the ICZM planning process. The final set of activities under this output will be defined during further consultations to be had with the countries in Q1 2018.

Output 2.2: In 2 priority coastal areas, reports produced of the main legal, policy and institutional barriers and opportunities for implementing the adaptation solutions identified under Component 1.

The final methodology to develop the reports will be defined during detailed country consultations in early 2018.

Particular attention will be dedicated to governance issues, in particular to legal, policy and institutional barriers and opportunities for implementing the adaptation solutions. This output will be developed based on the thematic inputs collected during the Climagine workshops and on the feedback from the governmental bodies, experts and all other stakeholders involved in the preparation of the coastal plan. During both processes, the inputs will be collected to identify potential barriers for implementing the adaptation solutions, placing particular attention to main legal, policy and institutional barriers and opportunities. Before finalizing the coastal plan a thematic report will be prepared in order to support successful implementation.

Component 3: Access to existing and emerging finance mechanisms relevant to climate change adaptation, including international and domestic instruments.

Outcome 3.1: Public spending relative to climate adaptation in the coastal zone prioritized and national resources mobilized.

and

Outcome 3.2: Facilitated access to international climate change adaptation financing.

This component aims to assist partner countries in prioritizing and developing projects contributing to climate adaptation objectives in their coastal and marine zones, by enhancing preparedness to access international climate financing mechanisms and funds, optimizing the availability of domestic public funds, and leveraging private sector engagement.

Relevant tools will be provided to countries, such as methodological guidelines for elaborating a financing plan for climate change adaptation in the coastal area. Activities will also facilitate the development of a concrete multi-country / regional project proposal suggested to be endorsed and supported by partner countries and submitted to appropriate international donors for financial support.

The activities under the Component 3 of the SCCF project will be coordinated with the ‘Med Water Matchmaker’ Project (Making Water Cooperation Happen in the Mediterranean) and the GWP Water, Climate and Development Programme (WACDEP), co-financed by Sida and GWP.

Output 3.1: Methodological guidelines developed on preparing a financing plan for climate change adaptation in coastal areas comprising domestic, international and private sector investment.

Activities under this output relate to the preparation of a guidelines document detailing how to elaborate a financing plan for climate change adaptation in coastal areas comprising domestic, international and private sector investment.

Climate change adaptation financing is a combination of national and international financial resources, drawn from public and private sources, mobilized for addressing related objectives. Over the years, there has been a constant call for scaled-up, new and additional, predictable and adequate funding, particularly for developing countries. Related financing tools have been developing over recent years. However, the global climate finance architecture is complex: finance is channeled through multilateral funds -such as the Global Environment Facility and the Green Climate Fund. In addition, a growing number of recipient countries have set up national climate change funds that receive funding from multiple developed countries in an effort to coordinate and align donor interests with national priorities. Figure 10 provides a schematic of the evolving global climate finance architecture²⁹.

²⁹ <http://www.climatefundsupdate.org/about-climate-fund/global-finance-architecture>

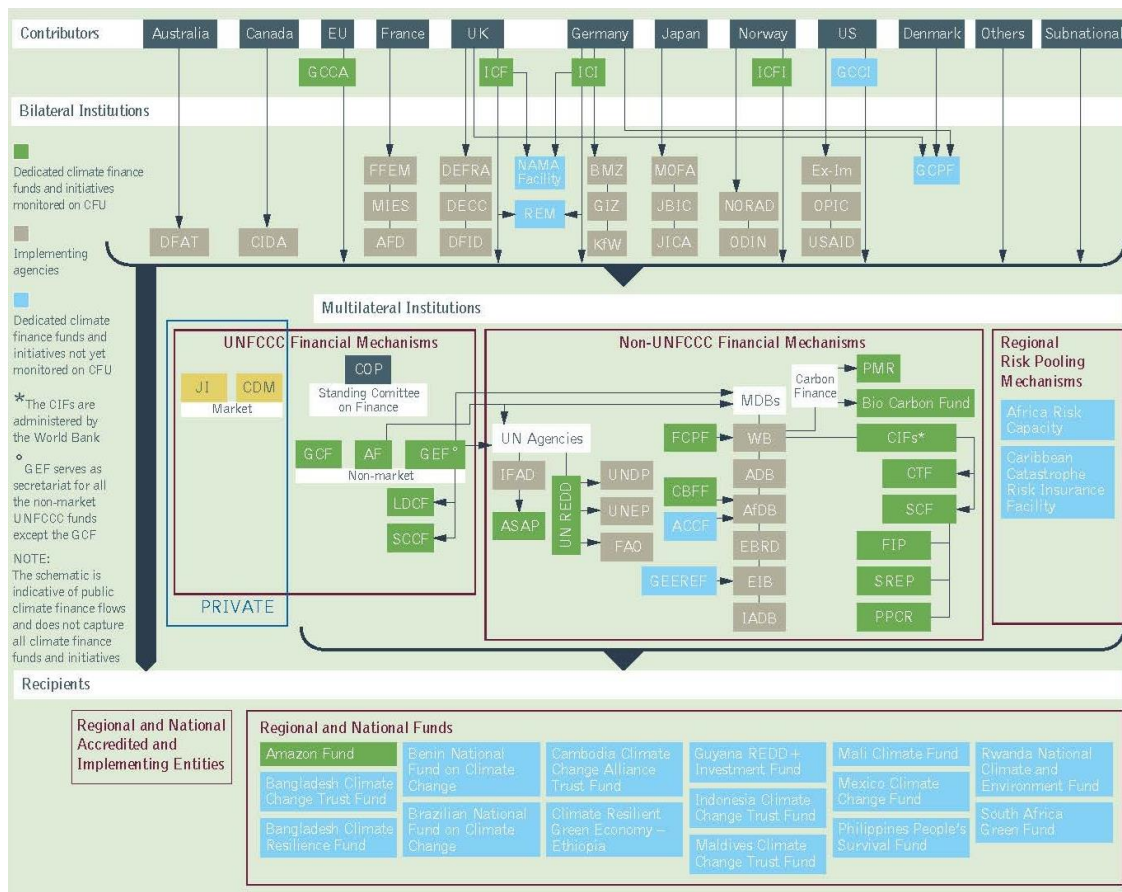


Figure 10 Global Climate Finance Architecture

Despite their importance, a limited number of climate change adaptation investments have targeted Mediterranean coastal and marine areas. Additional challenges include the lack of public authorities’ capacity to utilize international financing opportunities and prioritize national investments as well as the lack of key stakeholders’ capacity to contribute to these efforts.

