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**Mediterranean Action Plan Coordinating Unit
Barcelona Convention Secretariat**



**United Nations
Environment Programme**

Date: 5 February 2019

Subject: In-kind contribution to the GEF ID 9684 project “Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts.” – Child Project 1.1 of the MedProgramme.

In my capacity as Coordinator of the Barcelona Convention Secretariat, Coordinating Unit for the Mediterranean Action Plan (UN Environment/MAP), I wish to confirm that UN Environment/MAP will coordinate the execution of the child project of the MedProgramme “Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts” which will contribute to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas.

I am hereby pleased to confirm that UN Environment/MAP will support the project with an in-kind contribution of 386,032 USD which will be allocated over the 60 months of the project duration starting from its approval by the GEF Secretariat. The in-kind contribution will be allocated as follows:

- 381,032 USD: Staff time in support of the project (Management of the Barcelona Convention Secretariat, Coordinating Unit for the Mediterranean Action Plan, Programme Officer and Monitoring & Assessment Officer of MED POL, Administration/Fund Management Officer, Human Resources Officer and Administrative Staff);
- 5,000 USD: In-kind contribution for Sundry and communication costs.

Yours sincerely,

Gaetano Leone
Coordinator

GEF Coordination Office
United Nations Environment Programme (UNEP)
United Nations Avenue
P O Box 30552-00100

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)

Ref.: 1821/19/ELC/SD
Followed by: Jean-Pierre GIRAUD

Marseille, 18/02/2019

Subject: **Co-financing contribution from Plan Bleu for Child Project 1.1 of the MedProgramme**

Dear Ms. Ishii,

I wish to reiterate Plan Bleu's interest in and support to the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). The Plan Bleu is committed to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, especially those of Child Project 1.1.

Co-financing for Child Project 1.1

Child Project 1.1 is devoted to "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts". As a co-executing agency of this Child Project, the Plan Bleu will undertake activities on the socio-economic status and trends for the Transboundary Diagnostic Analysis (TDA). More specifically, the Plan Bleu will develop this part of the TDA in relation with the State of the Environment and Development Report (SoED) 2019, the MED 2050 Foresight Study on the Environment and Development in the Mediterranean and the Horizon 2020 Assessment (in the framework of the Shared Environmental Information System/SEIS project).

To inform and reinforce the activities foreseen in Child Project 1.1, the Plan Bleu will bring an important set of data and knowledge generated from several complementary initiatives, including the following:

- H2020 - Shared Environmental Information System (SEIS) principles and practices in the ENP South region – SEIS Support Mechanism Phase I: 2010-2015
- H2020 - Shared Environmental Information System (SEIS) principles and practices in the ENP South region – SEIS Support Mechanism Phase II: 2016-2020
- MAVA/ "A blue economy for a healthy Mediterranean": 2015-2017

The value of all related complementary initiatives, staff time and institutional support is estimated at USD 542,000, which represents the Plan Bleu's in-kind co-financing to Child Project 1.1.

Yours sincerely,



Elen Lemaitre-Curri
Director

الجمهورية الجزائرية الديمقراطية الشعبية

République Algérienne Démocratique et Populaire

Ministère de l'Environnement
et des Energies Renouvelables

وزارة البيئة
والطاقات المتجددة

Ref : 32 / IGE / 2018

Ms. Naoko Ishii

17 DEC 2018

Chief Executive Officer and Chairperson
Global Environment Facility (GEF)

Subject: Co-financing contribution from Algeria for Child Project 1.1 of the MedProgramme

Dear Ms. Ishii,

The Ministry of Environment and Renewable Energies welcomes the forthcoming collaboration between the Government of Algeria and the GEF in the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Algeria in support of Child Project 1.1. In keeping with the GEF's policy on co-financing, the Government of Algeria will contribute to the successful implementation of this Child Project (PCBs Elimination/ Mercury) through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

Child Project 1.1 is primarily devoted to the reduction of pollution from POPs and mercury, with a complementary action to update the transboundary diagnostic analysis (TDA) for the Mediterranean Sea. The pollution reduction measures for this project – which include actions for both disposal and prevention – will be implemented in a two-phase process, with final decisions on the national activities for each phase to be taken by the Project Steering Committee at the appropriate stage of implementation. The national activities identified for Algeria during the project preparation phase include an inventory of transformers suspected of contamination by PCBs and the potential disposal of up to 1,968 tons of PCBs and 17 tons of metallic mercury from the coastal region. Algeria will also participate in the regional activity on the update of the TDA and in efforts intended to improve the integration and sharing of monitoring and research data across the region. Algeria will also participate in the regional activity on updating the TDA and efforts to improve the integration and sharing of surveillance and research data in the region.

The Algerian government will support activities related to the elimination of in-kind PCBs that may include, coordination, issuance of autorisation and access to sites, provision of information, supervision, safeguarding of equipment, transportation according to possibility , possible help

with repackaging (personal supply, etc.) and a project related to the control of industrial pollution.

These activities will also benefit from the dedicated technical assistance of the Algerian National Center for Clean Technology Production and its regional center of the Stockholm Convention, as well as the construction of a regional forum on the updating of the TDA: sharing of monitoring data, relevant socio-economic information,... In addition, the pollution prevention activities of the Enfant 1.1 nouveau project will build on a significant set of initiatives implemented by the Algerian government to support the sound management and safe disposal of chemicals and wastes. . These initiatives include:

- National initiatives on POPs management, mercury.
- Any project not funded by the GEF on the management / clearance of POPs / mercury.

The value of all related in-kind support and complementary initiatives is estimated at **22, 352,977 USD**, which represents the in-kind co-financing contribution of the Government of Algeria to Child Project 1.1.

We would like to take this opportunity to request that the execution by UNEP/MAP through MED POL of national activities of Algeria on POPs and Mercury as well as the update of the Transboundary Diagnostic Analysis for the Mediterranean Sea be conducted in full coordination with our Ministry who work closely with the competent authorities.

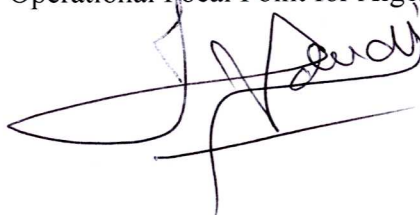
Algeria is one of the Contracting Parties to the Barcelona Convention, and as such we have benefitted from a longstanding and successful collaboration with UNEP/MAP and MED POL. This institutional arrangement provides a strong regional framework for the successful completion of the Child Project, as well as the technical knowledge, guidance and capacity to successfully execute the Project, as agreed, in the framework of the Barcelona Convention Protocols for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities and of the Programme of Work on the Mediterranean Action Plan. We are confident that this approach would be most effective to execute Child Project 1.1 of the MedProgramme and to support [Country] in efforts to achieve the Child Project's ambitious objective.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

Ms.Samira HAMIDI

GEF Operational Focal Point for Algeria

A handwritten signature in black ink, appearing to read 'S. Hamidi', is written over a horizontal line. The signature is stylized and cursive.



REPUBLIC OF LEBANON
MINISTRY OF ENVIRONMENT

THE MINISTER

Beirut, 12-02-2019
Our ref: 785/B

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)
1899 Pennsylvania Ave NW, Washington, DC 20006, USA

Subject: Co-financing contribution from Lebanon for Child Project 1.1 of the MedProgramme

Dear Ms. Ishii,

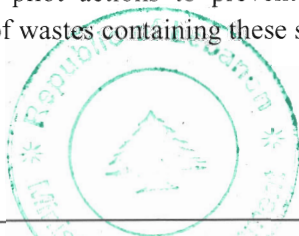
The Ministry of Environment welcomes the forthcoming collaboration between the Government of Lebanon and the GEF in the “Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security” (GEF ID 9607).

We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Lebanon in support of Child Project 1.1.

In keeping with the GEF’s policy on co-financing, the Government of Lebanon will contribute to the successful implementation of this Child Project through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

Child Project 1.1 is primarily devoted to the reduction of pollution from POPs and mercury, with a complementary action to update the transboundary diagnostic analysis (TDA) for the Mediterranean Sea. The pollution reduction measures for this project – which include actions for both prevention and disposal – will be implemented in a two-phase process, with final decisions on the national activities for each phase to be taken by the Project Steering Committee at the appropriate stage of implementation. The national activities identified for Lebanon during the project preparation phase include the disposal of up to 1,050 tons of PCBs, the de-chlorination of 126 tons of PCBs contaminated oil, priority remediation actions and pilot actions to prevent the future consumption of mercury and certain POPs and the generation of wastes containing these substances.



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REPUBLIC OF LEBANON
MINISTRY OF ENVIRONMENT

The Government of Lebanon will support these national and regional activities. For the national activities through the coordination, facilitation of issuance of permits and access to sites, provision of information, supervision, safeguarding of equipment, possible centralization/transport and potential assistance with repackaging (i.e., provision of equipment and staff, etc.). Whereas for the regional activity on the TDA update through the share of monitoring data and relevant socioeconomic information to update the baseline situation.

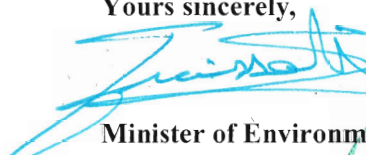
Furthermore, the pollution prevention activities of Child Project 1.1 will build upon and benefit from an important set of initiatives implemented by the Government of Lebanon to support the sound management and safe disposal of harmful chemicals and wastes. These initiatives include the following:

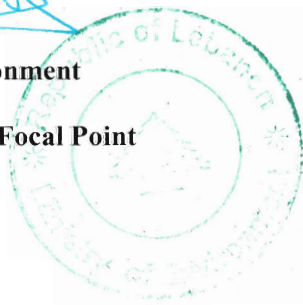
- National initiatives on the management of POPs/mercury.
- Any non-GEF funded projects on POPs/mercury management/remediation of POPs/mercury contaminated sites.

The value of all related in-kind support and complementary initiatives is estimated at USD 185,059,000, which represents the in-kind co-financing contribution of the Government of Lebanon to Child Project 1.1.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,


Minister of Environment
Fady Jreissati
GEF Operational Focal Point



Enclosed:

Annex 1: Co-financing for Child Project 1.1*

- c.c:** Mr. Gaetano Leone - Coordinator of the UN Environment Mediterranean Action Plan-Barcelona Convention Secretariat.
Ministry of Environment: Service of Natural Resources.
Ministry of Environment: Service of Environmental Technology.
Ministry of Environment: Registry-Department of Public Relations and External Affairs.
Ministry of Environment: Service of Urban Environment-Department of Urban Environmental Protection..



التاريخ: / / 143
الموافق: 22 / 11 / 2018

الرقم الإشاري: _____

Draft co-financing letter for the State of Libya

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)

Subject: Co-financing contribution from the State of Libya for Child Projects 1.1 and 3.1 of the MedProgramme

Dear Ms. Ishii,

The Environment General Authority welcomes the forthcoming collaboration between the State of Libya and the GEF in the “Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security” (GEF ID 9607). We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in the context of Child Projects 1.1 and 3.1. In keeping with the GEF’s policy on co-financing, the State of Libya will contribute to the successful implementation of these Child Projects through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

The value of all related in-kind support and complementary initiatives is estimated at 1.3 million USD, which represents the in-kind co-financing contribution of the State of Libya to Child Project 1.1.

Co-financing for Child Project 3.1

Child Project 3.1 is devoted exclusively to management support and expansion of Marine Protected Areas (MPAs) in Libya. The activities that will be undertaken in Libya in this context include the establishment of a governance structure for MPAs, a national inventory of marine and coastal sites of conservation interest, the creation of on-site MPA management units and management plans, capacity building on the governance and management of MPAs, and awareness raising campaigns on the value and importance of MPAs in Libya, amongst other activities. The State of Libya will support these activities through the time of its staff, the provision of relevant data, coordination with relevant institutions and Ministries and logistic support. In addition, activities of Child Project 3.1 will build upon and contribute to any complementary initiatives implemented by the State of Libya, which related to protection of marine areas, assessments of marine and coastal biodiversity, governance of natural resources, etc.}





التاريخ : / / 143
الموافق : / / 201

الرقم الإشاري : _____

The value of all related in-kind support and complementary initiatives is estimated at 2.5 million USD, which represents the in-kind co-financing contribution of the State of Libya to Child Project 3.1.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

M. Soliman

GEF Operational Focal Point for the State of Libya





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20 DEC. 2018

To Madame Naoko Ishii
CEO and Chairperson of Global Environment Facility

Subject: Co-financing commitment from the Kingdom of Morocco for Child Projects 1.1 and 2.2 of the Mediterranean Sea Programme: Enhancing Environmental Security" (GEF ID9607)

Dear Ms. Ishii,

The Secretariat of State in Charge of Sustainable Development welcomes the forthcoming collaboration between the Kingdom of Morocco and the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security". We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Morocco in support of Child Projects 1.1 and 2.2. In keeping with the GEF's policy on co-financing, the Kingdom of Morocco will contribute to the successful implementation of these Child Projects through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

Child Project 1.1 is primarily devoted to the reduction of pollution from POPs and mercury, with a complementary regional action to update the transboundary diagnostic analysis (TDA) for the Mediterranean Sea. The pollution reduction measures for this project – which include actions for both disposal and prevention – will be implemented in a two-phase process, with final decisions on the national activities for each phase to be taken by the Project Steering Committee at the appropriate stage of implementation.

The national activities identified for Morocco during the project preparation phase include the potential inventory and disposal of 32 tons of POPs wastes, the potential disposal of 2 tons of metallic mercury and pilot actions to prevent the future consumption of certain POPs and the generation of new POPs wastes. Morocco will also participate in the regional activity on the update of the TDA and in efforts intended to improve the integration and sharing of monitoring and research data across the region. The Kingdom of Morocco will support these activities through Coordination, facilitation of issuance of permits and access to sites, provision of information, supervision, safeguarding of equipment, possible centralization/transport, potential assistance with repackaging (i.e., provision of equipment and staff, etc.), and sharing of monitoring data, relevant socioeconomic information to update the baseline situation.

Furthermore, the pollution prevention activities of Child Project 1.1 will build upon and benefit from an important set of initiatives implemented by the Kingdom of Morocco, including the private sector, to support the sound management and safe disposal of harmful chemicals and wastes. These initiatives include among others the National Solid Waste Program (PNDM); the Updated National Implementation Plans (NIPs) for Stockholm Convention and the National MedPol Programme.

The value of all related support and complementary initiatives is estimated at USD 8 million, which represents the in-kind co-financing contribution of the Kingdom of Morocco to Child Project 1.1.

We would like also, in context of the Child Project 1.1 to take this opportunity to request that the execution by UNEP/MAP through MED POL of national activities of Morocco on POPs and Mercury as well as the update of the Transboundary Diagnostic Analysis for the Mediterranean Sea be conducted in full coordination with our Ministry and competent authorities. Morocco is one of the Contracting Parties to the Barcelona Convention, and as such we have benefitted from a longstanding and successful collaboration with UNEP/MAP and MED POL. This institutional arrangement provides a strong regional framework for the successful completion of the Child Project, as well as the technical knowledge, guidance and capacity to successfully execute the Project, as agreed, in the framework of the Barcelona Convention Protocols for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities and of the Programme of Work on the Mediterranean Action Plan. We are confident that this approach would be most effective to execute Child Project 1.1 of the MedProgramme and to support Morocco in efforts to achieve the Child Project's ambitious objective.

Co-financing for Child Project 2.2

Child Project 2.2 will foster water, food and energy security and the reduction of land-based nutrient pollution and other pressures, through the adoption of the water-food-energy-ecosystems nexus approach. The interventions in Morocco foreseen in this project include demonstration activities to build capacity and to test the effectiveness of the nexus approach in the relevant institutional settings, which will then feed into the development of a nexus strategy and action plan for a priority coastal area in the country. The Kingdom of Morocco will support these activities through the time of its staff, the provision of relevant data, coordination with relevant institutions and Ministries and logistic support.

Furthermore, a number of complementary initiatives in Morocco will produce knowledge and tools that can contribute to the activities of Child Project 2.2, including the Nexus Regional Dialogues (NRD) with UpM and Arab Countries League (2019-2022), The national agricultural plan (Plan Maroc Vert), Project on Promotion of Energy Efficiency in Agriculture in Morocco (2016-2020) with GIZ, ongoing project case studies "The Role of the Water-Energy-Food Nexus in Implementing the SDGs in Morocco" with cooperation of Texas University, National Rural Wastewater Programme (PNAR), National Project addressing integrated water resources management, agricultural practices, ecosystem services and the sectorial activities for implementing the Action Plans Of Sustainable Development in Water, energy and Agriculture.

The value of all related support and complementary initiatives is estimated at USD 6.5 million, which represents the in-kind co-financing contribution of the Kingdom of Morocco to Child Project 2.2.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

The GEF Operational Focal Point

Directeur du Partenariat, de la
Communication et de la Coopération

Rachid FIRADI

REPUBLIC OF TUNISIA
—0—
**MINISTRY OF LOCAL AFFAIRS
AND ENVIRONMENT**

13 MARS 2019

- 2450

Tunis:.....

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)

Subject: Co-financing contribution from Tunisia for Child Project 1.1 of the MedProgramme.

The Ministry of Local Affairs and Environment welcomes the forthcoming collaboration between the Government of Tunisia and the GEF in the “Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security” (GEF ID 9607). We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Tunisia in support of Child Project 1.1. In keeping with the GEF’s policy on co-financing, the Government of Tunisia will contribute to the successful implementation of this Child Project through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

Child Project 1.1 is primarily devoted to the reduction of pollution from POPs and mercury, with a complementary action to update the transboundary diagnostic analysis (TDA) for the Mediterranean Sea. The pollution reduction measures for this project – which include actions for both disposal and prevention – will be implemented in a two-phase process, with final decisions on the national activities for each phase to be taken by the Project Steering Committee at the appropriate stage of implementation. Tunisia will also participate in the regional activity on the update of the TDA and in efforts intended to improve the integration and sharing of monitoring and research data across the region. The Government of Tunisia will support these national and regional activities through coordination, facilitation of issuance of permits and access to sites, provision of information, supervision, safeguarding of equipment, possible centralization/transport, potential assistance with repackaging (i.e., provision of equipment and staff, etc.). Furthermore, the activities of Child Project 1.1 will build upon and benefit from an important set of initiatives implemented by the Government of Tunisia and the private sector, as appropriate to support the sound management and safe disposal of harmful chemicals and wastes. These initiatives include the following:

- Development of contaminated sites monitoring network (50,000 USD).
- Implementation of national hazardous chemicals database including POPs (100,000 USD).
- Implementation of database on monitoring of hazardous waste management authorized companies (50,000 USD).
- Elaboration of 2020 strategy on hazardous waste management (50,000 USD).
- Implementation of national data base on national hazardous waste inventory (90,000 USD).
- Review of the hazardous waste list (15,000 USD).

- Project of rehabilitation of the hazardous waste treatment center of Jradou and transfert centers of Sfax and Gabès (100,000 USD dedicated to wastes containing POPs and mercury).
- Project of rehabilitation and decontamination of the pulp paper plant of Kasserine (National budget: 1,000,000 USD).
- Elaboration of decree on POPs management in Tunisia (50,000 USD).
- Elaboration of national communication awareness plan on the risks of chemicals (20,000 USD).
- Elaboration of a draft law on the harmonized general system for the labeling and classification of chemicals (15,000 USD).

For the regional activity on the TDA update, the Government of Tunisia will support the project activities through sharing of monitoring data and relevant socioeconomic information to update the baseline situation.

The value of all related in-kind support and complementary initiatives is estimated to USD 1,490,000 which represents the in-kind co-financing contribution of the Government of Tunisia to Child Project 1.1.

We would also like to take this opportunity to request that the execution by UNEP/MAP through MED POL of national activities of Tunisia on POPs and Mercury as well as the update of the Transboundary Diagnostic Analysis for the Mediterranean Sea be conducted in full coordination with our Ministry and competent authorities. Tunisia is one of the Contracting Parties to the Barcelona Convention, and as such we have benefitted from a longstanding and successful collaboration with UNEP/MAP and MED POL. This institutional arrangement provides a strong regional framework for the successful completion of the Child Project, as well as the technical knowledge, guidance and capacity to successfully execute the Project, as agreed, in the framework of the Barcelona Convention Protocols for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities and of the Programme of Work on the Mediterranean Action Plan. We are confident that this approach would be most effective to execute Child Project 1.1 of the MedProgramme and to support Tunisia in its efforts to achieve the Child Project's ambitious objective.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,


**Le Ministre des Affaires Locales
et de l'Environnement**

Mokhtar HAMMAMI

Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC)

Sant Pau Recinte Modernista. Pavelló de Nostra Senyora de la Mercè
Carrer de Sant Antoni Maria Claret, 167.

08025 Barcelona, Catalunya (Spain)

Tél. +34 93 553 87 90 - Fax +34 93 882 36 37

www.scprac.org

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)

Subject: Co-financing contribution from SCP/RAC for MedProgramme Child Project 1.1 - Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts

Dear Ms Ishii,

I wish to confirm SCP/RAC's interest in and support to the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607) and in particular to its Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts".

We look forward to our collaboration with the GEF in the context of this project which will substantially contribute to the implementation of the Stockholm Convention and the LBS Protocol of the Barcelona Convention. The Regional Action Plan on Sustainable Consumption and Production in the Mediterranean, under the LBS Protocol, and adopted by the Contracting Parties in 2016 identifies a number of actions related to the reduction, substitution and prevention of hazardous chemicals that are fully in line with activities of Child Project 1.1. to be developed by SCP/RAC.

SCP/RAC will execute the activities of Child Project 1.1 on reduction, substitution and prevention of POPs and mercury in at least four countries of the Mediterranean basin. The results of these activities will be disseminated throughout the Mediterranean and opportunities will be sought to promote their visibility and use within the Region and beyond, including through the mechanisms of the Stockholm Convention (SCP/RAC is a Regional Centre for Spain under that Convention).

I am pleased to inform you that SCP/RAC will support the Project activities with an in-kind contribution of 4,075,718 USD that will be allocated in the following way:

- SwitchMed I Policy Component (EU): 1,418,367 USD;
- SwitchMed II activities under OUTCOME II - Enabling environment for a Resource Efficient and a Circular Economy created at regional and national level: 996,569 USD;
- Activities under the "SWIM and H2020 Supporting Mechanisms" project: 237,473 USD;

Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC)

Sant Pau Recinte Modernista. Pavelló de Nostra Senyora de la Mercè

Carrer de Sant Antoni Maria Claret, 167.

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www.scprac.org

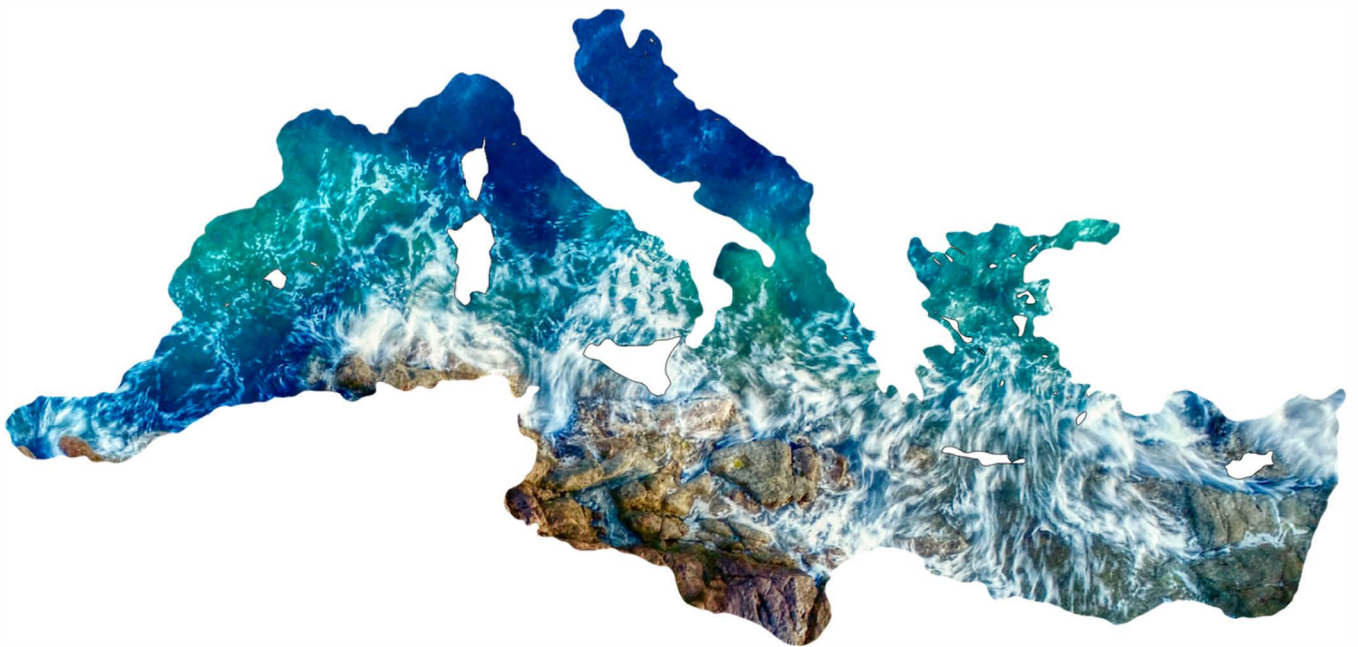
- Activities supporting the implementation of the Regional Action Plan on Sustainable Consumption and Production in the Mediterranean, based on the 2018-2019 Mediterranean Action Plan Programme of Work and the current estimation for the period 2020-2024: 855,291 USD;
- Activities with the Secretariat of the Basel, Rotterdam and Stockholm Conventions (prevision for 2019): 88,540 USD; and
- Programme, administrative and finance staff time: 479,478 USD (Mediterranean Trust Fund 2018-219 and the current estimated amount for the period 2020-2024).

With kindest regards,

Josep Maria Tost i Borràs

KNOWLEDGE MANAGEMENT(KM) STRATEGY

GEF/UN Environment
“Mediterranean Sea Programme (MedProgramme)
Enhancing Environmental Security”
(2019- 2024)



*The strategy was developed in the framework of the
Project Preparation Grant (PPG) of the MedProgramme by Lucilla Minelli,
UN Environment/Mediterranean Action Plan (MAP) consultant.
June-October 2018*

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1. Overview and background

1.1 Purpose

The purpose of the present Knowledge Management (KM) strategy¹ is to offer a structured and integrated approach to leverage and systematically share knowledge assets generated by the Child Projects of the MedProgramme with the intended beneficiaries and audiences. In doing so, the strategy aims to maximize the MedProgramme's impact by: strengthening operational coherence; harnessing synergies and pooling resources, including time; inform policy makers and key stakeholders about the MedProgramme (its activities, needs, outputs, meetings, results, etc.) and of the benefits arising from the Programme interventions. It will also contribute to the objectives of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention), the Minamata Convention on Mercury and the Stockholm Convention on Persistent Organic Pollutants by fostering a broader culture of learning, cooperation and environmental sustainability in the region.

1.2 Context

The present KM strategy is designed to support the implementation of the GEF/UN Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (2019- 2024)². The MedProgramme represents the first GEF programmatic multi-focal area initiative in the Mediterranean Sea aiming to operationalize priority actions to reduce major transboundary environmental stresses in its coastal areas while strengthening climate resilience and water security and improving the health and livelihoods of coastal populations. The MedProgramme is implemented in nine beneficiary countries sharing the Mediterranean basin: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. Its eight Child Projects³ cut across four different Focal Areas of the Global Environment Facility (International Waters [IW], Biodiversity [BD], Chemicals and Waste [CW], and Climate Change [CC]) and involve a wide spectrum of developmental and societal sectors, ranging from banking institutions, the private sector, governmental and non-governmental bodies, industry, research, media, and various other organizations. It builds on the MedPartnership and ClimVar & ICZM⁴ GEF projects which have enriched the knowledge on the Mediterranean environment and unraveled the implications of climate change and variability; strengthened countries' mutual trust, cooperation and common purpose; consolidated the partnership among countries,

¹ The strategy is illustrated in relevant sections of MedProgramme Child Project 4.1. The full document is annexed to individual MedProgramme Child Project documents to provide a harmonized and consistent reference across the entire portfolio of interventions.

² GEF Lead Implementing Agency: UN Environment. Other GEF Implementing Agency: European Bank for Reconstruction and Development (EBRD). Leading Executing Agency: UN Environment/MAP. Executing partners: UNESCO International Hydrological Programme (IHP), European Investment Bank (EIB), Global Water Partnership – Mediterranean (GWP-Med), WWF Mediterranean Programme Office (WWF MedPO), IUCN, Priority Actions Programme Regional Activity Centre (PAP/RAC), Plan Bleu Regional Activity Centre (Plan Bleu), Specially Protected Areas Regional Activity Centre (SPA/RAC) and the Sustainable Consumption and Production Regional Activity Centre (SCP/RAC).

³ At the time of its approval in October 2016, the MedProgramme was comprised of seven Child Projects. Subsequently, a Mediterranean climate change adaptation project was developed by UN Environment/MAP for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF Secretariat that this SCCF project would be managed for all intents and purposes as an additional Child Project of the MedProgramme. Hence the reference to eight Child Projects of the MedProgramme.

⁴ More info on MedPartnership, ClimVar and ICZM (Integration of climatic variability and change into national strategies to implement the ICZM Protocol in the Mediterranean) projects: <http://www.themedpartnership.org/>, <https://iwlearn.net/iw-projects/2600> and <https://iwlearn.net/iw-projects/3990>. Some partners to the MedPartnership developed a series of dedicated websites for their activities. For instance, PAP/RAC activities on MedPartnership can be found at: <https://pap-thecoastcentre.org/medpartnership> ; <https://pap-thecoastcentre.org/climvar/> and <https://pap-thecoastcentre.org/projects/>

UN bodies, civil society organizations, bilateral donors and the European Union (EU); and tested on the ground the feasibility and effectiveness of technical and policy instruments aimed at addressing major present and future threats to environmental sustainability and climate related impacts.

The Mediterranean countries have worked together with GEF IW support since the late 1990s to set priorities related to national, as well as transboundary environmental concerns (Transboundary diagnostic analysis [TDA] for the Mediterranean Sea⁵) and have jointly agreed on the interventions needed to address these priorities in two Strategic Action Programmes (SAPs): 1) The Strategic Action Programme to Address Pollution from Land-Based Activities (SAP-MED); and 2) the Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region (SAP-BIO).

Following the formal adoption by the Barcelona Convention of the SAP-MED and SAP-BIO (2005 and 2003), the Mediterranean countries translated the SAP priorities into National Action Plans (NAPs), and benefited from international support in moving towards on the ground implementation. The MedPartnership project (2010-2015) supported countries in the initial implementation of the SAPs and of the newly developed Protocol on Integrated Coastal Zone Management (ICZM), which was adopted in 2011.

More recently, the 2015 – 2016 update of the NAPs associated with the SAP-MED has succeeded in creating additional momentum at local, national and regional levels, with a remarkable level of involvement and participation of all stakeholders. In each country, national and local authorities, the industrial sector and Non-governmental Organizations (NGOs) discussed priorities, possible actions and opportunities for investment thus making the NAPs a realistic initiative. These significant achievements, while not yet bringing about measurable changes in the levels of environmental stress or in degradation trends, have however created the indispensable foundation and the enabling conditions for initiating national actions targeting major causes of marine and coastal transboundary degradation. To confront the challenge of implementation, to execute the SAPs and to reinforce implementation of the NAPs thereby achieving concrete and lasting results, are the *raison d'être* of MedProgramme.

The Barcelona Convention provides the policy framework under which the MedProgramme will operate and the UN Environment Mediterranean Action Plan (MAP) system will ultimately carry forward the legacy of the outcomes of the MedProgramme's Child Projects, and in particular of its knowledge management mechanisms, approaches and tools. The MAP Regional Activity Centers (RACs) will play a crucial role in sustaining and amplifying these efforts. Moreover, regular reporting to the Meeting of Contracting Parties to the Barcelona Convention on the progress made by the MedProgramme will be ensured through the UN Environment/Mediterranean Action Plan-Barcelona Convention Secretariat.

⁵ Transboundary diagnostic analysis (TDA) for the Mediterranean Sea, UNEP/MAP, 2005 - <https://wedocs.unep.org/bitstream/handle/20.500.11822/598/medtda.pdf?sequence=2&isAllowed=y>

Box 1 The Barcelona Convention and the MAP system

The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (referred to as the Barcelona Convention) is a regional convention adopted in 1976 to prevent and abate pollution from ships, aircraft and land-based sources in the Mediterranean Sea. It is developed under the UN Environment Regional Seas Programme which was established in 1974 with the scope of coordinating activities aimed at the protection of the marine environment through a regional approach. The Mediterranean Action Plan (MAP) was the first UN Environment initiative to be developed under the Programme and became the model for other seas across the globe. Since 1975, MAP has provided the institutional framework for cooperation in addressing common challenges of marine environmental degradation adopted by the Mediterranean States and the European Union.

There are 22 Contracting Parties (Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, the European Union, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, Turkey) and they decide on MAP strategies, budget and programme of work in pursuit of MAP's goal at their Ministerial level meetings, held every two years. They appoint Focal Points to review the progress of work and ensure the implementation of recommendations at the national level. A rotating Bureau of six representatives of the Contracting Parties guides and advises the MAP Secretariat (located in Athens) in the interim period between the biannual meetings.

More information on the Coordinating Unit for the Mediterranean Action Plan, Secretariat to the Barcelona Convention and its Protocols at: <http://web.unep.org/uneppmap/>.

The Minamata Convention on Mercury⁶, the Stockholm Convention on Persistent Organic Pollutants⁷, the Basel Convention⁸ and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activity (GPA)⁹ are also among the key guiding frameworks for the Child Projects focusing on reduction of land-based pollution (Component 1 of the MedProgramme).

In terms of knowledge management (KM), the MedProgramme holds a tremendous opportunity to generate new information and consciousness, encourage transboundary cooperation, scale up needed investments and raise general awareness about the benefits arising from good governance and management of natural resources in coastal areas.

The eight Child Projects (CP) of the MedProgramme are expected to deliver a set of complementary results embracing the categories of priorities identified by the TDA for the Mediterranean Sea which are translated into three components of the program: i) Reduction of Land-Based Pollution in Priority Coastal Hotspots and measuring progress to impacts; ii) Enhancing Sustainability and Climate Resilience in the Coastal Zone; and iii) Protecting Marine Biodiversity (see Table 2, MedProgramme Components, Child Projects and GEF Focal Areas, page 16).

⁶ The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury. It entered into force on 16 August 2017. More info: <http://www.mercuryconvention.org>

⁷ The Stockholm Convention on Persistent Organic Pollutants is an international environmental treaty, signed in 2001 and effective from May 2004, that aims to eliminate or restrict the production and use of persistent organic pollutants (POPs). More info: <http://chm.pops.int>

⁸ The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is an international treaty that was designed to reduce the movements of hazardous waste between nations, and specifically to prevent transfer of hazardous waste from developed to less developed countries (LDCs). The Convention was opened for signature on 22 March 1989 and entered into force on 5 May 1992. As of February 2018, 185 states and the European Union are parties to the Convention. More info: <http://www.basel.int>

⁹ The UNEP Global Programme of Action (UNEP/GPA) aims at preventing the degradation of the marine environment from land-based activities by facilitating the realization of the duty of States to preserve and protect the marine environment. It is unique in that it is the only global initiative directly addressing the connectivity between terrestrial, freshwater, coastal and marine ecosystems. More info: <https://www.unenvironment.org/nairobi-convention/unep-global-programme-action-uneppgpa>

The fourth component (Knowledge Management and Programme Coordination) includes Child Project 4.1 “Mediterranean Sea LME Environment and Climate Regional Support Project” which plays a key role within the MedProgramme as it “implements mechanisms for Programme-wide learning and dissemination of knowledge, monitoring the Programme’s progress to impacts, and fostering synergistic interactions among Child Projects”. Within the GEF programmatic approaches there is a need to ensure programme coherence and impact through coordination among diverse sets of multi-focal area Child Projects contributing to the same programme outcomes. A Support Project functions as a trait d’union (a common link) among Child Projects by providing overall coordination of the programme portfolio, resource-saving services, a robust system to managing knowledge effectively and a sound action plan for gender mainstreaming.

The present strategy provides the context and the boundaries within which KM will operate in the MedProgramme, essentially answering the strategic questions: where are we now? (baseline and project needs), what do we want to achieve? (vision and objectives), and how to get there? (framework for processes, tools, activities and governance).

The present strategy does not aim to provide a final definition of the tools, software and instruments that will be used to reach its goals. Although a wide range of them is considered and analysed, their selection will take place during the inception phase of the MedProgramme together with its stakeholders (countries and executing partners). This process will be driven by the specific needs of the stakeholders and will follow a competitive process for selection ensuring an efficient use of resources.

1.3 Where are we? (Baseline Scenario)

A baseline scenario in the context of this strategy was built through a detailed scanning of existing initiatives related to KM and the objectives of the MedProgramme, and a survey addressed to project designers aimed at diagnosing needs and expectations related to KM and outreach of Child Projects.

The overview of regional (and global when relevant) initiatives on knowledge/ information management focusing on pollution reduction, biodiversity, water resources (fresh water and marine) and climate change revealed that there is a great potential for cross-fertilization and incremental innovation. At the same time, the analysis brought to light some challenges, such as fragmentation, the inability of some projects to sustain their results, insufficient resources or attention devoted to KM approaches, gaps in information sharing, among others, which point to the need to clearly address these challenges at the onset of the MedProgramme.

The responses to the web-based survey served to inform the design of the strategy and its levels, in terms of target audiences, objectives, tools and activities.

1.4 What do we want to achieve? (KM Vision and Objectives)

The MedProgramme strives to become a knowledge hub in the Mediterranean region to scale up successful practices, encourage broader adoption, promote knowledge sharing and support the common objectives of the parties to the Barcelona Convention.

In this effort, it also pioneers a new integrated KM methodology for GEF-financed programs in line with GEF programmatic approaches. The strategy puts in place a framework that will underpin and guide the MedProgramme knowledge-sharing activities and support the achievement of the programme outcome(s), reflecting the complexity of its portfolio while ensuring that its findings are effectively translated, shared and delivered to the intended audiences.

The strategy aims to maximize the MedProgramme impact by (the KM strategy objectives):

- Strengthening coordination and operational coherence among Child Projects and their partners;
- Monitoring the execution of the activities under the entire Programme to assess progress to impact;
- Leveraging and systematically sharing knowledge assets generated by the Child Projects with the intended beneficiaries and audiences;
- Strengthening the science-policy interface (SPI) and influencing decision making through data and information sharing, capacity building, and regional stakeholder engagement;
- Supporting the objectives of the Barcelona Convention and the work of the MAP system through effective stocktaking and scaling up of programme results; and
- Fostering incremental innovation within GEF programmatic approaches and enriching the knowledge base of GEF Implementing and Executing Agencies.

1.5 How to get there?

In order to achieve this vision and related objectives, three interconnected functional levels¹⁰ have been identified to articulate the KM strategy:

1. at the **PORTFOLIO LEVEL** to support the work of project managers and executing partners by providing project management tools and training to key regional stakeholders;
2. at the **GENERAL PUBLIC LEVEL** to share results, inform and influence target audiences by reaching out to and engaging with civil society, media, and representatives of non-scientific community;
3. at the **POLICY and DECISION-MAKING LEVEL** to support the Contracting Parties of the Barcelona Convention, relevant decision makers in the region and the work of GEF Implementing and Executing Agencies by contributing to relevant regional policy processes and related GEF initiatives (particularly the IW:LEARN project).

Organizational coherence and strong synergies among MedProgramme Child Projects are considered critical to sustain effective knowledge sharing and ensure the successful achievement of the KM objectives. Careful consideration was given to the different types of knowledge that will be generated throughout the lifespan of the programme to ensure that intangible assets (tacit knowledge, intended as human and intellectual capital) as well as technical and codified information (explicit knowledge) are properly valued and managed.

1.6 Methodology

The strategy was prepared during the period June - September 2018 in the framework of the Project Preparation Grant (PPG) phase of the MedProgramme (October 2017- December 2018) in close coordination with the senior staff of the UN Environment/Mediterranean Action Plan Secretariat. It is based on the analysis of the Program Framework Document (PFD) of the MedProgramme¹¹ various background documentation (including the Report from the First Regional Consultation held on 7-8 March 2018 in Athens which confirmed the decision of the countries to prepare a KM strategy), the results of a dedicated online survey, exchanges

¹⁰ Activities and tools outlined in this strategy contribute to one or more of these operational levels.