Methodological guidelines for elaborating a financing plan for climate change adaptation in the coastal area will be prepared to assist Mediterranean countries’ knowledge base. They will capture the relevant information from the literature and from regional experience about how a developing country, in the specific conditions of the Mediterranean, could most efficiently mobilize existing and emerging financing resources and opportunities in order to meet the complex challenges of adapting the environment, the communities and the economic activities in their marine and coastal zones to the risks of a changing climate.

The document will present the current international climate finance architecture and will describe the essential steps that national authorities need to take in order to build on available opportunities, including how to properly prepare and submit a project proposal aligned with related investment criteria and all other relevant modalities. The document will be tailored to cases for coastal areas’ interventions. Among others, the document will provide a valid input for the activities under Outcome 3.2 and the Outcome 2.1.

Although funds for climate adaptation activities are and will be available from international sources, much of the relevant efforts will need to be supported by national and subnational authorities through their domestic budget frameworks and systems, including those dedicated to coastal zone management planning and its implementation. The guidelines document will provide an overview of international experience and recommendations for effective coordination, screening, prioritization and monitoring of public spending relevant to the whole climate-related development architecture, including National Adaptation Plans (NAPs), Nationally Determined Contributions (NDCs) under the UNFCCC and the Paris Agreement, but also relevant to the SDGs process.

In this sense, the guidelines will, inter alia, address how much and what type of climate finance is available, the roles of different actors including the private sector, the key project design elements including cross-cutting issues (e.g. gender, rights, poverty, etc.), how to assemble a proposal, the technical and financial support available to elaborate a proposal, etc.

This guidance document will be written in plain language and form, and be addressed mainly to national policymakers enhancing their related capacities but also to competent stakeholders assisting them to become better partners in such endeavors. The document would be presented, as relevant, at consultation meetings that will be organized by other Outcomes of the Project.

Output 3.2: At least 2 countries assisted to access international financing for climate change adaptation in coastal zone.

Despite growing opportunities for climate financing through established international climate funds, no major regional project on the adaptation of the Mediterranean coastal environment has been proposed/submitted yet to related financing mechanisms.

A multi-country / regional proposal for an adaptation-related project in the coastal zones of the countries involved will be prepared for submission to an international climate finance fund(s)/institution(s). At least 2 project countries will be part of the proposal.

A concept note will be prepared as a background document, describing contents, scope and modalities for the development of the project proposal, tailored to needs, capacities and available funding options.

A regional consultation will bring together competent public authorities of the project countries. The objectives would be to share and discuss priorities among countries for adaptation-related activities to be implemented in their marine and coastal zones; to reach a consensus on specific common priority themes and issues; to elaborate on options for bundling together priority activities in a consolidated project proposal; to discuss appropriate options of international financing mechanisms to which the proposal could be submitted for funding; and, to agree on a roadmap for the preparation of the proposal. The process should conclude and/or be followed up with an expression of commitment by interested countries to engage in the preparation of the project proposal, committing related capacities at national level.

Collection of technical material of, primarily, mature interventions suggested by committed countries will follow, providing a preliminary screening of possible activities to be included in the project proposal. Specific recommendations will be provided to national authorities to ensure full preparedness and compliance with the modalities and all other requirements of the financing institution/fund.

Technical fact-finding missions in the countries would validate suggestions or identify alternative options in close collaboration with, and based on guidance by, the competent authorities. Based on needs, consultation workshops may be organized at country or local level with the participation of targeted stakeholders. These would assist prioritizing specific themes, issues to address, hotspots to focus on and types of activities to include in the proposal. They will also provide the opportunity to present, discuss and validate the guidelines document also prepared under Component 3. As well as enhance knowledge and capacities of participants on national preparedness to access international climate finance mechanisms, and present adaptation-related national strategies and plans and discuss their interlinkages.

Preparations for the regional project proposal, including the needed consultations, will be led by the project team with contributions from external experts, as relevant. Contents should reflect country priorities, and would align with the Regional Climate Change Adaptation Framework and the coastal adaptation plans and solutions defined in Component 1 and 2 of the project. The proposal will focus on country interventions in at least 2 countries, and would include a regional component of policy dialogue, capacity building and knowledge management. It will justify the potential for impact within sustainable development objectives and for paradigm shift, and it will demonstrate its response to beneficiary countries' needs as well as its elements of efficiency and effectiveness in doing these.

Effort will be made to attract leverage of climate-related private investment as part of the regional proposal. However, inherent difficulties in achieving this aim are well understood, and may be beyond the Project's capacity to effectively deal with.

One, or more, regional consultation / working meetings will take place during elaboration, as needed. Drafts of the project proposal will be consulted and agreed with the project countries. Submission of the proposal, if agreed, could be made by either UN Environment as an accredited agency to several multilateral climate funds, as relevant and upon decision of the competent bodies, or other competent partners if so decided.

Component 4: Knowledge, management, project coordination and influencing.

Outcome 4 –Strengthened science-policy interface, accessibility of related knowledge and enhanced regional climate information.

Effective knowledge management is an important mechanism of the proposed project to achieve up-scaling and broader adoption of the planning approaches, vision, policies and practices promoted by the MSP. The knowledge management support provided through this component will foster intergovernmental and inter-ministerial cooperation, promote best practices and develop portfolio-wide training and communication strategies.

The project knowledge management has three outputs, concerned with codifying the project learning into guidelines and a summary assessment report, and disseminating the project learning in the region in a dedicated meeting convened for this purpose and a presentation of the learning in another major regional forum linked to other regional processes such as the MedProgramme and the Union for Mediterranean Climate Change Expert Group and the emerging UfM Water Agenda.

Through this Component, the proposed project will establish synergies with other ongoing relevant GEF supported projects and initiatives in the region. In particular with:

- (i) UN Environment/MAP's "Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and Related Assessment Criteria" (IMAP) information system that will ensure the establishment of the regional pool of data that can be used for the production of common indicator assessment reports.
- (ii) Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security. This major effort aimed at jump-starting the full implementation of the SAP MED and SAP BIO is led by UN Environment in cooperation with EBRD and other partners, and executed by UN Environment / MAP. It consists of seven full sized projects targeting environmental degradation hot spots along the Mediterranean Coast. The SCCF Project will act in close synergy with MedProgramme Child Project 4.1 "Mediterranean Sea Basin Environment and Climate Regional Support Project", major outputs and results from the SCCF project will feed into the MedProgramme knowledge dissemination processes.
- (iii) The SCCF project will be linked to the UfM Climate Change Expert Group by participating (delivering and sharing information) in the forum of experts meeting convened by UfM. Furthermore, linkages will be sought with the Climate Change Adaptation thematic area of the new UfM Water Agenda, once it is developed.

The project will fully participate in the IW LEARN activities and IW Conferences, and contribute by producing experience notes and dissemination materials.


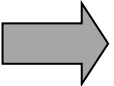
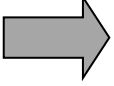
The Component will result in three main awareness raising and knowledge management outputs:

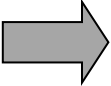
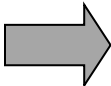
Output 4.1 A regional meeting to share information and knowledge on the findings and outputs of the adaptation planning processes with a view to replication, and to agree on an adaptation-relevant Monitoring and Evaluation framework to be applied in the MedProgramme.

Output 4.2: 1 glossy and eye catching brochure and 1 scientific assessment report on environmental and climate risks in hotspot areas in the Mediterranean region, based on prepared reports and summaries for decision-maker.

Output 4.3 Project learning presented at one major forum in the Mediterranean region in end of year 2, in order to strengthen the uptake of lessons learned in the MedProgramme, and other relevant initiatives such as the Union for Mediterranean Climate Change Expert Group and others

4) Additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing;

	Business-as-usual		Alternative adaptation scenario
Problem Description	<p>Under this scenario, the ecosystems and communities in marine and coastal areas in the Mediterranean are increasingly and negatively affected by climate change and climate variability.</p> <p>There will continue to be limited technical capacity, knowledge and financial resources for adaptation.</p> <p>As well as a lack of coordination and efficient management of resources within the region, will continue to pose as a barrier towards sustainable climate resilient development.</p>		<p>SCCF funds will be used to:</p> <ul style="list-style-type: none"> strengthen engagement and partnerships between stakeholders, build capacity of policy makers and relevant actors, mainstream climate change adaptation into ICZM strategies and plans, and mobilizes public and private finance for adaptation in the region, and enhance regional knowledge on adaptation and climate information.
Project Outcomes	<p>Outcome 1: Under the business as usual scenario:</p> <ul style="list-style-type: none"> There will continue to be a lack of stakeholder engagement and consultation within coastal planning processes in the Mediterranean Countries. There will continue to be a lack in capacity and technical knowledge in the use of climate risk and vulnerability assessments to define and prioritise adaptation solutions. 		<p>SCCF resources will be used to enhance the stakeholder engagement, and the Countries' capacity building and cooperation. This will be done by:</p> <ul style="list-style-type: none"> Developing a gender-sensitive climate risk assessment to provide sufficient basis for building coastal resilience to climate change and sustainability. Consulting with policy makers and relevant actors to find solutions for building coastal resilience and sustainability. Providing training to technical experts, decision makers and international finance institutions from all project countries on the use of climate risk and vulnerability assessments, and the benefits of potential ecosystem-based adaptation solutions. <p>Cost: SCCF US\$300,000</p>
	<p>Outcome 2: Under this scenario climate change adaptation is not mainstreamed into ICZM strategies and coastal plans. This will result in:</p> <ul style="list-style-type: none"> A lack of costed and measurable national ICZM and adaptation strategies. Continued lack of implementation of adaptation solution in coastal areas due to the existing legal, policy and institutional barriers. 		<p>SCCF resources will be used to develop best practices for enhanced sustainability and climate resilience in the coastal zone. This will be done by:</p> <ul style="list-style-type: none"> Developing costed and measurable national ICZM and adaptation strategies / coastal plans through participatory process. Producing reports on the main legal, policy and institutional barriers and opportunities for implementing the adaptation solutions in at least two priority coastal areas. <p>Cost: SCCF US\$310,000</p>

	<p>Outcome 3:</p> <ul style="list-style-type: none"> • There will continue to be limited public spending relative to climate adaptation in the coastal zone. • There will continue to be limited number of proposals to access international financing support for climate change adaptation in coastal zone. 		<p>SCCF resources will be used to assist accessing existing and emerging finance mechanisms relevant to climate change adaptation by:</p> <ul style="list-style-type: none"> • Developing guidelines on preparing a financing plan for climate change adaptation in coastal areas to access domestic, international and private sector investment. <p>The guidelines will be developed using existing knowledge and will be tailored toward the particular conditions of developing Mediterranean countries and to the thematic contents of increasing resilience of their coastal areas from climate change impacts.</p> <ul style="list-style-type: none"> • Developing proposals to assist accessing international financing support for climate change adaptation in the coastal zone. <p>Technical assistance will be provided to the interested countries in prioritizing climate-related interventions in coastal areas, and eventually applying for funding to climate financing institutions, mobilizing domestic resources and exploring possibilities of leveraging private funding.</p> <p>Cost: SCCF US\$150,000</p>
	<p>Outcome 4: Under this scenario there will continue to be limited development of regional specific climate information, as well as limited sharing of experiences and lessons learned on adaptation planning within the region. In addition, there will continue to be limited coordination among countries.</p>		<p>SCCF resources will be used to enhance the knowledge management and coordination by:</p> <ul style="list-style-type: none"> • Organizing a regional meeting to share information and knowledge on the findings and outputs of the adaptation planning processes. • Developing knowledge materials such as brochure and scientific assessment report on environmental and climate risks in hotspot areas in the Mediterranean region. Presenting the project's lessons learned at a major forum in the Mediterranean region <p>Cost: SCCF US\$160,000</p>
<p>Financed by:</p>	<p>Secretariat of State to the Minister for Energy, Mines and Sustainable Development (Morocco), Ministry of Sustainable development and tourism (Montenegro). GEF eligible Contracting Parties to the Barcelona Convention</p>		<p>SCCF</p>

5) [adaptation benefits](#) (LDCF/SCCF)

There are no updates to the PIF yet as country consultations in Morocco and Montenegro are on-going

6) innovativeness, sustainability and potential for scaling up.

There are no updates to the PIF yet as country consultations in Morocco and Montenegro are on-going.

A.2. *Child Project?* If this is a child project under a program, describe how the components contribute to the overall program impact.