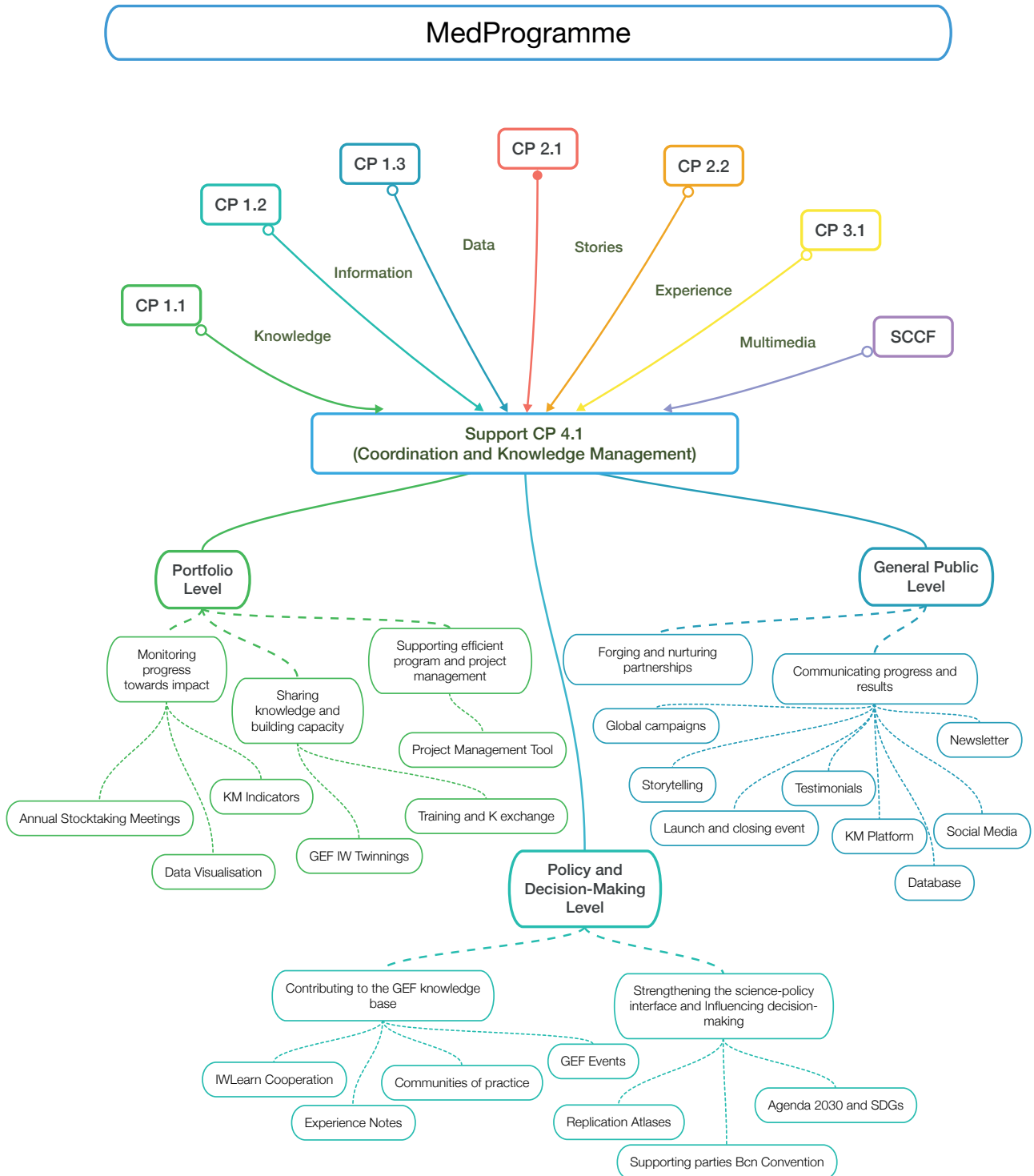
¹¹ The Program Framework Document (PFD) was approved by the GEF Council on 26 October 2016. More info: <https://www.thegef.org/project/mediterranean-sea-programme-medprogramme-enhancing-environmental-securitynairobiconvention/unep-global-programme-action-uneppga>

with project designers (with in-depth review of available drafts of Child Project documents), desk research, contact with relevant technical counterparts (i.e. for project management tool, visualization, etc). Further inputs were collected during the Second Regional Consultations for the MedProgramme held on 20 and 21 September 2018 at UNESCO HQ in Paris. Moreover, the design of the strategy took into account lessons learned from the predecessor project of the MedProgramme, the MedPartnership Project. The approach illustrated in the present strategy will be operationalized during the MedProgramme inception phase in 2019.

1.7 Implementation

The overall KM strategy is built within the MedProgramme Support Child Project 4.1 and executed by the MedProgramme Coordinating Unit (MedPCU) in close coordination with all Child Projects. Outcomes and outputs of Child Project 4.1 are closely aligned with the present strategy, which, in addition to the logframe in the project document, also envisions actions to be possibly undertaken in the course of the execution of the Programme. The final detailed list of tools, activities and initiatives (and their costs) will be validated during the MedProgramme inception phase and fully agreed with the countries, executing partners and stakeholders of the Programme.

Fig. 1 Knowledge production, management and dissemination in the MedProgramme



2. Baseline scenario and projects needs

2.1 Overview of regional KM initiatives

“ Connection, not collection: that’s the essence of knowledge management. –Tom Stewart ”

As the MedProgramme cuts across four different GEF Focal Areas (Biodiversity, Chemicals and Waste, International Waters and Climate Change), its results will be relevant for many different sectors and activities in the Mediterranean region. A review of the existing initiatives related to knowledge management in these domains was carried out with the purpose to: 1) avoid unnecessary duplication; 2) replicate and build on successful practices; and 3) establish potential synergies and partnerships. The research included knowledge platforms, databases, initiatives and projects on knowledge/information sharing in the Mediterranean region (or globally when relevant) focusing on pollution reduction, biodiversity, water resources (fresh and marine) and climate change.

The result is a detailed knowledge map that will be useful during the execution of the MedProgramme to: establish collaborations (for content sharing and use of respective networks to increase impact and dissemination), benefit from existing collected data and technical information, make reference to relevant policy and legal frameworks, get inspiration from effective data visualization examples and platform designs, and replicate/participate in successful awareness raising campaigns and capacity building activities (see legend in Table 1 “Relevance for the MedProgramme”).

Against this baseline, the MedProgramme will generate new data and develop additional capacity of beneficiary countries to reduce pollution in marine and freshwater coastal bodies, increase resilience to climate change, improve the governance of water resources, promote the nexus approach and protect biodiversity and ecosystems.

The analysis of the knowledge map shows that there is an existing wealth of information in these domains. This poses a number of challenges as well as opportunities for effective knowledge sharing. The risk of fragmentation is high, and coordination among similar or complementary initiatives is not always optimal. Often, the results of projects are not fully sustained after their closure (possibly due to lack of funds after project execution is completed, insufficient ownership of results by key stakeholders and partners, or inadequate emphasis and instruments dedicated to KM). Another crucial issue remains the integration of different environmental datasets. Aware of these challenges, the MedProgramme is tackling KM at the very outset identifying possible solutions to overcome them. Moreover, there is ample room for cross-fertilization and learning: one must avoid the temptation to reinvent the wheel, and build instead on existing knowledge useful for incremental innovation. Lastly, the wealth of partners involved in the MedProgramme and especially the MAP system, can prevent pitfalls due to lack of ownership by leveraging and sustaining the KM efforts through their networks.

Legend Table 1




	Potential Collaboration for Content Sharing and use of Respective Networks to Increase Impact and Dissemination		Relevant Scientific Data and Technical Information	IW	BD	GEF Focal Areas (International Waters, Biodiversity, Chemical and Waste, Climate Change)
	Reference to Key Policy and legal Frameworks		Effective Example(s) of Data Visualisation, Web Design and UX	CW	CC	
						Successful Awareness Raising, Outreach and Capacity Building

Table 1 Overview of selected knowledge platforms and initiatives relevant for the MedProgramme (2018)


























A selection of platforms, databases, initiatives and projects on knowledge - and information - sharing in the Mediterranean region (or globally when relevant) focusing on pollution reduction, biodiversity, water resources and climate change compiled for the purpose of drawing a KM baseline scenario for the GEF/UN Environment “MedProgramme”.

Initiative Name and URL	Organizations	Where - When - What	Relevance for MedProgramme										
AMAre https://amare.interreg-med.eu https://bit.ly/2BxKG9J	Executing Partners: CNR, Interreg Mediterranean Donors: ERDF, IPA	Geographical Area: Mediterranean Sea Activity Period: 36 months (ongoing) Description: The objectives of this project are 1- to develop shared methodologies and geospatial tools for multiple stressors assessment, coordinated environmental monitoring, multi criteria analyses and stakeholders' engagements; 2- to translate these guidelines into concrete pilot actions and coordinated strategies in selected Marine Protected Areas (MPAs) to solve hot spots of conflicts affecting marine biodiversity and the services it provides.								BD	CW		
AQUACROSS http://dataportal.aquacross.eu	Executing Partners: IOC-UNESCO Donors: EU	Geographical Area: Europe Activity Period: 2018 - ongoing Description: Aquacross Information Platform aims to provide open access to a wide range of resources related to aquatic (freshwater, marine and coastal) ecosystem and biodiversity management at the European level. The primary focus is on data used in the various project Case Studies and Work packages, and resulting maps, model outputs and tools.								IW	BD		
Aquastat http://www.fao.org/nr/water/aquastat/main/index.stm	FAO	Geographical Area: Global (particular focus on Africa, Asia, Latin America, and the Caribbean) Activity Period: 1994 - ongoing Description: AQUASTAT started with the aim to contribute to FAO's goals through the collection, analysis and dissemination of information related to water resources, water uses and agricultural water management, with an emphasis on countries in Africa, Asia, Latin America, and the Caribbean. AQUASTAT is FAO's global water information system, developed by the Land and Water Division. It is the most quoted source on global water statistics. We collect, analyze and disseminate data and information by country on water resources, water uses, agricultural water management.								IW	CW	CC	
Basel, Rotterdam and Stockholm Conventions Joint Clearing House Mechanism http://synergies.pops.int/Implementation/KnowledgeManagementandOutreach/Clearinghousemechanism/tabid/5382/language/en-US/Default.aspx	UN and UN Environment	Geographical Area: Global Activity Period: 2001 - ongoing Description: The joint clearing-house mechanism is a multi-stakeholder global system that facilitate the exchange of information and expertise relevant for the Basel, Rotterdam and Stockholm conventions. To achieve such an objective the Secretariat has developed, and is continuously enhancing, a global knowledge base made of <i>information and tools</i> , fed and used by all members of the clearing-house community.								IW	CW		
Biodiversity Information System for Europe (BISE) https://biodiversity.europa.eu/	European Commission, European Environment Agency	Geographical Area: Europe Activity Period: Ongoing Description: BISE is a single entry point for data and information on biodiversity supporting the implementation of the EU strategy and the Aichi targets in Europe.								IW	BD	CW	
Blue Med Virtual Knowledge Centre http://www.bluedmed-initiative.eu/virtual-knowledge-centre/	Executing Partners: UiM, EU Commission, EIB, IMO Donors: EU Commission	Geographical Area: Mediterranean Area Activity Period: 2014 - ongoing Description: The Digi-gate for Marine and Maritime Knowledge in the Mediterranean. The Virtual Knowledge Centre (VKC) was launched with the objective to provide a centralised platform for marine and maritime information and to improve synergies across different initiatives and projects in the Mediterranean region.								IW			
Climate-ADAPT https://climate-adapt.eea.europa.eu	EU Commission, European Environment Agency	Geographical Area: Europe Activity Period: 2012 - ongoing Description: Climate-ADAPT aims to support Europe in adapting to climate change. It is an initiative of the European Commission and helps users to access and share data and information on: Expected climate change in Europe; Current and future vulnerability of regions and sectors; EU, national and transnational adaptation strategies and actions; Adaptation case studies and potential adaptation options; Tools that support adaptation planning.									CC		
CONSUME-LESS Consume Less in Mediterranean Touristic Communities https://consume-less.interreg-med.eu		Geographical Area: Mediterranean Area Activity Period: 2016 - 2019 Description: Consume-Less aims to develop integrated sustainable energy, water and waste management strategies and to promote sustainable tourism models in Mediterranean cities. Six pilot areas are involved: Gozo, Vélez-Málaga, Saranda, Ragusa, Realmonte and Naxos.									CW		
COPERNICUS Marine Environment Monitoring Service http://marine.copernicus.eu	Executing Partners: EU Commission, ESA, EUMETSAT, ECMWF Donors: EU Commission	Geographical Area: Global Activity Period: 2015 - ongoing Description: The Copernicus Marine Environment Monitoring Service (CMEMS) provides regular and systematic reference information on the physical state, variability and dynamics of the ocean and marine ecosystems for the global ocean and the European regional seas.								IW	BD	CW	CC
COPERNICUS Land Monitoring Service https://land.copernicus.eu/ https://scihub.copernicus.eu/ https://www.sentinel-hub.com/	Executing Partners: EU Commission, ESA, EUMETSAT, ECMWF Donors: EU Commission	Geographical Area: Global Activity Period: 2015 - ongoing Description: Copernicus Land Monitoring Service (CLMS) provides geographical information on land cover to a broad range of users in the field of environmental terrestrial applications. This includes land use, land cover characteristics and changes, vegetation state, water cycle and earth surface energy variables.								BD	CW	CC	

<p>EMODnet http://www.emodnet.eu/</p>	<p>Executing Partners: EU Commission DG MARE</p>	<p>Geographical Area: Europe Marine Environment Activity period: 2013 - ongoing Description: The European Marine Observation and Data Network (EMODnet) consists of more than 160 organisations that together work on assembling, harmonising and making marine data, products and metadata more available to public and private users. The main purpose of EMODnet is to unlock fragmented and hidden marine data resources and to make these available to individuals and organisations (public and private), and to facilitate investment in sustainable coastal and offshore activities through improved access to quality-assured, standardised and harmonised marine data which are interoperable and free of restrictions on use. EMODnet provides access to European marine data across seven discipline-based themes: Bathymetry; Geology; Seabed habitats; Chemistry; Biology; Physics; Human activities. EMODnet motto is 'collect data once and use it many times'.</p>							IW	BD	CW	
<p>Environment LIVE https://environmentlive.unep.org</p>	<p>UN Environment</p>	<p>Geographical Area: Global Activity Period: Ongoing Description: Environment Live provides the UN Member States open access to information and knowledge on the environment at the global, regional and national levels. Environment Live is a dynamic on-line platform for sharing contextualized data and knowledge to keep the environment under review.</p>							IW	BD	CW	CC
<p>Euro-Mediterranean Information System on know-how in the Water sector (EMWIS) http://www.semide.net/ http://www.emwis.org</p>	<p>Executing Partners: UfM, EEA, GWP, WWF, Lebanese Minister of Energy and Water, INBO-MENBO, MED-EUWI, IME, ACWUA, AQUAMADRE, EcoMENA, MEDRC, UNU-INWEH, L'Ambassade de l'Eau Donors: EU Commission, EuropeAid Co-operation Office & EC DG Environment, France, Italy and Spain</p>	<p>Geographical Area: Mediterranean Sea Activity Period: 1999 - 2020 Description: EMWIS is an initiative of the Euro-Mediterranean Partnership. It provides a strategic tool for exchanging information and knowledge in the water sector between and within the Euro Mediterranean partnership countries. All the countries involved in the Union for the Mediterranean (UfM) are concerned: The 27 EU member states of the EU and the 16 Mediterranean Partner Countries (Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Jordan, Israel, Lebanon, Mauritania, Monaco, Montenegro, Morocco, Palestinian Authority, Syria, Tunisia, Turkey).</p>							IW			
<p>European MSP Platform https://www.msp-platform.eu/</p>	<p>Executing Partners: EASME on behalf of DG MARE Donors: EU Commission under the EMFF</p>	<p>Geographical Area: Europe Activity Period: Ongoing Description: The European MSP Platform is an information and communication gateway designed to offer support to all EU Member States in their efforts to implement Maritime Spatial Planning (MSP) in the years to come. Funded by the EU Directorate General for Maritime Affairs and Fisheries (DG MARE), the European MSP Platform acts as the central exchange forum for the rich knowledge generated in past, current and upcoming MSP processes and projects.</p>							IW			
<p>European Ocean Biogeographic Information System – EurOBIS http://www.eurobis.org</p>	<p>EMODnet, MarBEF, LifeWatch, Flanders Marine Institute (VLIZ)</p>	<p>Geographical Area: Mediterranean Area Activity Period: 2004 - ongoing Description: EurOBIS - the European Node of the international Ocean Biogeographic Information System (OBIS) - publishes distribution data on marine species, collected within European marine waters or collected by European researchers outside European marine waters. EurOBIS is an online marine biogeographic database compiling data on all living marine creatures. The principle aims of EurOBIS are to centralize the largely scattered biogeographic data on marine species collected by European institutions and to make these data freely available and easily accessible.</p>							IW	BD		
<p>FATE and impact of pollutants in terrestrial and aquatic ecosystems http://fate.jrc.ec.europa.eu/rational/home.html</p>	<p>Executing Partners: EU Commission, JRC, Institute for Environment and Sustainability Donors: EU, JRC</p>	<p>Geographical Area: Europe Activity Period: 2009 - 2015 Description: FATE is the ensemble name for the pool of activities related to the assessment of fate and impacts of pollutants in terrestrial and aquatic ecosystems carried out at the Institute for Environment and Sustainability (IES) of the Joint Research Centre (JRC). Contaminants spread across different environmental media through atmospheric deposition, leaching from soil to groundwater, accumulation in rivers and lakes, and discharge into the sea. FATE addresses the fate and impacts of pollutants across a range of temporal and spatial scales depending on the policy question and making the best use of available data. The results are pollution risk and vulnerability maps, which are very useful to assess the impact of EU policies, raise public awareness and facilitate planning of management scenarios.</p>								BD	CW	
<p>GBIF Global Biodiversity Information Facility https://www.gbif.org</p>	<p>EMODnet, EU, EU BON, Japan Ministry of Environment</p>	<p>Geographical Area: Global Activity Period: 1999 - ongoing Description: GBIF—the Global Biodiversity Information Facility—is an international network and research infrastructure funded by the world's governments and aimed at providing anyone, anywhere, open access to data about all types of life on Earth. Coordinated through its Secretariat in Copenhagen, the GBIF network of participating countries and organizations, working through participant nodes, provides data-holding institutions around the world with common standards and open-source tools that enable them to share information about where and when species have been recorded.</p>								BD		
<p>General Fisheries Commission for the Mediterranean (GFCM) http://www.fao.org/gfcm/data/en/</p>	<p>FAO</p>	<p>Geographical Area: Mediterranean Sea and Black Sea Activity Period: 1997 - ongoing Description: The General Fisheries Commission for the Mediterranean (GFCM) is a regional fisheries management organization (RFMO) established under the provisions of Article XIV of the FAO Constitution. The GFCM initially started its activities as a Council in 1952, when the Agreement for its establishment came into force, and became a Commission in 1997. The main objective of the GFCM is to ensure the conservation and the sustainable use, at the biological, social, economic and environmental level, of living marine resources as well as the sustainable development of aquaculture in the Mediterranean and in the Black Sea (GFCM area of application).</p>							IW	BD		
<p>Geo-referenced information system for coastal aquifers in the Mediterranean (INWEB) http://www.inweb.gr/index.php?option=com_wrapper&view=wrapper&Itemid=220#</p>	<p>Executing Partners: UNESCO Chair and Network/International Network of Water-Environment, Centres for the Balkans (INWEB), Aristotle University of Thessaloniki. Donors: UNESCO</p>	<p>Geographical Area: Mediterranean Area Activity Period: 2003 - 2015 Description: The UNESCO Chair/INWEB is a network of academic and non-academic institutions. Each of the ten Balkan member countries has a focal point for its own country's members. Concentrating mainly on transboundary issues, the UNESCO Chair/INWEB promotes a multi-disciplinary approach to water resources management issues, involving scientists, engineers, economists, legal experts and sociologists. It encourages initiatives on water resources management issues from the bottom up, and promotes joint training projects and the sharing of expertise. The objectives of INWEB are to: 1. Establish an open international network of communication and shared expertise in the Balkans and other developing countries to facilitate the exchange of information and expertise in the field of water and the environment; 2. Promote the services to the region of an international body of recognised experts in water and environmental issues; 3. Create and maintain a database on transboundary water and the environment by developing an inventory of existing transboundary monitoring systems for water resources and the environment.</p>							IW			

<p>GODEM - Optimised Management of Waste in the Mediterranean</p> <p>https://tra4dev.cor.europa.eu/portal/EN/coopmonth/Pages/GODEM.aspx</p> <p>Green Growth Knowledge Platform - GGKP</p> <p>http://www.greengrowthknowledge.org</p>	<p>EU Commission</p> <p>Executing Partners: GGGI; OECD; World Bank; UNEP.</p> <p>Donors: MAVA, Swiss, Netherlands, Germany</p>	<p>Geographical Area: Mediterranean Basin</p> <p>Activity Period: 2010 - 2012</p> <p>Description: The project is aimed at setting a network for the exchange of information and experiences between European local/regional authorities and institutions of the southern Mediterranean on the sustainable management of waste treatment.</p> <p>Geographical Area: Global</p> <p>Activity Period: 2012 - ongoing</p> <p>Description: The GGKP is a global community of organisations and experts committed to collaboratively generating, managing and sharing green growth knowledge and data to mobilise a sustainable future.</p>									<p>CW</p>
<p>H2020/SEIS Info system</p> <p>https://eni-seis.eionet.europa.eu/south https://www.h2020.net/</p>	<p>Executing Partners: EEA, UN Environment MAP</p> <p>Donors: EU</p>	<p>Geographical Area: South Mediterranean (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Tunisia)</p> <p>Activity Period: 2015 - ongoing</p> <p>Description: ENI SEIS II South Project aims to contribute to the reduction of the marine pollution in the Mediterranean by developing a Shared Environmental Information System (SEIS) supporting the regular production and sharing of quality assessed environmental data, indicators and information.</p>								<p>IW</p>	<p>CW</p>
<p>ICZM Platform</p> <p>http://www.iczmpatform.org</p>	<p>Executing Partners: PAP/RAC</p> <p>Donors: MTF</p>	<p>Geographical Area: Mediterranean Area</p> <p>Activity Period: 2018 - ongoing</p> <p>Description: This interactive space is designed as a multi-disciplinary "bank" of information, documentation and good practices related to ICZM in the Mediterranean (and elsewhere), as well as a place for networking and exchange. This platform provides information on the legal and policy framework, capacity building, awareness raising, data base of projects, library and the resources for networking.</p>								<p>IW</p>	<p>CC</p>
<p>IMAP Info Pilot System</p> <p>(website under development as of 11/2018)</p>	<p>Executing Partners: UN Environment MAP, InfoRAC</p> <p>Donors: UN Environment MAP, EC</p>	<p>Geographical Area: Mediterranean Basin</p> <p>Activity Period:</p> <p>Description: Pilot IMAP compatible Data and Information System, connected to MAP Components' information systems and other relevant regional knowledge platforms, will provide data based on data standards and data dictionaries for ten selected IMAP Common Indicators.</p>								<p>IW</p>	
<p>INSPIRE Knowledge Base</p> <p>https://inspire.ec.europa.eu</p>	<p>Member States of the EU</p>	<p>Geographical Area: EU</p> <p>Activity Period: 2007 - ongoing</p> <p>Description: The INSPIRE Directive aims to create a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment. This European Spatial Data Infrastructure will enable the sharing of environmental spatial information among public sector organisations, facilitate public access to spatial information across Europe and assist in policy-making across boundaries. INSPIRE is based on the infrastructures for spatial information established and operated by the Member States of the European Union. The Directive addresses 34 spatial data themes needed for environmental applications. The Directive came into force on 15 May 2007 and will be implemented in various stages, with full implementation required by 2021.</p>									
<p>INTEGRATED COASTAL WATER MANAGEMENT FOR MED (ICWM)</p> <p>https://business.esa.int/projects/icwm-for-med</p>	<p>ESA; Planetek</p>	<p>Geographical Area: Tyrrhenian Sea</p> <p>Activity Period: 2015 - ongoing</p> <p>Description: The objective of ICWM for MED is to demonstrate the benefits of a service based on the integration of Earth Observation based products, Satellite Communication and Navigation solutions together with Terrestrial assets and crowdsourcing features, for the set-up of an improved coastal surveillance and water quality monitoring service.</p>								<p>IW</p>	<p>CW</p>
<p>Interreg Mediterranean</p> <p>https://interreg-med.eu http://forum.interreg-med.eu/en/med-community/(Forum)</p>	<p>European Regional Development Fund, IPA fund</p>	<p>Geographical Area: Mediterranean Basin</p> <p>Activity Period: 2014 - 2020</p> <p>Description: 13 countries are working together in the transnational European Cooperation Programme for the Mediterranean area towards low carbon economy, the protection of natural and cultural resources and the strengthening of innovation. The main objective of the Interreg MED Programme is to promote sustainable growth in the Mediterranean area by fostering innovative concepts and practices and a reasonable use of resources and by supporting social integration through an integrated and territorially based cooperation approach. In the period 2014-2020, Interreg MED Programme will promote cooperation between a varied typology of actors of these thirteen Mediterranean countries.</p>					<p>IW</p>	<p>BD</p>			<p>CC</p>
<p>IODE</p> <p>https://www.iode.org</p>	<p>Executing Partners: UNESCO IODE</p> <p>Donors: UNESCO</p>	<p>Geographical Area: Global</p> <p>Activity Period: 1961 - ongoing</p> <p>Description: The programme "International Oceanographic Data and Information Exchange" (IODE) of the "Intergovernmental Oceanographic Commission" (IOC) of UNESCO was established in 1961. Its purpose is to enhance marine research, exploitation and development, by facilitating the exchange of oceanographic data and information between participating Member States, and by meeting the needs of users for data and information products.</p>								<p>IW</p>	
<p>IW:LEARN (Global Environment Facility's International Waters Learning Exchange and Resource Network)</p> <p>www.iwlearn.net</p>	<p>Executing Partners: UNDP; UN Environment.</p> <p>Donors: GEF</p>	<p>Geographical Area: Global (GEF IW portfolio)</p> <p>Activity Period: 2004 - ongoing</p> <p>Description: IW:LEARN is the Global Environment Facility's (GEF) International Waters Learning Exchange and Resource Network. The IW:LEARN project was established to strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative solutions to common problems across the GEF International Waters portfolio. It promotes learning among project managers, country officials, implementing agencies, and other partners.</p>								<p>IW</p>	
<p>IW:LEARN Groundwater Community of Practice</p> <p>http://groundwatercop.iwlearn.net</p>	<p>Executing Partners: UNDP, UN Environment (Implementing Agencies); UNESCO International Hydrological Programme (Executing Agency)</p> <p>Donors: GEF</p>	<p>Geographical Area: Global (GEF IW portfolio)</p> <p>Activity Period: 2012 - ongoing</p> <p>Description: The GW CoPs aims to accelerate learning from and within the GEF IW portfolio, and promote replication of good practices in transboundary freshwater management. The CoP acts as a catalytic coalition among GEF IW projects to promote learning that meets project-level priorities. It is designed to build on existing knowledge from inside and outside the GEF portfolio and be responsive to the learning needs of the GEF IW projects. The CoP provide an opportunity to build capacity on groundwater resources management and promote the conjunctive management with surface freshwater and marine waters.</p>						<p>IW</p>	<p>BD</p>		<p>CW</p>

<p>MAMIAS - Marine Mediterranean Invasive Alien Species http://www.mamias.org</p>	<p>UNEP/MAP, RAC/SPA</p>	<p>Geographical Area: Mediterranean Sea Activity Period: 2012 - ongoing Description: The Database includes among Alien species, cryptogenic ones. Tropical Atlantic species, which have expanded their geographic distribution in the Mediterranean, are noted as range expansion, or vagrant. The Database includes also species that have been occasionally reported as alien but were subsequently excluded from lists, along with the reasoning of their exclusion.</p>			<p>BD</p>
<p>MAPAMED http://www.rac-spa.org/mapamed</p>	<p>MedPAN and SPA/RAC</p>	<p>Geographical Area: Mediterranean Sea Activity Period: 2012 - ongoing Description: MAPAMED (Marine Protected Areas in the Mediterranean) is a GIS database that gathers information on marine protected areas of the Mediterranean, and more generally on sites of interest to the conservation of the marine environment. It is developed and jointly administered by the MedPAN association and SPA/RAC. MAPAMED (i) facilitates the access and the sharing of data on Mediterranean MPAs, (ii) allows the analysis and the evaluation of the status and trends of the MPA network and (iii) identifies ecological and management issues at a supra-AMP scale.</p>			<p>IW BD</p>
<p>MapX https://www.mapx.org</p>	<p>UN Environment, World Bank, GRID-Geneva</p>	<p>Geographical Area: Global Activity Period: Ongoing Description: MapX was developed by UN Environment, the World Bank and the Global Resource Information Database (GRID-Geneva) to capitalize on the use of new digital technologies and cloud computing in the sustainable management of natural resources. One of the founding principles was to equalize information held by different stakeholders as a prerequisite to better dialogue, decision making and monitoring. MapX evolved from an initial focus on extractive resources to include a range of different resource types and themes. Of particular relevance for the MedProgramme are the data layers in MapX developed by UN Environment for MapX to support countries in meeting their reporting obligations on mercury use and emissions under the Minamata Convention, and to manage spatial information regarding PCBs and facilitate reporting for the Stockholm Convention.</p>			<p>IW BD CW CC</p>
<p>Marine Biodiversity and Ecosystem Functioning EU Network of Excellence - MarBEF http://www.marbef.org</p>	<p>EU</p>	<p>Geographical Area: Europe Marine Environment Activity Period: 2004 - 2009 Description: A key task of the MarBEF Network is the integration of different resources related to marine biodiversity. The inventory of these resources can be found on this website. At the moment, this relational database includes information on different European marine biodiversity research sites and European marine biodiversity datasets. The European Register of Marine Species, ERMS and the European node of the Ocean Biogeographic Information System, EurOBIS is also accessible through this website. The terms of use of data are formulated in the MarBEF data policy.</p>			<p>IW BD</p>
<p>MED POL Info System http://www.info-rac.org/en/activities/infomap</p>	<p>UNEP/MAP</p>	<p>Geographical Area: Mediterranean Sea Activity Period: 2001 - ongoing Description: MED POL Info System is an online portal that allows Contracting Parties to submit their quality assured data generated from the implementation of the national marine pollution programmes designed in accordance with LBS Protocol.</p>			<p>IW CW</p>
<p>MED-3R Euro-Mediterranean Strategic Platform for a Suitable Waste Management - Recycle, Reduce, Reemploy http://www.med-3r.org/index.php/en/about/the-med-3r-project</p>	<p>Executing Partners: Mediterranean Sea Basin Programme ENPI CBCMED Donors: 90% European Union, 10% Partners</p>	<p>Geographical Area: Mediterranean Basin Activity Period: 2012 – 2015 Description: MED-3R sets up an institutional innovation of multi-level governance, implemented on the basis of strategic platform: "The Euro-Mediterranean Strategic Platform for a Suitable Waste Management" to the benefit of technical managers and experts on waste management over the Mediterranean basin.</p>			<p>CW</p>
<p>MEDACES - Mediterranean Database of Cetacean Strandings medaces.uv.es/home_eng.htm</p>	<p>Executing Partners: RAC/SPA, ICBIBE Donors: Spanish Ministry of the Environment, and Rural and Marine Affairs (MMA)</p>	<p>Geographical Area: Mediterranean Sea Activity Period: 2001 - ? Description: In November 2001, the 12th Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, within the "Biological Diversity and Specially Protected Areas" section, recommended for implementing the Action Plan for the Conservation of Cetaceans in the Mediterranean Sea, to approve the offer by Spain with regard to the establishment in Valencia of a Mediterranean database on cetacean strandings (MEDACES).</p>			<p>BD</p>
<p>MediCIP http://medicip.grid.unep.ch</p>	<p>Executing Partners: UNEP/MAP, Plan Bleu, GWR, PAP/RAC Donors: GEF</p>	<p>Geographical Area: Mediterranean Basin Activity Period: 2009 - 2015 Description: MediCIP is an online multi countries effort to share data and information on Climate Change in the Mediterranean coastal areas. It is a "portal of portals" which gathers data, information and web links towards other institutions (national and regional), in support the implementation of the ICZM protocol.</p>			<p>IW CC</p>
<p>Mediterranean Basin Biodiversity Hotspot http://www.birdlife.org/cepf-mad/hotspot</p>	<p>Executing Partners: CEFP (Critical Ecosystem Partnership Fund); Bird's Life; LPO; DOPPS. Donors: CEFP (GEF, World Bank, AFD, CI, EU, Japan Gov.)</p>	<p>Geographical Area: Mediterranean Basin Activity Period: 2012 - 2022 Description: During the initial investment, 108 grants were awarded to 84 different organizations in 12 countries. This first investment phase demonstrated that civil society organizations do exist in each hotspot country, and that adequate financial support, combined with technical support, has the potential to build strong constituencies able to tackle conservation issues at the local level. CEFP's second phase of investment will focus on protecting plants, promoting regional networking and preserving three ecosystems—coastal, freshwater and traditionally managed landscapes. CEFP is a joint initiative of l'Agence Française de Développement, Conservation International, the European Union, the Global Environment Facility, the Government of Japan, the MacArthur Foundation and the World Bank.</p>			<p>BD CC</p>
<p>MEDITERRANEAN OBSERVATORY ON ENVIRONMENT AND SUSTAINABLE DEVELOPMENT http://obs.planbleu.org/en/</p>	<p>Executing Partners: Plan Bleu, UNEP/MAP Donors: MAVA, UN Environment</p>	<p>Geographical Area: Mediterranean Basin Activity Period: Ongoing Description: Plan Bleu, acting as a Mediterranean Observatory on Environment and Sustainable Development, has developed an experience in collecting, managing and disseminating data on Sustainable development issues in the Mediterranean Region. One of Plan Bleu's mission is to provide the Contracting Parties of Barcelona Convention with environmental and sustainable development statistics, indicators and assessments to support their action and decision making process.</p>			<p>IW CC</p>

<p>Mediterranean Water Knowledge Platform (MWKP) http://www.emwis.net/initiatives/MWKP</p>	<p>International Office for Water (IOWater); Institut Méditerranéen de l'Eau (IME); Union for the Mediterranean (UfM)</p>	<p>Geographical Area: Mediterranean Basin Activity Period: (Phase 1) 2013-2016 - (Phase 2) 2016-2018 Description: The regional project towards a Mediterranean Water Knowledge Platform got the UfM label on 8 April 2014, at the unanimity of 43 countries members of the Union for the Mediterranean. The project has two components: the 1st one, coordinated by the International Office for Water (IOWater), aims at strengthening the National Information Systems on Water in line with the regional approach taken implemented by the Euro-Mediterranean Information System on know-how in the Water sector (EMWIS); the 2nd one, coordinated by the Institut Méditerranéen de l'Eau (IME), is based on the exploitation of data and information on water for the preparation of a Mediterranean White Paper on Water. This White Paper is part of logical showcasing best practices for integrated water resources management.</p>	 			<p>IW</p>
<p>MEDLEM (MEDiterranean Large Elasmobranchs Monitoring) PROGRAM www.arpat.toscana.it/medlem</p>	<p>ARPAT (agenzia regionale per la protezione ambientale della Toscana)</p>	<p>Geographical Area: Mediterranean Sea Activity Period: 2002 - ongoing Description: MedLem is a monitoring programme on the captures and sightings of the large cartilaginous fishes occurring in the Mediterranean Sea. A tool for storing and sharing the large shark's data collected in the mediterranean countries. The database is under maintenance: it will be on line again at the end of 2017.</p>				<p>BD</p>
<p>MedOpen http://www.medopen.org</p>	<p>Executing Partners: PAP/RAC Donors: UNEP</p>	<p>Geographical Area: Mediterranean Area Activity Period: Ongoing Description: MedOpen aims at assisting Mediterranean countries in building capacities for coastal management. The training programme has been created to share ideas, knowledge and strategies to forward the art of designing and implementing local, national and regional place-based integrated coastal zone management (ICZM), as well as to enhance a policy dialogue and build / improve capacities on implications of climate variability and change (CV&C) considerations. The MedOpen training is completely free of charge.</p>	  			<p>IW</p>
<p>MedPAN - The network of Marine Protected Areas managers in the Mediterranean http://medpan.org</p>	<p>Executing Partners: UNEP RAC/SPA, WWF, IUCN Donors: EU Commission, UNEP, WWF and others</p>	<p>Geographical Area: Mediterranean Sea Activity Period: 2008 - ongoing Description: The MedPAN network's mission is to promote, through a partnership approach, the sustainability and operation of a network of Marine Protected Areas in the Mediterranean which are ecologically representative, connected and effectively managed to help reduce the current rate of marine biodiversity loss.</p>	 			<p>IW BD CC</p>
<p>NBB PRTR (website under development as of 11/2018)</p>	<p>Executing Partners: UN Environment MAP, InfoRAC Donors: UN Environment MAP, EC</p>	<p>Geographical Area: Mediterranean Basin Activity Period: Description: Provides information on pollution load from sectors and activities in accordance with the requirements LBS Protocol of Barcelona Convention</p>	 			<p>IW CW</p>
<p>OBIS - Ocean Biogeographic Information System http://www.iobis.org/</p>	<p>IOC-UNESCO, IODE</p>	<p>Geographical Area: Global Activity Period: 1997 - ongoing Description: OBIS is a global open-access data and information clearing-house on marine biodiversity for science, conservation and sustainable development. Its aim is to build and maintain a global alliance that collaborates with scientific communities to facilitate free and open access to, and application of, biodiversity and biogeographic data and information on marine life. Obis mission is to build and maintain a global alliance that collaborates with scientific communities to facilitate free and open access to, and application of, biodiversity and biogeographic data and information on marine life.</p>	  			<p>IW BD</p>
<p>OpenChannels https://www.openchannels.org/</p>	<p>Executing Partners: Open Communication for The Ocean and Partners Donors: Gordon and Betty Moore Foundation</p>	<p>Geographical Area: Global Activity Period: 2012 - ongoing Description: OpenChannels aims to foster a vibrant online community of ocean planners and managers sharing experience, knowledge, and advice with peers. In doing so, we can speed the advancement of sustainable ocean management and conservation. OpenChannels is designed to be highly focused on user needs. We want to provide access to all the information that ocean planners and managers need to do their jobs most effectively, including existing high-quality content and new information products and services.</p>	   			<p>IW</p>
<p>PANACeA project https://biodiversity-protection.interreg-med.eu</p>	<p>Executing Partners: Malaga University, Interreg Mediterranean, Plan Bleu Donors: ERDF, IPA</p>	<p>Geographical Area: Mediterranean Basin Activity Period: 36 months (ongoing) Description: Devised as a one entry point to scientific evidence supporting best practice on protected area management and environmental policymaking in the region, the Mediterranean Biodiversity Protection Platform (BPP) gathers the expert knowledge generated by the Mediterranean biodiversity protection community as main providers of content. The MedBiodiversity Knowledge platform will open in 2018.</p>				<p>BD CC</p>
<p>Pegaso Project - People for Ecosystem-based Governance in Assessing Sustainable development of Ocean and coast http://pegasosdi.uab.es/</p>	<p>Universitat Autònoma de Barcelona (UAB)</p>	<p>Geographical Area: Mediterranean Sea and Black Sea Activity Period: 2010 - 2014 Description: The main objective of PEGASO is to build on existing capacities and develop common novel approaches to support integrated policies for the coastal, marine and maritime realms of the Mediterranean and Black Sea Basins in ways that are consistent with and relevant to the implementation of the ICZM Protocol for the Mediterranean. The PEGASO SDI is a distributed sharing infrastructure made up of GeoNodes and with three main components: a map viewer, map services and a spatial catalog.</p>				<p>IW</p>
<p>Protected Planet https://www.protectedplanet.net/marine</p>	<p>Executing Partners: UNEP-WCMC, IUCN Donors: UNEP, IUCN</p>	<p>Geographical Area: Global Activity Period: 2014-ongoing Description: Protected Planet is the most up to date and complete source of information on protected areas, updated monthly with submissions from governments, non-governmental organizations, landowners and communities. It is managed by the United Nations Environment World Conservation Monitoring Centre with support from IUCN and its World Commission on Protected Areas (WCPA). It is a publicly available online platform where users can discover terrestrial and marine protected areas, access related statistics and download data from the World Database on Protected Areas (WDPA).</p>	   			<p>IW BD</p>
<p>SPACE ALBORAN http://www.iucn-geoportalboran.org/</p>	<p>Executing Partners: IUCN Center for Mediterranean Cooperation Donors: IUCN, EU, MAVA, POCTAFEX</p>	<p>Geographical Area: Alboran sea (Gibraltar strait) Activity Period: 2007 - ongoing Description: The geoportal's aim is to promote governance of the natural resources of the Alboran sea. A space for governance that promotes the exchange of knowledge, participation, management and learning.</p>	  			<p>IW BD</p>

<p>Strategic Approach to International Chemicals Management (SAICM) http://www.saicm.org/Home/tabid/5410/language/en-US/Default.aspx</p>	<p>Donors: UN Environment, ICCA, EU + 15 countries</p>	<p>Geographical Area: Global Activity Period: 2006 - ongoing Description: SAICM was developed by a multi-stakeholder and multi-sectoral Preparatory Committee and supports the achievement of the 2020 goal agreed at the 2002 Johannesburg World Summit on Sustainable Development. SAICM overall objective is the achievement of the sound management of chemicals throughout their life cycle so that by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.</p>									<p>CW</p>
<p>The Mediterranean Biodiversity Platform http://data.medchm.net/en/</p>	<p>Executing Partners: SPA/RAC Donors: MAVA Foundation</p>	<p>Geographical Area: Mediterranean Sea Activity Period: 2017 - ongoing Description: The Mediterranean Biodiversity Platform is an online tool to inventory, catalog and store data on marine and coastal biodiversity in the Mediterranean, and view them on maps.</p>					<p>IW</p>	<p>BD</p>			
<p>The MPA Action Agenda https://www.mpaaction.org/</p>	<p>WWF and partners</p>	<p>Geographical Area: Global Activity Period: 2014 - ongoing Description: The MPA Action Toolkit is an online platform designed for MPA managers and establishers, marine researchers and other MPA advocates. The objective of this online platform is to share knowledge on MPAs and tools that can contribute to MPA advocacy. On this toolkit you find infographics, videos, academic articles, reports and other types of material that can be used for MPA advocacy and relating activities.</p>					<p>IW</p>	<p>BD</p>			
<p>The Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership) Project http://themedpartnership.org</p>	<p>Executing Partners: UNEP/MAP Donors: GEF, EU, others</p>	<p>Geographical Area: Mediterranean Basin (Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Lebanon, Libya, Morocco, Montenegro, Palestine, Syria, Tunisia and Turkey) Activity period: 2010 - 2015 Description: The Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership) is a collective effort of leading environmental institutions and organizations together with countries sharing the Mediterranean Sea to address the main environmental challenges that Mediterranean marine and coastal ecosystems face. The goals include: to improve environmental conditions of pollution and biodiversity hotspots and other priority areas under stress, to promote the sustainable use of marine and coastal resources through integrated approaches, to reduce pollution from land-based sources, to enhance the protection of 'critical' habitats and species, and to integrate climate considerations into national marine and coastal planning.</p>					<p>IW</p>	<p>BD</p>			
<p>UN Environment World Conservation Monitoring Centre https://www.unep-wcmc.org/</p>	<p>UNEP, WCMC</p>	<p>Geographical Area: Global Activity Period: Ongoing Description: The UN Environment World Conservation Monitoring Centre (UNEP-WCMC) works with scientists and policy makers worldwide to place biodiversity at the heart of environment and development decision-making to enable enlightened choices for people and the planet. Our 100-strong international team are recognised leaders in their field and have unrivalled understanding of the institutional landscape surrounding biodiversity policy and ecosystem management. Based in Cambridge, UK, UNEP-WCMC is a collaboration between UN Environment and the UK charity, WCMC. By working with expert partners worldwide, we draw together, analyse and interpret information on biodiversity, and strengthen the ability of others to do so.</p>					<p>IW</p>	<p>BD</p>			
<p>Water Information Network System (WINS) http://ihp-wins.unesco.org/</p>	<p>UNESCO IHP</p>	<p>Geographical Area: Global Activity Period: 2017 - ongoing Description: Launched in January 2017 by the International Hydrological Programme of UNESCO, WINS is an open-access and participatory platform to share, access and visualize water-related information at all levels. It provides also a networking hub through online working groups, which aims to facilitate exchange among stakeholders. As of June 2018, 40 Member States have joined the platform.</p>					<p>IW</p>				
<p>WISE - Water Information System for Europe https://water.europa.eu/freshwater https://water.europa.eu/marine</p>	<p>Executing Partners: DG-ENV, JRC, EEA, Eurostat Donors: EU Commission, European Environmental Agency (EEA)</p>	<p>Geographical Area: Europe Marine Environment Activity Period: 2007 - ongoing Description: The Water Information System for Europe (WISE) is a partnership between the European Commission (DG Environment, Joint Research Centre and Eurostat) and The European Environment Agency. WISE is a gateway to informations on European marine issues in support of ocean governance and ecosystem based management</p>					<p>IW</p>	<p>BD</p>	<p>CW</p>		
<p>WOCAT - World Overview of Conservation Approaches and Technologies https://www.wocat.net/en/about</p>	<p>Universitat Bern, SDC, GIZ, CIAT, ICARDA, FAO, ISRIC, ICI-MOD</p>	<p>Geographical Area: Global Activity Period: 1992 - ongoing Description: The World Overview of Conservation Approaches and Technologies (WOCAT) is a Network that was established in 1992. The WOCAT Network launched efforts to compile, document, evaluate, share, disseminate, and apply sustainable land management (SLM) knowledge. It was far ahead of others in recognizing the vital importance of SLM and the pressing need for corresponding knowledge management. In early 2014, WOCAT's growth and ongoing improvement culminated in its being officially recognized by the UNCCD as the primary recommended database for SLM best practices.</p>					<p>IW</p>		<p>CW</p>	<p>CC</p>	
<p>World Resource Institute http://www.wri.org</p>	<p>WRI</p>	<p>Geographical Area: Global Activity Period: 1982 - ongoing Description: World Resources Institute (WRI) is a global research organization that spans more than 60 countries. Our more than 700 experts and staff turn big ideas into action at the nexus of environment, economic opportunity and human well-being. We start with data, creating user-friendly information systems, protocols and standards. We conduct independent, unbiased research to analyze relationships and design solutions, and communicate our findings in a compelling manner.</p>					<p>IW</p>	<p>BD</p>		<p>CC</p>	
<p>World Water Quality Portal http://www.worldwaterquality.org</p>	<p>Executing Partners: UNESCO-IHP, IWQ (International Initiative on Water Quality), EOMAP Donors: UNESCO-IHP</p>	<p>Geographical Area: Global Activity Period: Ongoing Description: UNESCO, through its International Initiative on Water Quality (IIWQ) under IHP, has launched the first comprehensive worldwide water quality online portal for freshwater systems, lakes and rivers, retrieved from satellite-based earth observation data, to assist with global water quality assessment and capacity building.</p>					<p>IW</p>		<p>CW</p>		

2.2 Analysis of preliminary survey results



Every project creates knowledge. Every project depends on knowledge. –Unknown



The eight Child Projects of the MedProgramme are expected to produce different sets of outputs and results while contributing to the overarching goal of enhancing environmental security in the region, embracing three categories of transboundary concern (components 1, 2 and 3) as illustrated in Table 2. The fourth component hosts the Support Child Project on coordination and knowledge management.