NA

A.3. *Stakeholders.* Identify key stakeholders and elaborate on how the key stakeholders engagement is incorporated in the preparation and implementation of the project. Do they include civil society organizations (yes /no)? and indigenous peoples (yes /no)?³⁰

During Q1 2018, country and regional consultations will be held to better define the project strategy. The project will ensure that the following stakeholders will be involved in project outputs and activities:

Regional:

- UNEP MAP Priority Actions Programme Regional Activity Centre (PAP/RAC).
- UNEP MAP Plan Bleu Regional Activity Centre (Plan Bleu).
- Global Water Partnership – Mediterranean (GWP Med).
- European Commission
- European Financing Institutions Working Group on Adaptation to Climate Change (EUFIWACC).
- European Investment Bank (EIB).
- European Bank for Reconstruction and Development (EBRD).
- World Bank Group (WB).
- The African Ministers' Council on Water (AMCOW).
- NGO “Green home”.
- NGO ECODEL.
- NGO Le Centre Méditerranéen pour l’Environnement et le Développement (CMED).
- Swedish International Development Cooperation Agency (SIDA)

National:

- Ministry of Sustainable development and tourism of Montenegro.
- Public Enterprise for Coastal Zone Management of Montenegro.
- IHMS, Montenegro.
- Municipality of Kotor.
- Municipality of Tivat.
- Municipality of Herceg Novi.
- Tivat Salina.
- Ministère de l’Énergie, des Mines et du Développement durable
- Secrétaire d’Etat chargé du développement Durable.
- Ministère national de l’aménagement du territoire national, de l’urbanisme de l’habitat et de la politique de la ville.
- Centre National de Recherches Météorologiques et Systèmes.
- Secrétariat d’Etat chargé du Tourisme.
- Gouverneur de la province de Tétouan.
- Président de la commune de Tétouan.
- Président de la commune de Fnideq.
- Président de la commune de Martil.
- Président de la commune de M’Diq.

A.4. *Gender Equality and Women's Empowerment.* Elaborate on how gender equality and women’s empowerment issues are mainstreamed into the project implementation and monitoring, taking into account the differences, needs,

³⁰ As per the GEF-6 Corporate Results Framework in the GEF Programming Directions and GEF-6 Gender Core Indicators in the Gender Equality Action Plan, provide information on these specific indicators on stakeholders (including civil society organization and indigenous peoples) and gender.

roles and priorities of women and men. In addition, 1) did the project conduct a gender analysis during project preparation (yes /no)?; 2) did the project incorporate a gender responsive project results framework, including sex-disaggregated indicators (yes /no)?; and 3) what is the share of women and men direct beneficiaries (women 50%, men 50%)? ³¹

An update will be provided following final country consultations in Morocco and Montenegro.

A.5 Risk. Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

To support the delivery of the project’s objective, there is a need to identify and assess the risks to implementation. Effective identification and assessment of risks will allow appropriate countermeasures to be taken. Monitoring and updating the identified project risks will be an important task of the project manager throughout the project implementation phase. The table below summarises the identified risks and suggested countermeasures. National level risks will be further defined following country consultations to be held in Q1 2018.

#	Description	Potential consequence	Contingency Measures	Risk category	Probability & impact (1–5)
1	Lack of political support.	The effectiveness of project implementation is reduced. Dialogue with the National Focal Points and key stakeholders will become difficult and/or inconsistent.	<ul style="list-style-type: none"> • A detailed plan and clear description of roles and responsibilities will be developed to ensure that all stakeholders are well appraised of the project across all the countries. • The National Coordinator within each Country will be responsible for ensuring appropriate coordination among project partners at national level. Moreover, the National Coordinator will be constantly liaising with the Project PMU to ensure that GEF standards are met. • Political support and continuity of the execution of the activities at national level will be carefully monitored through the standard instruments provided by the Barcelona Convention. Informal meetings of the Contracting Parties to the Convention, including Morocco and Montenegro, are constantly happening allowing to timely identifying possible bottlenecks and 	Organizational	P=1 I=3

³¹ Same as footnote 8 above.

			<p>challenges.</p> <ul style="list-style-type: none"> • Formal and informal communication and reporting functions between national and regional committees will be undertaken in both English and French. 		
2	Political instability.	Political and social instability of the region	<ul style="list-style-type: none"> • Ensuring a wide range of stakeholders in each country are briefed on project objectives and aims. • Working with CSOs, local authorities, communities and non-government insitutions so that project activities can continue if political situation is tense. • Keeping abreast of political tension within the region and putting together a risk strategy should the situation escalate. 	Political/ Organizational	P=4 I=1
3	Inability of the MSP to guide and influence the timely and effective implementation of national activities.	The timely delivery and effectiveness of the project is reduced.	<ul style="list-style-type: none"> • The existing cross-sectoral committees and mainstreaming mechanisms in each country will be used to promote communication and information sharing between sectors. • The knowledge management strategy developed for the GEF MedProgramme (GEF Program ID 9607) will support the execution of the MSP. 	Political/ Organizational	P=2 I=3

A.6. Institutional Arrangement and Coordination. Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

UN Environment, as GEF implementing Agency for the Project, will play a supervisory role to the project to ensure that GEF fiduciary standards and policies are adhered to. UN Environment will also play a close coordination and liaison role with the executing partners. As the IA, UN Environment will also be responsible for all enquiries regarding the Project implementation progress and Project-level reporting, mid-term review and terminal evaluation and, final Project completion and the achievement of higher level of the Project's impacts on the global environment.

UN Environment/MAP, the Executing Agency for the project ensuring synergy with the on-going GEF MedProgramme (GEF Programme ID: 9607) and projects related to the scope of this MSP and initiatives funded by other donors/institutions in the Mediterranean. UN Environment/MAP in close cooperation and communication with UN Environment HQ and the other partner Agencies will allocate through Component 4 financial and technical resources in achieving coordination and exchange of experiences.

A Project Steering Committee (PSC) will be established. The main role of the PSC will be to provide guidance and steer the project towards meeting its intended outcomes and results.

The project will benefit from being anchored in the recently approved Mediterranean Sea Programme (MedProgramme): **Enhancing Environmental Security** project. The main objective of the MedProgramme is to accelerate the implementation of agreed upon priority actions to reduce major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations.

The SCCF project will share its Project Management Unit (PMU) facilities and staff with the MedProgramme. Hotspot areas to work in in each area/ site will be determined using MedProgramme entry points and the learning from the SCCF project will be disseminated through the MedProgramme policy channels.

Management structure

Division of responsibilities:

UN Environment Ecosystems Division is the Implementing Agency (IA) on behalf of GEF. Its main roles are:

- Project oversight,
- Ensuring that both GEF and UNEP standards are met (technical, fiduciary, M&E).
- In charge of organizing the terminal evaluation, and
- Provide technical support to the execution of the project.

UN Environment MAP will be Executing Agency (EA) for the regional components of the project.

Its main responsibilities include:

- Establish and house the project management unit (PMU). For the SCCF project the PMU will be share with the PMU established for the GEF Program ID 9607: the MedProgramme. This has been agreed in the PIF of the SCCF project with a view to coordinate and create synergies in terms of knowledge management, execution of the activities, dissemination of the learning from the project and political and technical relationships with the countries and stakeholders.
- Co-Chairing (the countries will chair in a rotational way) the Steering Committee, and
- Oversee that the project runs according to the agreed workplan, budget and reporting tasks.