Table 2 MedProgramme Components, Child Projects and GEF Focal Areas

Mediterranean Sea Programme (MedProgramme)		
MedProgramme Component	Child Project	GEF Focal Areas
1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and measuring progress to impacts.	1.1 “Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts”	IW and CW
	1.2 “Mediterranean Pollution Hot Spots Investment Project”	IW
	1.3 “Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)”	IW
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone.	2.1 “Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection”	IW
	2.2 “Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS”	IW
	SCCF “Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas”	CC
3. Protecting Marine Biodiversity	3.1 “Management Support and Expansion of Marine Protected Areas in Libya”	BD
4. Knowledge Management and Programme Coordination	4.1 “Mediterranean Sea Basin Environment and Climate Regional Support Project”	IW and CW

In order to diagnose KM-related needs and expectations of Child Projects (CP), a preliminary survey¹² was prepared and shared with project designers (July-August 2018). The designers of all projects participated in the web-based survey (27 questions), sometimes with representation of more than one person per CP. The analysis of the answers helped building the KM approach, identifying tools and levels of intervention particularly related to:

- Target audiences
- Project / Programme management
- Managing and Visualizing the data
- Information and Knowledge Management

Relevant results of the survey are presented below by cluster topics, however overall the following can be observed:

- The Child Projects of the MedProgramme will produce a rich and heterogenous amount of data and results (quantitative, qualitative, normative). A responsive system to manage the information flow is therefore needed to: capture, store and digest raw data; ensure smooth reporting and coordination; offer a digital representation of the progress through visualization tools for both spatial and non-spatial information; and use the collective information to package appropriate products and knowledge-sharing assets for the intended target audiences of the MedProgramme.
- Data sharing and data collection modalities are critical for generating and managing knowledge. Defining how projects will prepare and make available their data should be addressed at the beginning of the Inception phase of the MedProgramme, once indicators are selected for all Child Projects. A dedicated workshop should be organized to identify sharing standards, protocols and practices for data collection and reporting, including to ensure data quality, respect of privacy and compatibility with data visualization tools on the MedProgramme portal.
- The primary audience of the MedProgramme CPs are policy- and decision-makers in the region. However, in order to influence policy making there is a need to engage and involve a large number of diverse stakeholders to inform them about the findings and benefits arising from the MedProgramme interventions. To this end, three different functional levels (see page 32) and groups of audiences/ stakeholders have been identified to articulate the KM strategy.
- Technical practitioners are among the principal consumers of scientific reports and detailed assessments; therefore, each Child Project shall consider specific groups of technical practitioners in their stakeholder analysis to make sure that the KM strategy can incorporate these views at the programme level.
- The mapping of stakeholders and related engagement plan is crucial to ensure the impact of the KM strategy and of the MedProgramme as a whole. It is important to identify knowledge suppliers/ brokers, knowledge recipients/ beneficiaries and potential change agents at the project level (to be done during the inception phase) and then make sure that these are involved and engaged at the Programme level (see more page 25).
- During the Project Preparation Grant (PPG) phase (June-September 2018) details on activities, stakeholders, outputs and indicators of every Child Project were not available due to the staggered timeframes in preparing the individual project documents. However, through the survey (and several bilateral consultations) it was possible to collect enough insights into the planning of each CP to suggest appropriate solutions and frameworks to manage knowledge holistically across the MedProgramme portfolio.

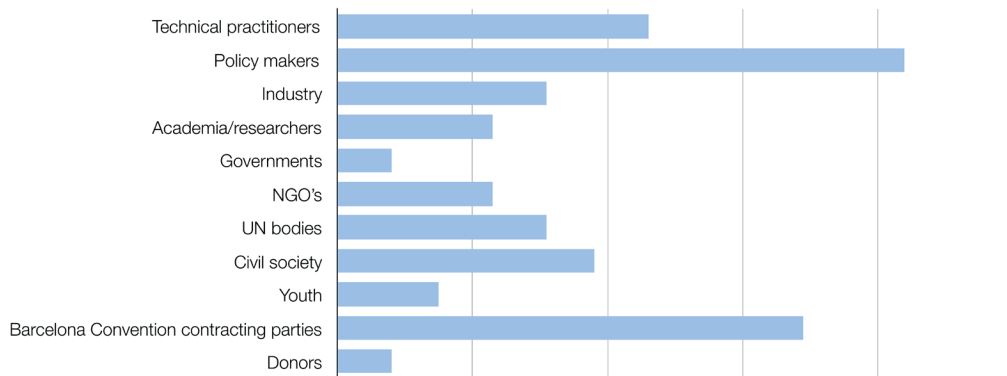
¹² Ref. The preparation of the survey benefitted from the expert and kind advice of staff from UN Environment, Plan Bleu and PAP/RAC. The full questionnaire, which was shared through Google Forms, is annexed in .pdf

Target audiences

[Q2] Who will the primary target audience for your project results be?

The respondents identify as their principle target audience policy makers and the parties to the Barcelona Convention, followed by technical practitioners and civil society. Other relevant audiences are: industry, academia and other UN bodies are: industry, academia and other UN bodies.

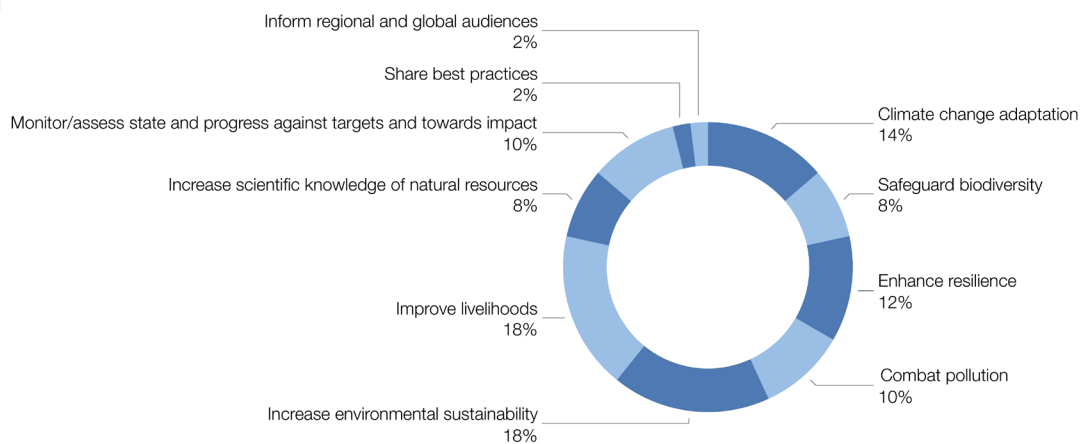
Chart 1



[Q4] Why is your data important?

The data produced will have different objectives, including the priorities to enhance environmental sustainability, increase livelihoods, and adapt to climate change.

Chart 2

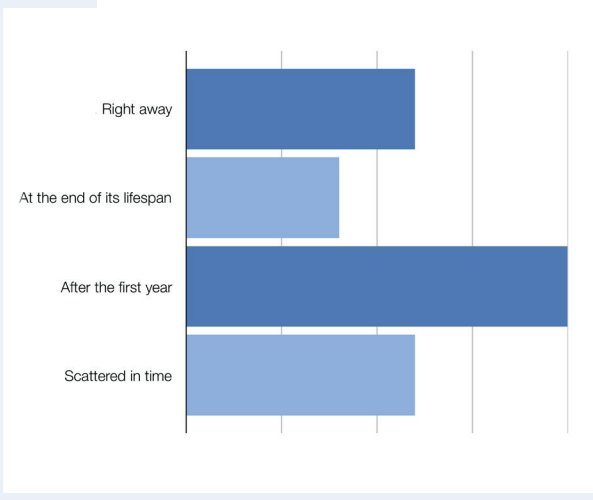


Project/Programme management

[Q3] When will your project start to produce data/results?

Three projects will start producing data right away while other projects will produce data at different times.

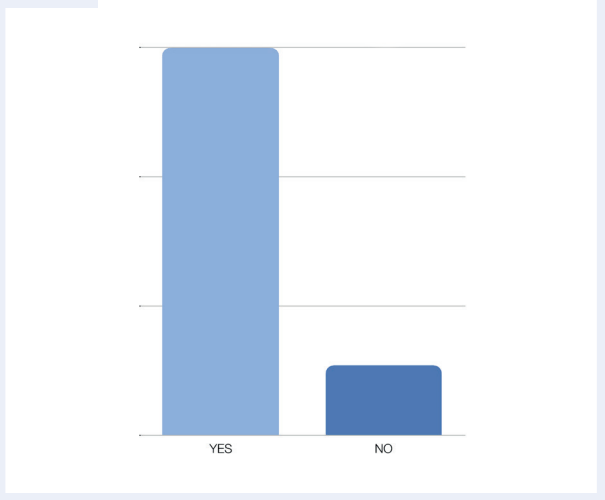
Chart 3



[Q7] Will you and your collaborators be willing to adopt the selected project management tool?

85% of respondents are willing to adopt a web-based project management tool with initial training provided.

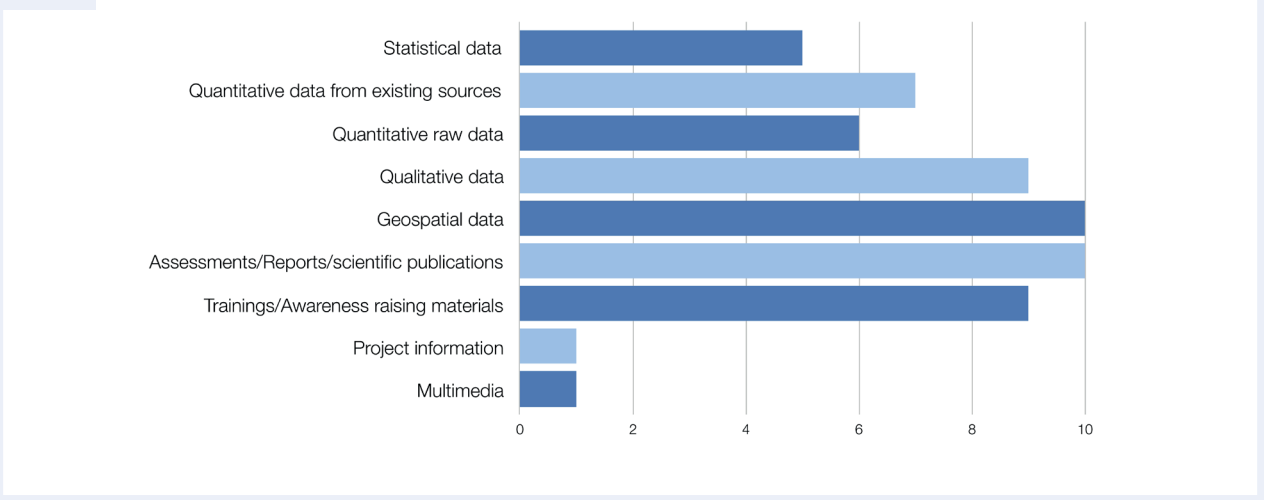
Chart 4



Managing and Visualizing the Data

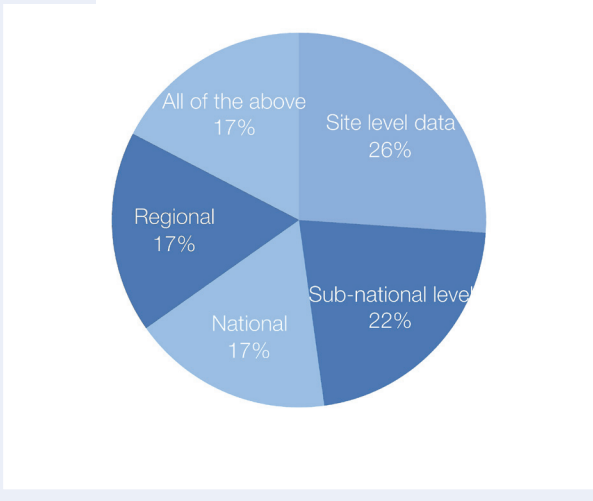
[Q10] What type of data will you collect and manage as part of your project?

Chart 5



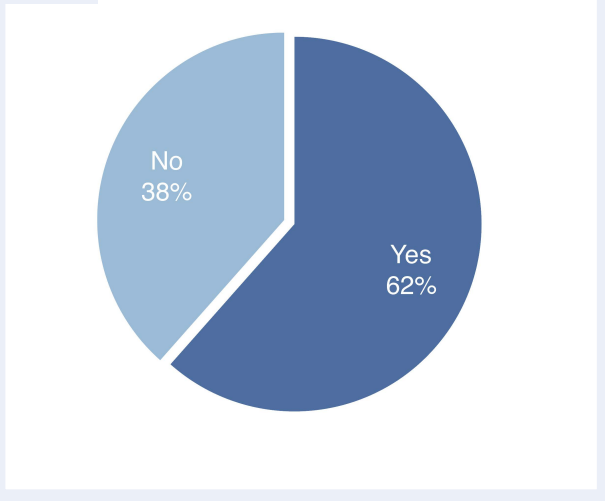
[Q11] **If your project works with geospatial data, what scale do you work at?**

Chart 6



[Q13] **Does your project include the collection and management of time series data?**

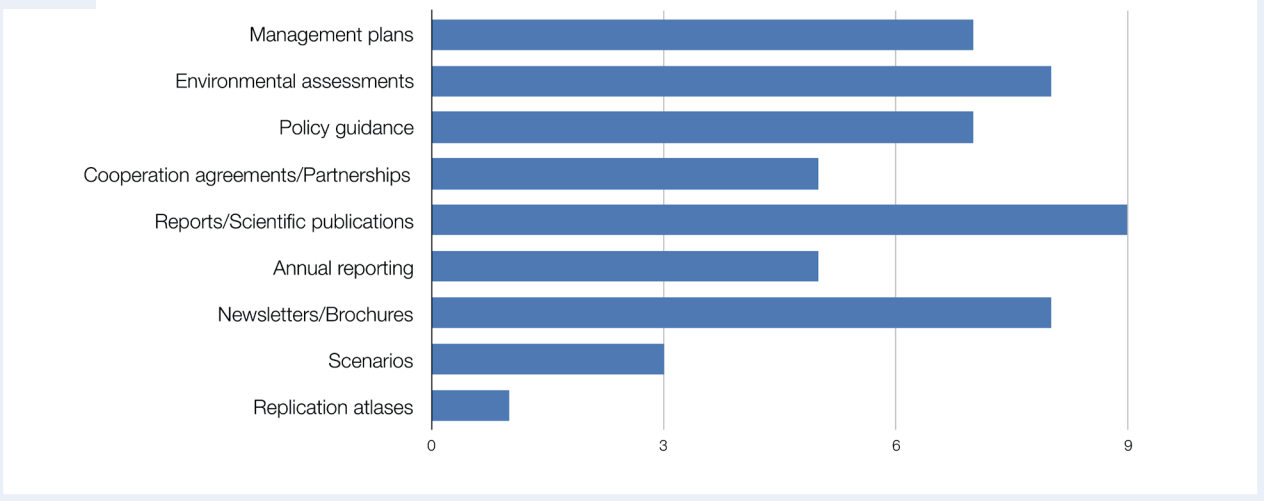
Chart 7



[Q10,11,13,14] Six of the CPs will produce geospatial data from site to regional levels, five will produce qualitative data (see also [16], data from surveys), four will use existing data from external sources, and three will generate new raw data, some of which will be in the form of time series with varying update frequency.

Chart 8 [Q12] **If your project produces qualitative data, what kind is it?**

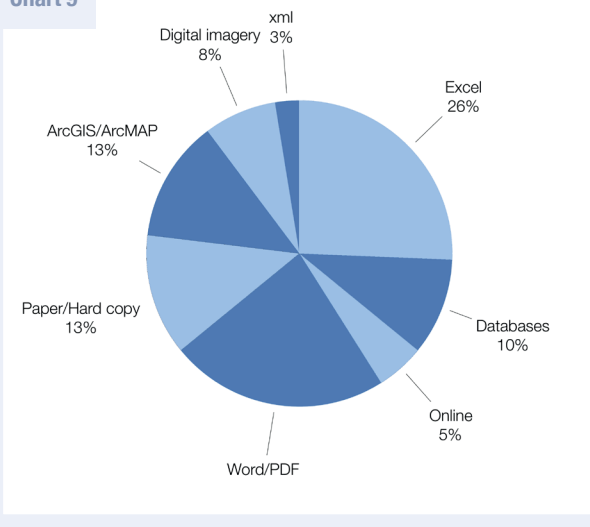
Chart 8



[Q16] What format will you prepare your data in?

A majority of respondents will use Excel to manage their data. Four will use MS Access or similar. Most projects will also manage (qualitative) data in Word, xml and even hard copies (e.g. from questionnaires and surveys). Five projects will manage ArcGIS or ArcMap files and three expect to generate digital images.

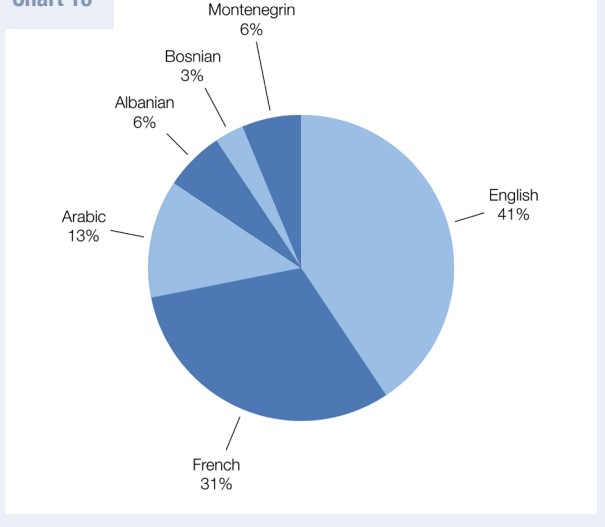
Chart 9



[Q5] What language(s) will your data be produced in?

Data will be produced in six different languages, with the vast majority producing data in English (41%) and/or French (31%) and Arabic.

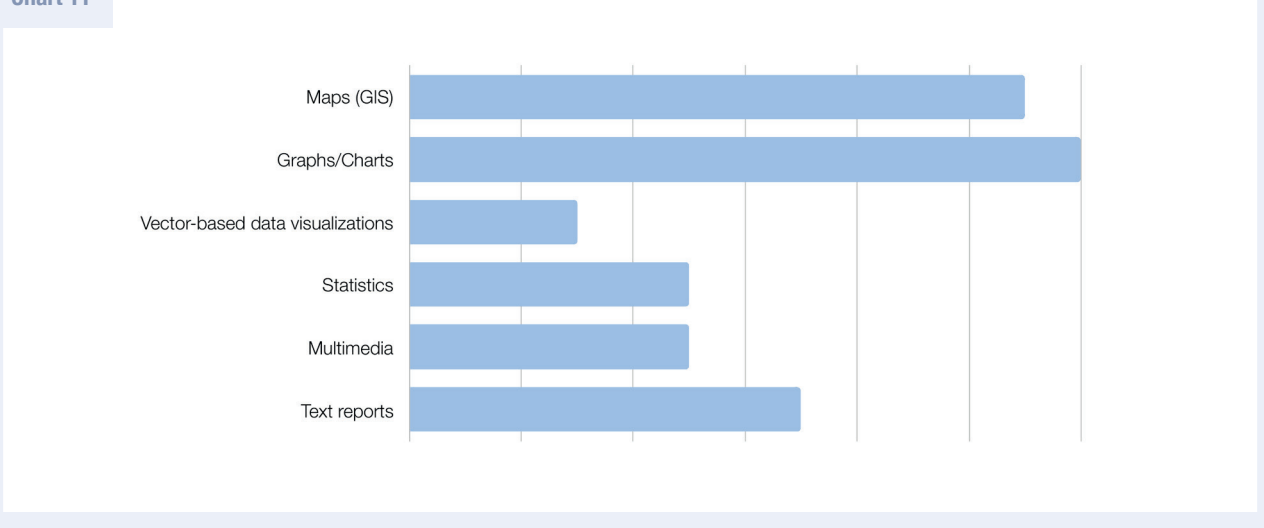
Chart 10



[Q17] Within your Organization/Institution, what type of online visualization tools have you been using so far (if any)?

Most respondents have used charts/graphs and GIS to visualize their data in the past while a smaller number use reports, multimedia and statistics.

Chart 11

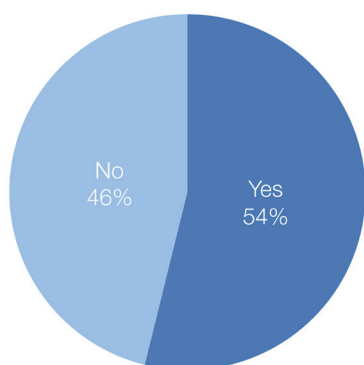


Information and Knowledge Management

[Q8] Have you ever used a Knowledge and Information Management platform?

About half of the respondents have used information and knowledge management platforms before.

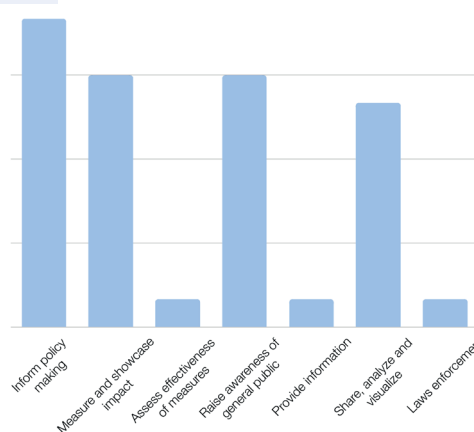
Chart 12



[Q23] What is your key objective for an online (geospatial) platform?

Respondents' expectations in relation to the platform are multiple and include an internal dimension related to data management and information/knowledge sharing among projects, and a public dimension related to showcasing impact, raising awareness and informing policy making in a transparent way. The platform should also help gather the elements that will be needed to tell engaging stories over the lifespan of the programme.

Chart 13



[Q26] What is your key objective for an online (geospatial) platform?

To this open question, respondents illustrated a variety of needs including:

- Engage partners from the beginning so they know they have a channel to promote their work (addressed at the 3 functional levels);
- Help track progress towards set goals (addressed at the portfolio level);
- Improve the internal work between executing partners and the way to communicate (addressed at the portfolio level);
- Facilitate reporting to the GEF (e.g. by timely gathering relevant information from executing partners) (addressed at the portfolio and policy levels);
- Effectively manage documents collaboratively among the co-executing partners (addressed at the portfolio level);
- Provide a roster of environmental experts (addressed at the portfolio level and policy levels);
- Provide a solid and centralized structure as well as cost-effective tools to collect, assess and share data and information (addressed at the portfolio level);
- The strategy should be designed in a way to primarily serve the governments of the contracting parties who have the executive powers to manage the environment, coast, biodiversity, natural resources (addressed at the policy level);
- The strategy should timely inform partners about expectations regarding their contributions to the communication strategy and the amount of work expected (addressed at the portfolio level); and
- The KM strategy should become a best practice for other programmatic approaches and projects.

2.3 MedProgramme Stakeholders

Stakeholder participation is an inherent part of the structure of MAP and the Barcelona Convention where all countries (represented by the MAP focal points) form the Contracting Parties to the Barcelona Convention. In addition, about 100 NGOs and Intergovernmental Organizations (IGOs), termed “partners” are participants to the meetings of the Barcelona Convention. It should also be stressed that stakeholders participated in the formulation of the TDA-MED, SAP-MED, SAP-BIO and the NAPs of the countries, on which the MedProgramme is based. In summary, the key stakeholders that CP 4.1 will strive to involve at national level include:

- Public Sector: ministries responsible for water resources; environment; spatial and development planning; transport; tourism; fisheries; industry; maritime affairs; health; fire-fighting; community development; education; culture and local government authorities.
- Private Sector: national and regional organizations representing: farmers; fisher folk; manufacturers/ industrialists; tourism and aquaculture sector; banks; insurers.
- Non-governmental Organizations (NGOs): national trusts; conservation associations; women's organizations; community-based organizations (CBOs);
- Scientific community: researchers; sociologists; environmental managers; engineers (water, civil, environmental); environmental economists; biologists; climatologists, geographers, oceanographers; teachers; curriculum specialists; media practitioners;
- General public such as the entire coastal population of the Mediterranean Basin (in particular those living in identified hotspots and sensitive areas) and the 176 million tourists visiting the Mediterranean annually.;

At a regional and global level, the stakeholders will be the various signatories to the relevant Multilateral Environmental Agreements (e.g. Barcelona Convention and its Protocols, Convention on Biological Diversity, Basel Convention, United Nations Convention to Combat Desertification, Rotterdam Convention, Stockholm Convention) and all individuals and organizations associated with the achievement of the 2030 Sustainable Development Goals.

The Terminal Evaluation of MedPartnership observed that in spite of the wide stakeholder engagement during implementation of the MedPartnership, the involvement of NGOs, private sector, and Mediterranean countries that are not eligible for GEF funding could have been greater. In the implementation of MedProgramme and its Child Projects, the Lead Implementation and Executing Agencies will foster opportunities to more closely involve NGOs and the private sector in project activities and to engage more closely with non-GEF eligible countries that share the Large Marine Ecosystem (LME) of the Mediterranean Sea. Child Project 4.1 will play an important role in this effort by broadly disseminating information on, and the progress and results of the MedProgramme, stimulating all other Child Projects to design and implement effective stakeholder participation strategies, and promoting involvement in the project's milestone events of relevant NGOs, of the private sector (in particular the tourism industry), and of all non-beneficiary Mediterranean countries.

As regards to specific stakeholders, each Child Project shall undertake its own research and analysis based on respective project objectives to identify partners, target groups and beneficiaries. This analysis is essential to understand who the different players are, their expectations and interest, their characteristics, commitment and constraints, their influence over others, etc. The MedProgramme KM Strategy will support the jump-start and continuous engagement of these groups at the programme level with targeted actions and outreach tools.

Box 2 Glossary: Stakeholders, Beneficiaries, Target groups, Partners

Stakeholders: groups that have a role and interest in the objectives and implementation of a programme or project; they include target groups, direct beneficiaries, those responsible for ensuring that the results are produced as planned, and those that are accountable for the resources that they provide to that programme or project.

Target groups: the main stakeholders of a programme or project that are expected to gain from the results of that programme or project; sectors of the population that a programme or project aims to reach in order to address their needs based on gender considerations and their socio- economic characteristics. When the target group is not sufficiently differentiated, the problem analysis tends to be superficial or too broad and does not allow the effect of the core problem within the various subgroups to be captured.

Direct beneficiaries: usually institutions and/or individuals who are the direct recipients of technical cooperation aimed at strengthening their capacity to undertake development tasks that are directed at specific target groups. In micro-level interventions, the direct beneficiaries and the target groups are the same.

Ultimate (or indirect) Beneficiaries: This is the target group that is expected to be better off as result of the project. The project may provide services directly to this group or more commonly target this group through the strengthening of institutions and organizations (i.e., the direct recipients), which support, increase awareness, or advocate on behalf of the ultimate beneficiaries. The distinction between direct recipients and ultimate beneficiaries is particularly important for donor-funded technical cooperation projects, where donors are primarily concerned with the impact of the project on the latter group. As a result, the project proposal should spell out the intended results of the project beyond just the direct recipients.

Partners: The individuals and/or organizations that collaborate to achieve mutually agreed upon objectives. Note: The concept of partnership connotes shared goals, common responsibility for outcomes, distinct accountabilities and reciprocal obligations. Partners may include governments, civil society, non-governmental organizations, universities, professional and business associations, multi- lateral organizations, private companies, etc.

Source: adapted from UNDP and ILO

2.4 Contributing to the Programme-wide KM

Each Child Project is expected to participate in the common knowledge management (KM) strategy to maximize efficiency, ensure good governance of the programme and achieve greater impact at the different functional levels identified (portfolio level, general public level and policy-making level).

While specific needs related to the diverse outputs of the individual projects will be analyzed on a case-by-case basis, all CPs are evenly contributing to the various activities illustrated in this document. A standard text included in each Child Project document reflects this approach and is aimed at harmonizing individual contributions. The synergetic approach is also reflected in the allocation of evenly distributed budget under each CP that will be used to support KM activities, production of knowledge and data. CP 4.1 will cover for example the costs of developing the KM platform (including the project management tool), organizing activities and events and producing communications material. Each CP will use the dedicated allocation of funds to, for instance, feed the platform with processed data, produce specific information for the preparation of advocacy material, etc.

3. Why a KM strategy?



Much of knowledge management is common sense, but not common practice. –Unknown



3.1 KM in the literature

Since the early 1990s there has been growing attention to the process of managing knowledge within organizations and businesses, mostly with the objective of improving performance and capitalizing on lessons learned. Pioneering professors Ikujiro Nonaka and Hirotaka Takeuchi, were among the first to investigate the benefits of Knowledge Management in organizations and popularize the concepts of “tacit” and “explicit” knowledge. In their 1991 groundbreaking article “The Knowledge-Creating Company”, they affirm that: “In an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge”. Through the work of dedicated scholars, knowledge management (KM) has gained a consolidated reputation leading to its establishment as a recognized discipline. KM is now viewed as an organization’s most valuable and strategic asset deserving to be treated accordingly.

There are many definitions of KM (see Box. 2) but it can be commonly described as the “systematic process to identify, capture, structure, value, leverage, and share an organization’s intellectual assets to enhance its performance and competitiveness through a multidisciplinary approach”.

Box 3 Definitions

Knowledge Management (KM): the systematic processes, or range of practices, used by organizations to identify, capture, store, create, update, represent, and distribute knowledge for use, awareness and learning across and beyond the organization.

Knowledge Management Systems (KMS): any kind of IT system that stores and retrieves knowledge, improves collaboration, locates knowledge sources, mines repositories for hidden knowledge, captures and uses knowledge, or enhances the KM process.

Knowledge Products and Services: these refer to outputs such as databases, publications, visual material, maps (knowledge products) and outcomes such as awareness raising, information sharing, and capacity building (knowledge services).

Knowledge Assets: are the accumulated intellectual resources of an organization in the form of information, ideas, learning, understanding, memory, insights, cognitive and technical skills, and capabilities.

Source: Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC.

Knowledge Sharing: A subset of knowledge management encompassing the exchange of knowledge (information, skills, experiences, or expertise) within and across organizations. Although it can be one- directional, knowledge sharing in most cases is a two-way or multilateral exchange in which the parties learn from each other. Knowledge sharing is more than mere communication because much knowledge in organizations is hard to articulate. In development work, some knowledge sharing has a regional aspect. For example, South-South knowledge sharing refers to exchanges among partners and peers across developing countries.

Source: Steffen Souleijman Janus. 2016. Becoming a Knowledge-Sharing Organization: A Handbook for Scaling Up Solutions through Knowledge Capturing and Sharing. Washington, DC: World Bank. doi:10.1596/978-1-4648-0943-9. License: Creative Commons Attribution CC BY 3.0 IGO

KM is based on two critical activities:

1. the capture and documentation of explicit (technical and codified information) and tacit knowledge (intangible assets intended as human and intellectual capital);
2. their dissemination amongst the intended audiences and stakeholders.

There are two key challenges: knowledge is difficult to assemble, and it is difficult to encourage its use. Many managers see it as a time-consuming distraction from their core role. However, proper knowledge management can reduce risks and increase efficiency through the re-use of proven approaches and avoidance of known pitfalls. It can also produce a virtuous circle as individuals and teams see their contributions recognised and re-used, thus encouraging further participation in the process. Accurate knowledge management is a powerful enabler of organizational learning and an indispensable ally for strengthening the science-policy interface. Writing a report or producing scientific data is only a part of the broader effort to promote environmental sustainability, because without effective sharing of information (in terms of language, tools, channels, etc) and dialogue among all stakeholders involved, the impact of the knowledge produced remains very limited. Considerable progress in raising awareness and improving scientific dissemination has been achieved in recent decades, but the urgency posed by challenges worldwide calls for accelerated and renewed efforts to raise the awareness of policy makers and the public at large about the measures needed to achieve sustainable development and the protection of natural resources.

3.2 KM under GEF programmatic approaches

The policy recommendations emanating from the GEF-7 replenishment¹³ clearly refer to knowledge as a “critical asset of the GEF Partnership” and commend “the steps taken to build the GEF’s knowledge management systems and practices in GEF-6, as well as the increasing attention to learning and knowledge exchange in GEF projects and programs, notably the integrated approach pilot programs, and in outreach to recipient countries”.

The call for more investments in knowledge management systems and practices also stems from recent GEF OPS (Overall Performance Studies) which have found that “the relevance of knowledge management to the GEF mandate has been increasingly recognized, and efforts to improve knowledge management in the partnership have been made on several fronts”. The GEF2020 Strategy emphasizes “strategically generating knowledge” as a priority. In 2014, the policy recommendations in the GEF-6 Replenishment Document similarly emphasized “the importance of developing a knowledge management (KM) system that aims to improve the GEF partnership’s ability to learn by doing and thereby enhance its impact over time”.¹⁴

At the same time, the GEF-7 Programming Directions commend programmatic approaches (see Box 3) to tackle environmental degradation, making the case for better performance and higher impact of projects within a program. It is noted that “Child projects generally performed better than stand-alone projects on all rating dimensions, especially on execution quality, sustainability and M&E design. Child projects have also improved in design and are now better linked to the overall program in terms of objectives, result based

¹³ Ref. GEF-7 Replenishment, Policy Recommendations, Fourth Meeting for the Seventh Replenishment of the GEF Trust Fund, GEF/R.7/18, p.9, www.thegef.org/council-meeting-documents/gef-7-policy-recommendations

¹⁴ Ref. Global Environment Facility Independent Evaluation Office (GEF IEO), OPS6 Final Report: The GEF in the Changing Environmental Finance Landscape. Washington, DC: GEF IEO, 2018, p. 147 www.thegef.org/sites/default/files/council-meeting-documents/GEF.A6.07_OPS6_0.pdf

management and M&E.”¹⁵ In addition, OPS6 reports that “multi-focal area projects are better at achieving global environmental and socio- economic outcomes at completion compared to single-focal area projects”¹⁶. A recent IEO brief¹⁷ further noted that country stakeholders cite “improved knowledge sharing and synergies with other GEF projects among the incentives for joining a program.

Box 4 GEF Programmatic approaches

Programmatic approaches, formalized in 2008¹⁸, are particularly relevant to the Global Environment Facility (GEF), given the long-term nature of the environmental problems the GEF addresses. The GEF-7 Replenishment Programming Directions¹⁹ reaffirms this approach noting that “more complex programs and sets of child projects will tend to offer more entries for development links due to multi-sectoral approach, multi-stakeholder engagements and platforms, and potential for delivering socio-economic co-benefits, along with enhancing the sustainability of the associated investments.”

Managing knowledge holistically within programs is a key undertaking, posing additional challenges due to the extra complexity and number of partners and stakeholders involved. The STAP²⁰ notes that “as the GEF moves further towards integrated approaches, multi-focal projects and impact programs, it is increasingly important to facilitate acquisition of formal and tacit knowledge, organize knowledge assets from complex situations and make them available to inform future investments. The Integrated Approach Pilot (IAP) programs and Impact Programs impose greater needs for connections between ‘child’ projects and program objectives. KM is the obvious means to tie these connections together, to collect evidence-based learning, and to achieve sustained impact that deliver benefits far into the future.”²¹

This emphasis from the GEF on both integrated knowledge management systems and holistic multi-focal area programmes, clearly sets the ground for a purposeful, concrete and action- orientated KM strategy for the MedProgramme. During its execution, the MedPCU will make sure that actions are closely aligned with GEF KM-related guidelines²².

¹⁵ Ref. GEF-7 Replenishment, Programming Directions, Fourth Meeting for the Seventh Replenishment of the GEF Trust Fund, GEF/R.7/19, p.6, <https://www.thegef.org/council-meeting-documents/gef-7-programming-directions>

¹⁶ Ibid

¹⁷ Evaluation of Programmatic Approaches in the GEF, IEO Brief, The Independent Evaluation Office (IEO) of the GEF, 2017. Full brief at: <http://www.gefio.org/sites/default/files/ieo/signposts/files/programmatic-approaches-2016- brief.pdf>

¹⁸ “Programs have been part of the GEF since its establishment. [...] In 2008, the Council endorsed the objectives and principles for programmatic approaches. For the first time, detailed procedures for designing programs were approved, including the introduction of the program framework document (PFD). This resulted in an increase in the submission of programs to the Council and a change in their nature from phased to clustered ones. Importantly, a stimulus to program ownership was introduced by defining programs as “a more strategic level interaction with the GEF” for countries. [...] Until GEF-5, Council discussions about programs centered more on administrative than technical matters. This changed in 2014, when the Council approved a revised modality based on program scope: (1) thematic—the program addresses an emerging issue (e.g., a driver of environmental degradation), and (2) geographic—the program focuses on a particular geography. In GEF-6, the GEF introduced the IAPs, which focus on drivers of environmental degradation through supporting broad stakeholder coalitions and scalable activities.” IEO BRIEF, Evaluation of Programmatic Approaches in the GEF, January 2018

¹⁹ The full document of the GEF-7 Replenishment Programming Directions is available at: https://www.thegef.org/sites/default/files/council-meeting-documents/GEF-7%20Programming%20Directions%20-%20GEF_R.7_19.pdf

²⁰ STAP stands for the Scientific and Technical Advisory Panel of the Global Environment Facility. More info: <http://www.stapgef.org>

²¹ Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 3

²² At the time of the PPG phase (June-September 2018) final GEF guidelines on KM were not yet available. However, due consideration of provisions contained in the GEF Knowledge Management Approach Paper (2015, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.48.07.Rev_01_KM_Approach_Paper.pdf) and other relevant documents was taken into account when preparing this strategy.