The execution arrangements for the national activities under the project's components 1 and 2 in Montenegro and Morocco will be defined during country consultations in early 2018.

Project management Unit (PMU):

- Project Coordinator or Chief Technical Advisor (shared with the GEF Program ID 9607: the MedProgramme)
- Administrative Assistant (shared with the GEF Program ID 9607: the MedProgramme)

Roles:

- Ensure Project execution (all technical aspects of project implementation),
- Ensure project governance and oversight of the financial resources from GEF investment,
- Provide staff time and expertise in guiding and advancing the project,
- Sharing of all achievements and products of the project with all the stakeholders,
- Watch over the consultants and project partner organizations to deliver against their contracts and in time,
- Organize the Steering Committee meetings and serve as its secretariat,
- Overall management and implementation of the project results and output level M&E framework, to evaluate project performance,
- Management of the flow of information from the field to the stakeholders, and producing periodic monitoring reports.

National Project Coordinators (Morocco and Montenegro)

- National Project Coordinator

Roles:

- Provide guidance and support to executing partners on national and local logistical arrangements associated with specific activities;
- Identify relevant national level stakeholders, record these in a database and share with relevant executing partners;
- Establish and update a calendar of planned project events in the respective country (including missions, meetings, workshops, surveys, etc.);
- Facilitate coordination with local and national stakeholders;
- Support the preparation and execution of the project knowledge management system in the country including facilitate knowledge products and lessons learned
- Communicate the results of the project including appropriate visibility of donor, UN Environment, regional partners, national and sub-national implementing partners.

Project Partners (Regional Stakeholders)

The role of the Regional Stakeholders (Priority Actions Programme Regional Activity Centre - PAP/RAC, Plan Bleu Regional Activity Centre - Plan Bleu, and the Global Water Partnership – Mediterranean - GWP Med), will be defined during consultations in early 2018.

The SCCF project will work in a collaborative manner with:

International financing institutions such as the Green Climate Fund, Adaptation Fund, World Bank Group, European Investment Bank, European Bank for Reconstruction and Development, African Development Bank. These IFIs are already active in the Mediterranean region providing finance for projects on climate change mitigation and adaptation and collaborate with the Barcelona Convention and UNEP MAP. Beyond the provision of finance, such institutions increasingly provide support to countries for accessing financing mechanisms and to mobilize domestic resources. For example, the World Bank Group helps strengthen markets and improve operational efficiency and access to capital, assists countries to implement climate change public expenditure reviews, and overall promotes private sector development in the region. The European Investment Bank supports public authorities in the preparation, procurement and implementation of PPP infrastructure projects through the MED 5P advisory facility (Public-Private Partnership Project Preparation in the Southern and Eastern Mediterranean). The Adaptation Fund under its Climate Finance Readiness Programme supports countries to get accreditation with the Fund and to build capacity for undertaking climate finance readiness activities. The Green Climate Fund (GCF), the major international instrument for climate finance, is also active in the Region. Out of the 45 projects it has approved (as of October 2017), 3 adaptation-related ones will be implemented in Morocco (Development of Argan orchards in degraded environments; Adaptation of irrigated agriculture to climate change in semi-arid areas; Saïss Water Conservation Project). Additionally, the GCF has approved a mitigation project in Egypt (Renewable Energy Financing Framework) and another one on Sustainable Energy Financing Facilities involving 10 countries, three of which are Mediterranean.

Regional projects:

- The EU-funded project **ENPI ClimaSouth project**, which aims to assist partner countries (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia) with the transition towards low carbon economies and enhanced climate resilience. The project assists partner countries in accessing the various finance mechanisms under the UNFCCC by enhancing existing capacities of National Implementing Entities (NIE) to comply with the respective modalities and requirements.
- The EU-funded **Sustainable Water Integrated Management and Horizon 2020 Support Mechanism (SWIM-H2020 SM)** project, whose regional activities include the promotion of the role of green banking in supporting investments in the water sector, particularly with the involvement of private banks (in collaboration with the Governance & Financing for the Mediterranean Water Sector Programme).

- Seven European institutions are working together under the umbrella of the European Financing Institutions Working Group on Adaptation to Climate Change (EUFIWACC). The group comprises AFD, CEB, EBRD, EC DG CLIMA, EIB, KfW, and NIB. In June 2016, EUFIWACC produced a note on ‘Integrating Climate Change Information and Adaptation in Project Development: Emerging Experience from Practitioners’ aiming at sharing knowledge on making projects and investments more resilient to the effects of climate change and to implement adaptation measures that reinforce the climate resilience of goods, people, economies and territories of beneficiary countries.
- The Mediterranean part of the GWP Water, **Climate and Development (WACDEP) Programme (2013-2019)** aims to integrate water security and climate resilience in development planning processes, build climate resilience and support countries to adapt to a new climate regime through increased investments in water security. Moreover, the Project ‘**Making Water Cooperation happen in the Mediterranean**’ (**Med Water Matchmaker Project**) aims at making tangible advancements on priority issues of sustainable water resources management, at regional and transboundary level in the Mediterranean with a focus on and for the benefit of MENA countries, as means for enhanced regional cooperation towards sustainable development objectives shared among countries of the region. It has two components: enhancing regional transboundary cooperation and assisting the regional water and climate change adaptation policy agenda. SCCF project activities, particularly under Component 3, will be operationally integrated with activities to be implemented within the WACDEP and the Med Water Matchmaker projects, also providing co-financing. The SCCF project will coordinate with these regional projects/initiative by inviting them to the Regional stock taking meetings organized in the framework of the MedProgramme.