4. Getting there: a modular architecture

“ Knowledge is the new capital, but it’s worthless unless it’s accessible, communicated, and enhanced. ”

–Hamilton Beazley

In order to achieve the objectives of the KM strategy, three interconnected functional levels have been identified to structure actions, activities and tools:

1. at the **PORTFOLIO LEVEL**;
2. at the **GENERAL PUBLIC LEVEL**;
3. at the **POLICY and DECISION-MAKING LEVEL**

Each level is articulated along different objectives. Activities and tools contribute to one or more KM levels and to the two Components of Child Project 4.1 (see Table 3, page 32). They are presented associated with objectives (such as “Monitoring progress towards impact”), but in most cases they are meant to respond to the needs of more than one KM level.

Table 3 Contribution of activities and tools to KM levels and CP 4.1 Components

Activity/Tools	Portfolio Level	General Public Level	Policy Level	CP 4.1 Component 1 Knowledge Sharing and Dissemination	CP 4.1 Component 2 Coordination and Synergies
Project/Program Management Tool	X				X
Database and Visualization tools	X	X	X	X	X
Public portal		X	X	X	
Annual Stocktaking Meetings	X	X	X	X	X
Replication Atlases		X	X	X	X
Trainings for portfolio	X				X
MedProgramme identity	X	X		X	
Med Bulletin/Newsletter	X	X	X	X	X
Storytelling (movies, graphic novels, podcasts, infographics, ...)		X	X	X	
Social media		X	X	X	
Technical reports and scientific publications, IW:LEARN Experience Notes		X	X	X	
MedProgramme Launching event and Final Conference	X	X	X	X	X
IW:LEARN IWC and twinnings, GEF events	X		X	X	X
Global campaigns and processes		X	X	X	
Engagement with testimonials		X		X	
Partnerships	X	X	X	X	

4.1 Portfolio Level

The work of project managers and executing partners is supported through provision of project management tools, monitoring frameworks, trainings and knowledge exchanges. A series of IT- based solutions and knowledge-mining and -sharing techniques are used to capture codified information as well as intangible assets.

4.1.1 Supporting efficient project management

4.1.1.1 Project Management Tool

A multilingual online project management tool²³ (integrated in the KM platform) can respond to the need of supporting efficient project (and programme) management by facilitating communication and information exchange among key actors of the Programme; promote knowledge sharing and peer-to-peer learning; facilitate tracking and monitoring of progress; and meet reporting requirements. A review of options currently available on the market (such as Asana, Freedcamp, Wrike, Slack, Microsoft Project, Basecamp, among others) has been carried out in the preparatory phase of the MedProgramme with a view to inform the selection of the most suitable tool to serve the needs of the portfolio. The final selection and adoption of the tool will occur during the inception phase of CP 4.1.

This decision-support system employs effective data-mining techniques and can be customized to suit the programme's needs, and project managers (and designated project collaborators) will receive specific training on its use and adoption to ensure portfolio-wide consonance.

Key features for such a tool include (but are not limited to): automated reporting, shared calendars, live editing/collaboration on document development, workflow and task monitoring, Gantt-Chart, time tracking, file management and cloud repository, encrypted security, back-ups, integration with email and other products, mobile apps, and role-based access control and discussion boards.

The majority of respondents to the online survey on projects needs welcomed the idea of utilizing a PMT (and benefitting from ad hoc training). Previous experience from MedPartnership showed little use of a similar tool, however since then these online tools have greatly improved their features and levels of customization, and have been adopted widely to manage complex, multi- partner and multi-lingual projects.

4.1.2 Sharing knowledge and building capacity

One of the objectives of the MedProgramme is to improve the capacity of key regional stakeholders and build socio-economic resilience of impacted communities. To this end, a series of knowledge exchanges will take place at different levels taking inspiration and practical lessons learned from the GEF Partnership (reflecting the wealth of experience and examples from projects and programs around the world) and other relevant Organizations involved. A milestone activity in this sense is represented by the series of MedProgramme Annual Stocktaking Meetings (see next section).

²³ Project management tools (PMT) are aids to assist an individual or team to effectively organize work and manage projects and tasks. PMTs can either be desktop software, web-based and as a mobile app. Most of the tools are web- based only with a few providing also desktop and mobile based versions, regardless of the kind of version all the work is updated instantly across all devices and accounts.

4.1.2.1 Knowledge Exchanges

At the portfolio level, the MedPCU will capacitate Child Project teams with knowledge and training that can help them to deliver better project results and achieve greater impact. The identification of topics and modalities of exchange (face-to-face, virtual meetings, Communities of Practice, Expert visits, Study Tours, manuals, among others²⁴) will be defined at the beginning of the Programme implementation. Preliminary topics could include:

1. Gender mainstreaming and stakeholders' engagement;
2. Scientific communication: bridging the gap between scientists/technical practitioners and media specialists;
3. Lessons learned from the MedPartnership and the ClimVar and ICZM projects.

It is expected that these knowledge exchanges will further empower project stakeholders, enhance cooperation, strengthen the institutions they represent and ultimately influence policies and norms for better management of natural resources in coastal areas.

Additionally, Child Projects will participate in learning exchanges by twinning with other relevant GEF IW projects as facilitated by the GEF IW:LEARN Project (see more at page 44).

Moreover, the MedPCU will support specific capacity building activities foreseen by each Child Project by taking stock and amplifying results through the programme-wide outreach.

4.1.3 Monitoring progress towards impact

4.1.3.1 Annual Stocktaking Meetings (ASM)

The Annual Stocktaking Meetings (ASM)²⁵ are one of the milestone activities of the MedProgramme. They are major regional events aiming to establish synergistic interactions among Child Projects and with other relevant initiatives and stakeholders, including with all other Mediterranean countries not participating in the MedProgramme.

ASMs hold a two-fold objective: 1) provide a forum for peer-to-peer learning among the Programme portfolio, and 2) catalyze regional and global attention on the progress made towards impact in the entire Mediterranean region.

The ASMs will be an occasion for face-to-face knowledge exchanges, south-south and north-south learning, and promotion of the broader adoption of MedProgramme approaches and solutions. Project managers, stakeholders and beneficiaries will have the opportunity to learn from each other, tap into respective tacit knowledge, and at the same time benefit from experiences and expertise generated by GEF and non-GEF projects and other relevant experts in different disciplines with diverse backgrounds. Moreover, Child Projects will have the chance to showcase their implementation advancement, discuss problems encountered, and engage with a broad audience of peers and stakeholders. The participation of regional and global media

²⁴ Useful guidance can be found in the following publications: “The Art of Knowledge Exchange. A Results-Focused Planning Guide for the GEF Partnership” 2015 (https://www.thegef.org/sites/default/files/publications/GEF_WB_AoKE_English.pdf); “Becoming a Knowledge-Sharing Organization” 2016 (<http://documents.worldbank.org/curated/en/306761478498267644/pdf/109809-PUB-Box396311B-PUBLIC-DOCDATE-11-2-16.pdf>); and

²⁵ The importance of, and need for stocktaking meetings emerged during the execution of the Strategic Partnership for the Danube and Black Sea Basin, the first GEF experiment in multi-project programs.

will raise public awareness across the Mediterranean countries and beyond. These knowledge exchanges will further enhance cooperation, strengthen the institutions they represent and ultimately influence policies and norms for better management of natural resources in coastal areas. The meetings will involve: all Child Projects and Governments of the participating countries, the MedProgramme’s implementing and executing agencies, the GEF Secretariat and Independent Office of Evaluation (IOE), Convention Secretariats, the UN Environment Global Program of Action (GPA), as well as major regional and global NGOs, representatives of those Mediterranean countries not participating in the MedProgramme; bilateral and multi-lateral donors, IFIs, the UfM, other regional intergovernmental organizations (OSS, etc.), and major private sector coastal area actors, water users, tourism associations and the shipping industry. Representatives of faith-based leaders, women’s organizations, youth organizations, fashion/art/sport testimonials, media specialists, among other relevant groups will also be invited to participate in these events, following a dedicated stakeholders’ analysis.



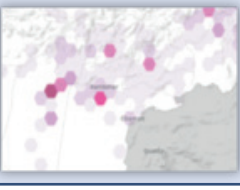
All project partners are expected to attend, and meaningfully participate in, the ASMs. They will be organized by the MedPCU in cooperation with all CPs and country representatives and will take place on a rotation basis in different project countries.



The ASM design, objectives and architecture will be defined during the first year of MedProgramme operation and approved at the CP 4.1 Steering Committee level. The first ASM will be held during the second year of MedProgramme operation.



4.1.3.2 Data visualization

Data visualization tools effectively support monitoring and reporting through easy visualization of selected data thus taking stock of progress. The table below illustrates possible types of visualization for geospatial and other types of data²⁶.

Table 5 Visualization examples for geospatial data and other types of data

GEOSPATIAL DATA		
Type of visualization	Type of data example	Visual example
Pin, symbol (with or without color or icon coding)	Coastal contamination hotspots, industrial wastewater treatment plants, etc.	
Polygon (with or without color coding, with or without color following a scale)	Number of water system clients connected to modern wastewater facilities, Coastal contamination hotspots, Concentration of mercury in coastal waters, Landscape and seascape under improved management, etc.	
Proportional symbol (color and/or size follow a scale)	Amounts of POPs disposed of /recycled on-site, Amounts of Mercury/ disposed of recycled on-site, Volume of industrial wastewater receiving secondary treatment, Volume of treated industrial wastewater reused, etc.	

GEOSPATIAL DATA		
Type of visualization	Type of data example	Visual example
Heatmap	Concentration of POPs in coastal waters, etc.	
Choropleth maps	Countries implementing comprehensive Integrated Coastal Zone Management, Countries implementing sustainable consumption and production (SCP) approaches, Countries having completed inventories of submarine groundwater discharges, etc.	

OTHER TYPES OF DATA		
Type of visualization	Type of data example	Visual example
Animated gauge	Real-time progress towards target of 3,250 tonnes reduction in POPs contamination, progress towards target of 50 tonnes reduction in mercury contamination, etc.	
Pie chart	Training distribution by type of training and by gender, etc.	

Note: For each geospatial visualization above, more information could be displayed in overlays (which appear when hovering the mouse).

4.1.3.3 Measuring Knowledge Management impact



Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted. –Albert Einstein



Unlike other activities that can be justified in terms of explicit and measurable monetary savings, the added value of knowledge management is more difficult to quantify. Knowledge management benefits are both far reaching and hard to measure as they relate primarily to preventing the waste of money, time and human resources. It is difficult to quantify the expense – in terms of time and money – of finding the right information or reproducing knowledge that already exists, or of using obsolete rather than up-to-date information. The prevention of errors and the savings that are often achieved through better use and reuse of existing knowledge are practically invisible in accounting terms²⁷.

Nevertheless, it is important to assess the performance of KM efforts and measure the impact of the KM strategy. Measurement, benchmarking and incentives are essential to accelerate the learning process and to drive cultural change. When distilling recommendations to improve the systematic treatment of the need for KM, the STAP recommends that “knowledge management progress indicators should be included in the GEF Results-Based Management system”²⁸.

A menu of indicators (both quantitative and qualitative) will be considered by the MedPCU in order to monitor knowledge-related activities (Table 5). Once indicators are discussed and approved during the inception phase of the MedProgramme, related targets can be developed to measure the achievement of the objectives.

Table 6 Possible KM Indicators

What to measure	Indicators	Means of verification
How often are internal users I) accessing, II) contributing to, or III) using the knowledge assets and sharing processes at their disposal?	<ul style="list-style-type: none"> • Number of connections per day/week/month • Number of knowledge assets downloaded • Number of discussions or messages shared, etc. 	Usage data will be provided by the MedProgramme portal analytics
What is the level of internal user satisfaction with the MedProgramme project management tools and how is it impacting their work?	<ul style="list-style-type: none"> • User friendliness of the tool from 1 to 5 (e.g. interface, design, navigation, etc.) • Technical quality of the tool from 1 to 5 (features, speed, etc.) • Overall level of satisfaction from 1 to 5 • Has facilitated collaboration within your CP from 1 to 5 • Has facilitated collaboration with other CPs from 1 to 5 • Has helped you save time by giving your access to resources from 1 to 5 	This can be measured through internal satisfaction surveys that will also provide a venue for users to suggest improvements, (virtual) meetings, etc. Stakeholders should be engaged in a structured manner, for example through interviews, focus groups, or peer learning activities.

²⁷ Steffen Soulejman Janus. 2016. *Becoming a Knowledge-Sharing Organization: A Handbook for Scaling Up Solutions through Knowledge Capturing and Sharing*. Washington, DC: World Bank. doi:10.1596/978-1-4648-0943-9. License: Creative Commons Attribution CC BY 3.0 IGO

²⁸ Stocking, M. et al. 2018. *Managing knowledge for a sustainable global future*. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 5

What to measure	Indicators	Means of verification
How often are public users IV) accessing the MedProgramme portal, and V) accessing the knowledge assets?	<ul style="list-style-type: none"> Number of visits, Average time spent Number of downloads Pages visited Number of recipients opening the newsletter Ease of finding knowledge resources on the portal from 1 to 5, etc. 	Usage data will be provided by the MedProgramme portal analytics. A feedback form can also be available at all time on the portal.
Is MedProgramme producing quality knowledge assets?	<ul style="list-style-type: none"> Level of satisfaction of stakeholders with knowledge asset Are stakeholders using knowledge assets in their work 	This can be measured through a stakeholder survey.
Is MedProgramme contributing to the GEF knowledge base?	<ul style="list-style-type: none"> Knowledge assets shared on other GEF platforms (IW:LEARN and others) 	This will be monitored by the MedPCU.
Is MedProgramme building the capacity of key regional stakeholders?	<ul style="list-style-type: none"> Key regional stakeholders have been identified Number of knowledge exchange activities implemented Number of participants at the Annual Stocktaking meetings 	This will be monitored by the MedPCU.
Is MedProgramme participating / contributing to global and regional campaigns, events and processes?	<ul style="list-style-type: none"> Number of regional and global events with MedProgramme participation (as presenter) Number of #MedProgramme mentions on SDG social media channels 	This will be monitored by the MedPCU.
Is MedProgramme getting the attention of the media?	<ul style="list-style-type: none"> Number of media hits in target languages / countries Number of media hits in first tier media outlet Number of Op-eds placed, etc. 	This can be monitored by a media agency for a fee or with free tools such as Google Alerts.
Are Parties to the Barcelona, Stockholm, Minamata, and Basel Conventions VI) aware of the MedProgramme outputs / outcomes? VII) using the MedProgrammes outputs?	<ul style="list-style-type: none"> Number of briefing organized with Parties to the Barcelona Convention Number of countries attending the briefing Number of countries using MedProgramme outputs 	This will be monitored by the MedPCU and country representatives can be surveyed through face-to-face interviews, etc.

4.2 General Public Level

Civil society, media, and representatives of non-scientific community are informed about MedProgramme’s results and engaged in knowledge sharing activities both as brokers and beneficiaries

4.2.1 Communicating progress and results

The KM strategy foresees a large component on communications and outreach aimed at ensuring that results are properly shared with the intended audiences to maximize, replicate and scale up best practices and lessons learned.

A number of traditional communications activities (such as newsletters, brochures, etc.) will be blended with innovative and creative approaches (graphic novels, documentaries, podcasts, etc.) to ensure visibility of the Programme.

4.2.1.1 Knowledge Management Platform

The engine of the KM strategy is enshrined in a powerful web-based knowledge hub comprised of a

data and information management system (with both public and restricted access) and a combination of visualization tools to serve the portfolio's needs.

The platform will serve as central repository of all the data generated by the Child Projects and will be designed with a view to the following strategic knowledge management objectives:

- Facilitate information sharing and promotion of the Programme achievements among the partners and the regional stakeholders.
- Reflect the indicators of all Child Projects in the establishment of the relevant tools and frameworks, and seek coherence with efforts underway in the GEF's Chemicals and Waste Focal Area to create a platform to assist countries in meeting the reporting requirements of the Stockholm and Basel Conventions.
- Support policy development through its data collection and management tools.
- Strengthen the science-policy interface, incorporating relevant data already generated by the countries, with the clear understanding that no data would be disseminated without the permission of its owner.
- In the long term, become a tool of the Contracting Parties of the Barcelona Convention.
- Assist countries in meeting their IMAP reporting requirements.
- Ensure that the highly valuable legacy of the MedPartnership, which produced a substantial volume of knowledge and information as well as a number of tools and guidelines, lessons, and experiences, is carefully preserved and easily accessible, including translations of key documents.

Such an integrated platform should host: 1) a project management tool; 2) a public/outward-facing portal, including sub-webpages for each CP; 3) visualization tool(s) to display a digitalized representation of data through GIS and other suitable means; and 4) a database for raw/primary data.

1. The project management tool was described previously (page 33)
2. The outward-facing MedProgramme portal will be populated with key information showcasing progress towards impact and the contribution of the MedProgramme to global and regional environmental goals. The portal will serve as a gateway for information related to international waters, coastal zones, biodiversity and climate resilience in the Mediterranean sea basin, bringing together information from GEF and non-GEF projects (for example results from the MedPartnership project will be made available and possibly re-packaged in new material) for broad dissemination and cross-fertilization (several platforms identified in the Baseline can be cross-referenced from the MedProgramme platform to reach out to vaster audience and stakeholders). It will closely dialogue with the GEF's new portal (corporate database for projects, reports, and documentation) and the IW:LEARN website. The MedProgramme portal will feature a highly user-friendly interface including effective search functions, filters (such as drop-down menus) and analytical capabilities. Each Child Project will have dedicated sub-pages about their specific activities. CPs are expected to provide regular information (in different multimedia formats) to generate content for their respective project sub-pages and the overall programme portal. The MedPCU will be responsible for curating the information provided and packaging them for the intended audiences.

3. Visualization tools²⁹ will be used to display spatial and non-spatial data (be they quantitative or qualitative) generated by the projects. Data need to be stored and mined in a way that makes them readily available not only to track progress but also to support decision making by the different stakeholders. GIS (geographic information system³⁰) will be largely used as well as textual information, photos, story maps, pie charts, graph charts, infographics, map dashboards, trend line charts, among others (see examples in Table 5). Users can build a query based on specific criteria such as geographic area, data layer or specific indicators. Alternatively, users can simply browse for information using the icons provided. There are a number of visualization software tools available both as open source and commercial options. A number of products (with license or open access) could be suitable for integration in the MedProgramme knowledge platform, such as Esri ArcMap and ArcGis, Geonode, QGIS, MapX³¹ and Google Earth Outreach³². The final selection will be made during the inception phase.
4. Raw/primary data will be stored in a database with flexible restricted/public access. A shared data model/protocol should be agreed at the beginning of the Programme to ensure that projects will compile relevant data with a standardized approach and enable a harmonized data entry system (the INSPIRE directive³³ could be taken as reference to harmonize the process). Issues related to open data, ownership, quality and review of data will be addressed in this exercise; a mapping of voluntary standards can help to evaluate feasible options. Contributors of data are all stakeholders of the MedProgramme, including the Executing Partners. Child Projects are responsible for producing their own data.

4.2.1.2 MedProgramme identity

In terms of visibility, the MedProgramme will be presented in a holistic and coherent way through the development of clear vision statement and positioning, visual identity, logo design, etc. showing consistency and integration across the portfolio. At the same time, each Child Project will be granted individual identities within the overall MedProgramme-branding in order to promote specific activities and benefit from ad hoc services. This will entail the design of consistent logos for each CP, creation of sub-websites within the Programme platform, organization of tailor-made trainings, preparation of specific publications, social media services, among others.

The MedPCU will develop a proposal³⁴ in close consultation with project teams and, once adopted at the Steering Committee level, Child Projects are expected to use it consistently.

²⁹ Data visualization is the presentation of data in a pictorial or graphical format, and a data visualization tool is the software that generates this presentation. Data visualization provides users with intuitive means to interactively explore and analyse data, enabling them to effectively identify interesting patterns, infer correlations and causalities, and supports sense-making activities.

³⁰ The information about location associated with observation and statistical analysis is called geographic information.

³¹ MapX was developed by UN Environment, the World Bank and the Global Resource Information Database (GRID-Geneva) to capitalize on the use of new digital technologies and cloud computing in the sustainable management of natural resources. More info: www.mapx.org

³² A recent partnership has been established between UN Environment and Google.

³³ The INSPIRE Directive aims to create a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment. This European Spatial Data Infrastructure will enable the sharing of environmental spatial information among public sector organisations, facilitate public access to spatial information across Europe and assist in policy-making across boundaries. INSPIRE is based on the infrastructures for spatial information established and operated by the Member States of the European Union. The Directive addresses 34 spatial data themes needed for environmental applications. The Directive came into force on 15 May 2007 and will be implemented in various stages, with full implementation required by 2021. More info: <https://inspire.ec.europa.eu>

³⁴ In line with both UN Environment and GEF policies on branding and use of logos.

4.2.1.3 Newsletters (Med Bulletin)

Periodic MedProgramme Bulletins will be published (every six months or on a quarterly basis) to showcase progress of the Programme as a whole and of individual Child Projects, including highlights of results, success stories and project events, and relevant global, regional and national relevant meetings and events. It will be one of the primary tools for tracking achievement of targets and milestones for all Child Projects, based upon the corresponding results frameworks. Bulletins will feature a “journalistic” style making the content appealing for a wide range of audiences. Therefore, all CPs are expected to contribute to these Bulletins with different types of inputs in order to document their activities and progress, such as high-quality pictures, articles, statistics, quotes, interviews, footage, among others.

4.2.1.4 Storytelling for advocacy

A number of traditional storytelling instruments will be blended with innovative and creative approaches to increase dissemination and advocacy efforts. Particular emphasis will be given to the preparation of high-quality short movies, animations and documentaries, graphic novels³⁵, documentaries, podcasts³⁶/radio programmes, infographics, art exhibitions, digital interactive stories/articles/interviews, professional photos, microblogging, e-books, art exhibits, among others. The MedPCU will collect different multimedia material from the CPs necessary to prepare these products. Translations of key communications outputs will be carried out in English, French and Arabic to ensure ample dissemination in the participating countries. Specific translations in other national languages will be sought pending budget constraints and upon due consideration of stakeholders’ needs.

4.2.1.5 Social Media

Facebook, Instagram, YouTube and Twitter are four social media tools suggested for use by the MedProgramme. Development of timely and appropriate content and material to populate these channels is indispensable to achieve the desired impact. CPs will be prompted to contribute with relevant and ad-hoc information, pictures, statistics and other data to enrich the social media campaign.

The use of hashtags will be coordinated with the GEF IAs and EAs and project and country representatives of the Programme in support also of other related initiatives and campaigns.

The registration on the above-mentioned channels (or a selection of them) will take place at the beginning of the Programme and content population will start as soon as data and information from the projects becomes available.

4.2.1.6 Participation to global campaigns, events and processes

Experiences and lessons learned from the MedProgramme will be of relevance for a number of global processes shaping policies related to the sustainable management of natural resources in coastal areas. In turn, global processes are important for the MedProgramme to align with national, regional and global priorities and be receptive to new “waves” (policies, socio-economic trends, tech advances, etc). MedProgramme activities in this sense will build on existing successful campaigns, for example the “ICZM Mediterranean awareness-raising Strategy (MARS)”. Contribution to these events will take different forms, ranging from physical attendance, production of specific products, content and multimedia material to be packaged in suitable products, among others. Examples of processes and events that could be relevant for the MedProgramme include the Agenda 2030 and SDGs conferences, the United Nations Environment Assembly (UNEA), Mediterranean-wide policy dialogues, the UN Environment campaigns against chemical and plastic pollution, the EU Development Days

³⁵ Graphic novel or graphic journalism” is an increasingly popular literary genre that uses comics and poignant texts to explain complex matters. It is a compelling way of storytelling for scientific dissemination.

³⁶ A mix of radio and audiobooks, podcasts are a very incisive and entertaining way of sending messages across and inform and spark debate on pressing issues. They are easy to share and can reach a vast and varied audience.

and other key gatherings at the EU level, International Days (such as Coast Day, Environment Day, World Water Day, Health Day, etc), among others.

4.2.1.7 Engagement with media and testimonials

The MedPCU will reach out to a different number of media outlets and journalists with a view to establish long-lasting collaborations. To this end, CPs will be asked to liaise with national and local media of the project countries (for instance, by providing the MedPCU with a list of relevant contacts). A series of direct interactions with communications specialists, media experts and social media influencers is foreseen throughout the duration of the Programme to increase mutual understanding and flow of information. The MedPCU will also reach out to renowned personalities from different realms (such as art, sports, entertainment or fashion) to invite them to serve as ambassadors for the Programme and raise awareness about the main environmental challenges (and solutions) in the coastal areas of the Mediterranean. CPs will be prompted to suggest names, and facilitate contacts when possible, of suitable and potential “goodwill ambassadors” of relevance in the region.

4.2.1.8 Launching/Closing events of the MedProgramme

The design and practical details of these events will be planned during the inception phase of the MedProgramme. Considering the staggered initiation timeframes of the different Child Projects, a launching event of the MedProgramme could be organized in the form of a press conference to coincide with the kick-off of the Support Child Project 4.1. Basic communications material about the objectives of the MedProgramme (such as visual identity, slogan, mission statement, description of Child Projects, informative brochure, short promo video, basic online pages, etc) should be prepared prior to the launching event. Participation to these events will not necessarily be open to the large public, however the information and messages emanating by these two occurrences will be relevant for a general audience as well.

4.2.2 Forging and nurturing Partnerships

“ *If you want to go fast, go alone. If you want to go far, go together.* –African Proverb ”

Opportunities to enlarge the existing partnership of the MedProgramme should not only be welcomed, but actively sought. By reaching out to different stakeholders – individuals, organizations or companies – and engaging them directly in selected MedProgramme activities, a series of distinct advantages will be produced. These include:

- Contributing to transformational change: groups that are likely to evade the radar of “usual suspects” mapping (intended as classic stakeholders for environmental projects) will be intentionally targeted, moving away from the old-fashioned top-down view of passive beneficiaries of knowledge to a new vision in which conscious citizens are regarded as source of knowledge and potential allies in the strive against environmental degradation. For example, a collaboration with Faith-Based Organizations³⁷ to prepare a workshop or joint statements disseminated through their networks would tremendously increase the chances to inform and influence a large portion of general public that is not reached by traditional channels. Another possibility is a partnership with a fashion magazine to sensitize readers about sustainable business in coastal areas.

³⁷ Faith-Based Organizations could be a very important stakeholder group to engage in environmental decision-making. “Religion plays a significant role in the understanding and shaping of attitudes, opinions and behaviours including for management and use of the environment and natural resources”. UN Environment Foresight Brief 008, April 2018.

- Facilitating a more rapid achievement of the Programme results: for example, a partnership with tourism institutions in the different participating countries could accelerate the adoption of more sustainable touristic habits to reduce pollution load into water bodies and increase the acceptance and reuse of treated freshwater for human consumption.
- Raising the profile of the GEF investments in the Mediterranean and of the countries and partners participating to the effort. A partnership with National Geographic for instance, or with national TVs and radio stations, could enhance the dissemination of knowledge and results generated by the MedProgramme as well as by related initiatives and policy-frameworks, like the Barcelona Convention.
- Further stimulating a sense of ownership and contributing to the sustainability of Programme results: making tight connections for example with the Bibliotheca Alexandrina to host a permanent or temporary exhibition about the MedProgramme, which could then travel around museums of the entire Mediterranean basin (starting with participating countries), and thus ensure that the legacy of the MedProgramme will continue to inspire people even after the programme closure.
- Providing additional means to further expand Programme activities: by adding ad hoc co-financing (cash or in-kind) to produce, for example, through a publication or a short movie for the general public, the MedProgramme could gain positive returns in terms of resources and reputation. Bringing together renown artists from project countries and the private sector to jointly produce a graphic novel on the MedProgramme, for instance, could be rewarding in many regards.

The MedProgramme holds the possibility to create a fertile hub for different partners to come together and share experiences and solutions to common challenges related to environmental degradation and pollution of freshwater/marine waters in the region. The private sector is a prime stakeholder in this effort and should be always engaged to cross-fertilize the MedProgramme's interventions. As emphasized in the GEF 2020 strategy: "Coordination failures abound in environmental management, in part because of the prevalence of 'tragedy of the commons' issues. Moreover, the complexity of environmental challenges requires that actions be taken simultaneously by many different stakeholders to be effective; [...] Partnerships with the private sector, civil society, research groups, and indigenous and local communities are vital in this regard."³⁸

The importance of tightening relations with the private sector is again stressed in the GEF 2020 strategy: "The IAPs (Integrated Approach Pilots) will give special attention to engaging the private sector and improving evidence-based design and implementation to enhance learning and the effectiveness of the IAP interventions."³⁹

Furthermore, in strengthening collaboration with a vast and diverse, yet relevant, groups of stakeholders, the MedProgramme will contribute to the vision encapsulated in the Sustainable Development Goal 17: "A successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local level."

³⁸ 2020 Strategy for the GEF, April 2015. p.27 Full document: https://www.thegef.org/sites/default/files/publications/GEF-2020Strategies-March2015_CRA_WEB_2.pdf

³⁹ 2020 Strategy for the GEF, April 2015. p.22 Full document: https://www.thegef.org/sites/default/files/publications/GEF-2020Strategies-March2015_CRA_WEB_2.pdf

4.3 Policy and Decision-Making Level

The Contracting Parties of the Barcelona Convention, relevant decision makers in the region, technical practitioners as well as GEF Implementing and Executing Agencies are supported in their work through contributions to relevant regional policy processes and related GEF initiatives (particularly through the IW:LEARN project).

4.3.1 Strengthening the Science-Policy Interface (SPI) and Influencing Decision-Making

4.3.1.1 Replication Atlases

A number of highly informative National Replication Atlases, translated in relevant languages, will be produced to stimulate replication of successful practices demonstrated by the Programme and encourage regional and global dialogue. Broader adoption and replication of the successful policies, practices and technologies implemented under the Programme will be promoted through these means, highlighting areas and situations where replication of the Programme's demonstrations should preferentially occur.

Relevant results of Child Projects will be featured in the Atlases and the MedPCU will inform about the participatory process to collect and present the inputs.

4.3.1.2 Agenda 2030 and the Sustainable Development Goals

The MedProgramme will produce regional environmental benefits contributing to the Sustainable Development Goals, in particular the goals on responsible consumption and production (SDG 12), climate action (SDG 13), life below water (SDG 14), and life on land (SDG 15), which reflect to a large extent the GEF's core mission. By fighting environmental degradation in coastal areas and improving livelihoods, the MedProgramme is supporting beneficiary countries, and all populations living in the Mediterranean basin, to increase their capacity to build climate resilience, reduce pollution from nutrients and persistent toxic substances (POPs and Mercury), sustainably manage coastal freshwater and marine resources, protect biodiversity, and restore coastal ecosystems. Moreover, its focus on improving freshwater quality and quantity will directly contribute to SDG 6 on water and sanitation, while a dedicated gender strategy will ensure compliance with the SDG 5 on gender equality and women's empowerment.

4.3.1.3 Supporting countries to implement IMAP

Since the 2005 Mediterranean TDA, the situation in the Mediterranean in terms of transboundary issues in the marine and coastal areas has evolved. In terms of monitoring, the adoption in 2008 of the EU Marine Strategic Framework Directive (MSFD) led to the development in EU countries of national monitoring plans based on a set of detailed common criteria and indicators. UN Environment/MAP initiated the Ecosystem Approach in 2008, which led to the adoption of 11 Ecological Objectives, 61 indicators and definition of GES and targets in 2012 at the COP17 of the Barcelona Convention. This led to the Integrated Monitoring and Assessment Programme (IMAP) for the Mediterranean, which was adopted in 2016 at the Barcelona Convention COP19. IMAP is the best available common set of tools for informing the science-policy interface (SPI) which is critical to achieve meaningful progress on stress reduction. Now the challenge is for countries, especially the non-EU countries, to redesign their national monitoring programs in line with IMAP and the 23 common indicators covering also the areas beyond national jurisdiction. Regarding monitoring of pollution, countries will build upon their MED POL monitoring program and database that has been in existence since 1999, with agreed parameters and stations in key hotspots and coastal areas. However, very few data exist for the majority of the common indicators, other than some contaminants, nutrients and chlorophyll data, particularly in the GEF eligible countries of the Mediterranean.

4.3.2 Contributing to the GEF knowledge base

The results produced by the MedProgramme (hot spots of coastal/marine pollution and habitat degradation, implementing ICZM and nexus planning, conjunctive surface water and groundwater management, protecting coastal groundwater-related ecosystems and coastal/marine biodiversity) will substantially contribute to the GEF knowledge base and to relevant GEF process, events and activities involving the four focal areas of International Waters, Chemicals and Waste, Biodiversity, Climate Change. Technical practitioners and scientists are also addressed as direct consumers of technical reports and assessments, and they are key agents to strengthen the science-policy interface.

4.3.2.1 Technical reports and scientific publications

The MedPCU will ensure that relevant scientific reports and scientific peer-reviewed publications are prepared by the various CPs providing technical information about the achievements of the Programme.

4.3.2.2 Synergies with the GEF IW:LEARN and LME:LEARN Projects

The MedProgramme will closely collaborate with the GEF International Waters Learning and Resource Exchange Network (IW:LEARN) Project⁴⁰ to facilitate uptake of lessons learned and knowledge exchange from/to the MedProgramme portfolio.

Cooperation in the following activities will be particularly addressed:

- Participation to the GEF International Waters Conferences (landmark biannual events of the IW portfolio). The first MedProgramme contribution is expected for the 10th edition of the IWC in 2020.
- Production of Experience Notes (short case studies) produced by Child Projects to showcase worthy results and disseminated through IW:LEARN channels and the MedProgramme KM platform. The format of Experience Notes is standard (<https://iwlearn.net/documents/experience-notes>)
- Participation to IW:LEARN Twinning with other GEF relevant projects and programs.
- Contribution to IW:LEARN.net with specific content (i.e. data visualization).
- Contribution to social media, news, events, etc.
- Participation to GEF Communities of Practice (CoPs) on IW, CW, when relevant.

4.4 Governance

Both the strategy and its implementation are critical to successful exploitation of knowledge. Many KM strategies fail not because there is something intrinsically wrong with them, but because they are not well implemented.

There must be a good strategy, but also appropriate organizational structure, systems, resources and the right people to execute it.

It is crucial to create teams that are centers of excellence for their specific knowledge skills and experience. Also, the appropriate technical equipment (hardware and software) and adequate expertise are key ingredients to ensure expected results. The GEF STAP concurs with the need for adequate resources noting that “KM delivers cost-efficiency and savings, for example, reduced failure of projects, and it needs up-front resourcing to cover for additional time, specific tools and database needs. [...] KM professionals are essential in applying the discipline, including creating tools and products that help establish KM as a standard practice throughout the organization⁴¹” .

⁴⁰ More info at www.iwlearn.net

The KM strategy of the MedProgramme will require different sets of expertise for its execution. It is anticipated that the following professional profiles will be required throughout the duration of the programme (either full-time and/or part-time):

- Knowledge Management Specialist (to coordinate the implementation of the KM strategy)
- Communications assistant (to support the execution of the communications plan)
- Data Analyst (to help harmonize data produced by Child Projects and maintain the database)
- Web Developer (to develop the KM platform)
- IT Specialist (to administer the IT-based platform and systems)
- Experts in copy-editing, video-making, graphic design, translations, etc. to be contracted as needed.

These and other services will be provided by the staff of the MedPCU, consultants hired to carry out specific tasks and by outsourcing the work to companies (such as for the project management tool, hosting providers, licenses, etc).

“Knowledge-sharing is at the crossroads of core and support functions”⁴². Knowledge-sharing tasks and responsibilities should be as much as possible integrated in the jobs descriptions and terms of reference of projects’ executing teams.

As efforts leading to an effective knowledge management system can be seen as time-consuming and not immediately benefitting the project outputs, there must be a good system in place to incentivize project teams to dedicate time and resources to KM. As noted by the GEF Strategic Technical Advisory Panel (STAP⁴³): “there needs to be better recognition for KM inputs, achievements and publicity. Rewarding projects at mid-term, for example, for demonstrating the use of knowledge to improve and/or adapt the project to meet project objectives may be an effective incentive”. The form of these rewards can vary, but in the case of the MedProgramme they can range for instance from prizes announced at the Annual Stocktaking Meetings, to public recognition mentions (internally or externally the portfolio, such as in the Med Bulletins), among others.

⁴¹ Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 9

⁴² Steffen Soulejman Janus. 2016. Becoming a Knowledge-Sharing Organization: A Handbook for Scaling Up Solutions through Knowledge Capturing and Sharing. Washington, DC: World Bank. doi:10.1596/978-1-4648-0943-9. License: Creative Commons Attribution CC BY 3.0 IGO, p. 24.

⁴³ Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 9

5. Legacy and Sustainability



Share your knowledge. It is a way to achieve immortality. –Dalai Lama XIV



The benefits arising from managing knowledge properly are both far reaching and hard to measure. This strategy represents one of the first attempts to manage knowledge holistically within a GEF-financed program with multi-focal areas Child Projects, and the role played by the Support Child Project 4.1 in implementing the programme-wide KM strategy is innovative yet challenging. The envisaged result is to effectively support portfolio coordination, provide beneficiary countries with long-lasting capacity and tools to improve national and transboundary coastal ecosystems, and enrich the GEF Partnership with replicable solutions and lessons learned for future interventions in the Mediterranean region. Its success will be determined by the commitment and ownership of all executing partners and stakeholders, in addition to adequate resources and means in place. Its sustainability will translate into reinforced capacity (information, expertise, awareness...) of MedProgramme stakeholders to address environmental challenges making use of a modular knowledge hub which will continue to evolve after the programme ending.

The contracting parties of the Barcelona Convention will be the custodians of the KM structure implemented for the MedProgramme and will carry forward the legacy of the MedProgramme by supporting informed decision-making, paving the way for more investments and interventions, and encouraging broader adoption and knowledge transfer to improve environmental security in the coastal areas of the Mediterranean.

GEF/UN Environment “Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security”

GEF ID 9607

Implementing Agencies



Leading Executing Agency



United Nations
Environment Programme

Mediterranean Action Plan
Barcelona Convention

Executing Partners



THE MEDITERRANEAN SEA PROGRAMME:
ENHANCING ENVIRONMENTAL SECURITY (2019 – 2024)

GENDER MAINSTREAMING STRATEGY

UN ENVIRONMENT/MEDITERRANEAN ACTION PLAN
OCTOBER 2018

*This strategy was prepared during the Project Preparation Grant (PPG) phase
of the MedProgramme (June – September 2018)*

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1. Introduction

1.1 *Defining Gender Mainstreaming – from 1997 to 2017*

In 2017, shortly after the 23rd Conference of the Parties (COP) in Bonn concluded with the ‘Fiji Momentum for Implementation’, the United Nations Framework Convention on Climate Change (UNFCCC) announced its pioneering Gender Action Plan. The COP23 Presidency underscored the priority of the Plan¹ to increase awareness of, and generate support for the development and effective implementation for, gender-responsive climate and environmental action. Showcasing not only the consensus of the State Parties on these key issues, this critical achievement encapsulates the growing international efforts towards gender mainstreaming and the integration of gender equality perspectives in sectoral policies and programs, since articulated by the UN Economic and Social Council (ECOSOC) twenty years ago.

In July 1997, the Group of Specialists on Mainstreaming, appointed by the ECOSOC, laid out the tenets of gender mainstreaming, which continue to spur and inform UN action:

*“Gender Mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels. It is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and social spheres so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal is to achieve gender equality”.*²

Elaborating upon this definition, the Division for the Advancement of Women on Gender Mainstreaming, added:

*“Gender Mainstreaming requires more than a quantitative change in numbers of women and men participating in, or benefiting from, policies and programs. It requires a transformation of all sectoral policies at all levels, and of institutions, organizational practices, attitudes and systems that shape them so that they fully consider the realities, needs, and views of women.”*³

The conceptualization and definition of Gender Mainstreaming, as presented above, derives from, and builds on, the preceding conversation of inclusion of women and gendered considerations in development policy. To elucidate, it does not represent a ‘totally’ new approach – but rather, a unique take on gender and developmental policy antecedents dating back to the early 1970s. Functioning as a pivot, gender mainstreaming builds on the Gender and Development (GAD) approach, which differentiates itself from the preceding Women in Development (WID) and Women and Development (WAD) approach, by discarding the notion that gender perspectives should automatically entail the demarcation of women as a target group. The image below⁴ visualizes the timeline of these different approaches leading up to gender mainstreaming, the approach chosen for the Mediterranean Sea Program (MedProgramme): Enhancing Environmental Security Gender Strategy towards

¹ See *Recommendations of the Subsidiary Body of Implementation on Gender and Climate Change* (Agenda No. 20). UNFCCC. (2017)

² See *Gender Mainstreaming: An Overview* for more. United Nations. (2002)

³ *Ibid.*

⁴ The image was developed by the author from: Rathgeber, E. “WID, WAD, GAD: Trends in Research and Practice”. International Development Research Centre (Ottawa). Paper Presentation at the meetings of the Canadian Institute for the Advancement of Women held in Quebec City. (1988)

incorporating gender-responsive project outcomes, gender-sensitive policy formulations, and gender-aware decision-making.