GEF financed projects expected to be on-going during the initial start time expected for this project are as follows:

- **Second Biennial Update Report on Climate Change (2016 – 2018)** - US\$ 352,000 and the **Third National Communication on Climate Change (2016 – 2020)** - US\$ 500,000 project.
- **Towards Carbon Neutral Tourism (2014 – 2019)** aims to enable Montenegro to reduce GHG emissions from its tourism sector and maintain the overall tourism sector related GHG emissions at the 2013 level while continuing to welcome the rapidly growing number of visitors to the country. Activities foreseen in this context include: an enhanced legal framework to support more sustainable modes of tourism as well as eco-certification schemes for accommodations; investment in transportation infrastructure to promote low carbon transport options within the tourism sector; assistance in accessing financing mechanisms to support climate change mitigation; and raising public awareness on the carbon footprint generated by tourism and the benefits of reducing GHG emissions. The GEF has provided US\$ 3.09 million in financing for this project. The SCCF project will build on the project Towards Carbon Neutral Tourism by engaging with the relevant national authorities of Montenegro to provide guidelines on how to mainstream climate change adaptation considerations into the coastal planning for touristic activities. This will be done through the activities that will be executed under the SCCF project, namely engaging the stakeholders to the Towards Carbon Neutral Tourism project into training on potential ecosystem-based adaptation solutions based on the climate risk and vulnerability assessment in coastal management.
- **Integrated Coastal Zone Management Project in Morocco (2012 – 2017)**, the ICZM approach was piloted in the eastern Mediterranean coast of Morocco. Taking into account the needs of coastal areas to develop strategies to adapt to future climate change impacts. This US\$ 25.18 million project was jointly funded by the GEF/World Bank (US\$ 5.18 million USD) and Morocco (US\$ 20 million). The SCCF Project will engage with the stakeholder of this project to involve them into the development of the climate risk assessment as a basis for building coastal resilience to climate change and sustainability and into trainings on potential ecosystem-based adaptation solutions based on the climate risk and vulnerability assessment in coastal management.
- **Enhancing the Climate Resilience of the Moroccan Ports Sector (2014 – 2018)** is addressing the need to increase the climate resiliency of Morocco's ports in both the immediate and longer-term through investment in climate-resilient upgrades and/or new port facilities, as well as through capacity development to introduce best international practice in the Moroccan ports sector's strategy, operations, management and monitoring. This US\$ 55 million project is supported by the GEF (US\$ 6 million), EBRD (US\$ 47 million) and others (US\$ 2 million). The SCCF Project will build on this initiative by engaging the stakeholder to this project with the view to involve them

into the development of the climate risk assessment as a basis for building coastal resilience to climate change and sustainability in the Port

Additional Information not well elaborated at PIF Stage:

A.7 Benefits. Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCAF/SCCF)?

There are no updates to the PIF yet as country consultations in Morocco and Montenegro are on-going.

A.8 Knowledge Management.

The final knowledge management strategy of the SCCF project reports will be defined in parallel with the development of the knowledge management strategy for the MedProgramme. A knowledge management specialist will be hired under the MedProgramme and the inputs from the regional and national stakeholders will be gathered during the preparation of the larger Programme.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Consistency with National Priorities. Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.:

These descriptions have been updated since the submission of the PIF to reflect the latest developments in the countries, except as noted where no new information was identified.

The governments of Albania, Algeria, Libya, Montenegro, Morocco and Tunisia have ratified several multi-lateral agreements, including: i) the Sustainable Development Goals (SDGs); ii) the Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP); iii) the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention); iv) the Convention on Biological Diversity (CBD); and v) the Ramsar Convention on Wetlands. Furthermore, all of these countries but Libya have ratified the Paris Agreement.

These international conventions provide frameworks that influence the policies, plans and strategies of signatory nations. Examples of national plans and strategies developed in the Mediterranean region as a result of the ratification of these conventions include i) the National Communications, National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs) under the UNFCCC; ii) national plans and strategies for integrated coastal zone management (ICZM) under the MAP and the Barcelona Convention; and iii) national strategies and action plans for sustainable development and sustainable consumption and production under the MAP. These national plans and strategies provide guidance for countries to reduce the effects of climate change, in general with a greater focus on mitigation rather than on adaptation. Therefore, there is a need to increase the countries' emphasis on adaptation to climate change, particularly using an ecosystem-based approach.

The Sustainable Development Goals (SDGs) were adopted in 2015 by countries with a common goal of ending poverty, protecting the planet, and ensuring prosperity for all as part of a new sustainable development agenda. There are 17 SDGs that are to be achieved by 2030. The goals relevant to the SCCF-financed project are:

- SDG 5 – Achieve gender equality and empower all women and girls, by ensuring equal participation of men and women in project activities;
- SDG 14 – Conserve and sustainably use the oceans, seas and marine resources for sustainable development ; and
- SDG 13 – Take urgent action to combat climate change and its impacts by taking current and future climate change scenarios into account during urban planning.

The SCCF-financed project will align with the Technology Needs Assessments (TNAs) that have been undertaken in Albania, Montenegro, Morocco and Tunisia. These TNAs are a set of country-driven activities that identify and

determine the priority needs of these countries in terms of mitigation and adaptation technologies of developing country parties. The project activities will build on the technology needs analyses and training material developed for the global TNA project.

In addition to these national initiatives, the SCCF-financed project is also fully aligned with the Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas.

The SCCF-financed project will support the objectives of these frameworks and policies by strengthening the capacity of local, national and regional authorities to mainstream climate change adaptation into national policies. In particular, the project will align with the national and local policies and strategies on climate change in each country as described below.

Albania

- The Third National Communication (NC3) (2016) sets forth Albania's GHG inventory for 2000-2009 (considering only the sectors of energy and industry), priority measures to reduce GHGs and to facilitate access to financing mechanisms, and an action plan for the adaptation of coastal areas to the effects of climate change. A vulnerability assessment and adaptation measures are also provided for the sectors of water, agriculture, livestock, forest, crops, biodiversity, tourism and population, and health.
- The National Adaptation Plan (NAP) (2016) has been prepared and climate change has been streamlined in a series of strategic policy documents, in the energy, water, transport, agriculture, forest, biodiversity and urban development sectors.
- Albania's Intended Nationally Determined Contribution (INDC) (2016) describes the country's commitment to reduce CO2 emissions by 11.5% compared to the baseline scenario between 2016 and 2030. Albania intends to sell carbon credits during the period until 2030 to contribute to cost-effective implementation of a low emission development pathway and sustainable development.
- The National Strategy for Development and Integration 2014 – 2020 (2014) presents Albania's strategy for attaining its vision for socio-economic development, in view of preparing the country for accession to the European Union. In addition to climate mitigation measures, the Strategy reflects considerations of climate change adaptation in the strategic priorities for the sectors of agriculture, water resources management, and health services. Also highlighted is the need for actions in support of integrated water resources management to reduce contamination of water resources and marine waters due to insufficient wastewater collection and treatment.
- The Albanian Strategy for Health Adaptation into the Climate Change Context 2011 – 2021 (2011) is designed to strengthen the ability of national health services to anticipate and respond to public health challenges arising from the impacts of climate change, with a particular focus on vulnerable groups. Ten strategic objectives are presented along with specific actions for their achievement, including those aimed at reinforcing monitoring of air pollution and emergency responses for natural disasters induced by climate change.
- The Action Plan for Reducing Vulnerability to Climate Change in Albanian Agricultural Systems (2012) provides an analysis of impacts of climate change on crops, livestock and water availability for agriculture and sets forth a menu of adaptation strategies for managing the risks associated with these impacts and for increasing climate resilience in the sector.

Algeria

- The Second National Communication (2010) provides the country's GHG inventory for the year 2000 in four priority sectors (energy; industry; agriculture, land use and forestry; and waste) as well as an analysis of vulnerability and adaptation that focuses chiefly on the impacts of climate change on water resources. Future water demands are predicted to 2050 and compared with anticipated water availability, and measures are proposed to enhance the country's capacity to devise appropriate adaptation strategies in response.
- Algeria's Intended Nationally Determined Contribution (INDC) (2015) documents the country's commitment to reduce GHG emissions by 7% to 22%, by 2030, compared to a business as usual scenario. The 7% GHG reduction will be achieved with national means. Algeria's mitigation strategy addresses the energy, forests, housing,

transport, industry and waste sectors. It is based in particular on the national programs for renewable energy and energy efficiency. The INDC sets forth the country's plan to develop in the near term its National Adaptation Plan with measures oriented towards the safeguarding of human populations, the preservations of natural resources and the protection of key infrastructure against the risks of extreme events.

- Algeria is currently preparing its National Adaptation Plan as referenced in its INDC. Prior to this, Algeria adopted a National Plan of Action and Adaptation to Climate Change (PNA-ACC) (2013) which outlines both climate change mitigation and adaptation policy measures including the promotion of renewable energy technologies, carbon sequestration, industrial emission reductions, reforestation and water system innovation.
- The legal framework for addressing climate change in Algeria is based on Law No. 04-09 relative to Renewable Energy Promotion in the Framework of Sustainable Development (2004) that codifies the country's goals to promote the domestic development of renewable energy sources, to curb climate change by limiting GHG emissions, and to encourage sustainable development via the conservation and preservation of fossil fuel resources.
- Algeria recently extended its National Plan of Actions for the Environment and Sustainable Development 2002 – 2011 to cover the period of 2016 – 2020. The updated action plan builds upon the previous programme of environmental initiatives and sets forth a new strategic framework with a number of objectives related to water resources including: improved access to potable water and a renewed focus on integrated water resources management; conservation of water through improved irrigation and use of treated wastewater for agriculture; and improved economic competitiveness for the water sector through responsible use of water resources.

Libya

To date, Libya does not have any climate change related laws, adaptation policies or strategies. Since the preparation of the PIF, there have been no major updates on the baseline situation in Libya regarding climate change and adaptation. As mentioned previously, Libya has signed but has not yet ratified the Paris Agreement.

Montenegro

- Montenegro's Second National Communication (NC2) (2015) provided substantial updates to previous versions of the chapters on national circumstances, national GHG inventories, policies and measures for climate change mitigation, vulnerability to climate change and steps taken to adapt to climate change impact, including raising awareness and building capacities on climate change issues. The NC2 recognizes the vulnerability of Montenegrin coasts to the effects of climate change – including increased flood risks resulting from sea level rise and extreme storm winds – and the need to establish local meteorological, hydrological and hydrographic observation programmes as a basis for risk assessment and for the development of a plan to mitigate the consequences of a changing climate.
- Montenegro's Intended Nationally Determined Contribution (INDC) (2015) documents the country's commitment to a 30% reduction in its GHG emissions by 2030 compared to the 1990 base year, through coordinated efforts across the sectors of energy, industry, agriculture and waste. The INDC development was guided by Montenegro's National Climate Change Strategy and its Energy Development Strategy by 2030.
- While Montenegro intends to prepare its National Adaptation Plan under the UNFCCC in the near future, no concrete measures in this regard have yet been undertaken.
- Montenegro's National Climate Change Strategy by 2030 (2015) documents the country's prioritized programmes and activities which, once implemented, will lead to significant reduction in GHG emissions, improved market competitiveness and other non-market benefits. The Strategy also details recommended adaptive measures for the sectors of water resources, agriculture, forestry, coastal areas and human health. Enhanced monitoring of hydrological and meteorological data as well as mapping of water resources are considered crucial to the strategy, as are measures to forecast the potential flooding risks associated with project sea level rise.
- The National Strategy with Action Plan for transposition, implementation and enforcement of the EU acquis on Environment and Climate Change 2016-2020 (2016) describes how Montenegro will gradually transpose the requirements of the EU acquis for Chapter 27 – Environment and Climate Change into its legal system, through 51 measures over a period of 42 months. In addition, the Strategy identifies measures to build human and institutional

capacities through technical and administrative trainings on climate change issues and on inspection skills that will be needed for the enforcement of environmental and climate change related regulations.

- The National Strategy for Sustainable Development by 2030 (2015) sets forth priorities and concrete actions for preservation of natural capital, development of the green economy, and for identification of financing mechanisms to support sustainable development, amongst others. A significant number of actions foreseen to preserve natural capital are focused on climate change adaptation and water resources management. These include the preparation of a National Plan for Adaptation to Climate Change (supported by local plans); construction of resilient coastal infrastructure; integration of climate change adaptation measures into water management systems; improvement of data sources to underpin integrated water resource management; and efficient control of surface and ground water pollution and improved networks for the monitoring of surface and groundwater quality.