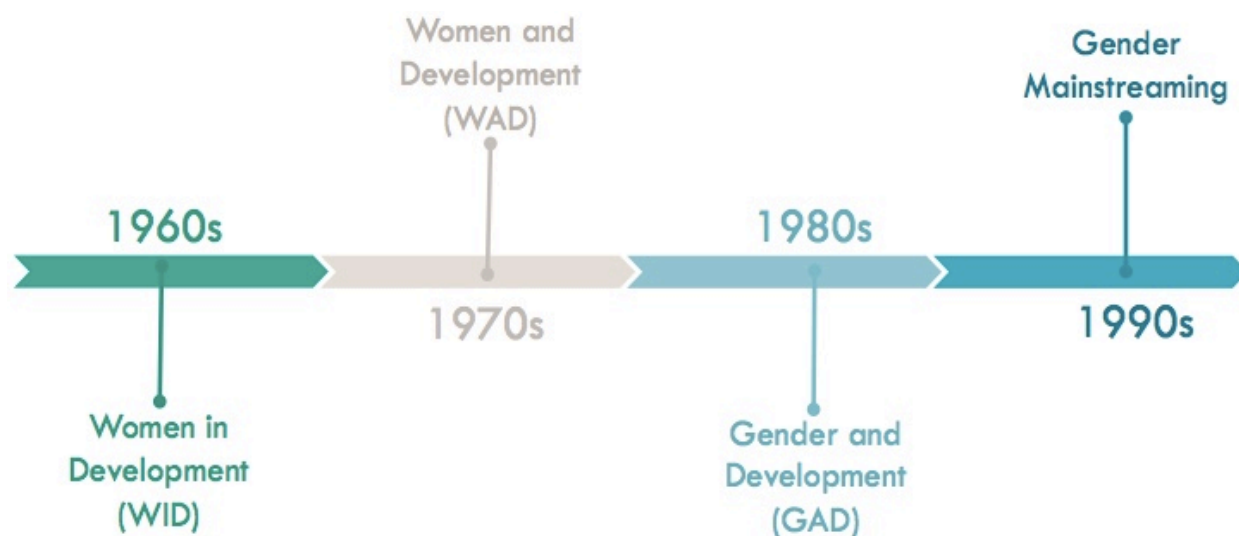


Figure 1: Timeline towards present-day Gender Mainstreaming approach. (adapted from Rathgeber [1988] by author)

1.2 Global Environment Facility (GEF) and UN Environment

Keeping with the above mandate of gender mainstreaming and promoting women’s empowerment, both the GEF and UN Environment have prioritized delivering inclusive and gender-responsive environmental results, and adaptation and mitigation solutions towards climate risks.

Having launched its initial gender policy in 2011, the GEF approved a reinforced policy in November 2017⁵ at the 53rd Council Meeting, shifting the focus from a ‘gender-aware, do no harm’ approach to a ‘gender-responsive, do good’ approach. This requires robust standards in the design, implementation and evaluation of GEF activities, and introducing measures that will allow the GEF, over time, to better leverage strategic opportunities to address gender gaps critical to the achievement of global environment benefits.⁶ More recently, the GEF-7 Programming Directions, prepared by the Secretariat in the April 2018 Stockholm meeting further clarifies the GEF’s evolving and progressive gender strategy – by providing action points for each GEF focal point.⁷ It lays out clear gender standards for each domain under the GEF, and for the MedProgramme, gender directives of the:

- a. Biodiversity focal area (such as: assessments to understand gender-disaggregated biological resource, providing women and other natural resource-dependent groups equal partnership in protection management);
- b. Climate Change focal area (such as: incorporating action points to address the different climate risks faced by men, women, boys and girls and providing adaptation alternatives that improve the status quo);

⁵ See here for the latest [GEF Gender Mainstreaming guide](#) (EN). GEF. (2017) (publication)

⁶ “A new Policy on Gender Equality for the GEF”. GEF official website. (2017) (news update)

⁷ GEF-7 Replenishment – Programming Directions. Meeting Report from the 4th meeting held at Stockholm, Sweden for the Seventh Replenishment of the GEF Trust Fund, in April 2018.

- c. Chemicals and Waste focal area (such as: understanding the socioeconomic dynamics that expose men and women to different chemicals, as well as their biological implications),
 - d. IW focal area (such as: gender assessments and social analysis during project preparation, and differentiated reporting of output indicators and additional measures based on the GEF's Gender Action Plan⁸)
- are particularly relevant and have been incorporated as action points for the operationalization for this Strategy.

UN Environment recognizes the role of gender equality as a 'driver of sustainable environment development'⁹, particularly to enhance environmental security and climate resilience; to assuage the stresses on natural resources and dependent communities, including unsustainable management of coastal resources; and to preserve the health of large marine ecosystems (like the Mediterranean) which provide environmental and economic services to coastal populaces. Overall, the organization focuses on the increased visibility and capacity of vulnerable groups in sustainable development policy- and decision-making. To that end, the agency has produced a lessons-learnt report¹⁰, through gender case study compilation, on issues homologous with the overall MedProgramme agenda: gender integration in Integrated Coastal Zone Management (ICZM) and Integrated Water Resources Management (IWRM), marine and coastal pollution, coastal disaster risk reduction and climate change adaptation, coastal developmental planning, and advocacy for gender-inclusive marine ecosystem management and research.

1.3 *The MedProgramme Gender Mainstreaming Strategy*

The MedProgramme represents a pioneering effort, being the first GEF programmatic multi-focal initiative in the Mediterranean region, aiming to operationalize agreed-upon priority actions to reduce major transboundary environmental stresses in its coastal areas, while strengthening climate resilience and water security, as well as improving the health and livelihoods of coastal populations. The MedProgramme will be implemented in nine beneficiary countries sharing the Mediterranean basin: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. The Lead GEF Agency is UN Environment¹¹. Its eight Child Projects¹² cut across four different Focal Areas of the GEF (Biodiversity, Chemicals and Waste, Climate Change, and International Waters), and involve a wide spectrum of developmental and societal sectors, ranging from banking institutions, the private sector, government and non-government bodies, industry, research, media, and various other organizations.

⁸ *Ibid*, p. 55.

⁹ *Gender Equality and the Environment: Policy and Strategy*. UN Environment. (2015)

¹⁰ *Regional Seas Reports and Studies No. 207* (forthcoming). Marine and Coastal Ecosystems Unit. UN Environment. (2018)

¹¹ GEF Lead Agency: UN Environment. Other GEF Agencies: European Bank for Reconstruction and Development (EBRD). Executing Partners: UNEP/MAP, European Investment Bank (EIB), UNESCO International Hydrological Program (IHP), Global Water Partnership (GWP) Med, World Wildlife Fund (WWF), MEDPOL, UNIDO, and IUCN.

¹² At the time of its approval in 2016, the MedProgramme comprised of seven Child Projects. Subsequently, UN Environment/MAP developed a Mediterranean-focused climate change adaptation project, for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF that this SCCF project would be managed, for all intents and purposes, as an additional Child Project of the MedProgramme. Hence, the number of Child Projects now stands at eight.

Seeking to maintain funding agency (GEF) and lead agency (UN Environment) organizational priorities outlined above, as well as preparing for a proactive GEF-7 ready portfolio, this Gender Mainstreaming Strategy, developed in the Project Preparation Grant (PPG – between June to September, finalized in October) phase, will: provide tailored action points to improve the gender status quo in the countries; place gender-responsive activities and gender-aware policy-making at the core of the MedProgramme agenda; and partake as well as further the existing efforts on gender equality, to leverage opportunities for inclusive and accessible environmental and social co-benefits.

2. Methodology

This Gender Mainstreaming Strategy (GMS), as contextualized above, has been tailored for the MedProgramme. Developed with a two-fold framework, the Strategy is informed by: (a) political ecology and gender studies literature¹³(presented below) to establish a mixed methodology, and (b) Program component- and country-level diagnostics to identify the baseline scenario (Section 3), which the Strategy expects to positively impact with strategic, selective and appropriate mainstreaming measures in project-specific contexts.

At the outset, this Strategy adopts a political ecology lens, which aims to influence policy development, environmental action and investment programs by ‘offering chains of explanations’ rather than single and disjointed root causes. This perspective, when combined with a gender-lens, highlights the socio-political dimensions of coastal and natural resource access, control, distribution and agency, which further govern issues such as environmental degradation, climate risks and resource management policies.

In the words of Rocheleau (1996), gender is relevant to a political ecology perspective as:

“A critical variable in shaping resource access and control, interacting with class, caste, race, culture and ethnicity, to shape process of ecological change, the struggle of men and women to sustain ecologically viable livelihoods, and the prospects of community for sustainable development.”¹⁴

Thus, as the Gender Mainstreaming Strategy for the MedProgramme, this Strategy will espouse and embed the use of a combined political ecology- and gender-lens for the constituent projects. This will create a Program-wide focus (albeit, in different site-specific contexts) on understanding the spatially and temporally contingent ways in which gender issues, social relations, and the environment interact. This programmatic approach will, then, be able to consider the gamut of gendered dimensions present in the Mediterranean, such as: gender division of labor, male and female participation in labor, gendered environmental rights and responsibilities, environmental politics and governance, and collective action and resilience.

Secondly, the importance of gender-relevant and vetted data to provide empirical evidence to the policy and program needs is prioritized. Thus, available data indicators (particularly,

¹³ Bauhardt, C. & Harcourt, W. *Feminist Political Ecology and the Economics of Care*. (2018) has been a critical influence on this Gender Mainstreaming Strategy.

¹⁴ Rocheleau, D. E. *Gender and Environment: A Feminist Political Ecology Perspective*. (1996)

from the World Bank Gender Data Portal and UNDP indices) and country-specific (and where available, local site-specific) statistics have been extensively used to justify the concerns raised by the Strategy. The data on each country has been collated through gender diagnostics of desk-reviewed literature and secondary statistics, which has further revealed the existing inconsistency and low relevance accorded to gender considerations and corresponding statistics within on-going environmental projects, programs and policies.

Thus, by using gender-relevant data to contextualize its priorities, the Strategy will attempt to set an example and highlight both the need to incorporate targeted and selective gender actions based on empirical data within the MedProgramme, as well as the urgency to bolster internal and country-level monitoring systems for the collection and reporting of sex-disaggregated, environmentally-related data from project, sub-national and national levels.

3. Baseline Scenario for MedProgramme Components

The MedProgramme builds on the significant achievements of the MedPartnership¹⁵ and ClimVar & ICZM¹⁶ GEF Projects. The latter have enriched the knowledge on the Mediterranean environment and unraveled the implications of climate change and variability in the region; strengthened countries' mutual trust, cooperation and common purpose; consolidated the partnership among countries, UN bodies, Civil Society Organizations, bilateral donors and the European Union; tested on the ground feasibility and effectiveness of technical and policy instruments aimed at addressing major present and future threats to environmental sustainability and climate-related impacts. However, despite these different successes, the two projects were limited by the lack of adequate gender-responsive planning in their sectoral strategies and programs. This represents a 'missed opportunity', as incorporating the gender-lens from project preparation phase through to the monitoring and evaluation phase aid in the mapping of links between gender and environment, as well as identifying positive synergy and improve social/gender and environment outcomes from the outset. This Gender Mainstreaming Strategy, which has been developed as an input in the MedProgramme's preparation phase with the scope of scaling up in parallel with the advancement of the program cycle, thus addresses the gender-blind baseline represented by earlier initiatives.

The MedProgramme represents a comprehensive and powerful response to the environmental and socioeconomic challenges faced by the Mediterranean, in light of continued degradation of coastal zones, growing impacts of climate variability, and loss of livelihoods and deterioration of social conditions. Its objective is to kick-start the implementation of agreed-upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas, while

¹⁵ Strategic Partnership for the Mediterranean Large Marine Ecosystem-Regional Component: Implementation of Agreed Actions for the Protection of the Environmental Resources of the Mediterranean Sea and its Coastal Areas (MedPartnership) – GED ID 2600

¹⁶ Integration of climatic variability and change into national strategies to implement the ICZM protocol in the Mediterranean (ClimVar & ICZM) – GED IF 3990.

strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations. The focus will be primarily on hotspots of land-based pollution, harmful chemicals and wastes (POPs and mercury), and excess nutrients; critical sections of the coastal zone particularly affected by climatic variability, freshwater stress and habitat degradation the efficient and sustainable management of priority marine protected areas; measuring progress to impacts and overall Program coherence. Dedicated Child Projects (eight) will prioritize each of these key issues. The Child Projects will be entry points for gender mainstreaming actions through gender assessments and action plans that determine targeted gender-responsive action through project objectives and outcomes at the project, local and national level.

The following table posits the hypothetical effects of a gender-blind approach to the MedProgramme components (the tentative child project – CP – is mentioned alongside), as opposed to mainstreaming robust gender outcomes within the same:

TABLE I: GENDER-BLIND v. GENDER-RESPONSIVE APPROACH

MedProgramme Component	CP	What is a <i>gender-blind</i> approach?	What is a <i>gender-responsive</i> approach?
Reduction of land-based pollution in priority coastal hotspots, and measuring progress to impacts	1.1	Top sources of land-based pollution, contaminating marine and coastal hotspots, result out of anthropogenic activities such as usage of heavy metals and untreated dumping in river systems, sewage, litter, plastic pollution, usage of pesticides and fertilizers and synthetic organic compounds. ¹⁷ Due to the ubiquitous access and usage of marine resources, the coastal populace is vulnerable to the detrimental effects of	Oxfam’s <i>Handbook of Development and Relief</i> provides one of the pioneering accounts of the connections between poverty and environmental degradation, noting a ‘ <i>downward spiral of cause and effect</i> ’ – ‘ <i>poverty can cause environmental degradation, as poor people over-exploit already strained resources, and environmental degradation causes further poverty as people are unable to find the resources to meet their daily needs.</i> ’ ¹⁸ Environmental change, climate disruptions and damage to marine systems and coastal zones have gendered impacts, and women and men shoulder these burdens differently. In what is identified as the ‘ <i>feminization of poverty</i> ’ or women’s increasing burden of and share in global poverty, economists and development analysts have observed that ‘ <i>women constitute an estimated 70% of the world’s poor people, and households headed by</i>

¹⁷ Windom, H. L. “Contamination of marine environment from land-based sources” in *Marine Pollution Bulletin*, (Vol. 25, No. 1-4). (1992)

¹⁸ Eade, D. & Williams, S. *The Oxfam Handbook of Development and Relief*. (1994)

	1.2	land-based pollutants, and therefore, marine pollutants, both in health and livelihood indicators.	
	1.3		<p><i>women alone... are the world's poorest households as a general trend.</i>¹⁹ For example, environmental degradation-induced livelihood impacts are differentiated in coastal areas – fishing communities, based on local gender norms and informal nature of work, relegate remunerative activities (which often tend to be associated with risk, like ‘going out to the waters’) to the men, while women perform post-harvest work, which may not always be remunerated properly, if at all. The gendered allocation of remuneration, thus, creates a disparity in economic capital, and in turn impedes the capacity to adapt to environmental change and climate disruptions. Marine contaminants threaten both human health and the health of marine organisms. However, health impacts are gender-differentiated as well. Many marine and coastal contaminants are particularly dangerous for pregnant women and lactating mothers, as well as for fetal development.²⁰</p>

¹⁹

Ibid.

²⁰

See *Global Gender Environment Outlook*, Section 2.5 for more. UN Environment. (2016)

<p>Enhancing sustainability and climate resilience in coastal zones</p>	<p>2.1</p>	<p>According to a recent report²¹, ocean-related activities in the Mediterranean Sea generate an annual economic value of 450 billion dollars with economic assets for coastal economies and communities amounting to 5.6 trillion dollars. The need for enhancing sustainability and climate resilience in the region is crucial, as the Mediterranean is experiencing a number of immediate coastal problems, which require both short-term and long-term coastal management. Regional scale studies indicate that the Mediterranean is particularly vulnerable to increased flooding and saltwater intrusion as sea levels rise.²² The region has also been marked out as a ‘hot spot of climate change’, with an increase in air temperature range of 2.2°C to 5.1°C predicted over the period of 2080 – 2099.²³</p>	<p>While impacts of environmental degradation and climate risks are undoubtedly severe for the entire coastal populaces, men and women, privileged and vulnerable communities, young and the elderly shoulder burdens unequally. Often the vulnerable and marginalized groups are limited by the exclusion of their needs and perspectives from regional negotiations and management policies. The immediate and long-term coastal problems being faced by the Mediterranean have implications for complex gender relations in the region, which are a kaleidoscope²⁴ of overlapping social, economic and cultural roles, spread across a diverse multitude of countries and communities. The European Mediterranean countries have distinct social patterns and gender norms, which differ from the Middle East and North Africa (MENA) Mediterranean countries, for example. Additionally, the varying political situations in the region also determine how women and men are able to access and leverage sustainable development opportunities to be able to cope with environmental degradation, pressures on natural resources and coastal and marine ecosystems, and climate risks. For the northern Mediterranean countries (the Western Balkan nations), labor market dynamics exhibit a significant gender gap: women’s employment rates (especially for marginalized communities such as Romas) are lower, along with an existing gender wage gap. Since economic capital is among the important determinants of coping capacities to external shocks (in this case, water stress, degradation of coastal aquifers, loss of</p>
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²¹ See *Reviving the Economy of the Mediterranean Sea: Actions for a Sustainable Future* for more. WWF and The Boston Consulting Group. (2017)

²² Nicholls, R. J. & Hoozemans, F. M. N. “The Mediterranean: vulnerability to coastal implications of climate change” in *Ocean and Coastal Management*, (Vol. 31, No. 2-3). (1996)

²³ See *Climate Change and Energy in the Mediterranean* for more. European Investment Bank. (2008)

²⁴ See [this report](#) by the Union for the Mediterranean (UfM) regarding an action plan towards investing in gender equality in the region.

	2.2		<p>coastal livelihoods, climate impacts et al), women (and other marginalized groups, including ethnic minorities) are more likely to be vulnerable. The ‘double disadvantage’ of the situation should also be reckoned with: due to lack of viable economic capital, vulnerable groups are often excluded from socio-political control over coastal zone and water resources (coastal aquifers, particularly) management policies – increasing the possibilities of exposure to the threats looming in the Mediterranean region. For MENA countries, coupled with barriers to the labor market and employment opportunities, women face institutionalized exclusion from civil society and political spheres. Decision-making power within the household and the polity is limited, reducing women’s capacities to engage in the public sphere and gear development opportunities to safeguard their interests. In recent years, however, women have been capitalizing on opportunities presented by pluralistic interpretations of traditional gender norms and entering both the work force and the public space. The gains achieved through social change in this region may not keep pace with the risks and threats arising from the lack of proper management policies for natural resources and the coastal zone, and growing threats of climate change and environmental degradation in the region. As with the European Mediterranean countries, burdens of emerging risks and shocks may fall on the vulnerable groups.</p> <p><i>(Refer to footnote 12, for more information on the SCCF Project – and why it is a Child Project under the MedProgramme)</i></p>
Protecting marine biodiversity	3.1	The Mediterranean’s biodiversity underpins the ability of ecosystems	Until recently, there was a lacuna in the empirical and normative literature on gender and marine biodiversity. However,

		<p>to provide humans with the services they require to survive – although as Hooper shows, delineating the role of biodiversity in ecosystem services and relative roles of difference functional groups has been extremely complex. The Mediterranean’s predominantly coastal population is increasingly threatened by the loss of biodiversity, due to mismanagement and unsustainable use, and this situation is projected to worsen with the coupled effects of human-induced climate impacts, such as warming sea surface temperatures, altering ocean chemistry and increasing run-off of land-based pollutants and sediments.²⁵ Resuscitating and protecting these marine ecosystems, which form the resource base for coastal economic and social activities, requires all possible expedition.</p>	<p>with reviewed studies on the role of gender with respect to conservation, particularly that of mangroves and their ecological significance, brought to light the clear link between gender and biodiversity and conservation outcomes. According to the Convention on Biological Diversity, considering gender issues in relation to biodiversity involves identifying the gender roles and relations have on the use, management and conservation of biodiversity. To begin with, this MedProgramme component should address the knowledge gap regarding gendered biodiversity practices in the region, through extensive data and information collection, stakeholder consultations and focused-group discussions. This would contribute towards gender-responsive policies within marine resource management and biodiversity conservation plans that can increase the sustainability of outcomes by incorporating artisanal and traditional knowledge gathered from both women and men. Exposing gender-differentiated biodiversity practices²⁶ will also help demarcate the different levels of harm caused by different groups (income-generating activities, traditionally relegated to men, may be more exploitative in some instances), as well as the inequalities in control of resources. Biodiversity conservation plans can be truly effective if they address poverty, inequality and resource access dynamics among coastal communities.²⁷</p>
Knowledge management and program coordination	4.1	<p>Knowledge management and program coordination, if carried out with a top-down approach and without a stakeholder-facing participatory approach, risks excluding the needs</p>	<p>Robust coordination and knowledge management strategies panning the MedProgramme have to be operationalized to ensure its success. Given the breadth and value of the initiative, as well as the numerous partners and focus points, these strategies will ensure: stakeholder representation</p>

²⁵ Lockwood, M. et al. “Marine biodiversity conservation governance and management: Regime requirements for global environmental change” in *Ocean and Coastal Management*, (Vol. 69). (2012)

²⁶ See the gender tab on *Convention on Biological Diversity* for more.

²⁷ The Secretariat of the Convention on Biological Diversity hosted a meeting in Bangkok (December 2017) to develop training material to advance gender inclusion in biodiversity planning in the Asia-Pacific region. See the reporting [here](#).

	<p>and concerns of beneficiaries. Additionally, procedural and red tape hurdles tend to disproportionately affect those with limited resources and access to governing mechanisms, support organizations and implementing agencies.</p>	<p>and engagement, technical and administrative coordination of the program; establish a commune of practice and initiative among different stakeholders and partners; management of knowledge generated on an accessible platform (both data and normative) as well as dissemination of lessons learnt and best practices in later stages of the program cycle; high-quality and timely systems for monitoring of the Program's progress to impacts. In tandem with a knowledge management and program coordination strategy, a gender mainstreaming strategy for the MedProgramme will be developed to provide critical gender-responsive research inputs for Programme components, as well as to espouse a gender-aware policy in the region, taking stock of the existent inequities and gender norms of the Mediterranean. Gender mainstreaming shall be pursued within the different Child Projects, with tailored gender assessments and action plans determining strategic and selective action to improve the baseline inequality within project- and country-specific dimensions. This will safeguard the interests and priorities of the vulnerable and marginalized communities among the Mediterranean coastal populaces, as well as increase the sustainability and inclusion of the MedProgramme's priorities in the region and contribute to the regional conversation on decreasing inequality, poverty and vulnerability.</p>
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4. *Baseline Scenario for MedProgramme Countries*

The nine Mediterranean countries participating in the MedProgramme (Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia), face different developmental challenges and socioeconomic disparities, as seen from the country profiles, developed for this Gender Mainstreaming Strategy.. These data profiles borrow from UNDP's Human Development Index, Gender Inequality Index, and Gender

Development Index. Additionally, they refer to the Global Gender Gap Index (World Economic Forum) and compiles national-level poverty statistics (conducted by national authorities of the nine countries, as well as the World Bank, in some cases). These indices have differing methodologies, and are being employed, at the outset, as indicative (and *not* conclusive) measures of current levels of development, gender equality, and poverty and labor force participation.

As Booysen’s research²⁸ shows, composite indices present both challenges and advantages. It should be noted that numerous fallacies have been identified in the methodologies employed in composite indexing. These indices are mainly quantitative, and present empirical and aggregate measures of complex development phenomena, making values apparently objective, at the cost of subjective nuances. Yet, these also remain invaluable as useful supplements to income-based development indicators, understanding relative degrees of development, simplifying complex measurement constructs as well as providing access to non-technical audiences. To balance this dichotomy, ranks have been removed in certain indices and have been linked in the footnoting, and the broader development categories (high/medium/low development) have been used.

TABLE II: HUMAN DEVELOPMENT INDEX (HDI)²⁹
(out of 188 countries – United Nations Development Program – UNDP, 2018)

Defining the HDI: This index measures and combines three basic dimensions of human development (long and healthy life, knowledge and decent standard of living) and provides an overall socioeconomic landscape of a country.

Relevance of the HDI: Since socioeconomic capital and security are crucial determinants of the capacities to adapt towards natural resource stress, loss of coastal livelihoods, marine and environmental degradation, and climate risks, this index indicates how poised each country may be to consider different resource management, resilience, adaptation and mitigation options.

Indicative, not conclusive: In line with Booysen’s argument, the HDI should be treated as indicative, not conclusive. It provides an overview of relative degree of development in a particular country but remains a ‘synthetic indicator’. Recent research has shown the need to supplement the HDI with other indicators associated with economic and social cohesion, sound development strategies, and sustainability in growth models.³⁰

Country	Rank	Relevance
Albania	68 th	With ‘high human development’, Albania’s capacity to adapt to climate risks and variability is pegged well. However, due to regional variation in poverty rates (high in the Kukës prefecture – 22% v. Gjirokastrë prefecture (qarks) – 8%, in particular ³¹) in the country, environmental services and social co-benefits may not be equitably shared.

²⁸ Booysen, F. “An Overview and Evaluation of Composite Indices of Development” in *Social Indicators Research*, (Vol. 59 No. 2). (2002)

²⁹ UNDP. (2018)

³⁰ Bilbao-Ubillos, J. “The Limits of *Human Development Index*” in *Sustainable Development*, (Vol. 21 No. 6). (2011)

³¹ *Portraits of Poverty and Inequality in Albania*. INSTAT (Albanian Institute of Statistics) & World Bank. (2015)

Country	Rank	Relevance
Algeria	85 th	With ‘high human development’, Algeria wields capital, largely derived from its oil economy, in readiness against climate shocks. However, due to high inequality in consumption, high unemployment rates (particularly, women and youth) and largely informal workforce ³² , environmental services and social co-benefits may not be equitably shared.
Bosnia and Herzegovina (BiH)	77 th	With ‘high human development’, BiH’s capacity to adapt to climate risks and variability is pegged high and similar to Algeria. As a post-conflict nation, however, educational attainment and labor market access continue to be determined by poverty status ³³ in the country, thus, environmental services and social co-benefits may not be shared.
Egypt	115 th	With ‘medium human development’, Egypt’s readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritize other pressing developmental pursuits. ³⁴ With a volatile political climate, and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.
Lebanon	80 th	With ‘high human development’, Lebanon’s capacity to adapt to climate risks and variability is pegged well. However, due to high concentration of income and wealth in the country ³⁵ and the spill-over effects of the Syrian civil war, environmental services and social co-benefits may not be equitably shared.
Libya	108 th	With ‘medium human development’, Libya’s readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritize other seemingly pressing developmental pursuits. With a volatile political climate challenging economic stability ³⁶ , dependence on oil production and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.
Montenegro	50 th	With ‘very high human development’, Montenegro is poised to adapt well to climate risks. However, due to historic ethnic exclusionism (the Roma population, in particular ³⁷) in the country, environmental services and social co-benefits may not be equitably shared.
Morocco	123 rd	With ‘medium human development’, Morocco’s readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritize other seemingly pressing developmental pursuits. Pronounced gender inequality in the country slows economic growth ³⁸ , environmental services and social co-benefits may not be equitably shared.
Tunisia	95 th	With ‘high human development’, Tunisia’s capacity to adapt to climate risks and variability is pegged well. However, due to concentration of income and wealth in the country ³⁹ , high unemployment rates (particularly, youth) and economic unrest challenging political stability, environmental services and social co-benefits may not be equitably shared.

³² “Poverty has fallen in the Maghreb, but inequality persists”. World Bank. (2016)

³³ *Poverty and Inequality in BiH*. World Bank. (2011)

³⁴ *Inequalities, Uprisings and Conflicts in the Arab World. MENA Monitor*. World Bank. (2015)

³⁵ Assouad, L. “Rethinking the Lebanese Economic Miracle”. WID. (2017)

³⁶ *Libya Economic Outlook*. World Bank. (2018)

³⁷ *Gender at a Glance: Montenegro*. World Bank. (2015)

³⁸ “Reducing gender inequality in Morocco can boost growth”. IMF. (2017)

³⁹ *Tunisia: Economic Outlook*. World Bank. (2018)

TABLE III: GENDER INEQUALITY INDEX (GII)⁴⁰

(out of 159 countries – UNDP, 2018)

Defining the GII: This index, showing inequality in achievement between men and women in three aspects (reproductive health, empowerment and labor market), provides a useful gender baseline in terms of health equity, economic capital and financial access, speaking to the gender opportunities of men and women in the countries. This baseline has been elaborated upon using existing gender studies literature on each country.

Relevance of the GII: This index provides a primary understanding of the different levels of achievements on basic development indicators between men and women. This displays useful features towards the gender status quo hypotheses, which could then be derived in the context of this project.

Indicative, not conclusive: In line with Booyesen’s argument, the GII should be treated as indicative, not conclusive. Pernmayer finds that the functional form of the index could be unclear, particularly the inclusion of indicators of relative performance of women vis-à-vis men, along with absolute women-specific indicators.⁴¹

Country	Rank	Relevance
Albania	52 nd	In Albania, traditional beliefs continue to influence gender roles, particularly in the household setting. During socialist rule, although policies promoted women’s presence in the public sphere (through education and work), the continued responsibility for unpaid domestic work remained with women (leading to time poverty or ‘double shifts’). During the transition to a capitalist economy, gender equality laws were not put in place for private sector jobs, and thus, employment for Albanian women could not be safeguarded. ⁴²
Algeria	100 th	In Algeria, social codes affect women’s empowerment. Since labor force participation disparity is pronounced, women lag behind on economic capital needed to combat risks arising from environmental degradation, mismanagement of water and coastal resources, and climate shocks. According to the Arab Barometer, in 2017, compared to 2013, a greater number of Algerians regarded higher education as more important for men, as well as reinforced the notion that married women should be ideally relegated to household duties. ⁴³ This also makes them dependent on the patrilocal structure of Algerian society.
Bosnia and Herzegovina (BiH)	37 th	Despite progress in closing the gender gap in endowments - mainly in education among the younger generation - BiH still faces a number of gender issues, particularly in women’s access to economic and employment opportunities. Alongside improved educational outcomes, significant gaps remain in labor market participation and employment in favor of men, as women continue to face challenges in accessing economic opportunities. ⁴⁴ Additional obstacles continue to exist for women in exercising agency (the power to choose and decide options to preserve to act for oneself), particularly managing domestic work, lack of political representation and participation as well as widespread gender-based violence.

⁴⁰ UNDP. (2018)

⁴¹ Pernmayer, I. “A Critical Assessment of the UNDP’s Gender Inequality Index” in *Feminist Economics*, (Vol. 19 No. 2). (2013)

⁴² World Bank. (2012)

⁴³ “Droits des femmes en Algérie: les lois progressent mais pas les mentalités”. *Middle East Eye*. (2017)

⁴⁴ *BiH: Economic Mobility, Jobs and Gender*. World Bank. (2016)

Country	Rank	Relevance
Egypt	101 st	Political, social and economic capitals are not equitably distributed among Egyptian men and women. Without access to these vital resources, the risks identified by MedProgramme will only burden those at the lower echelons of society. Despite improvement of young women's education levels in recent times (Egypt's rank improved by 34 spots in the latest GII quoted here), the workforce participation and retention rates remain unperturbed, signaling a stagnated job market and scarce employment opportunities. ⁴⁵ Egypt also faces some particular gender-specific barriers in high numbers, such as FGM and sexual harassment, arising out of sexual inequality between men and women in the country.
Lebanon	85 th	Lebanese women face the least gender disparity in the Arab world with their male counterparts. Despite this, discriminatory social codes, particularly the focus on intersectional civil and family laws, continue to impede women's empowerment. ⁴⁶ Although the gender gaps at higher levels of education are reversing, women continue to face entry barriers to the labor market as well as time poverty due to the predominance of unpaid care work.
Libya	38 th	Women in Libya have had a long history of actively participating in the economic, social and political development of the country, going back to the 1950s. Yet, with Gaddafi's introduction of the <i>Declaration of the Authority of the People</i> in 1977 and the <i>Great Green Charter of Human Rights in the Age of the Masses</i> in 1988, these rights were compromised at a substantive level. ⁴⁷ Furthermore, traditional family laws, as a general trend in the MENA region, continue to disadvantage women and exacerbate their time poverty. The 2011 uprisings signaled that women were entering the public space, yet changes in women's empowerment has been sluggish in the past seven years.
Montenegro	32 nd	Montenegro is relatively advanced in terms of progress towards gender equality. This enhances the capacities of Montenegrin men and women to face climate-risks and capitalize on adaptation opportunities. However, gender-inequitable dynamics remain in important determinants such as access to labor markets, health equity et al, rendering certain demographics vulnerable.
Morocco	119 th	Political, social and economic capitals are not equitably distributed among Moroccan men and women. Without access to these vital resources, climate risks will only burden those at the lower echelons of society. Gender equity in labor force participation is one of the lowest in the world ⁴⁸ , disadvantaging women further: women lag behind on economic capital needed to combat climate shocks and risks.
Tunisia	63 rd	In Tunisia, traditional social codes affect women's empowerment. Since labor force participation disparity is thoroughly pronounced, women lag behind on economic capital needed to combat climate shocks and risks. This also makes them dependent on the patrilocal structure of Tunisian society. However, the January 2011 uprisings signaled that women were entering the public space, leveraging opportunities for their economic empowerment, ⁴⁹ although it remains to be seen if the force of this societal shift can keep pace with climate risks.

⁴⁵ *Egypt: Country Gender Assessment. World Bank. (2010)*

⁴⁶ *Lebanon: Country Gender Assessment. European Union. (2015)*

⁴⁷ *Libya: Country Profile. Gender Concerns International. (2015)*

⁴⁸ *Morocco: Country Gender Assessment. World Bank. (2015)*

⁴⁹ *Gender in MENA Projects: Tunisia. World Bank. (2011)*

TABLE IV: GENDER DEVELOPMENT INDEX (GDI)⁵⁰

(grouped in 5 categories, 1: high equality to 5: low equality – UNDP, 2018)

& GLOBAL GENDER GAP INDEX (GGI)⁵¹

(out of 144 countries – World Economic Forum – WEF, 2017)

Defining the GDI & GGI: The GDI (UNDP) index shows the ratio of female to male HDI values. GDI expresses values in deviation, hence, in order to facilitate understanding GDI grouped categories have been used (as grouped by UNDP) to show the absolute deviation from gender parity in HDI values. This further reiterates the results of the HDI and GII (also by UNDP), and shows the real gender gap in human development achievements.

The GGI (WEF) benchmarks 144 countries on their progress towards gender parity on four thematic dimensions – economic participation and opportunity, educational attainment, health and survival, and political empowerment. The Index benchmarks national gender gaps on economic, political, education- and health-based criteria, and provides country rankings that allow for effective comparisons across regions and income groups, over time.

Relevance of the GDI & GII: Since the GDI and GGI use different methodologies, and are conducted by different agencies, this report does not suggest a causality between the two indices. However, a correlation is undeniable, and both indices pick up similar rates of gender disparity in the MedProgramme countries.

Indicative, not conclusive: In line with Booyesen’s argument, the GDI & GII should be treated as indicative, not conclusive. Geake Dijkstra and Hanmer find that although gender-related development indices have increased attention towards ‘feminization of poverty and underdevelopment’, more robust data needs and indicators are required to create aggregate indices that are sensitive to contemporary trends in gendered privation, particularly with the categorization of ‘women’.⁵²

Country	GDI – Group	GGI – Rank	Relevance
Albania	Medium-high equality	38 th	Despite being categorized as a country with high HDI, a pronounced gender gap in Albania is evinced from the grouping and ranking.
Algeria	Low equality	127 th	Algeria, with Tunisia, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap is revealed.
Bosnia and Herzegovina (BiH)	Medium-low equality	66 th	Despite being categorized as a country with high HDI, a pronounced gender gap in BiH is evinced from the grouping and ranking.
Egypt	Low equality	134 th	The gender gap in Egypt is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Lebanon	Low equality	137 th	The gender gap in Lebanon is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.

⁵⁰ UNDP. (2018)

⁵¹ WEF. (2017)

⁵² Geske Dijkstra, A. & Hanmer, L. C. “Measuring Socio-Economic Gender Inequality: Towards an Alternative to the UNDP Gender Index” in *Feminist Economics*, (Vol. 6, No. 2). (2000)

Country	GDI – Group	GGI – Rank	Relevance
Libya	Medium-high equality	Not available	NA
Montenegro	Medium-high equality	77 th	Although Montenegro features among the upper categories of the previous indices, this reveals a more entrenched gender gap. Women lag behind their male counterparts, in a greater amount than expected, despite very high human development achievements in the country.
Morocco	Low equality	136 th	The gender gap in Morocco is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Tunisia	Medium-low equality	117 th	Tunisia, with Algeria, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap is revealed.

TABLE V: SOCIOECONOMIC FACTORS

Note: This table is compiled from various sources, and determines poverty levels (according to USAID income grouping), rural-urban divide and labor force participation parity in the MedProgramme countries.

***Poverty Level:** Environmental degradation and climate change is a threat multiplier, and often its impacts combine with poverty, hence this is an important indicator, corroborating HDI ranking. To illustrate this, the Multidimensional Poverty Index has been used. (The Oxford Poverty and Human Development Institute (OPHI), and UNDP calculate the MPI, for measuring acute poverty in developing countries. It complements traditional income-based poverty measures by capturing the severe deprivations with regard to different indicators: education, health, and living standards. The index not only identifies those living in multidimensional poverty, but the extent (or intensity) of their poverty. The MPI can help the effective allocation of resources by making possible the targeting of those with the greatest intensity of poverty; it can help address some SDGs strategically and monitor impacts of policy intervention.⁵³

***Rural-Urban Divide:** Climate risks take different forms in rural and urban areas, but lack of development and investment in rural areas (particularly in the Mediterranean) often impedes adaptive capacities of vulnerable demographics, who also derive their livelihoods (in this case, coastal livelihoods) from managed and natural resources.

***Labor force participation parity (% of working age population active)⁵⁴:** In the Mediterranean, one of the prime arenas of gender disparity is labor force participation parity. The region is plagued with high unemployment rates⁵⁵ (12.5% average), and this phenomenon remains a gendered one: women and youth are less likely to be employed than men, as a general trend. Additionally, the existing gap in labor force participation indicates that women possess less economic capital, and are limited to gendered (mostly unpaid care work) roles. This directly correlates to lessened participation in coastal economies and scarce or unstable livelihoods; lack of decision-making power both within the household and larger policy frameworks such as coastal resource use and water management; and, greater exposure to repercussions of marine environmental degradation, water stress and potential climate risks (which often acts as a threat multiplier, in this context).

⁵³ See UNDP's *Technical Notes* (2016) for more.

⁵⁴ *World Employment and Social Outlook: Trends for Women*, ILO. (2017)

⁵⁵ "Unemployment: The Mediterranean Effect", *World Bank*. (2012)

Please find table contents on p. 21 (adjusted for footnoting).

Country	Poverty Indices	Rural-Urban	Labor Force Participation <i>(The gender gap is calculated as the difference between women's and men's labor force participation rates – simply, the number of working age men and women employed in a country, ILO 2016)</i>
Albania	<p>1.2% below the National Poverty Line.⁵⁶</p> <p>The Multidimensional Poverty Index reveals that 7.2% of Albanians are precariously 'near' poverty.</p>	<p>Diber and Kukes <i>qarks</i> (prefectures) show lowest rates of urbanization, and related issues: fragmentation, population decline, <i>et al.</i> Tirana and Durres, on the other hand, have the highest level of urbanization and best performance on demographic and geographic indicators.⁵⁷ Rural to urban migration is common, and often unbridled, leading to environmental complications as well as socioeconomic tussles.</p>	<p>39.3% female 60.7% male</p> <p>During the socialist rule, the government policy of full employment boosted female participation and, as a consequence employment rates were higher than the average figures of the OECD countries. Policies such as investment in childcare facilities and female education stimulated women to enter and remain in the labor market. The market economy disadvantaged women by providing unstable employment opportunities, although education outcomes and employment sectoral options have improved in recent decades, leading to the widening of the gender gap in labor force participation.⁵⁸</p>

⁵⁶ *Regional disparities in Albania.* UNDP. (2010)

⁵⁷ *Regional disparities in Albania.* UNDP. (2010)

⁵⁸ Garcia-Pereiro, T. "The Determinants of Female Employment in Albania". Open access on [ResearchGate](#). (2016)

<p>Algeria</p>	<p>11.8% below the National Poverty Line.⁵⁹</p> <p>The MPI is unavailable for the country. However, the <i>Ligue Algérienne pour la Défense des Droits de l'Homme (LADDH)</i> reports that about 35% (14 million) of Algerians are in poverty.⁶⁰</p>	<p>Poverty in Algeria has a distinctly urban face: 75% of the country's poor live in cities, undertaking informal jobs without access to social safety nets. Additionally, the disproportionate rates of urban poor show that the incidences of poverty in the Algerian Sahara are twice as much than among people living in the Steppe.⁶¹</p>	<p>19.0% female 70.4% male</p> <p>Female labor force participation is low in Algeria, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.⁶² However, according to ILO, the status quo is slowly altering (although not quite at an ideal pace), as there are marked difference between participation rates from 2011 to 2018.⁶³</p>
<p>Bosnia and Herzegovina (BiH)</p>	<p>15% below the National Poverty Line.⁶⁴</p> <p>The MPI reveals that 3.2% of the populace are precariously 'near' poverty.</p>	<p>BiH remains one of the most rural countries in Europe – with over 60% of its populace residing in rural areas.⁶⁵ The rural poverty rate is higher than urban areas, although income dynamics are similar.⁶⁶</p>	<p>34.4% female 58% male</p> <p>Between the years 1992-1995, Bosnia and Herzegovina went through a destructive war that resulted in mass emigration of around 50% of the total population. In the period after the war, although considerable number of refugees returned, it remains unclear how the jobs market was affected around the time. With the failing of the state's strong social protection services such as long-term care, child care and elderly care, and new categories of 'returnee refugees' and 'internally-displaced people', women bear the brunt of unpaid care work. Although more women attend university than men, they continue to face sociocultural barriers in entering the labor force.⁶⁷</p>

⁵⁹ Poverty has fallen in the Maghreb, but inequality persists". [World Bank](#). (2016)

⁶⁰ See *Ligue Algérienne pour la Défense des Droits de l'Homme*(LADDH)for more.

⁶¹ "Poverty has fallen in the Maghreb, but inequality persists". [World Bank](#). (2016)

⁶² Women face the highest proportion of legal restrictions (*de jure* discrimination) in the MENA region, as well as sociocultural norms (*de facto* discrimination) that stipulate limits to women's entry in the public, and working sphere. Young females are particularly discouraged from seeking employment.

⁶³ This [ILO report](#) (2014) expounds on the factors affecting employment and labor force participation in Algeria.

⁶⁴ *Poverty and Inequality in BiH*. [World Bank](#). (2011)

⁶⁵ *Rural Development in BiH: Myth and Reality*. [UNDP](#). (2013)

⁶⁶ *Poverty and Inequality in BiH*. [World Bank](#). (2011)

⁶⁷ This [ILO report](#) (2011) expounds on the factors affecting employment and gender in BiH.

<p>Egypt</p>	<p>27.8% below the National Poverty Line.⁶⁸</p> <p>Although extreme poverty has been virtually eradicated, Egypt is yet to turnaround the effects of the 2011 Arab Springs on its economy, leaving a third of Egyptians in precarious poverty. Particularly, high inflation over 2015-17 has lowered the purchasing power of households.⁶⁹</p>	<p>Regional disparities continue to be a part of the country's landscape, with upper rural Egypt showing poverty rates three times higher than metropolitan Egypt.⁷⁰</p>	<p>22.8% female 76.1% male</p> <p>Female labor force participation is low in Egypt, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.⁷¹ This is a significant loss as including women and enabling conditions to retain them in the workforce can boost the growth rate of the Egyptian economy.⁷² In recent times, Egypt's performance on health and education indicators is improving, and this could change labor dynamics.</p>
<p>Lebanon</p>	<p>30% below the Middle-Income-Country Poverty Line.⁷³</p> <p>Although GDP increase in Lebanon remains steady, the country faces the economic and social impact of the Syrian crisis. With the influx of 1.5 million refugees, Lebanon's public finances, service delivery, and the environment have been strained, increasing poverty headcount and unemployment.⁷⁴</p>	<p>Lebanon's population is 87% urban, concentrated particularly in Beirut. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector. In the rural areas, different causes entrench poverty: social protection and government service delivery are limited in these remote and mountainous regions.</p>	<p>23.5% female 70.3% male</p> <p>Female labor force participation is low in Lebanon, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. This is a significant loss as including women and enabling conditions to retain them in the workforce can potentially boost the growth rate of the Lebanese economy.⁷⁵ Recent studies, however, show that Lebanon is leading the growth rate of female participation in labor force in the MENA region.⁷⁶</p>

⁶⁸ *Egypt: Economic Outlook*. World Bank. (2018)

⁶⁹ *Ibid.*

⁷⁰ *Ibid.*

⁷¹ ILO. *Women in Business and Law*. (2014)

⁷² The Economic Research Forum (ERF), a regional forum on economic research in Arab countries, Turkey and Iran finds that encouraging the participation of women in the labor force, particularly the 'married women' demographic could usher in rapid growth for the Egyptian economy. See [here](#).

⁷³ *Lebanon: Rapid Poverty Assessment*. UNDP. (2016)

⁷⁴ *Lebanon: Economic Outlook*. World Bank. (2017)

⁷⁵ Find more on Lebanon on the ERF [website](#).

⁷⁶ See this AN-NAHAR [coverage](#).

Libya	<p>40% below the Middle-Income-Country Poverty Line.</p> <p>Although economic growth is projected to rebound at around 15% in 2018, Libya's oil-dependence does not benefit the majority of the Libyan populace. High inflation coupled with weak basic service delivery have exacerbated socioeconomic exclusion in the country. Libya continues to experience conflict and insecurity.</p>	<p>Libya's population is 85% urban, concentrated particularly in Tripoli, Benghazi, Misrata and Bayda. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector.</p>	<p>27.8% female 78.7% male</p> <p>Female labor force participation is very low in Libya, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. Women often take on informal sector roles, particularly starting their own small business, despite receiving higher rates of advanced education than men (77% versus 63%). Movement in Libya for women is severely limited and is another deterrent to workforce participation.</p>
Montenegro	<p>8.6% below the Middle-Income-Country Poverty Line.⁷⁷</p> <p>In Montenegro, there has been sustainable reduction in poverty in the last five years.</p>	<p>60.5% of the rural populace is classified poor.⁷⁸</p> <p>In 2010, MONSTAT finds that not only are the rural populace are at a higher poverty risk, they also face more entrenched forms of poverty.⁷⁹</p>	<p>42.5% female 55% male</p> <p>As the country emerged from dirigisme, social property was privatized, and the economy sprouted 'grey areas' of undeclared or unregulated work. Post-conflict Montenegro is still reeling from the economic effects of war, which increased unemployment (17.8% in 2016)⁸⁰ and bolstered GDP loss. The Roma populace face entry barriers to the workforce, and employment rates are far below national averages: 47% Roma male and 8% Roma female are employed.</p>
Morocco	<p>15.5% below the Lower-Middle-Income-Country</p>	<p>3 million out of the 4 million poor live in rural areas⁸²</p>	<p>25% female 74.1% male</p>

⁷⁷ The middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of \$5.50/day. World Bank. (2017)

⁷⁸ MONSTAT. (2010)

⁷⁹ MIDAS Project, World Bank. (2016)

⁸⁰ World Bank. (2016)

⁸² Fair Observer. (2017)

	<p>Poverty Line.⁸¹</p> <p>In Morocco, there has been steady decline in poverty, though the underlying factors may be remittances, deceleration of population growth and macroeconomic stability. Inequalities between rich and poor are still abounding, and poverty essentially has a rural face in the country.</p> <p>The MPI also reveals that an additional 12.6% of Moroccans are dangerously ‘near’ poverty. Among the 15.5% poor, 5% are in ‘severe’ multidimensional poverty.</p>	<p>The subjective poverty rate has increased by 15% from 2004 figures in rural Morocco. Meanwhile, the urban poverty rate is half of the national average in 2001, and in 2014, stands at one-third.⁸³</p>	<p>Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.⁸⁴ However, Morocco is entering a period potential demographic dividend, with the number of working-age population, relative to below 15 and above 64 years, increasing. This could either signal a potential economic boom or an unemployment crisis, if economic activity is not encouraged and made inclusive for the marginalized.⁸⁵</p>
Tunisia	<p>24.7% below the National Poverty Line.⁸⁶</p> <p>Poverty rates in Tunisia have seen a significant increase, from 15.5% (2010) to 24.7% (2018). Income disparities are high: the top 20% of Tunisians earn 46% of the national income, while the bottom 20% earn only 5.9%.⁸⁷ Civil unrest since the 2011</p>	<p>Rural areas in Tunisia remain marginalized and underprivileged, leading to high rates of rural to urban migration, particularly towards Greater Tunis and its agglomeration economies.⁸⁸</p>	<p>25.1% female 71.3% male</p> <p>Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.⁸⁹ Like Morocco, Tunisia faces crucial demographic transition in the coming years, yet barriers to the job market remain high. Young women are particularly vulnerable and face exclusion from economic activities.⁹⁰</p>

⁸¹ The lower-middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of \$3.10/day. World Bank. (2017)

⁸³ World Bank. (2018)

⁸⁴ ILO. *Women in Business and Law*. (2014)

⁸⁵ This IFAD report expounds on the factors affecting employment and gender in Morocco.

⁸⁶ “Poverty has fallen in the Maghreb, but inequality persists”. World Bank. (2016)

⁸⁷ *Tunisia: Economic Outlook*. World Bank. (2018)

⁸⁸ Amara, M., Jemmali, H. & Ayadi, M. “Rural-Urban Migration and Income Disparity in Tunisia”. *Economic Research Forum*. (2017)

⁸⁹ ILO. *Women in Business and Law*. (2014)

⁹⁰ This ILO report expounds on the factors affecting employment and gender in Tunisia.

	has increased poverty and unemployment and discouraged entrepreneurs and private sector actors.		
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TABLE VI: POLICY ENVIRONMENT, LEGAL TOOLS & INSTITUTIONS

This section explores the policy environment in the countries participating in the MedProgramme, and presents a potential list of gender stakeholders, relevant for the site-specific activities and collaborations during the project cycle. Legal tools, and enabling policies are crucial in ensuring gender inequality can be address through tangible and formal procedures. This table, compiled from various sources, particularly UN Women and the Equal Futures Partnership, thus, takes stock of international conventions, national laws and policies, and country-level stakeholders that can aid the MedProgramme in gender mainstreaming and narrowing socioeconomic gaps.

Country	Policy Tools, Legal Instruments, Institutions	Provisions
Albania	1994 – CEDAW	Albania signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1994.
	1998 (amended 2012) – Constitution of the Government of Albania	Article 18 establishes that all are equal before the law. No one may be unjustly discriminated against for reasons such as gender, race, religion, ethnicity, language, political, religious and philosophical beliefs.
	2016 - 2020 – National Strategy and Action Plan on Gender Equality	The Strategy and the Action Plan represent a commitment for 2016 – 2020, with concrete interventions towards economic empowerment of women and men, ensuring actual participation and engagement in political and public decision-making processes; reducing gender-based violence and domestic violence and strengthening the coordination and monitoring role of the national mechanism of gender equality.
	Institutions	Ministry of Social Welfare and Youth (with contribution of the Inter-Agency Working Group) Ministry of Justice National Referral Mechanisms
Algeria	1996 – CEDAW	Algeria signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1996.
	2008 – Constitution of the Government of Algeria	Under the Algerian Constitution, women enjoy the same civil and political rights as men and have the status of full citizens (Articles 29 and 31).
	Institutions	Ministry of National Solidarity, Family Affairs and Status of Women

<p>Bosnia and Herzegovina (BiH)</p>	<p>1993 – CEDAW</p> <p>2006 – Law on Gender Equality</p> <p>2014 - 2017 – National Action Plan on Gender</p> <p>Institutions</p>	<p>BiH signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993.</p> <p>Bosnia’s Gender Equality Law provides definitions for direct and indirect discrimination, as well as gender-based violence and sexual harassment. It mandates the creation of gender equality of gender equality strategies and programs in education, employment, access to resources, social protection, etc.</p> <p>The NAP addresses the gender rights principles laid out in the national law, and works towards improving women’s participation in public life and decision-making, and particularly target the legacy of human trafficking and sexual slavery in the country’s post-conflict context.</p> <p>Agency for Gender Equality of Bosnia and Herzegovina Ministry of Human Rights and Refugees</p>
<p>Egypt</p>	<p>1981 – CEDAW</p> <p>2014 – Constitution of the Government of Egypt 1937 – Criminal Code of the Government of Egypt</p> <p>Integrated Gender Program (UNDP, UN Women and UNFPA)</p> <p>Institutions</p>	<p>Egypt signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1981.</p> <p>The two main legislations protecting and supporting women are the Egyptian Constitution of 2014 (Articles 11, 53 and 214) and the Criminal Code of 1937. Crimes against women in Egypt are divided in two groups: misdemeanors and felonies. Misdemeanors, such as catcalling, are usually punished by fines with shortened trials. Felonies, like FGM and rape, are permanent criminal offences, punished by longer jail time.</p> <p>The integrated program is helping to address multi-faceted challenges faced by women and young girl through three pillars of social, legal and economic empowerment. A similar EBRD project for the MENA region is active in Egypt as well.</p> <p>National Council for Women</p>

<p>Lebanon</p>	<p>1997 – CEDAW</p> <p>1936 – Constitution of the Government of Lebanon</p> <p>Women’s International League for Peace and Feminism (WILPF) – ABAAD Resource Centre of Gender Equality</p> <p>Institutions</p>	<p>Lebanon signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1997.</p> <p>The Lebanese legal system is primarily based on French Civil Code and Egyptian legal systems. Whilst there is no unified civil law in Lebanon, the Lebanese Constitution promulgated in 1926 articulates the principle of equality among all citizens (Articles 7 and 12).</p> <p>WILPF and ABAAD are leading national consultations to develop the first National Action Plan towards gender equality currently. The EU wrapped up its ‘Gender Equity and Empowerment of Women in Lebanon’ in early 2017, which has laid groundwork towards the adoption of a quota system for women in the country.</p> <p>National Commission for Lebanese Women</p>
<p>Libya</p>	<p>1989 – CEDAW</p> <p>2011 - 2013 – Interim Constitutional Declaration of the Government of Libya</p>	<p>Libya signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1989.</p> <p>After the end of Gaddafi’s rule, the UN-back interim government (Government of National Accord) has overseen the development of draft constitution. Women activists in Libya are currently in the process of including substantive demands⁹¹ in the draft, which will be presented to the Libyan people for referendum. This Constitution will lay out the new framework for gender equality legal tools and policy environment in the coming years.</p>
<p>Montenegro</p>	<p>2006 – CEDAW</p> <p>2007 – Law on Gender Equality</p> <p>2008 – Action Plan to Achieve Gender Equality in Montenegro – PAPRR</p> <p>Institutions</p>	<p>Montenegro signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 2006.</p> <p>The first Law on Gender Equality was adopted in July 2007. The Law on Amendments to the Law on Gender Equality was adopted in June 2015, in line with international specifications of the UN, the EU, and the Council of Europe. This document was drafted in the context of the accession of Montenegro to the EU, based on CEDAW. Action Plan is updated every 4 years, and out of the critical areas covered in Beijing Declaration, Montenegro has opted for 9.</p> <p>The Ministry of Human and Minority Rights The Department of Gender Equality Affairs</p>
<p>Morocco</p>	<p>1993 – CEDAW</p> <p>2011 – Constitution of the Government of Morocco</p>	<p>Morocco signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993.</p> <p>Article 19 establishes that men and women should enjoy equal rights and freedoms in all civil, political, economic, social, cultural and environmental matters.</p>

⁹¹

Libya Women’s Demands in the Constitution(UNDP-led Cairo consultations). (2017)

	2013 – IKRAM	The Government Plan for Equality was developed by the Government of Morocco along with key stakeholders. .
	Institutions	The Ministry of Human Rights The Ministry of Family, Solidarity, Equality and Social Development
Tunisia	1985 – CEDAW	Tunisia signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1985. However, in April 2014, Tunisia officially lifted key reservations on the CEDAW.
	2014 – Constitution of the Government of Tunisia	The new constitution adopted in January 2014 includes strong protection for women’s rights: Article 21 confirms equality of rights and duties; Article 34 guarantees women’s representation in all elected bodies; and, Article 46 ensures protection of human rights.
	2015 - 2018 – Gender Equality Promotion Program in Tunisia (EU-Tunisia)	The financing agreement of the EU-Tunisia program was signed in April 2015. It aims to contribute to achieving gender equality in Tunisia by reducing inequalities at national, regional and local levels.
	Institutions	The National Council of Peers for Equality and Equal Opportunities between Women and Men Ministry of Women, Family and Children

5. The MedProgramme’s Gender Approach, Target and Components

5.1 Means to an End: Transformative Gender Mainstreaming Towards Gender Equality

The conversation on gender mainstreaming to mobilize efforts on gender equality and reduction of discriminatory gender practices and social norms has gained currency as an intellectual concern, technical solution and international consensus. However, the discursive landscape of gender equality has shaped and reconfigured what gender mainstreaming could potentially achieve in different contexts, particularly– *the vision of equality* as sameness, which aspires to a gender-neutral world where women are treated according to the same principles, standards and norms as men, enjoying equal rights and opportunities; and, *the approach of difference or reversal*, which problematizes the existence of unquestioned patriarchal norms, reconstructing the political by seeking recognition of non-hegemonic gendered identities that have been treated as different in comparison to male normative identities and cultures.⁹²

This Gender Mainstreaming Strategy adopts the latter transformative approach (‘the approach of difference or reversal’), positing a gender equality vision for the MedProgramme that questions established categories and implements positive action measures towards gender-responsive actions in the Mediterranean region. In effect, gender mainstreaming is

⁹² Verloo, M. *Multiple Meanings of Gender Equality: A critical frame analysis of gender policies in Europe*, p. 23. (2008)

therefore not an end (goal) of the MedProgramme— rather, a means (process) to an end. This approach reflects also the normative standards defined by the European Institute for Gender Equality (EIGE), which stipulates the importance of identifying gender mainstreaming as a process because it:

“Ensures that policy-making and legislative work is of higher quality and has a greater relevance for society, because it makes policies respond more effectively to the needs of all citizens – women and men, girls and boys. Gender mainstreaming makes public interventions more effective and ensures that inequalities are not perpetuated.

*It does not only aim to avoid the creation or reinforcement of inequalities, which can have adverse effects on both women and men. It also implies analyzing the existing situation, with the purpose of identifying inequalities, and developing policies which aim to redress these inequalities, and undo the mechanisms that caused them”.*⁹³

5.2 *Targets and Components of the MedProgramme’s Gender Strategy*

Based on the above conceptual hinterland, this Strategy has identified three targets, that the eight Child Projects will address through their tailored assessments and action plans (Section 6):

a. Address gender-blind hurdles with gender-differentiated consequences.

Although formal gender equality rights and guarantees are almost ubiquitous in the Mediterranean nations, this Strategy recognizes that gender-neutral policy language may not result in gender-egalitarian outcomes, when implemented in a gendered environment, influenced by gender imbalances and biases.⁹⁴ The neutral policies and laws, which are veritably gender-blind, often work in concert with social tenets, traditional norms, constitutional interpretations, and cultural expectations in ways that may stymie the advancement of gender-responsive practices. Thus, in tandem with country partners and implementing agencies, the MedProgramme will stipulate the analysis of potential gender-neutral hurdles in project- and site-specific contexts to develop targeted action towards addressing the gender-differentiated consequences.

BOX 1: Female entrepreneurship in Mediterranean faces gender-blind hurdles.

The World Bank reports that seemingly gender-neutral barriers such as cumbersome and costly procedures for opening a business and uncertain chances of recovering assets from a failed venture often have gender-differentiated consequences, notably deterring women’s entrepreneurship in the Mediterranean region. Thus, gender-neutral laws, when implemented and interpreted in gendered contexts, often create ambiguities and unintended consequences for the disadvantaged. This also relates to legal inconsistencies and opaqueness afforded to gender-neutral policy language and laws by the fluid interpretation and precedence given to family law and measures, which are often derived from traditional sociocultural norms.

Source: The Environment for Women’s Entrepreneurship in the Middle East and North Africa. The World Bank. (2008).

⁹³ See *Good Practices in Gender Mainstreaming*, a technical guide by EIGE.

⁹⁴ See *The Environment for Women’s Entrepreneurship in MENA*, p. 52. The World Bank. (2008)

b. [Mitigate gender-specific barriers and discriminatory norms.](#)

Certain barriers and discriminatory norms are framed with gender-specificity, targeting one gender or more, against normative ideals that stipulate hegemonic social identities. Gender-specific barriers have tangible and invisible discriminatory outcomes, prejudices and stigma, and are often accepted, condoned and tolerated within the larger social framework. To address these barriers, attention, awareness and resources must be accorded to address the effects of the multiplicity of social differences and gender norms to usher in enduring change and assuage the gender burdens on specific demographic groups. The MedProgramme will, hence, develop dedicated project- and country-specific gender assessments and gender action plans for each of its constituent projects and from the preparation phase through to the concluding monitoring and evaluation stage of the project cycle, with objectives (relating to broader project objectives), transformative outcomes (relating to the wider focus of the project), means of verification and indicators.

BOX 2: Labor participation has gender-specific barriers in the Mediterranean.

The Union for the Mediterranean, on the occasion of its Ministerial Conference in Barcelona (2015), brought the focus on the importance of fostering women's participation in economic life and on its obstacles in the region: women's low presence in paid labor, low wages – with lower wages of 10 – 40%, and a low level of access to positions of responsibility and decision-making. These gender-specific barriers are exacerbated by the current unequal share of care, domestic and reproductive unpaid labor performed by women in the Mediterranean. Women also face discrimination, violence and legal inequalities, which impede their ability to leverage opportunities towards empowerment and independence.

Source: Visions and Actions to Promote Gender Equality in the Mediterranean. The Union for the Mediterranean. (2017).

c. [Scale up gender-sensitive policies and deliver gender-responsive outcomes.](#)

Building on the knowledge and analysis of gender-blind and gender-specific barriers, the MedProgramme will have the imperative to use consultative and participatory tools to conduct gender-differentiated beneficiary assessments and formulate gender-sensitive policies to address the same. These gender-sensitive policies will provide the basis for gender-responsive outcomes within the results framework of the different projects, by bringing transformative change towards⁹⁵: promoting equitable access to goods, services, status, and decision-making power (both within policy institutions and households); expanding the subjective and objective range of legal, social and psychological choices available to both men and women; breaking gender stereotypes, norms and patterns; and, providing the conducive environment, through capacity-building in policy institutions, governance structures and local bodies and awareness-raising among communities (particularly, male sensitization), for a pan-Mediterranean gender mainstreaming effort that is verifiable on all three accounts of accountability, transparency and incentive mechanisms. To scale up and deliver these policies and actions, the MedProgramme will stipulate gender-budget lines within the constituent projects, as dedicated resources need to be mobilized for positive impacts on the gender gap in the region.

⁹⁵ See *Good Practices in Gender Mainstreaming*, a technical guide by EIGE.

BOX 3: Agricultural reform requires gender-sensitive policies in the Mediterranean.

Women’s contribution to agricultural labor (particularly smallholder farming) in the Mediterranean Basin is significant: providing diversified income sources to households, creating empowerment opportunities, and boosting national agricultural and economic production. However, this contribution is often underplayed and misrepresented – although women undertake the time-consuming aspects of agricultural work, they often do so without or with scarce pay. Land ownership and tenure security in the Mediterranean displays gendered disparities as well, with succession laws and social customs in effect. FAO’s reform framework for agriculture in the region, as highlighted in the May 2018 *Regional Conference for the Near East*, showcases these issues through the “Promoting Food Security, Blue Growth, and Empowerment of Small-Scale Farmers and Women in the MENA region” policy document.

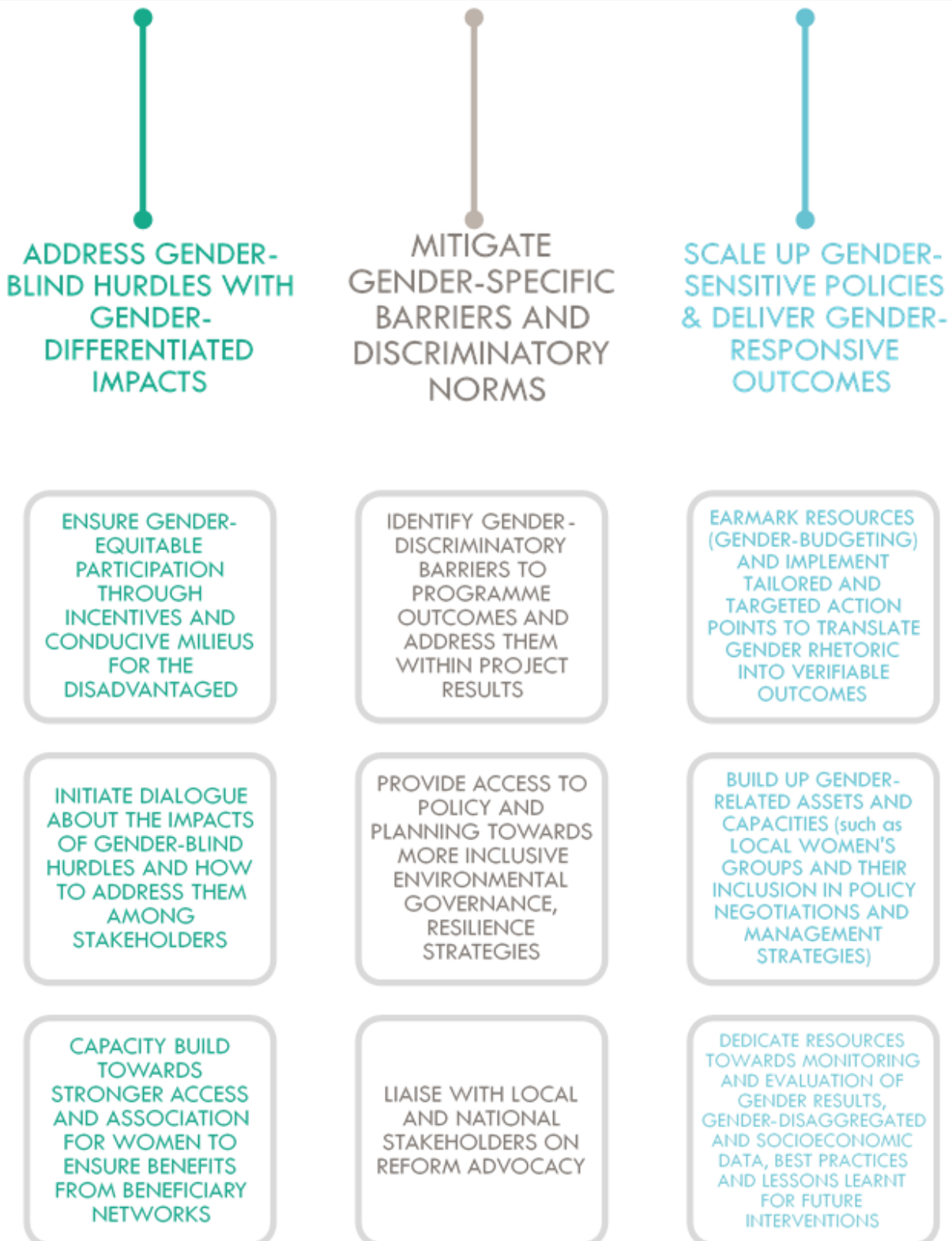
Source: “Mediterranean Women in Rural and Agricultural Communities: Double Jeopardy, Multiple Opportunities”. International Centre for Advanced Mediterranean Agronomic Studies. (2018).

5.3 *Visualization of the MedProgramme’s Gender Strategy*

Based their justification and review of peer examples, this Strategy has identified the following components for the MedProgramme’s gender targets, which reflect the types of actions that will be implemented by the Child Projects, visualized below:

Please see visual from p.14.

TARGETS AND COMPONENTS – MEDPROGRAMME GENDER STRATEGY



6. Operationalizing the Strategy – the MED Approach

Devising a gender mainstreaming strategy denotes only the very outset of a multi-stage policy cycle that requires consistent efforts of integration and consideration of gender perspectives, in each phase of the program and by all actors involved, to succeed.

To operationalize the Strategy, therefore, three necessary elements ('MED' – 5.1) have to be present and inform the different stages of execution, even if the content changes in real time to adequately meet the necessities of project- and site-specific contexts for the different Child Projects, as described below.

Further, a map (5.2) is presented of how the MED Gender Mainstreaming approach is expected to function.

6.1 *Defining the MED Approach*

The approach to be used to operationalize the Strategy is defined below:

a. *Multidimensional.*

A multidimensional approach ensures that gender is used as a principal analytical category – however not without context or functioning in a void. Linkages between gender, poverty, environmental justice, socioeconomic inclusion, ethnic diversity and customary practices must be identified, analyzed and considered in the formulation of inclusive environmental action and policy. Child Projects, hence, will have the autonomy to identify gender issues relevant to the project objectives and outcomes (gender assessments), and devise strategic as well as appropriate gender action plans to address these.

b. *Empowering*

Integrating empowerment as an operational imperative ensures that program objectives and technical components are geared towards environmental and socioeconomic co-benefits. This is necessary to convert gender-aware rhetoric and gender-responsive analysis into actionable points within project logframes (logical frameworks), and with dedicated resource allocation (gender-budgeting) – which have positive ramifications for the gender status quo in project-specific contexts both nationally and locally. Child Projects, hence, will ensure gender assessments and action plans dovetail with the locale of project activities, stakeholders involved, and ensure budgetary allocations to translate rhetoric towards actions with verifiable results.

c. *Durable.*

Durability is the hallmark of a successful strategy/ intervention/project or program. Gender-responsive actions must ensure a shelf life beyond the duration of the project cycle, with positive uptake among national and local stakeholders. Directing investment towards institutional and technical capacity-building, and ensuring ownership of project by stakeholders, will warrant exit strategies for the different Child Projects. Particularly, it will be a program-wide imperative to generate information and data on the linkages between environmental security, climate risks and gender specifically on the Mediterranean region – while, building up capacities of national and local stakeholders to address these in a holistic manner, beyond the duration of the project cycle.

Please see the visualization of the MED approach – and what it entails for Child Projects and the overall MedProgramme below on p.36.

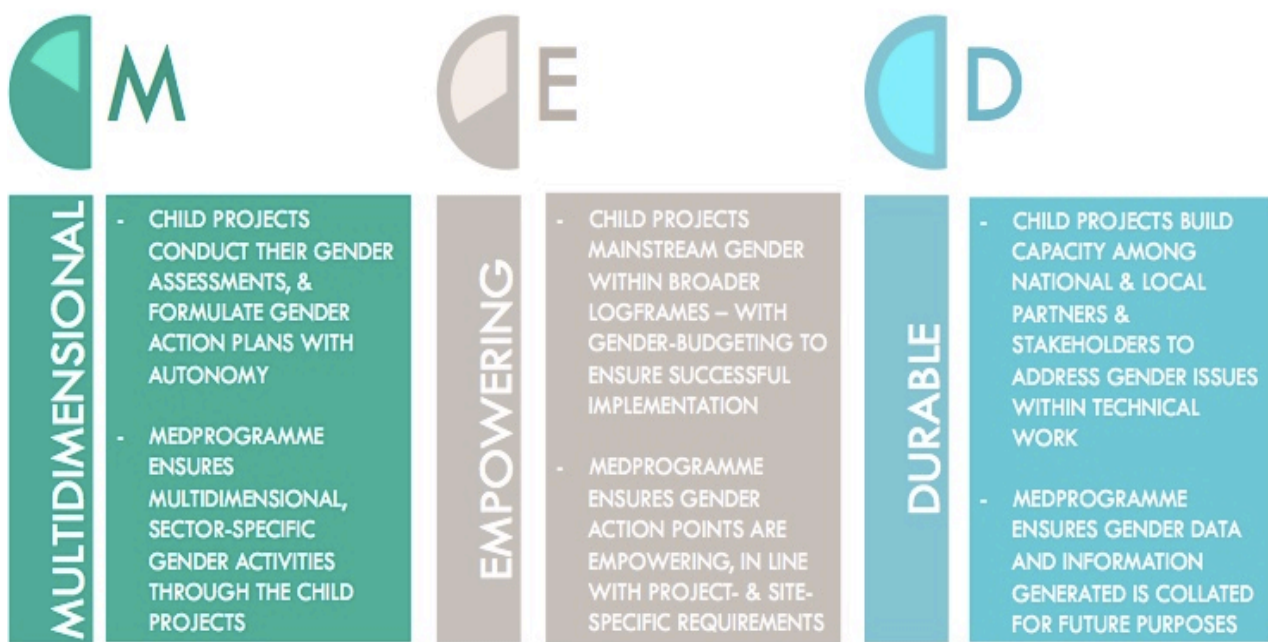


Figure 2: The 'MED' Approach –Child Projects and the MedProgramme

(developed by author)

6.2 Mapping the Programme-wide MED Approach with Child Projects

Having defined the guiding tenets of Program-wide gender mainstreaming to be devolved for each Child Project, the map (presented as a visual) of how this Strategy will tentatively be operationalized is presented below:

a. Preparation Phase – Child Projects identify gender priorities and actions through Gender Assessments

The MED approach of this Gender Mainstreaming Strategy for the MedProgramme will allow for considerable autonomy, as Child Projects will conduct their own gender assessments. The process of conducting a successful gender assessment includes: identifying the gender directives from the GEF focal point of the Child Project, as well UN Environment's gender priorities with regard to the Child Project thematic; desk-reviews of available literature on the theme from – gender, social development, and political risk perspectives; collating relevant data for the gender considerations from international organizations, development banks, national authorities, and think tanks (economic development-focused); structuring a potential baseline upon which the Child Project can positively impact; and finally, gathering information on relevant gender stakeholders (ministries, independent activist groups, NGOs) and legal mechanisms (gender-progressive laws) who could participate during the implementation phase.

b. Preparation Phase – Child Projects develop Gender Action Plans based on assessments

The individual gender assessments conducted by each Child Project will form the basis for the development of a tailored and strategic Gender Action Plan, which will mainstream action points to positively impact upon the gender status quo under the broader project objective, outcomes and activities, as well develop means of verification indicators to measure progress to impacts at later stages. This will ensure that Child Projects are able to cater to their specific gender priorities and issues, pertaining to country- and site-specific contexts, and address them in holistic manner through their activities. Further, such an

approach will avoid the perils of establishing a ‘one-size-fits-all’ approach for the MedProgramme, and allow for a nuanced and focused mainstreaming effort spanning the different Child Projects.

c. *Inception and Implementation Phase – Child Projects will plan the execution of action points identified in the Action Plans*

Operationalizing the Action Plans will involve meticulous planning, as well as resource allocation. As the Child Projects move into the inception phase and ground realities of project implementation take shape – the execution of the action points with dedicated gender budgeting will guarantee that the gender rhetoric moves towards practical and verifiable results within the broader project objectives and outcomes. The steady maintenance of momentum of gender mainstreaming, at this stage, is very crucial – and, will require concerted efforts from different actors within Child Projects to ensure gender stakeholders are engaged, capacity and consensus are mobilized, and resources are used to target beneficiaries to leverage both socioeconomic and environmental co-benefits.

d. *Throughout the Project Cycle – Child Project 4.1*

This Gender Mainstreaming Strategy, intended to structure gender-responsive activities and to provide a coherent mainstreaming methodology, will be included as one of the three pillars of the Child Project 4.1 – the support project providing also the knowledge management and coordination pillars to the entire MedProgramme. This gives the Child Project 4.1 a unique position: at once, while providing a gender support structure to the pan-MedProgramme portfolio, it will also provide a platform for ‘cross-fertilization’ by pooling in gender-relevant research and data (from the different Child Projects) to facilitate Programme-wide learning and exchange.

e. *Reporting and Monitoring – Child Projects align gender results with indicators/develop gender-specific indicators*

In keeping with the *durability* aspect of the MED approach – it is crucial to ensure a prolonged shelf life of the MedProgramme interventions. A step towards this begins in the inception and implementation phase by building capacity and consensus, while mobilizing adequate resources. Going into the reporting and monitoring stages, it will be important for Child Projects to measure progress to impacts against gender-specific indicators that are developed in the Gender Action Plans (in line with GEF gender indicators), to collate Programme-wide gender information and data, and report accordingly. This will also lay the ground for a potential ‘extension’ of the Gender Mainstreaming Strategy through future interventions – by ensuring these can benefit from the gender-responsive actions, policies and capacity building done in the region, and by expanding the entry points these new projects can take with the information and data generated towards cross-cutting issues such as poverty, water access, land and infrastructure etc.

7. Conclusion

This Strategy has stipulated the MedProgramme's gender priorities, targets and components, as well as the operationalizing approach towards achieving the same. The focus has been to usher a change and/or reversal perspective and posit a gender equality vision for the MedProgramme that hopes to question established social and gendered categories and implements positive action measures towards gender-responsive actions in the Mediterranean region. In effect, gender mainstreaming is therefore not an end (goal) of the MedProgramme— rather, a means (process) to an end (greater gender equality).

With international consensus, national priorities and organizational efforts (of the GEF and UN Environment – see 1.2) prioritizing gender mainstreaming as a solution to greater stakeholder involvement, improved environmental results and social outcomes of projects, and ensure inclusivity. In this milieu, this Strategy will generate regional cooperation and contribute to the pan-Mediterranean conversation on the importance of greater gender equality for the overall progress of society, improvement of economy and functioning of a healthy polity.

Gender Assessment and Action Plan **Child Project 1.1: Component 1 (Chemicals and Waste)**

*prepared by Debasmita Boral
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1. Introduction

This Gender Assessment has been prepared as an input for the design of the GEF (Global Environment Facility)-funded project (also referred to as the Child Project 1.1 of the MedProgramme) titled ‘Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts’, specifically for Component 1 – Chemicals and Waste¹. This project is being envisioned under the aegis of the Mediterranean Sea Programme (MedProgramme), a comprehensive and powerful response to the environmental and social challenges faced in the region. Comprising of regional components in tandem with national activities, this project will involve eight of the nine² MedProgramme beneficiary countries: Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Montenegro, Morocco and Tunisia.

For the broader context of the Child Project 1.1, it is important to understand the vision, breadth and capacity of the MedProgramme. The MedProgramme is the third step of 20 years of cooperation between UN Environment/MAP and GEF in the Mediterranean Region. It builds both on the successful implementation of previous GEF projects and on the legal framework provided by the Barcelona Convention and its protocols. The Programme encompasses a series of interconnected projects (Child Projects³) based on an overarching vision for change: ‘A healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse, contributing to sustainable development for the benefit of present and future generations’.

Through the joining of forces of three GEF focal areas and of numerous partners⁴ including UN agencies, development banks, MAP Regional Activity Centers, NGOs and others, under the leadership of UN Environment/MAP, the MedProgramme is expected to achieve large-scale impacts in improving livelihood and health of coastal populations, water security, and sustainability of marine and coastal ecosystem services. The Programme is, at once, a pioneering effort to generate dialogue, cooperation, and take action on a regional scale for greater gender equality; and will, therefore, strategically contribute to the sustainable development efforts and address gender gaps in the Mediterranean basin. CP 1.1’s focus on Chemicals and Waste, thus, can provide a unique entry point for gender actions in the Mediterranean context – as explored in the following section.

2. Contextualizing CP 1.1 CW and Gender Actions in the Mediterranean

Gender relations in the Mediterranean region are a kaleidoscope⁵ of overlapping social, economic and cultural roles, spread across a diverse multitude of countries and communities. The European Mediterranean countries have distinct social patterns and gender norms, which differ from the Middle

¹ Child Project 1.1 has two components, namely: Chemicals and Waste (CW) and International Waters (IW). This Gender Assessment pertains to the Chemicals and Waste portfolio, as the International Waters component is expected to mainstream gender within its TDA update process.

² Libya has been dropped due to security issues, and because the Stockholm Convention National Implementation Plan (NIP) could not be completed, leading to priority chemicals issues of concern as not being confirmed.

³ At the time of its approval in 2016, the MedProgramme comprised of seven Child Projects. Subsequently, UN Environment/MAP developed a Mediterranean-focused climate change adaptation project, for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF that this SCCF project would be managed, for all intents and purposes, as an additional Child Project of the MedProgramme. Hence, the number of Child Projects now stands at eight.

⁴ GEF Lead Agency: UN Environment. Other GEF Agencies: European Bank for Reconstruction and Development (EBRD). Executing Partners: UNEP/MAP, European Investment Bank (EIB), UNESCO International Hydrological Program (IHP), Global Water Partnership (GWP) Med, World Wildlife Fund (WWF), MEDPOL, UNIDO, and IUCN.

⁵ See [this report](#) by the Union for the Mediterranean (UfM) regarding an action plan towards investing in gender equality in the region.

East and North Africa (MENA) Mediterranean countries, for example. Additionally, the varying political situations in the region also determine how women and men are able to access and leverage sustainable development opportunities to be able to cope with environmental degradation, pollution risks, chemicals and waste hazards, and pressures on natural resources and coastal and marine ecosystems. To highlight the disparities in the region, the northern Mediterranean countries (in Europe), labour market dynamics, for example, exhibit a significant gender gap: women's employment rates (especially within marginalized communities such as the Romas) are lower, along with an existing gender wage gap. Since economic capital is among the important determinants of coping capacities to external shocks (in this case, land-based pollution, health risks arising from chemicals and waste), women (and other marginalized groups, including ethnic minorities) are more likely to be vulnerable. The 'double disadvantage' of the situation should also be reckoned with: due to lack of viable economic capital or socioeconomic rights, vulnerable groups are often excluded from, and limited by their lack of representation and agency, in chemicals and waste management policies— increasing the possibilities of exposure to the threats looming in the Mediterranean region.

Further, in MENA countries, coupled with barriers to the labour market and employment opportunities, women face institutionalized exclusion from civil society and political spheres. Decision-making power within the household and the polity is limited, reducing women's capacities to engage in the public sphere and gear development opportunities to safeguard their interests. In recent years, however, women have been capitalizing on opportunities presented by pluralistic interpretations of traditional gender norms, and entering both the work force and the public space. That being said, the gains achieved through social change in this region may not keep pace with the risks and threats arising from the lack of: collective management of transboundary waters; proper chemicals and waste disposal systems and implementation of prohibitive laws; containment of land-based pollutants in the backdrop of climate change and environmental degradation in the region. As with the northern Mediterranean countries, burdens of emerging health risks and shocks may fall on the vulnerable groups.

Despite mounting evidence of severe and irreversible health effects of specific hazardous chemicals on different population subgroups, there is a lack of recognition both by policymakers and governments.⁶ Further, where legislation and regulation measures do exist, these are often weak and not updated in accordance to latest health research and exposure data, and with specific policy focus.⁷ The Child Project 1.1, thus, is timely. Through its CW component, the project will enhance work towards preserving the rich yet fragile biodiversity, hosted by many diverse ecosystems, of the Mediterranean basin forming invaluable natural capital and provide ecosystem goods and services on which populations and economies depend. Managing anthropogenic pollution sources (land-based, such as: discharges of excess nutrients and hazardous substances, marine litter, and degradation of critical habitats) are being given priority to enhance the health of the Mediterranean LME, while managing threats to the regional biodiversity and human population arising from these pollutants. The project addresses the current need to reinforce the institutional and technical capacity of stakeholders for the development and application of chemical disposal and waste management policies; to accelerate priority actions towards implementing prohibitive and regulatory laws; and, manage biodiversity and coastal populace health risks generated from hazardous chemicals and heavy metals (POPs and mercury) as well as their concomitant socioeconomic repercussions. It also provides the means for the Mediterranean countries to sustainably address a regional chemical disposal issue, and to fill important knowledge gaps on the gendered use and effects of these chemicals by different demographics of the Basin.