Morocco

- Morocco's Third National Communication (NC3) (2016) provides a comprehensive analysis of the country's vulnerability to climate change and the adaptation measures it intends to take, as well as a study of measures and policies to mitigate climate change and an updated GHG inventory. Coastal areas and water resources are identified among the sectors that are most vulnerable to the effects of climate change and for which adaptation measures are proposed at the national level. In terms of adaptation in coastal areas, Morocco will rely on the National Strategy for Integrated Coastal Zone Management (ICZM) which is under preparation and on the local ICZM action plans, in addition to other national plans aimed at the specific thematic areas of biodiversity conservation and fisheries. Water resources will be conserved and protected through implementation of measures in Morocco's National Water Plan (2009) including improved irrigation infrastructure and water distribution systems as well as engagement with water users to encourage responsible use of water resources, and water-related risks will be reduced through the development of early warning systems for floods and the enhancement of hydrological models in flood prone areas.
- Morocco's First Nationally Determined Contribution (NDC1) (2016) details the country's commitment to reducing its GHG emissions by 42 % below business-as-usual (BAU) levels by 2030 through efforts to implement a set of 55 mitigation actions (of which 24 conditional and 31 unconditional) with an estimated cost of US\$ 49 billion. In addition, quantified goals for adaptation are provided for the sectors of agriculture, water, forests, fisheries and aquaculture, identified as the most vulnerable to climate change. Morocco estimates that between 2020 and 2030, the cost of implementation of adaptation projects for these sectors will amount at a minimum to US\$ 35 billion.
- Morocco's adopted a National Plan for Climate Change Adaptation (2016) and has initiated its implementation in three regions: Souss Massa, Béni Mellal-Khénifra and Drâa Tafilalet. This Plan will facilitate the uptake of best practices for climate change adaptation in six priority sectors: water, agriculture, forests, tourism, road infrastructures and human health.
- In 2009, Morocco released its National Plan against Global Warming, designed to reduce greenhouse gas emissions through the development and diversification of clean energy sources and the implementation of adaptation measures that rely mainly on its Strategy for Water and the Green Morocco Plan for Agriculture. A wide range of adaptation tools have been incorporated in Morocco's sectoral adaptation strategies, such as in the water sector, agriculture, forestry, protection of biodiversity and the fight against desertification, housing, fisheries and coastal management, health and tourism.
- Morocco's Constitution (2011) recognizes that sustainable development is a right for all citizens and elaborated upon this in the National Charter for Environment and Sustainable Development (2012). A Framework Law was enacted in 2014 that gives a legal basis to the Charter and explicitly mentions the fight against climate change and calls for strengthening capacities to promote adaptation to climate change.
- Most recently in 2017, Morocco operationalized its commitments to sustainable development through its adoption of the National Strategy on Sustainable Development. The Strategy's overarching goal is to move the country towards a green and inclusive economy by 2020, recognizing that this transition will require sound management and protection of natural resources and an acceleration of the implementation of climate change policies, amongst other measures. Morocco's political will for this Strategy is strong: 75% of the foreseen actions will be financed through the country's national budget.

Tunisia

- Tunisia’s Second National Communication (NC2) (2014) provides a GHG inventory for the year 2000 from six sources (energy, industry, solvents, agriculture, land use change and forestry and waste) and recounts the progress made on climate change mitigation, notably through energy conservation and the early implementation of the Tunisian Solar Plan . In addition, the NC2 sets forth the results of vulnerability assessments prepared for various sectors, including water resources, ecosystems and agriculture as well as adaptation measures being implemented in support of the National Strategy on the Adaptation of the Agricultural Sector, Water Resources and Ecosystems (focusing on agro-ecosystems) to Climate Change and the Adaptation Strategy and Action Plan for Sea-level Rise for the Tunisian Coastline.
- Tunisia’s Intended Nationally Determined Contribution (INDC) (2015) documents the country’s commitment to reduce its greenhouse gas emissions across all sectors (energy; industrial processes; agriculture, forestry and other land use; waste) by 41% by 2030, relative to the base year 2010. Mitigation efforts are focused mainly on the energy sector where there is the greatest potential for reductions, with an associated estimated cost of US\$ 17.5 billion for the INDC’s implementation period of 2015 – 2030. In terms of adaptation measures, the INDC describes the actions Tunisia is taking in the sectors of water resources, the coast, agriculture, ecosystems, tourism and health. The cost of these adaptation measures is estimated at US\$ 1.9 billion.
- An initial National Adaptation Strategy was developed from 2005 to 2007 in the framework of Tunisian–German bilateral cooperation between the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Tunisian Ministry for Agriculture and Water Resources.
- Tunisia adopted its National Strategy on Climate Change (2012) with the goal of integrating climate change in the country’s development strategies. The strategy lists a series of adaptation and mitigation measures to be implemented in various sectors of the economy.
- Tunisia’s National Strategy and Action Plan on Adaptation of the Agricultural Sector, Water Resources and Ecosystems to Climate Change (2007) is centered on three axes: (i) overcoming short term crisis management through a risk adaptation strategy linked to climate change (ii) integrating climatic volatility within agricultural and economic policies, and (iii) managing in an integrated sectoral approach the socio-economic consequences set to impact the agricultural sector.
- The Sea-level Rise Adaptation Strategy for the Tunisian Coastline (2007) and its action plan documents how Tunisia is responding to sea-level rise, including efforts to reinforce sea-level rise surveillance and monitoring; technical measures for restoring degraded coasts; preservation of coastal water resources, ecosystems and fisheries; and protection of coastal infrastructure.
- The Tunisian Constitution (2014) includes an article that expressly refers to climate change and the environment, guaranteeing the rights of its citizens to live in a safe environment and participate to the fight against climate change. To be provided by Matthew

The MSP will adhere to the priorities set forth by the countries in their National strategies and action plans for the implementation of the provisions of relevant conventions – Barcelona Convention and ICZM protocol and will implement SAP MED and SAP BIO priority actions. Also, activities relevant to the implementation of the Regional Climate Change Adaptation Framework and development and implementation of National Adaptation Plans will be one of the priorities for participating countries.

C. DESCRIBE THE BUDGETED M &E PLAN:

The M&E budget is presented in the table below.

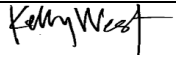
Type of M&E activity	Responsible parties	Budget US \$ (excluding project team staff time)	Time-frame
Inception workshop and report	<ul style="list-style-type: none"> • PM • UNEP Task Manager 	Cost: US\$9,000	Within first three months of project start up

	(TM)		
PIR	<ul style="list-style-type: none"> • PM • UNEP TM • M&E Specialist 	None. Financial audit records to be provided for PSC review	Annually
Progress reports	<ul style="list-style-type: none"> • PM • UNEP TM 	None	Quarterly
Project Steering Committee meetings	<ul style="list-style-type: none"> • PSC • PM • UNEP TM 	3 x US\$7,000 = US\$21,000	Annually
Independent terminal evaluation	<ul style="list-style-type: none"> • UNEP Evaluation Office 	Cost: US\$35,000	At least three months before the end of project implementation
TOTAL indicative COST Excluding project team staff time and UNEP staff and travel expenses	<ul style="list-style-type: none"> • Estimated Cost: US\$40,000 		

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies³² and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Kelly West, Senior Programme Manager & Global Environment Facility Coordinator Corporate Services Division UN Environment		November 14, 2017	Jessica Troni, Senior Programme Officer Adaptation Portfolio Manager Climate Change Adaptation Unit, Ecosystems Division	+254- 20-762- 3794	Jessica.Troni@unep.org

³² GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

The project results framework is to be defined and validated following country consultations in Q1 2018.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

No GEF, Council or STAP comments were received.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS³³

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF:			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF/CBIT Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
International Consultant	20,000	0	20,000
Travel to countries	17,000	0	17,000
National Meetings/ Workshops	13,000	0	13,000
Total	50,000	0	50,000

³³ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

N/A