Additionally, given the project's focus, a gender lens is both necessary and relevant for the project to achieve its primary objective of reducing hazardous chemicals in the Mediterranean, improving human and ecosystem health, and managing land-based pollutants. Efforts will be made to incorporate the dimension of gender in a holistic manner in the project's activities: by capacity-building on how to

⁶ "Why Focus on Women and Chemicals" in *Women and Chemicals: The Impact of Hazardous Chemicals on Women*. Women in Europe for a Common Future & UN Environment. (2015)

⁷ *Ibid.*

mainstream gender-responsive actions (and, simultaneously awareness-raising) for personnel involved in the development of regulatory protocols and disposal plans; by creating the impetus towards collection of gender-relevant data and information as pioneering effort to understand the crosscutting nature of gender and chemicals in the region; and, by engaging stakeholders on gender and socioeconomic aspects within policy solutions. In this manner, the project can ensure both environmental and social co-benefits through its results framework, as well as proactive compliance with GEF and UN Environment gender mainstreaming mandates, described in detail in the next section.

3. Gender Mainstreaming at the GEF and UN Environment

Employing a strong mandate of gender mainstreaming and promoting women’s empowerment as well as contributing to the international conversation on gender mainstreaming, both the GEF and UN Environment have prioritized delivering inclusive and gender-responsive environmental results, and mitigation solutions towards pollution risks, chemical hazards, and ecosystems degradation.

Having launched its initial gender policy in 2011, the GEF approved a reinforced policy in November 2017⁸ at the 53rd Council Meeting, shifting the focus from a ‘*gender-aware, do no harm*’ approach to a ‘*gender-responsive, do good*’ approach. This requires robust standards in the design, implementation and evaluation of GEF activities, and introducing measures that will allow the GEF, over time, to better leverage strategic opportunities to address gender gaps critical to the achievement of global environment benefits.⁹ More recently, the *GEF-7 Programming Directions*, prepared by the Secretariat in the April 2018 Stockholm meeting further clarifies the GEF’s evolving and progressive gender strategy – by providing action points for each GEF focal point.¹⁰ It lays out clear gender standards for each domain under the GEF, and for CP 1.1 CW – gender directives of the Chemicals and Waste focal area (such as: understanding the socioeconomic dynamics that expose men and women to different chemicals, as well as their biological implications), are particularly relevant and have been incorporated as action points for the operationalization for this Assessment. A case studies report also highlights the experiences from GEF Small Grants Programme in leveraging community-based chemicals and waste management – particularly how empowerment of youth and women could be facilitated through sustainable development projects undertaken in partnership with local civil society organizations and devolved governance structures.¹¹

UN Environment recognizes the role of gender equality as a ‘driver of sustainable environment development’¹², particularly to enhance environmental security and climate resilience; to assuage the stresses on natural resources and dependent communities, including unsustainable management of coastal resources; and to preserve the health of large marine ecosystems (like the Mediterranean Basin) which provide vital environmental and economic services to coastal populaces. Overall, the organization focuses on the increased visibility and capacity of vulnerable groups in sustainable development policy- and decision-making. To that end, the agency has:

- A. Published a lessons-learned report¹³, through gender case study compilation, on issues homologous with the overall MedProgramme agenda: gender integration in marine and coastal pollution, coastal disaster risk reduction and climate change adaptation, coastal developmental planning, and advocacy for gender-inclusive marine ecosystem management and research.
- B. Recently submitted a project for the GEF Trust Fund¹⁴, titled ‘Global Best Practices on Emerging Chemical Policy Issues of Concern under the Strategic Approach to International Chemicals

⁸ See here for the latest GEF Gender Mainstreaming guide (EN). GEF. (2017) (publication)

⁹ “A new Policy on Gender Equality for the GEF”. GEF official website. (2017) (news update)

¹⁰ GEF-7 Replenishment – Programming Directions. Meeting Report from the 4th meeting held at Stockholm, Sweden for the Seventh Replenishment of the GEF Trust Fund, in April 2018.

¹¹ See the full case study report, *Community-based Chemicals and Waste Management: Experiences from GEF Small Grants Programme* for more. UNDP. (2017)

¹² *Gender Equality and the Environment: Policy and Strategy*. UN Environment. (2015)

¹³ *Regional Seas Reports and Studies No. 207* (forthcoming). Marine and Coastal Ecosystems Unit. UN Environment. (2018)

¹⁴ Project ID: 9771, submitted on 30 May 2018.

Management (SAICM)', which has identified gender and chemicals as cross-cutting topics and the need to conduct a gender review to map emerging policy issues to be able to better target subgroups and understand user behavior.

- C. Collaborated with the Food and Agricultural Organization of the United Nations (FAO), and the Basel, Rotterdam and Stockholm Conventions to produce a grassroots case study report¹⁵ on gender perspectives on the management of hazardous chemicals and wastes.
- D. Supported Women in Europe for a Common Future (WECF) and Women International for a Common Future (WICF) in producing an in-depth knowledge product¹⁶ to collate information available and research perspectives on the issue of women and chemicals.

Thus, in keeping with the policies and prerogatives of both the GEF and UN Environment, the imperative of this Gender Assessment is the inclusion of more gender-responsive elements throughout this propitious project. Alongside, the development of a dedicated Gender Action Plan in the preparation stage (with clear timelines, responsible parties, indicators and budgetary allocations to be refined in the implementation phase) based on the Assessment, will ensure that the project generates gender-equitable and accessible benefits, promotes greater gender equality, and the empowerment of vulnerable gender demographics in context-specific locales.

4. Methodology

The Gender Assessment has *four* methodological building blocks:

- A. A comprehensive desk-review of existing literature was conducted on gender, chemicals and waste management and land-based pollution in Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Montenegro, Morocco and Tunisia (and, more generally, in the Mediterranean, Western Balkans, and Middle East and North Africa - MENA region). The literature review revealed useful data and research on chemicals and gender, health hazards and biological differences arising out of exposure, and guidelines on management and regulatory approaches. However, these thematic areas are not triangulated in mainstream research, and there exists lacunae of data and information sources on Mediterranean-specific gendered use (as well as socioeconomic aspects determining extents of exposure risk) and effects of POPs and mercury on different population subgroups. Thus, a *socioeconomic and gender indicators and baseline* (Section 5) was derived from national aggregate statistics (from United Nations Development Programme – UNDP, World Economic Forum – WEF, Oxford Poverty and Human Development Institute – OPHI, International Labour Organization – ILO, and, the World Bank) to identify the potential impacts on different vulnerable groups and demographics, in view of the Mediterranean's designation as a global pollution hotspot, with threats to natural and managed resources, degradation of coastal systems and low-lying areas and marine pollution.
- B. Gender-responsive entry points towards chemical and waste management, as well as land-based pollution reduction have been expounded upon in Section 6. This section locates specific gender considerations and actions for the project outcomes, and presents normative information to gear the same towards better socioeconomic and environmental co-benefits.
- C. Section 7 explores the policy environment in the countries participating in Child Project 1.1, and presents a potential list of gender stakeholders, relevant for the project activities and collaborations during the project cycle.

¹⁵ See *Gender Heroes: From Grassroots to Global Action* developed by the Gender Task Team of the Secretariat of the Basel, Rotterdam and Stockholm Conventions. (2015)

¹⁶ See *Women and Chemicals: The Impact of Hazardous Chemicals on Women*. WECF WICF & UN Environment. (2015)

D. Section 8 presents the Gender Action Plan, laying out specific action points mainstreamed within this GEF proposal’s results framework, corresponding actions, indicators, timelines, responsible parties, and budget allocations, to address the gender issues identified by the preceding Assessment.

5. Gender Baseline and Socioeconomic Issues in the CP 1.1 CW Beneficiary Countries

The eight Mediterranean countries tentatively participating in the CP 1.1 CW face different developmental challenges and socioeconomic disparities. Adopting the current perspective from development research, this Assessment proceeds from the following entry point: poverty, labour force status and economic stability, marginalization, and gender inequities have conclusive and direct links with increased risk of exposure to toxic chemicals and heavy metals, as well as determining coping capacities and managing health shocks.¹⁷ Table I explores these nuances in detail:

TABLE I: CW & GENDER – CROSS-CUTTING ISSUES

CW ISSUE	GENDER & SOCIOECONOMIC ENTRY POINT	Relevance
Chemicals and wastes – such as land-based pollutants, hazardous substances, POPs and mercury – have a blanket effect on the general populace	<ul style="list-style-type: none"> • Spatial distribution of human habitat • Poverty • Minority social groups 	<p>The current baseline of research and action on chemicals and gender, compared to other cross-cutting issues such as gender and climate change or gender and water, displays scant resource allocation, generic one-size-fits-all approaches, and lack of attention from policymakers, governments and researchers.</p> <p>Recent findings from international organizations (The World Bank, World Health Organization – WHO, UNDP and UN Environment)¹⁸ along with specialist research groups (Global Alliance on Health and Pollution – GAHP)¹⁹ have established strong interrelationship between heightened exposure risks and residential proximity, poverty, and being a minority social group in a particular context.</p> <p>Spatial distribution of human habitat mimics social class and poverty levels more often than not – lower-income groups (who could often overlap with minority groups)²⁰ often settle near industrial plants, ports or airport facilities, and chemical usage sites, where land and infrastructure may be cheaper. This residential proximity is exacerbated by added exposure from occupational hazards, specific susceptibility windows (urban poor women in pregnant or lactating stages), concurrent diseases or health indicator performance (usually, these population subgroups tend to be malnourished or have ‘hidden hunger’ or lack of micronutrients in diet).</p>

¹⁷ “Chemicals and Gender” in *Gender Mainstreaming Guidance Series*. UNDP. (publication year unknown)

¹⁸ “Linkages between toxics and poverty” in *Toxics and Poverty*. World Bank. (2002)

See [here](#) for a WHO bulletin on different metals and chemicals, and specific vulnerabilities.

“Chemicals and Gender” in *Gender Mainstreaming Guidance Series*. UNDP. (publication year unknown)

Women and Chemicals: The Impact of Hazardous Chemicals on Women. WECF WICF & UN Environment. (2015)

¹⁹ *The Poisoned Poor*. GAHP.

²⁰ Although not relevant to the geographical context of the CP 1.1 CW, research into American demographics have shown that poorer neighbourhoods in USA (with Afro-American, Hispanic, and South Asian populations) show greater exposure to toxic chemicals and heavy metals than affluent white neighbourhoods. Quoted from the *Scientific American*. (2012)

CW ISSUE	GENDER & SOCIOECONOMIC ENTRY POINT	Relevance
		Epidemiological evidence, culled from WHO data, also point towards this trend – developing countries with higher emissions are expected to see chronic disease (caused in part by exposure to toxic substances such as POPs and mercury) burden outweigh infectious disease burden by 2020. ²¹
Proactive investment in developing regulatory protocols, disposal and prevention plans, and strengthening coping capacities against pollution-risks and health hazards of toxic substances are immediate measures	<ul style="list-style-type: none"> • Financial resources – labour force participation and wage levels • Health equity and access • Time poverty 	<p>Building on the previous point, assessing how different social groups are able to cope when chemical hazards and pollution-risks do occur, also reveal why sociological factors are of import in the conversation on gender and chemicals.</p> <p>Health outcomes resulting out of heavy metal exposure, land-based pollutants, and chemical hazards can have ripple effects by creating income shocks among poorer groups, particularly those that lack health equity and access. Vulnerable groups – particularly women in urban poor demographics and rural communities – often lack stable sources of income (if at all – labour force participation rates among men and women reveal gender gaps and concomitant gender wage gaps in the Mediterranean, particularly the MENA countries), and this lowers access to healthcare, when insurance or free health provisions are unavailable. Further, women from these social groupings. Lack of economic capital also lessens the decision-making and bargaining power of individuals within the household – where men (often engaged in direct economic activities in the breadwinning roles) may prioritize other necessities.</p> <p>Additionally, there remains the issue of time poverty. Women, and adolescent girls, particularly in the MENA region, disproportionately shoulder the burden of unpaid care and domestic work.²² This leads to a phenomenon called ‘time poverty’, defined as a situation where a certain person’s time is inflexible, consumed by non-remunerative and non-productive tasks, perpetuating their absence from decision-making and raising the opportunity costs for other profitable pursuits. This time poverty could be exacerbated by additional care work necessary when family members develop health effects of toxic chemicals and heavy metals exposure from POPs and mercury.</p>

These data profiles, covering the gamut of issues outlined in Table I, thus borrow from UNDP’s Human Development Index, Gender Inequality Index, and Gender Development Index. Additionally, they refer to the Global Gender Gap Index (WEF) and compiles national-level poverty statistics (conducted by national authorities of the nine countries, as well as the World Bank, in some cases), labour force participation rates and status (primarily from ILO data), and traces the rural-urban dichotomy. These indices have differing methodologies, and are being employed, at the outset, as indicative (and *not*

²¹ “Poverty and the burden of chronic disease” in *Toxics and Poverty*. World Bank. (2002)

²² *Beyond Scarcity: Water Security in the Middle East and North Africa*. World Bank. (2018)

conclusive) measures of current levels of development, gender equality, and poverty and labor force participation.

As Booyesen’s research²³ shows, composite indices present both challenges and advantages. It should be noted that numerous fallacies have been identified in the methodologies employed in composite indexing. These indices are mainly quantitative, and present empirical and aggregate measures of complex development phenomena, making values apparently objective, at the cost of subjective nuances. Yet, these also remain invaluable as useful supplements to income-based development indicators, understanding relative degrees of development, simplifying complex measurement constructs as well as providing access to non-technical audiences. To balance this dichotomy, ranks have been given less precedence in certain indices and relevance notes have been included to contextualize the results.

TABLE II: HUMAN DEVELOPMENT INDEX (HDI)²⁴
(out of 188 countries – United Nations Development Program – UNDP, 2018)

Defining the HDI: This index measures and combines three basic dimensions of human development (long and healthy life, knowledge and decent standard of living) and provides an overall socioeconomic landscape of a country.

Relevance of the HDI: Since socioeconomic capital and security are crucial determinants of the capacities to adapt towards chemical contamination, pollution risks, health hazards, loss of coastal livelihoods due to ecosystem goods and service depletion, marine and environmental degradation, this index indicates how poised each country may be to consider different alternative (usually more expensive) chemicals, resource management, resilience, adaptation and mitigation options.

Indicative, not conclusive: In line with Booyesen’s argument, the HDI should be treated as indicative, not conclusive. It provides an overview of relative degree of development in a particular country but remains a ‘synthetic indicator’. Recent research has shown the need to supplement the HDI with other indicators associated with economic and social cohesion, sound development strategies, and sustainability in growth models.²⁵

Country	Rank	Relevance
Albania	68 th	With ‘high human development’, Albania’s capacity to reduce land-based pollutants and manage chemical and waste pollution is pegged well. However, due to regional variation in poverty rates (for example, high in the Kukës prefecture – 22% v. Gjirokastrë prefecture (qarks) – 8%, in particular ²⁶) in the country, environmental services and social co-benefits may not be equitably shared.
Algeria	85 th	With ‘high human development’, Algeria wields capital, largely derived from its oil economy, in readiness against hazards. However, due to high inequality in consumption, high unemployment rates (particularly, women and youth) and largely informal workforce ²⁷ , environmental services and social co-benefits may not be equitably shared.

²³ Booyesen, F. “An Overview and Evaluation of Composite Indices of Development” in *Social Indicators Research*, (Vol. 59 No. 2). (2002)

²⁴ UNDP. (2018)

²⁵ Bilbao-Ubillos, J. “The Limits of Human Development Index” in *Sustainable Development*, (Vol. 21 No. 6). (2011)

²⁶ *Portraits of Poverty and Inequality in Albania*. INSTAT (Albanian Institute of Statistics) & World Bank. (2015)

²⁷ “Poverty has fallen in the Maghreb, but inequality persists”. *World Bank*. (2016)

Country	Rank	Relevance
Bosnia and Herzegovina (BiH)	77 th	With 'high human development', BiH's capacity to reduce land-based pollutants and manage chemical and waste pollution is pegged well and similar to Algeria. As a post-conflict nation, however, educational attainment and labor market access continue to be determined by poverty status ²⁸ in the country, thus, environmental services and social co-benefits may not be shared.
Egypt	115 th	With 'medium human development', Egypt's readiness towards adopting safer (more expensive chemicals) and health hazards arising from current pollutants might be limited, wherein the government may prioritize other pressing developmental pursuits. ²⁹ With a volatile political climate, and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.
Lebanon	80 th	With 'high human development', Lebanon's capacity to to reduce land-based pollutants and manage chemical and waste pollution is pegged well. However, due to high concentration of income and wealth in the country ³⁰ and the spill-over effects of the Syrian civil war, environmental services and social co-benefits may not be equitably shared.
Montenegro	50 th	With 'very high human development', Montenegro is poised to adapt well to the changes suggested in this project's alternative scenario. However, due to historic ethnic exclusionism (the Roma population, in particular ³¹) in the country, environmental services and social co-benefits may not be equitably shared.
Morocco	123 rd	With 'medium human development', Morocco's readiness towards adopting more expensive chemicals and strict regulatory approach towards polluting industries might be limited, wherein the government may prioritize other seemingly pressing developmental pursuits. Pronounced gender inequality in the country slows economic growth ³² , environmental services and social co-benefits may not be equitably shared.
Tunisia	95 th	With 'high human development', Tunisia's capacity to reduce land-based pollutants and manage chemical and waste pollution is pegged well. However, due to concentration of income and wealth in the country ³³ , high unemployment rates (particularly, youth) and economic unrest challenging political stability, environmental services and social co-benefits may not be equitably shared.

²⁸ *Poverty and Inequality in BiH*. World Bank. (2011)

²⁹ *Inequalities, Uprisings and Conflicts in the Arab World. MENA Monitor*. World Bank. (2015)

³⁰ Assouad, L. "Rethinking the Lebanese Economic Miracle". *WID*. (2017)

³¹ *Gender at a Glance: Montenegro*. World Bank. (2015)

³² "Reducing gender inequality in Morocco can boost growth". *IMF*. (2017)

³³ *Tunisia: Economic Outlook*. World Bank. (2018)

TABLE III: GENDER INEQUALITY INDEX (GII)³⁴
(out of 159 countries – UNDP, 2018)

Defining the GII: This index, showing inequality in achievement between men and women in three aspects (reproductive health, empowerment and labor market), provides a useful gender baseline in terms of health equity, economic capital and financial access, speaking to the gender opportunities of men and women in the countries. This baseline has been elaborated upon using existing gender studies literature on each country.

Relevance of the GII: This index provides a primary understanding of the different levels of achievements on basic development indicators between men and women. This displays useful features towards the gender status quo hypotheses, which could then be derived in the context of this project.

Indicative, not conclusive: In line with Booyesen’s argument, the GII should be treated as indicative, not conclusive. Pernmayer finds that the functional form of the index could be unclear, particularly the inclusion of indicators of relative performance of women vis-à-vis men, along with absolute women-specific indicators.³⁵

Country	Rank	Relevance
Albania	52 nd	In Albania, traditional beliefs continue to influence gender roles, particularly in the household setting. During socialist rule, although policies promoted women’s presence in the public sphere (through education and work), the continued responsibility for unpaid domestic work remained with women (leading to time poverty or ‘double shifts’). During the transition to a capitalist economy, gender equality laws were not put in place for private sector jobs, and thus, employment for Albanian women could not be safeguarded. ³⁶
Algeria	100 th	In Algeria, social codes affect women’s empowerment. Since labor force participation disparity is pronounced, women lag behind on economic capital needed to combat risks arising from coastal chemical pollution, loss of ecosystem goods and services, and POPs and mercury hazards. According to the Arab Barometer, in 2017, compared to 2013, a greater number of Algerians regarded higher education as more important for men, as well as reinforced the notion that married women should be ideally relegated to household duties. ³⁷ This also makes them dependent on the patri-local structure of Algerian society.
Bosnia and Herzegovina (BiH)	37 th	Despite progress in closing the gender gap in endowments - mainly in education among the younger generation - BiH still faces a number of gender issues, particularly in women’s access to economic and employment opportunities. Alongside improved educational outcomes, significant gaps remain in labor market participation and employment in favor of men, as women continue to face challenges in accessing economic opportunities. ³⁸ Additional obstacles continue to exist for women in exercising agency (the power to choose and decide options to preserve to act for oneself), particularly managing domestic work, lack of

³⁴ UNDP. (2018)

³⁵ Pernmayer, I. “A Critical Assessment of the UNDP’s Gender Inequality Index” in *Feminist Economics*, (Vol. 19 No. 2). (2013)

³⁶ World Bank. (2012)

³⁷ “Droits des femmes en Algérie: les lois progressent mais pas les mentalités”. *Middle East Eye*. (2017)

³⁸ *BiH: Economic Mobility, Jobs and Gender*. *World Bank*. (2016)

Country	Rank	Relevance
		political representation and participation as well as widespread gender-based violence.
Egypt	101 st	Political, social and economic capitals are not equitably distributed among Egyptian men and women. Without access to these vital resources, the risks identified by CP 1.1 CW will only burden those at the lower echelons of society. Despite improvement of young women's education levels in recent times (Egypt's rank improved by 34 spots in the latest GII quoted here), the workforce participation and retention rates remain unperturbed, signaling a stagnated job market and scarce employment opportunities. ³⁹ Egypt also faces some particular gender-specific barriers in high numbers, such as FGM and sexual harassment, arising out of sexual inequality between men and women in the country.
Lebanon	85 th	Lebanese women face the least gender disparity in the Arab world with their male counterparts. Despite this, discriminatory social codes, particularly the focus on intersectional civil and family laws, continue to impede women's empowerment. ⁴⁰ Although the gender gaps at higher levels of education are reversing, women continue to face entry barriers to the labor market as well as time poverty due to the predominance of unpaid care work.
Montenegro	32 nd	Montenegro is relatively advanced in terms of progress towards gender equality. This enhances the capacities of Montenegrin men and women to face health hazards from chemical pollutants and coastal degradation and capitalize on adaptation opportunities to remove POPs and mercury from supply chains and industries. However, gender-inequitable dynamics remain in important determinants such as access to labor markets, health equity et al, rendering certain demographics vulnerable.
Morocco	119 th	Political, social and economic capitals are not equitably distributed among Moroccan men and women. Without access to these vital resources, chemical hazards will only burden those at the lower echelons of society. Gender equity in labor force participation is one of the lowest in the world ⁴¹ , disadvantaging women further: women lag behind on economic capital needed to combat health hazards and POPs and mercury.
Tunisia	63 rd	In Tunisia, traditional social codes affect women's empowerment. Since labor force participation disparity is thoroughly pronounced, women lag behind on economic capital needed to combat pollution hazards and chemical health risks. This also makes them dependent on the patri-local structure of Tunisian society. However, the January 2011 uprisings signaled that women were

³⁹ Egypt: Country Gender Assessment. World Bank. (2010)

⁴⁰ Lebanon: Country Gender Assessment. European Union. (2015)

⁴¹ Morocco: Country Gender Assessment. World Bank. (2015)

Country	Rank	Relevance
		entering the public space, leveraging opportunities for their economic empowerment, ⁴² although it remains to be seen if the force of this societal shift can keep pace with the loss of environmental degradation, coastal pollution, marine litter and decreasing ecosystems goods and services.

TABLE IV: GENDER DEVELOPMENT INDEX (GDI)⁴³
 (grouped in 5 categories, 1: high equality to 5: low equality – UNDP, 2018)
 & GLOBAL GENDER GAP INDEX (GGI)⁴⁴
 (out of 144 countries – World Economic Forum – WEF, 2017)

Defining the GDI & GGI: The GDI (UNDP) index shows the ratio of female to male HDI values. GDI expresses values in deviation, hence, in order to facilitate understanding GDI grouped categories have been used (as grouped by UNDP) to show the absolute deviation from gender parity in HDI values. This further reiterates the results of the HDI and GII (also by UNDP), and shows the real gender gap in human development achievements.

The GGI (WEF) benchmarks 144 countries on their progress towards gender parity on four thematic dimensions – economic participation and opportunity, educational attainment, health and survival, and political empowerment. The Index benchmarks national gender gaps on economic, political, education- and health-based criteria, and provides country rankings that allow for effective comparisons across regions and income groups, over time.

Relevance of the GDI & GII: Since the GDI and GGI use different methodologies, and are conducted by different agencies, this report does not suggest a causality between the two indices. However, a correlation is undeniable, and both indices pick up similar rates of gender disparity in the CP 1.1 CW countries.

Indicative, not conclusive: In line with Booyesen’s argument, the GDI & GII should be treated as indicative, not conclusive. Geake Dijkstra and Hanmer find that although gender-related development indices have increased attention towards ‘feminization of poverty and underdevelopment’, more robust data needs and indicators are required to create aggregate indices that are sensitive to contemporary trends in gendered privation, particularly with the categorization of ‘women’.⁴⁵

Country	GDI – Group	GGI – Rank	Relevance
Albania	Medium-high equality	38 th	Despite being categorized as a country with high HDI, a pronounced gender gap in Albania is evinced from the grouping and ranking.
Algeria	Low equality	127 th	Algeria, with Tunisia, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap

⁴² *Gender in MENA Projects: Tunisia*. World Bank. (2011)

⁴³ UNDP. (2018)

⁴⁴ WEF. (2017)

⁴⁵ Geske Dijkstra, A. & Hanmer, L. C. “Measuring Socio-Economic Gender Inequality: Towards an Alternative to the UNDP Gender Index” in *Feminist Economics*, (Vol. 6, No. 2). (2000)

Country	GDI – Group	GGI – Rank	Relevance
			is revealed.
Bosnia and Herzegovina (BiH)	Medium-low equality	66 th	Despite being categorized as a country with high HDI, a pronounced gender gap in BiH is evinced from the grouping and ranking.
Egypt	Low equality	134 th	The gender gap in Egypt is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Lebanon	Low equality	137 th	The gender gap in Lebanon is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Montenegro	Medium-high equality	77 th	Although Montenegro features among the upper categories of the previous indices, this reveals a more entrenched gender gap. Women lag behind their male counterparts, in a greater amount than expected, despite very high human development achievements in the country.
Morocco	Low equality	136 th	The gender gap in Morocco is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Tunisia	Medium-low equality	117 th	Tunisia, with Algeria, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap is revealed.

TABLE V: SOCIOECONOMIC FACTORS

Note: This table is compiled from various sources, and determines poverty levels (according to USAID income grouping), rural-urban divide and labor force participation parity in the CP 1.1 CW countries.

***Poverty Level:** Pollution and concomitant health hazards are threat multipliers, and often their impacts combine with poverty– hence this is an important indicator, corroborating HDI ranking. To illustrate this, the Multidimensional Poverty Index has been used. OPHI and UNDP calculate the MPI, for measuring acute poverty in developing countries. It complements traditional income-based poverty measures by capturing the severe deprivations with regard to different indicators: education, health, and living standards. The index not only identifies those living in multidimensional poverty, but the extent (or intensity) of their poverty. The MPI can help the effective allocation of resources by

making possible the targeting of those with the greatest intensity of poverty; it can help address some SDGs strategically and monitor impacts of policy intervention.⁴⁶

***Rural-Urban Divide:** Health hazards, arising out of POPs and mercury, may or may not take different forms in rural and urban areas, but lack of development and investment in rural areas often impedes adaptive capacities of vulnerable demographics, who also derive their livelihoods (in this case, coastal livelihoods) from managed and natural resources (that may become contaminated). Additionally, health equity, as a general trend, is harder to achieve for rural populaces, who may not be insured or may be unable to access proper health facilities to address hazards arising out of POPs and mercury. Additionally, the urban poor and the urban unemployed are vulnerable groups – the former may suffer from prolonged exposure as occupational hazards, and the latter may lack the economic capital to combat health shocks.

***Labor force participation parity (% of working age population active)⁴⁷:** In the Mediterranean, one of the prime arenas of gender disparity is labor force participation parity. The region is plagued with high unemployment rates⁴⁸ (12.5% average), and this phenomenon remains a gendered one: women and youth are less likely to be employed than men, as a general trend. Additionally, the existing gap in labor force participation indicates that women possess less economic capital, and are limited to gendered (mostly unpaid care work) roles. This directly correlates to lessened participation in coastal economies and scarce or unstable livelihoods; lack of decision-making power both within the household (especially health decisions) and larger policy frameworks such as coastal resource use and chemical management; and, greater exposure to repercussions of marine environmental degradation, water stress and potential health hazards arising out of POPs and mercury (which often acts as a threat multiplier, in this context).

See Table V from next page (adjusted for footnoting).

⁴⁶ See UNDP's [Technical Notes](#) (2016) for more.

⁴⁷ [World Employment and Social Outlook: Trends for Women](#). ILO. (2017)

⁴⁸ "Unemployment: The Mediterranean Effect", [World Bank](#). (2012)

Country	Poverty Indices	Rural-Urban	Labor Force Participation (The gender gap is calculated as the difference between women's and men's labor force participation rates – simply, the number of working age men and women employed in a country, ILO 2016)
Albania	<p>1.2% below the National Poverty Line.⁴⁹</p> <p>The Multidimensional Poverty Index reveals that 7.2% of Albanians are precariously 'near' poverty.</p>	<p>Diber and Kukes qarks (prefectures) show lowest rates of urbanization, and related issues: fragmentation, population decline, <i>et al.</i> Tirana and Durres, on the other hand, have the highest level of urbanization and best performance on demographic and geographic indicators.⁵⁰ Rural to urban migration is common, and often unbridled, leading to environmental complications as well as socioeconomic tussles.</p>	<p>39.3% female 60.7% male</p> <p>During the socialist rule, the government policy of full employment boosted female participation and, as a consequence employment rates were higher than the average figures of the OECD countries. Policies such as investment in childcare facilities and female education stimulated women to enter and remain in the labor market. The market economy disadvantaged women by providing unstable employment opportunities, although education outcomes and employment sectoral options have improved in recent decades, leading to the widening of the gender gap in labor force participation.⁵¹</p>

⁴⁹ *Regional disparities in Albania.* UNDP. (2010)

⁵⁰ *Regional disparities in Albania.* UNDP. (2010)

⁵¹ Garcia-Pereiro, T. "The Determinants of Female Employment in Albania". Open access on [ResearchGate](#). (2016)

Algeria	<p>11.8% below the National Poverty Line.⁵²</p> <p>The MPI is unavailable for the country. However, the <i>Ligue Algérienne pour la Défense des Droits de l'Homme (LADDH)</i> reports that about 35% (14 million) of Algerians are in poverty.⁵³</p>	<p>Poverty in Algeria has a distinctly urban face: 75% of the country's poor live in cities, undertaking informal jobs without access to social safety nets. Additionally, the disproportionate rates of urban poor show that the incidences of poverty in the Algerian Sahara are twice as much than among people living in the Steppe.⁵⁴</p>	<p>19.0% female 70.4% male</p> <p>Female labor force participation is low in Algeria, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.⁵⁵ However, according to ILO, the status quo is slowly altering (although not quite at an ideal pace), as there are marked difference between participation rates from 2011 to 2018.⁵⁶</p>
Bosnia and Herzegovina (BiH)	<p>15% below the National Poverty Line.⁵⁷</p> <p>The MPI reveals that 3.2% of the populace are precariously 'near' poverty.</p>	<p>BiH remains one of the most rural countries in Europe – with over 60% of its populace residing in rural areas.⁵⁸ The rural poverty rate is higher than urban areas, although income dynamics are similar.⁵⁹</p>	<p>34.4% female 58% male</p> <p>Between the years 1992-1995, Bosnia and Herzegovina went through a destructive war that resulted in mass emigration of around 50% of the total population. In the period after the war, although considerable number of refugees returned, it remains unclear how the jobs market was affected around the time. With the failing of the state's strong social protection services such as long-term care, child care and elderly care, and new categories of 'returnee refugees' and 'internally-displaced people', women bear the brunt of</p>

⁵² Poverty has fallen in the Maghreb, but inequality persists". *World Bank*. (2016)

⁵³ See *Ligue Algérienne pour la Défense des Droits de l'Homme*(LADDH)for more.

⁵⁴ "Poverty has fallen in the Maghreb, but inequality persists". *World Bank*. (2016)

⁵⁵ Women face the highest proportion of legal restrictions (*de jure* discrimination) in the MENA region, as well as sociocultural norms (*de facto* discrimination) that stipulate limits to women's entry in the public, and working sphere. Young females are particularly discouraged from seeking employment.

⁵⁶ This *ILO report* (2014) expounds on the factors affecting employment and labor force participation in Algeria.

⁵⁷ *Poverty and Inequality in BiH*. *World Bank*. (2011)

⁵⁸ *Rural Development in BiH: Myth and Reality*. *UNDP*. (2013)

⁵⁹ *Poverty and Inequality in BiH*. *World Bank*. (2011)

			unpaid care work. Although more women attend university than men, they continue to face sociocultural barriers in entering the labor force. ⁶⁰
Egypt	<p>27.8% below the National Poverty Line.⁶¹</p> <p>Although extreme poverty has been virtually eradicated, Egypt is yet to turnaround the effects of the 2011 Arab Springs on its economy, leaving a third of Egyptians in precarious poverty. Particularly, high inflation over 2015-17 has lowered the purchasing power of households.⁶²</p>	Regional disparities continue to be a part of the country's landscape, with upper rural Egypt showing poverty rates three times higher than metropolitan Egypt. ⁶³	<p>22.8% female 76.1% male</p> <p>Female labor force participation is low in Egypt, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.⁶⁴ This is a significant loss as including women and enabling conditions to retain them in the workforce can boost the growth rate of the Egyptian economy.⁶⁵ In recent times, Egypt's performance on health and education indicators is improving, and this could change labor dynamics.</p>
Lebanon	<p>30% below the Middle-Income-Country Poverty Line.⁶⁶</p> <p>Although GDP increase in Lebanon remains steady, the country faces the economic and social impact of the Syrian crisis. With the influx of 1.5 million refugees, Lebanon's public finances,</p>	Lebanon's population is 87% urban, concentrated particularly in Beirut. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector. In the rural areas,	<p>23.5% female 70.3% male</p> <p>Female labor force participation is low in Lebanon, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. This is a significant loss as including women and enabling conditions to retain them in the</p>

⁶⁰ This ILO report (2011) expounds on the factors affecting employment and gender in BiH.

⁶¹ Egypt: Economic Outlook. World Bank. (2018)

⁶² Ibid.

⁶³ Ibid.

⁶⁴ ILO. Women in Business and Law. (2014)

⁶⁵ The Economic Research Forum (ERF), a regional forum on economic research in Arab countries, Turkey and Iran finds that encouraging the participation of women in the labor force, particularly the 'married women' demographic could usher in rapid growth for the Egyptian economy. See [here](#).

⁶⁶ Lebanon: Rapid Poverty Assessment. UNDP. (2016)

	service delivery, and the environment have been strained, increasing poverty headcount and unemployment. ⁶⁷	different causes entrench poverty: social protection and government service delivery are limited in these remote and mountainous regions.	workforce can potentially boost the growth rate of the Lebanese economy. ⁶⁸ Recent studies, however, show that Lebanon is leading the growth rate of female participation in labor force in the MENA region. ⁶⁹
Montenegro	8.6% below the Middle-Income-Country Poverty Line.⁷⁰ In Montenegro, there has been sustainable reduction in poverty in the last five years.	60.5% of the rural populace is classified poor. ⁷¹ In 2010, MONSTAT finds that not only are the rural populace are at a higher poverty risk, they also face more entrenched forms of poverty. ⁷²	42.5% female 55% male As the country emerged from dirigisme, social property was privatized, and the economy sprouted 'grey areas' of undeclared or unregulated work. Post-conflict Montenegro is still reeling from the economic effects of war, which increased unemployment (17.8% in 2016) ⁷³ and bolstered GDP loss. The Roma populace face entry barriers to the workforce, and employment rates are far below national averages: 47% Roma male and 8% Roma female are employed.
Morocco	15.5% below the Lower-Middle-Income-Country Poverty Line.⁷⁴ In Morocco, there has been steady decline in poverty, though the underlying factors	3 million out of the 4 million poor live in rural areas ⁷⁵ The subjective poverty rate has increased by 15% from 2004 figures in rural Morocco. Meanwhile, the	25% female 74.1% male Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in

⁶⁷ *Lebanon: Economic Outlook*. World Bank. (2017)

⁶⁸ Find more on Lebanon on the ERF [website](#).

⁶⁹ See this AN-NAHAR [coverage](#).

⁷⁰ The middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of \$5.50/day. World Bank. (2017)

⁷¹ MONSTAT. (2010)

⁷² MIDAS Project, [World Bank](#). (2016)

⁷³ [World Bank](#). (2016)

⁷⁴ The lower-middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of \$3.10/day. World Bank. (2017)

⁷⁵ [Fair Observer](#). (2017)

	<p>may be remittances, deceleration of population growth and macroeconomic stability. Inequalities between rich and poor are still abounding, and poverty essentially has a rural face in the country.</p> <p>The MPI also reveals that an additional 12.6% of Moroccans are dangerously 'near' poverty. Among the 15.5% poor, 5% are in 'severe' multidimensional poverty.</p>	<p>urban poverty rate is half of the national average in 2001, and in 2014, stands at one-third.⁷⁶</p>	<p>the labor force participation of the MENA region is the widest in the world.⁷⁷ However, Morocco is entering a period potential demographic dividend, with the number of working-age population, relative to below 15 and above 64 years, increasing. This could either signal a potential economic boom or an unemployment crisis, if economic activity is not encouraged and made inclusive for the marginalized.⁷⁸</p>
Tunisia	<p>24.7% below the National Poverty Line.⁷⁹</p> <p>Poverty rates in Tunisia have seen a significant increase, from 15.5% (2010) to 24.7% (2018). Income disparities are high: the top 20% of Tunisians earn 46% of the national income, while the bottom 20% earn only 5.9%.⁸⁰ Civil unrest since the 2011 has increased poverty</p>	<p>Rural areas in Tunisia remain marginalized and underprivileged, leading to high rates of rural to urban migration, particularly towards Greater Tunis and its agglomeration economies.⁸¹</p>	<p>25.1% female 71.3% male</p> <p>Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.⁸² Like Morocco, Tunisia faces crucial demographic transition in the coming years, yet barriers to the job market remain high. Young women are particularly vulnerable and face exclusion from economic activities.⁸³</p>

⁷⁶ World Bank. (2018)

⁷⁷ ILO. *Women in Business and Law*. (2014)

⁷⁸ This [IFAD report](#) expounds on the factors affecting employment and gender in Morocco.

⁷⁹ "Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

⁸⁰ *Tunisia: Economic Outlook*. World Bank. (2018)

⁸¹ Amara, M., Jemmali, H. & Ayadi, M. "Rural-Urban Migration and Income Disparity in Tunisia". *Economic Research Forum*. (2017)

⁸² ILO. *Women in Business and Law*. (2014)

⁸³ This [ILO report](#) expounds on the factors affecting employment and gender in Tunisia.

	and unemployment and discouraged entrepreneurs and private sector actors.		
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6. Gender Entry Points for CP 1.1 CW Component

A commonsensical assumption of chemicals and heavy metal exposure is through food and supply value chains – indeed, in a study⁸⁴ conducted among a coastal community of the Moroccan Mediterranean coast, high seafood consumption and directly proportional dietary methylmercury exposure was confirmed. Total mercury, determined through analyzing human hair (a biomarker of mercury exposure) using multiple regression analysis, revealed that a high proportion of women childbearing age (50% of the females in the study group) had relatively higher levels. Additionally, fishermen and their families, groups that consume fish more frequently were far more exposed among the different population subgroup. This generic entry point can be further refined to view chemicals and gender (and socioeconomic status) as crosscutting issues, for the CP 1.1 CW portfolio – see Table V below.

TABLE V: GENDER MAINSTREAMING ENTRY POINTS

ENTRY POINT	GENDER MAINSTREAMING CONSIDERATIONS
<p>1. The knowledge and data gaps in understanding the social factors affecting the use of chemicals and heavy metals in the Mediterranean beneficiary countries are substantial</p>	<p>BASELINE:</p> <p>Compared to gender and climate change or gender and water management, the cross-cutting nature of gender and chemicals has received scarce academic and policy attention in the Mediterranean Basin. This lack of recognition has resulted in the paucity of concerted and coordinated effort to collate Mediterranean-specific, gender-responsive information⁸⁵ and data, specifically from a sociological perspective. The World Health Organization (WHO) in its <i>Gender, Health and the 2030 Agenda for Sustainable Development</i>, reiterates the costs of these gaps in understanding the social factors: "...biological explanations for differences between men and women have limited powers to explain the worldwide differences in health outcomes throughout human history, including in times of rapid demographic and epidemiological transition. These differences are largely due to the social phenomenon of gender".⁸⁶</p> <p>ALTERNATIVE SCENARIO:</p> <p>CP 1.1 CW can provide an in-depth and pioneering understanding of how men and women are differently exposed to POPs and mercury in site-specific contexts, where subgroups (such as the urban poor) lie on the capacity spectrum, and which gender constraints and priorities could to be addressed. Tentatively, it will seek to address these issues through the entry point:</p> <p>α. Vulnerable and marginalized demographics are often limited by the exclusion of their needs and perspectives from chemicals and hazardous waste management strategies, the lack of</p>

⁸⁴ "Hair mercury levels in relation to fish consumption in a community of the Moroccan Mediterranean coast" in *Food Additives and Contaminants*. (Vol. 24, No. 11). (2007)

⁸⁵ *Ibid*. This study is an illustrative example of why it is important to generate spatially tuned, context-specific information.

⁸⁶ See this [WHO](#) bulletin. (Published 12 June 2018)

	<p>decision-making power regarding industrial complexes near their habitats, and socioeconomic and political influence in the public sphere.</p> <p>b. Addressing the lacuna in the literature can also bolster updating of current mechanisms as well as future efforts in the region, by providing data-driven and normative information, and priming regional and national agencies to consider these parameters in the chemicals and wastes policy and action.</p> <p>Gender-responsive information and gender-disaggregated data, deriving from primary field sources (from small-scale surveys in selected target sites) and secondary sources, can help in fine-tuning existent policies, establish exposure scenarios for different genders and age-groups, formulate new regulations, streamline national and local action, and create a regional effort to address common issues to support vulnerable demographics. Involving vulnerable and marginalized groups, after identification through field surveys and consultations, in relevant hazardous chemicals and waste management policies as stakeholders can increase the shelf-life and ownership of the project outcomes.</p>
<p>PROJECT ACTIVITIES⁸⁷</p> <p>(DISPOSAL RISK ASSESSMENTS)</p>	<p>Outcome 1: <i>Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas</i></p> <ul style="list-style-type: none"> ✓ Output 1.1: <u>Management and disposal of POPs</u> ✓ Output 1.2: <u>Management and safe storage of mercury</u> <p>Potential Activities:</p> <ul style="list-style-type: none"> ✓ Environmentally Sound Management of both POPs and mercury is based on inventory of wastes; risk assessment and if necessary, prioritization for selection of wastes to be addressed by the project; treatment (centralization, repackaging and destruction). The key risk assessment tool will be the Environmental Management Plan (EMP – see Annex xx), which currently includes a section on consultation which includes gender/women’s organizations. Risk of different chemicals considers the toxicity of each chemical based on WHO Hazard Classes. However, there is currently no quantitative or gender-disaggregated data reflected. The project will adapt the EMP outline and guidelines to better quantify potential exposure routes and risks for women and vulnerable groups. <u>This may include site-specific surveying and consultation activities by local women’s or community-based organizations.</u> ✓ A second tool for risk assessment and prioritization will be the ‘MapX GIS’ interface. The prototype already includes a semi-automated function to map waste sites in relation to sensitive receptors (e.g. surface water, population centers) but there is no currently gender-disaggregated data. Gender-based datasets will be reviewed and integrated if available.

⁸⁷ Refer to Appendix A: Project Results Framework, [p.x – x](#) for detailed activity description. For the purposes of this Assessment, these activities are suggestive and will be fleshed out in alignment with project progression in later phases of the cycle.

2.

Once identified, linkages between social factors and exposure risks of different population subgroups have to be addressed

BASELINE:

Building on the previous entry point, in-depth research into gender and age-disaggregated pollutant exposure and chemical hazards will increase the comprehension of differentiated social factors in demarcating exposure risks (and concomitant consequences) and also reveal the shortcomings of present regulatory approaches and service delivery of chemical management regimes. Specific examples of differential exposure and risks among occupational / demographic groups could be pregnant and lactating mothers (among women) and firefighters (particularly among men).

ALTERNATIVE SCENARIO:

A plethora of epidemiological studies have revealed the health effects of hazardous chemicals and heavy metals on maternal and intergenerational child health have received attention. For example, exposure studies have revealed that women in the informal sector in developing countries, where chemical and health risks are often unregulated and exposure to solvents, mercury and POPs, are more likely to give birth to 'pre-polluted children', or with disabilities. To complement this existing literature, CP 1.1 CW will particularly look into social factors behind increased exposure risk, and resulting health effects.

- a. For example, poor women often carry multiple burdens of exposure⁸⁸ – in addition to informal employment and hazardous occupational risks, they may also be exposed through bad living conditions (spurious building materials).
- b. A specific occupational hazard that probably exists is for fire service personnel in the context of POPs (through flame retardants) and mercury. Firefighters are, as a global trend, predominantly men and are exposed to increased risk through their occupation.⁸⁹ Studies have shown increased rates of several types of cancer, as well as coronary heart disease, hearing loss and respiratory health problems than comparison groups among firefighters – despite the fact that, due to selection procedures, firefighters are often considered to be an inherently healthier group than the general population.
- c. Men also face the risk of non-communicable diseases as well as reproductive problems (most commonly infertility due to chemical exposure), which require probing in order to delineate the health effects of particular chemicals.

⁸⁸ In addition to reproductive health risks, women also face a plethora of other disease risks – non-communicable diseases such as breast cancer, pulmonary and respiratory problems as well as impediments to motor skills through bioaccumulation and biomagnification. Quoted in Walsh, P. (et al.) *Oceans and Human Health: Risks and Remedies from the Seas*. p. 96. (2011)

⁸⁹ Specifically in the Mediterranean region, increased risks of forest fires are exposing fire service personnel to greater risks. MEFISTO – Mediterranean Forest Fire Fighting Training Standardization program through the EU Civil Protection and Humanitarian Aid brings together the EU-Mediterranean countries on a singular platform to address the issue, and presents current statistics on this emerging problem.

PROJECT ACTIVITIES
(MULTI-FOCAL)

Outcome 1: *Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas*

- Output 1.1: Management and disposal of POPs
- Output 1.2: Management and safe storage of mercury
- Output 1.3: Long term POPs reduction through pilot activities on new POPs alternatives
- Output 1.4: Hg reduction through pilot activities on new Hg alternatives

Potential Activities:

- ✓ Awareness-raising: As mentioned previously, the dearth of knowledge and information on gender and social factors in the chemicals and waste domain has prevent effective policymaking and concerted efforts from governments. Thus, awareness-raising though workshops, can specifically address this. Additionally, the awareness-raising activity could contribute better information access for vulnerable and susceptible groups. Women's information networks are often smaller than men's, presenting fewer opportunities for learning about health hazards, pollution-risks, and mitigating actions. Spreading the information and data collected through accessible and effective delivery channels could aid in the uptake of preventive care – women are likely to address the needs of their families, particularly children, and bring changes in consumption patterns, once informed about the health effects of POPs and mercury.⁹⁰
- ✓ Capacity-building: Complementing the awareness-raising efforts, capacity-building can also be a strong gender-mainstreaming action point. CSOs, NGOs, labour rights groups, women's organizations and grassroots groups could be trained on the finer nuances of the socioeconomic factors determining the extent of pollution-risks and chemical hazards. They can, then, be involved to employ a bottom-up approach to include the identified stakeholders, as well as to generate inclusive policies.
- ✓ Technical assistance: Gender-balanced technical groups have to be established for the project activities. This is because vulnerable groups are often excluded from, and limited by their lack of representation and agency in such decision-making bodies.
- ✓ Legal framework: Regulatory tools, disposal plans, and POPs and mercury management policies could be made gender-responsive through A and B – wherein a participatory and informed approach dedicated to bring the marginalized and vulnerable to the table can lead to effective and inclusive policies.
- ✓ Governance tools: Using the above steps, CP 1.1 CW can

⁹⁰ *Women and Chemicals: The Impact of Hazardous Chemicals on Women*. p. 25. Women in Europe for a Common Future & UN Environment. (2015)

pioneer gender-responsive project steering and coordination, particularly ensuring that women are not only represented, but can also undertake meaningful and responsible roles in pollutants, chemicals and waste management in the beneficiary countries.

7. Policy Environment, Legal Tools and Institutions

This section takes stock of the policy environment and legal frameworks available for gender-responsive actions related to chemical pollution, regulatory approaches to POPs and mercury (international conventions, national laws and policies, strategy documents on gender and pollution management) in the beneficiary countries, as well as a list of potential institutions towards collaboration on gender mainstreaming during the project cycle. Legal tools and enabling policies are crucial in ensuring gender inequality can be addressed through tangible and formal procedures. Additionally, the inclusion of local and national gender partners engenders capacity and technical knowledge towards future gender efforts while establishing ownership of the project and the change narrative being implemented.

TABLE VI: POLICY ENVIRONMENT, LEGAL TOOLS & INSTITUTIONS

This table, compiled from various sources, particularly UN Women and the Equal Futures Partnership, takes stock of international conventions, national laws and policies, and country-level stakeholders that can aid CP 1.1 CW in gender mainstreaming and narrowing socioeconomic gaps.

Country	Policy Tools, Legal Instruments, Institutions	Provisions
Albania	1994 – CEDAW 1998 (amended 2012) – Constitution of the Government of Albania 2016 - 2020 – National Strategy and Action Plan on Gender Equality	Albania signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1994. Article 18 establishes that all are equal before the law. No one may be unjustly discriminated against for reasons such as gender, race, religion, ethnicity, language, political, religious and philosophical beliefs. The Strategy and the Action Plan represent a commitment for 2016 – 2020, with concrete interventions towards economic empowerment of women and men, ensuring actual participation and engagement in political and public decision-making processes; reducing gender-based violence and domestic violence and strengthening the coordination and monitoring role of the national mechanism of gender equality.

	Institutions	Ministry of Social Welfare and Youth (with contribution of the Inter-Agency Working Group) Ministry of Justice National Referral Mechanisms
Algeria	1996 – CEDAW	Algeria signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1996.
	2008 – Constitution of the Government of Algeria	Under the Algerian Constitution, women enjoy the same civil and political rights as men and have the status of full citizens (Articles 29 and 31).
	Institutions	Ministry of National Solidarity, Family Affairs and Status of Women
Bosnia and Herzegovina (BiH)	1993 – CEDAW	BiH signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993.
	2006 – Law on Gender Equality	Bosnia's Gender Equality Law provides definitions for direct and indirect discrimination, as well as gender-based violence and sexual harassment. It mandates the creation of gender equality of gender equality strategies and programs in education, employment, access to resources, social protection, etc.
	2014 - 2017 – National Action Plan on Gender	The NAP addresses the gender rights principles laid out in the national law, and works towards improving women's participation in public life and decision-making, and particularly targets the legacy of human trafficking and sexual slavery in the country's post-conflict context.
	Institutions	Agency for Gender Equality of Bosnia and Herzegovina Ministry of Human Rights and Refugees
Egypt	1981 – CEDAW	Egypt signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1981.
	2014 – Constitution of the Government of Egypt 1937 – Criminal Code of the Government of Egypt	The two main legislations protecting and supporting women are the Egyptian Constitution of 2014 (Articles 11, 53 and 214) and the Criminal Code of 1937. Crimes against women in Egypt are divided in two groups: misdemeanors and felonies. Misdemeanors, such as catcalling, are usually punished by fines with shortened trials.

	<p>Integrated Gender Program (UNDP, UN Women and UNFPA)</p>	<p>Felonies, like FGM and rape, are permanent criminal offences, punished by longer jail time.</p> <p>The integrated program is helping to address multi-faceted challenges faced by women and young girl through three pillars of social, legal and economic empowerment. A similar EBRD project for the MENA region is active in Egypt as well.</p>
<p>Lebanon</p>	<p>Institutions</p> <p>1997 – CEDAW</p> <p>1936 – Constitution of the Government of Lebanon</p> <p>Women’s International League for Peace and Feminism (WILPF) – ABAAD Resource Centre of Gender Equality</p>	<p>National Council for Women</p> <p>Lebanon signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1997.</p> <p>The Lebanese legal system is primarily based on French Civil Code and Egyptian legal systems. Whilst there is no unified civil law in Lebanon, the Lebanese Constitution promulgated in 1926 articulates the principle of equality among all citizens (Articles 7 and 12).</p> <p>WILPF and ABAAD are leading national consultations to develop the first National Action Plan towards gender equality currently. The EU wrapped up its ‘Gender Equity and Empowerment of Women in Lebanon’ in early 2017, which has laid groundwork towards the adoption of a quota system for women in the country.</p>
<p>Montenegro</p>	<p>Institutions</p> <p>2006 – CEDAW</p> <p>2007 – Law on Gender Equality</p> <p>2008 – Action Plan to Achieve Gender Equality in Montenegro – PAPRR</p>	<p>National Commission for Lebanese Women</p> <p>Montenegro signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 2006.</p> <p>The first Law on Gender Equality was adopted in July 2007. The Law on Amendments to the Law on Gender Equality was adopted in June 2015, in line with international specifications of the UN, the EU, and the Council of Europe.</p> <p>This document was drafted in the context of the accession of Montenegro to the EU, based on CEDAW. Action Plan is updated every 4 years, and out of the critical areas covered in Beijing</p>

		Declaration, Montenegro has opted for 9.
	Institutions	The Ministry of Human and Minority Rights The Department of Gender Equality Affairs
Morocco	1993 – CEDAW	Morocco signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993.
	2011 – Constitution of the Government of Morocco	Article 19 establishes that men and women should enjoy equal rights and freedoms in all civil, political, economic, social, cultural and environmental matters.
	2013 – IKRAM	The Government Plan for Equality was developed by the Government of Morocco along with key stakeholders. .
	Institutions	The Ministry of Human Rights The Ministry of Family, Solidarity, Equality and Social Development
Tunisia	1985 – CEDAW	Tunisia signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1985. However, in April 2014, Tunisia officially lifted key reservations on the CEDAW.
	2014 – Constitution of the Government of Tunisia	The new constitution adopted in January 2014 includes strong protection for women’s rights: Article 21 confirms equality of rights and duties; Article 34 guarantees women’s representation in all elected bodies; and, Article 46 ensures protection of human rights.
	2015 - 2018 – Gender Equality Promotion Program in Tunisia (EU-Tunisia)	The financing agreement of the EU-Tunisia program was signed in April 2015. It aims to contribute to achieving gender equality in Tunisia by reducing inequalities at national, regional and local levels.
	Institutions	The National Council of Peers for Equality and Equal Opportunities between Women and Men Ministry of Women, Family and Children

8. Conclusion

This Gender Assessment has identified and expounded upon both explicit and implicit gender and socioeconomic issues that could be addressed through the project outcomes. The findings from the Assessment also form the basis for the Gender Action Plan (Section 9), which will specifically address these by mainstreaming actionable points in the CP 1.1 CW's results framework, corresponding activities, indicators, timelines, responsible parties, and budget allocations. As gender equality gains priority in the GEF's, UN Environment's and other agencies' portfolio, this project partakes in the international conversation on gender mainstreaming and gender-responsive planning in chemical and wastes domain, international waters, environmental stress and security, and pollution hazards. If implemented effectively, this project has the potential to become a good practice gender mainstreaming guide to future interventions on the gender and chemical domain, and on pollution risk reduction and health hazards with socioeconomic considerations, in the beneficiary countries (Albania, Algeria, BiH, Egypt, Lebanon, Libya, Montenegro, Morocco, and Tunisia), regionally (the Mediterranean, Western Balkans, and the MENA region), as well as globally.

9. Gender Action Plan

CHILD PROJECT 1.1 CW OF THE MEDITERRANEAN SEA PROGRAMME: ENHANCING ENVIRONMENTAL SECURITY					
Programme Objective		To accelerate the implementation of agreed upon priority actions to reduce the 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 the coastal population			
Programme Component 1:		Reduction of land-based pollution in priority coastal hotspots, and measuring progress to impacts			
COMPONENT 1: CHEMICALS AND WASTE					
PROJECT OUTCOME: In coastal hotspots, measurable reduction of wastes and hazardous chemicals (POPs, Mercury) impacting human health and coastal habitats, through innovative practices, techniques, and regulatory approaches					
Outputs		Gender Baseline	Alternative Scenario	Gender Action Points	Means of Verification (Evaluation of Gender Mainstreaming Progress)
1.1	Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment area	<ul style="list-style-type: none"> Knowledge and data gaps in understanding socioeconomic and gender dynamics, in the context of hazardous pollutant, chemicals and waste exposure pathways and risks 	<ul style="list-style-type: none"> Generate relevant and reliable information and data regarding gender-specific and social factor-specific exposure risks in site-specific contexts 	<ul style="list-style-type: none"> Engage short-term Gender / Social Development Consultant to design social factors and gender-focused survey questionnaire for selected sites, with a strong participatory and inclusive focus (\$10,000 – 15,000 inclusive for potential field visit) 	<ul style="list-style-type: none"> ✓ Key Informant Interviews with local target groups on gender sensitivity, chemical use patterns, exposure pathways ✓ Focus Group Discussions with NGOs working on gender rights, local gender equality lobbying groups, trade unions, workers' associations, decentralised government bodies to identify needs and interests of each demographic, as well as to map gender relations in site-specific contexts
1.2	Management and safe storage of mercury	<ul style="list-style-type: none"> Time poverty scenarios and socioeconomic dynamics 	<ul style="list-style-type: none"> Understand time poverty scenario in site-specific 	<ul style="list-style-type: none"> Adapt EMPs to better quantify exposure pathways and risks for women and vulnerable groups Use MAPX GIS interface potentially to also portray gender-sensitive datasets, if relevant and reliable data can 	<ul style="list-style-type: none"> ✓ EMPs are adapted – story can potentially be published on the UN Environment news bulletin online to showcase this unique gender focus ✓ MAPX GIS gender-relevant datasets are shared through UN Environment news bulletin online to highlight the importance of data in the domain of gender and chemicals

		among population subgroups of target sites	contexts, and whether these affect awareness and activities relating to exposure	be collated	
1.3	Long term POPs reduction through pilot activities on new POPs alternatives	<ul style="list-style-type: none"> • 1.1 & 1.2 baseline points apply • Gender-exclusion at different stages of the policy/project cycle and lack of capacity to address gender mainstreaming 	<ul style="list-style-type: none"> ○ 1.1 & 1.2 Targets and Milestones apply ○ Ensure gender-balance in technical participation, and governance frameworks, as well as visibility and dissemination of information (and data) regarding social factors and gender aspects to influence policy and regulatory approaches (awareness-raising and capacity-building) 	<ul style="list-style-type: none"> ➤ Output 1.1 & 1.2 Action Points apply ➤ Involve 50% women in technical groups and decision-making bodies ➤ Host Gender Workshop to be conducted with technical support from the MedPCU Gender Specialist, for awareness-raising and capacity-building ➤ Train technical members how to highlight gender and socioeconomic factors where relevant in management and negotiation spaces (through the Workshop) ➤ Provision for regulatory frameworks, disposal plans and prevention policies to have gender-responsive focus and inclusive approach 	<ul style="list-style-type: none"> ✓ Output 1.1 & 1.2 Means of Verification apply ✓ Number of men and women trained to on gender mainstreaming in chemicals and waste sector ✓ Number of male and female participants disaggregated by age and household head ✓ Outcome report from Gender Workshop, possibly to include exit surveys to estimate levels of comprehension, agreement and acceptance of ideas discussed and presented ✓ Number of men and women in technical groups ✓ Meeting minutes ✓ Randomised interviews with different members of technical groups to gauge whether they see any positive effects of gender-responsive legal tools ✓ Knowledge products on POPs, Hg and gender (best practice guides, governance recommendations) – context and site specific information and data (if possible) ✓ Resource lists and annotated bibliography compilation
1.4	Hg reduction through pilot activities on new Hg alternatives				

Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security

GEF ID 9684, Child Project 1.1: Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts

Environmental Assessment and Management Plan – Lebanon

Draft
November 2018

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Abbreviations

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BOQ	Bill of Quantities
DDT	Dichlorodiphenyltrichloroethane
EDL	Electricite du Liban
EA	Executing Agency
EAMP	Environmental Assessment and Management Plan
EIA	Environmental Impact Assessment
ELV	Emission Limit Value
ESERN	UN Environment Environmental, Social and Economic Review Note
ESM	Environmentally sound management
GDP	Gross Domestic Product
GEF	Global Environment Fund
HCH	Hexchlorcyclohexane
HCW	Healthcare waste
HSE	Health, Safety and Environment
IA	Implementing Agency
IEE	Initial Environmental Examination
IMAP	Integrated Monitoring and Assessment Programme
IMDG	International Maritime and Dangerous Goods Code
LCA	Ministry of Finance / Lebanese Customs Authority
LM	Large Marine Ecosystem
MAP	Mediterranean Action Plan
MedPCU	MedProgramme Coordinating Unit
MED POL	Mediterranean Pollution Assessment and Control Programme
MIA	Mercury Initial Assessment (Minamata Convention)
MoA	Ministry of Agriculture
MoE	Ministry of Environment
MoEW	Ministry of Energy and Water
Mol	Ministry of Industry
MoL	Ministry of Labour
MoPH	Ministry of Public Health
NAP	National Action Plan (Barcelona Convention)
NIP	National Implementation Plan (Stockholm Convention)

PCB	Polychlorobiphenyl
PPE	Personal protection equipment
PPP	Purchasing Power Parity
PSC	Project Steering Committee
SAP MED	Strategic Action Programme to Address Pollution from Land-based Activities in the Mediterranean
RID	Regulations Concerning the International Transport of Dangerous Goods by Rail
TDA	Transboundary Diagnostics Analysis
WB	World Bank

Executive Summary

Child Project 1.1 (GEF ID 9684) is one of the seven projects developed in the framework of the GEF funded Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security. MedProgramme's objective 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 main expected outcomes of the Child Project 1.1 are:

- Measurable reduction of wastes and hazardous chemicals (POPs, mercury) impacting human health and coastal habitats is achieved;
- Update of the baseline situation/ TDA, harmonization of monitoring protocols, methodologies and procedures in compliance with IMAP, including design of offshore reference network and gender assessment.

The Environmental Assessment and Management Plan (EAMP) for Child Project 1.1 – PCBs disposal activities in Lebanon – describes the planned project interventions, country's legal and institutional framework pertinent to POPs management and the main characteristics (including population, infrastructure and key environmental characteristics) of the eight sites selected for Phase I disposal. At the same time, the EAMP identifies where potential negative environmental impacts could occur in case of no action or failure to ensure environmentally sound management (ESM) of PCB stocks. Based on such an assessment, potential safeguarding and disposal options are evaluated and an appropriate strategy proposed to manage, prevent and/ or mitigate negative environmental impacts. Environmental monitoring and evaluation plan is also proposed within the framework of this assessment.

Based on the detailed inventory completed in June 2018 under the GEF/ WB project PCB Management in the Power Sector (GEF ID 4108), a total of 257 transformers (with a weight of around 211 tonnes and containing over 61 tonnes of oil) were identified for risk management under Child Project 1.1 Phase I. This equipment will be collected and placed at eight sites, as presented in the table below, ready for safeguarding, transport and disposal.

Table 0-1: Distribution and quantities for Phase I equipment

Town/district	Site	Owner	Total weight (kg)	Oil (kg)	Metal (kg)	Number of transf.	Status*
Tripoli	Hraiche	Qadisha concession	165,205	36,442	128,763	151	Stock
Beirut	Bauchrieh	EDL	54,531	12,737	41,794	54	Stock
		Aley concession	3,495	698	2,797	4	Stock
			2,050	680	1,370	1	In use
Jbeil/Byblos	Jbeil concession storage	Jbeil concession	2,113	415	1,698	2	Stock
			26,865	5,777	21,088	23	In use
Beirut	Army barrack Kfarchima	Lebanese Army	7,830	2,283	5,547	5	Stock
	Zahrani oil refinery	Zahrani authority	230	85	145	1	Stock

Saida district			1,387	425	962	5	In use
Zahleh district	Midane	Zahleh concession	7,258	1,599	5,659	7	Stock
Jezzine district	Awali river hydro power plant	Litani authority	1,315	340	975	2	Stock
Jbeil district	Nahr Ibrahim hydro power plant	Nahr Ibrahim concession	180	80	100	2	In use
TOTAL			272,459	61,561	210,898	257	

A total of 31 transformers that were still in use at the time of inventorying will be removed from the network and be ready for disposal at the time of Phase I implementation. This is in line with the action plan prepared under the GEF/ WB project and endorsed by the equipment owners.

More than 90% of the Phase I equipment will be collected from the 3 sites: Hraiche, Tripoli (cca 165 t), Bauchrieh in Beirut (cca 60 t) and the central storage site for the Jbeil concession in Jbeil/ Byblos (cca 29 t). They are located in the densely populated areas in major cities (Beirut, Tripoli) and tourist centres (Jbeil). The shortest distance from Hraiche site to the Mediterranean Sea is some 50 m. Several Phase I sites are located in the areas assessed as hot spots under the 2016 Barcelona Convention National Action Plan (NAP) addressing pollution from land-based sources, including Bauchrieh and the towns of Tripoli and Saida.

A risk assessment conducted for the sites shows that the risk is largely commensurate with the quantity of PCB oil and equipment being stored at the sites (Hraiche > Bauchrieh > Jbeil). However, the Bauchrieh site has the highest potential for negative environmental and human health effects, despite having only just over half the quantity of stock of the Hraiche site. The Bauchrieh site is in an urban area, has an unprotected well at the site (that can potentially contaminate groundwater sources used for drinking water supplies) and already has contaminated soil reported.

The three main sites are located in the vicinity (within a 40 km radius) of the two major Lebanese ports – Beirut and Tripoli, which are likely to be used for export.

An assessment of the alternatives for the components of safeguarding, transport and disposal was conducted. The following strategy was proposed:

An international tender will be placed for the safeguarding, transport and environmentally sound disposal of the contaminated PCB oil and associated equipment. Selection criteria required as part of the evaluation process will mean that it is highly likely that an international contractor will be responsible for the majority of implementation of the works. It is proposed that national contractors should provide as much resources as possible for the safeguarding and transport components. Training/ stakeholders' capacity building programme comprising theoretical and practical elements will be delivered by the UN Environment MAP in its capacity of the executing agency (EA), in cooperation with the MoE, international and national experts. International contractor will facilitate the training by allowing for practical demonstration of methods required to undertake the work safely. Supervision of the work will be provided by the Ministry of Environment with support of UN Environment (implementing and executing

agencies). Absence of national facilities means that all wastes will be exported for treatment and disposal at a facility abroad.

Risk identification and mitigation planning conducted set out the risks and mitigation measures required for safeguarding, transport and disposal components of the work. The Environmental Monitoring Plan describes in detail both risks and mitigation measures, how the mitigation measures should be monitored, and which individual or organization has the responsibility for doing so. It is recommended that stakeholders responsible for collecting PCB oil and equipment from throughout Lebanon to the 8 sites above also follow the risk mitigation planning as well as the environmental monitoring plan.

A. Background and country setting

Lebanon is Eastern Mediterranean country with a total surface of 10,400 square km, 225 km long Mediterranean coastline, and a population of 6.3 million. The economy is predominantly based on services and oriented towards the region. During the past couple of years, GDP growth rates remained below 2 percent. The prolonged Syrian crisis and the slow pace of structural reforms are seen as critical impediments to achieving potential growth. Estimated per capita GDP (PPP – Purchasing Power Parity) in 2017 was USD 19,500.

The economic and social impact of the Syrian crisis is significantly exacerbating country's development and environmental problems. According to government and independent sources, up to 1.5 million Syrians, about a quarter of the Lebanese population, have taken refuge in Lebanon since 2011. This has strained Lebanon's public finances, service delivery, and the environment.

The main environmental issues include deforestation, soil deterioration (due to erosions, pollution and urbanisation), species loss, air pollution (especially in Beirut area where more than one third of the total population is concentrated), and pollution of coastal waters from wastewater, solid waste and oil spills. National environmental priorities include solid waste and wastewater management, and industrial pollution control, whereas the key environmental management challenges include e.g. completion of the regulatory and institutional frameworks, monitoring, licensing and enforcement of environmental legislation.

A.1 Description of the project

Child Project 1.1 (GEF ID 9684) is one of the seven projects developed in the framework of the GEF funded Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security. MedProgramme's objective 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 programme comprises four components:

- Component 1 - Reduction of land-based pollution and measuring progress to impact;
- Component 2 - Enhancing sustainability and climate resilience;
- Component 3 - Protection of marine biodiversity (component 3); and
- Component 4 - Knowledge management/ programme coordination.

Child 1.1 is developed under the first MedProgramme component together with Child 1.2 (addressing depollution and water resources management) and Child 1.3 (focusing on the design and implementation of innovative investment programmes) projects.

The main expected outcomes of the project are:

- Measurable reduction of wastes and hazardous chemicals (POPs, mercury) impacting human health and coastal habitats is achieved;
- Update of the baseline situation/ TDA, harmonization of monitoring protocols, methodologies and procedures in compliance with IMAP, including design of offshore reference network and gender assessment.

Child Project 1.1 is fully consistent with and supportive of implementation of the regional policy framework of the Barcelona Convention, in particular as regards Strategic Action Programme to Address Pollution from Land-based Activities (SAP MED), Regional Plans on POPs and mercury, Regional Action Plan on Sustainable Consumption and Production in the Mediterranean, Guidelines on Best Environmental Practices for the Environmentally Sound Management of Mercury Contaminated Sites, PCBs, Lube Oils and Lead Batteries, and the Integrated Monitoring and Assessment Programme for the Mediterranean. Moreover, implementation of the Child Project 1.1 is expected to contribute significantly to the implementation of national commitments under relevant conventions – primarily Stockholm and Minamata Conventions.

The project has two components: Component 1 – Chemicals and Wastes – with a budget of USD 11.25 million (6.25 million for POPs and 5 million for mercury), and Component 2 – International Waters – with a budget of USD 3 million.

Project Component 1 - Chemicals and Waste - aims to improve human health and coastal habitats, through reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas. Activities planned under this component include engaging with participating country governments on the provision of disposal options (for POPs) and long-term containment (for mercury); and raising awareness on new POPs in products and mercury in measuring devices, through targeted pilot activities to introduce alternatives. Ultimately project activities should lead to a tangible reduction of land-based pollutants in Mediterranean countries, through the disposal of 2,000 t of POPs and over 50 t of Mercury waste.

The activities to be implemented under Component 2 focus on improving Mediterranean countries' capacity to identify trends and monitor progress to impacts, including through an update of the Transboundary Diagnostics Analysis (TDA) for the Mediterranean large marine ecosystem (LME), gender assessment, strengthening and harmonisation of monitoring protocols, enhanced data sharing, and similar.

In the framework of project preparation activities (PPG phase), the Lebanon country mission was organised in December 2017 to confirm national priorities, collect data and assess PCBs stocks to be potentially addressed through Child Project 1.1. Stocks of mercury wastes were not reported as an issue requiring Child 1.1 assistance, but development/ consideration of mercury prevention activities was requested, together with the assistance to improve management of mercury wastes in health sector. Preparation of Mercury Initial Assessment (MIA) is expected to start in 2018.

Lebanon has been prioritised for POPs disposal activities of the Child Project 1.1 due to the following:

- the country did not benefit from the previous GEF supported UN Environment/ MAP project (MedPartnership) on POPs disposal;
- improvements in PCBs management are prioritised in the Stockholm Convention National Implementation Plan (NIP) 2017;
- The GEF/ World Bank project PCB Management in the Power Sector (GEF ID 4108) supported preparation of a detailed PCBs inventory (completed in June 2018) confirming a significant quantity (over 1,000 t) of PCBs/ PCBs contaminated equipment would remain in the power sector following project's completion in 2019;
- building up on the previous GEF-funded interventions/ sustainability;

- PCBs contaminated sites have been identified in the areas assessed as hot spots under the 2016 Barcelona Convention National Action Plan (NAP) addressing pollution from land-based sources NAP (such as Bauchrieh/ Beirut; Tripoli; Saida).

Child Project 1.1 Component 1 activities are structured under the following four outputs:

Output 1.1: Management and disposal of POPs

Output 1.2: Management and safe storage of mercury

Output 1.3: Long term POPs reduction through pilot activities on new POPs alternatives

Output 1.4: Hg reduction through pilot activities on new Hg alternatives

For the output 1.1 on management and disposal of POPs, a two-phase approach has been adopted, with a first phase of collection to secure, export, and dispose quantities verified during the PPG phase as being ready for disposal. Quantities identified in the PPG phase but requiring further work on verification and prioritisation are planned for Phase II. The criteria for determining quantities of POPs to be included in Phase I and Phase II are detailed in the subsequent paragraphs.

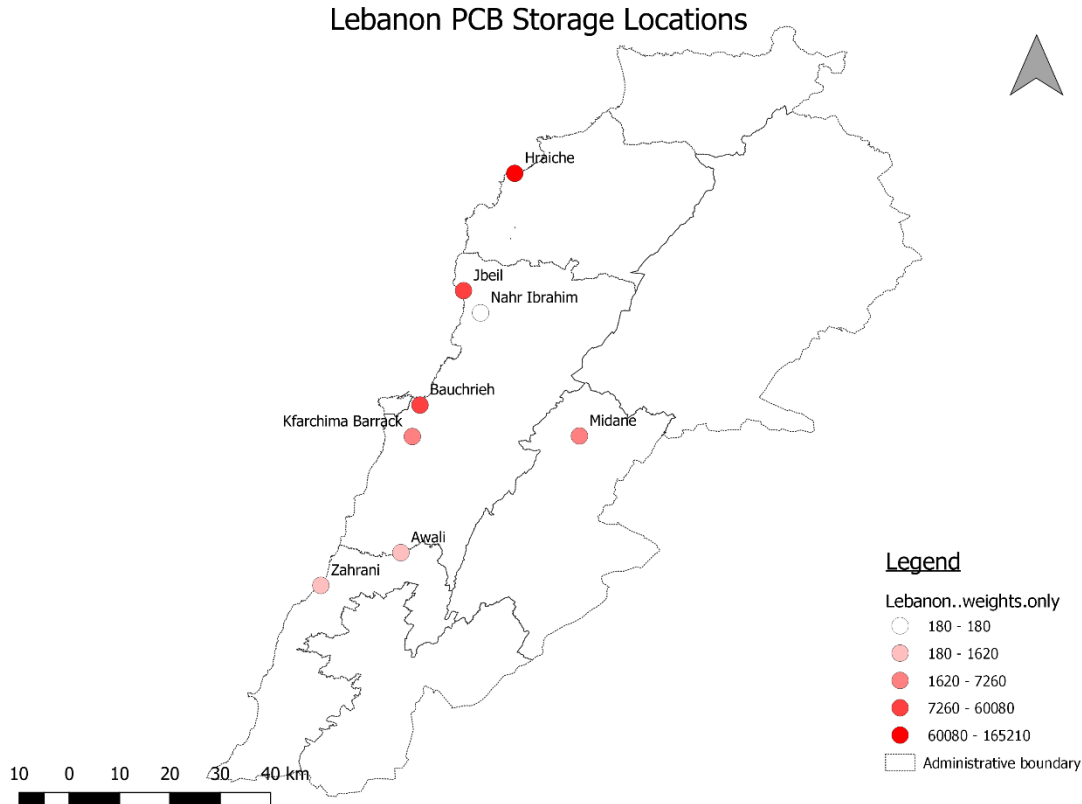
For inclusion in **Phase I**, stocks were required to be:

- fully inventoried on a per piece basis (i.e. individual transformers and other equipment are indicated in detail);
- confirmed as contaminated and, in the case of PCB contaminated oil, oil has been tested and PCB concentrations verified, or presence of pure PCBs established;
- declared by their owners to be available and ready for immediate disposal by the project, with adequate security measures in place to prevent stocks from being accessed and/or removed prior to project initiation.

The project preparation process confirmed more than 272 tonnes of Phase I stocks at eight sites in Lebanon (shown in the A-1 below). Results of the detailed inventory and consultations with the Lebanese Ministry of Environment were used to confirm Phase I stocks comprising 257 transformers with the total weight (oil and metal parts) of 272,459 kg. The predominant share of these are out of use transformers, while 31 transformers (with the total weight of cca 30 t) were still in use at the moment of survey. These will be removed from the network and ready for disposal by the time Phase I activities take off. Contamination levels in the equipment identified for Phase I range from 50 ppm to pure PCBs.

Four out of eight Phase I sites (storing some 75% of the total stocks) are located in major cities (Beirut, Tripoli) and tourism centres (Jbeil) in Lebanon's densely populated coastal belt. Population exposure risk factor in these areas is very high, and in the case of Bauchrieh (Beirut) it is exacerbated due to potential groundwater contamination through the site's well (more details in section C.1.2). Two of the Phase I sites – Hraiche and Zahrani oil refinery – are located in the immediate vicinity of the Mediterranean Sea.

Figure A-1: Lebanon PCB storage locations



For inclusion in **Phase II**, once the different priority wastes are characterized, a transparent and objective analysis will be made of the stocks based on the following criteria:

- Immediate risk to human health and environment; this will be assessed following an approach developed by FAO based on a chemical risk factor and an environment/ exposure risk factor;
- Cost effectiveness and feasibility within the timescale of the project, including the priority expressed by governments and existence of political will and co-finance to address wastes;
- Balance between disposal of legacy accumulations of wastes, and contemporary accumulations, in support of prevention pilots;
- Equitable regional distribution of project activities across project countries.

In line with the 2017 NIP priorities and inventory results, the following potential project interventions are identified for Phase II in Lebanon:

1. Disposal of up to 780 t of PCBs and in-use PCBs contaminated;
2. Mobile dechlorination for 126 t of PCBs contaminated oil from large transmission (in-use) transformers to enable full elimination of PCBs and cut potential cross-contamination routes;
3. Priority remediation measures for Bauchrieh – PCBs contaminated transformer maintenance and storage site located in a residential area of Beirut; priority measures include improvement of the drainage system at the site, pumping out the content of the site's well and disposing of the extracted oil and sludge.

Under the GEF/ WB project, an action plan on decommissioning contaminated in-use equipment was prepared following completion of the detailed inventory in June 2018 and is undergoing a consultation process with the equipment owners, starting from August 2018. The consultation process is expected to lead to an agreed upon course of action and a commitment by the equipment owners to phase out transformers contaminated above 50 ppm in line with country's Stockholm Convention obligations to eliminate PCBs by 2025. The action plan endorsed by the equipment owners – the main ones being Electricite du Liban (EDL), Qadisha and Zahleh Concessions – will be shared with the Child Project 1.1 and taken *in lieu* of declaration of ownership to confirm the quantities will be available for disposal (this is primarily relevant for Phase II equipment but also for 31 in-use transformers identified for Phase I disposal).

A.2 Scope, objectives and format of the Environmental Assessment and Management Plan

Scope

The Environmental Assessment and Management Plan (EAMP) for Child Project 1.1 – PCBs disposal activities in Lebanon planned under component 2 – describes the planned project interventions, country's legal and institutional framework pertinent to POPs management and the main characteristics (including population, infrastructure and key environmental characteristics) of the eight sites selected for Phase I disposal. At the same time, the EAMP identifies where potential negative environmental impacts could occur in case of no action or failure to ensure environmentally sound management (ESM) of PCB stocks. Based on such an assessment, potential safeguarding and disposal options are evaluated and an appropriate strategy proposed to manage, prevent and/ or mitigate negative environmental impacts. Environmental monitoring and evaluation plan is also proposed within the framework of this assessment.

Objectives

The main objectives of the EAMP are to:

- comply with UN Environment safeguard policies for projects, namely the UN Environment Environmental, Social and Economic Review Note (ESERN);
- describe the sites for Phase I activities and set the basis for preparation of Environmental Management Plans to be implemented by contractors at disposal stage;
- to identify risks associated with the work and appropriate mitigation measures to manage identified/ potential negative environmental impacts;
- assess national capacities and to recommend adequate safeguarding and disposal strategies.

The UN Environment ESERN approach categorizes projects into Low, Moderate and High risk, based on the potential for negative impacts. This project, involving handling and movement of highly hazardous substances, does have the potential for significant negative impacts, possibly irreversible, in the event of an accident or leakage. Thus, the project is likely to be classified as 'High Risk' and as such, requires a full impact assessment and effective safeguard management plan. This document sets out these requirements.

Format of the EAMP

In general, international hazardous waste safeguarding projects, including those dealing with PCB wastes, involve several components, namely, collection and centralization of wastes, repackaging, stowage into

ISO shipping containers, domestic and international transport and finally disposal. A principal step in the EAMP process is the environmental assessment (EA) which for this type of project is intended to give information about the type and level of risk at each site being dealt with. The format for the EAMP allows for the objective evaluation of available options for each of these components, taking into consideration the existing national capacity and the results of the EA. The assessment of available options includes deciding which organization will take responsibility for the management, supervision and implementation of each element. Additionally, the EAMP allows for a technical assessment of disposal technologies appropriate to the wastes being dealt with. A key output of the document in this regard is the safeguarding and disposal strategy.

Once the strategy has been decided upon, what follows is an assessment of key factors that will allow all aspects to be undertaken with minimal risks to human health and the environment. This is set out in the Environmental Management Plan which requires the detailed identification of risks at all stages of the project and proposal of appropriate risk mitigation measures for each one. This is followed by specification of the required monitoring (Environmental Monitoring Plan) to ensure that the mitigation measures have been put in place and the risks have been lowered. The EMP also requires that responsibility for monitoring is clearly assigned to individuals or institutions.

A.3 Country institutional and legal framework

The **key institutions** with competences for POPs/ PCBs management are briefly described below.

Ministry of Environment (MoE): The key governmental body with competences for environmental management in Lebanon, responsible for implementing the Stockholm Convention (SC) and in charge of coordinating all POPs related activities with relevant stakeholders. The Service of Environmental Technology – Department of Chemical Safety is specifically responsible for the management of chemicals including POPs. Following the amendments of the SC which resulted in addition new industrial chemicals (new POPs), this department coordinates with the Department of Protection of Urban Environment and the Service for Urban Environment, which are responsible (among other duties) for reviewing environmental conditions for industrial establishments in the permitting processes. MoE is also a competent authority for the environmental impact assessment (EIA) procedures.

Ministry of Agriculture (MoA): The Service of Plant Protection within the MoA is responsible for management of pesticides in the country including permitting, registration and distribution, as well as disposal and handling of empty containers.

Ministry of Public Health (MoPH): The Service of Sanitary Engineering within the MoPH is responsible for reviewing, updating, and enforcing the registration and use of public health pesticides, biocides, and home-owner pesticide products.

Ministry of Finance / Lebanese Customs Authority (LCA): Responsible for controlling goods imported/exported to/ from Lebanon in accordance to the Customs Law or any other law or agreement which Lebanon is party to. Import of POPs materials into Lebanon is controlled by the LCA.

Ministry of Energy and Water (MoEW) - Electricite du Liban (EDL): Under the jurisdiction of the MoEW, the EDL is an autonomous state owned national electrical utility that largely owns and manages the power sector in Lebanon. The MoEW/ EDL owns a large number of PCBs containing transformers and capacitors. The EDL has cooperated with MoE on the environmentally sound management of the PCBs in the power sector under the ongoing GEF/ WB project.

EDL produces some 90% of electricity in Lebanon and provides transmission and distribution services. In performing its functions, EDL also relies on service providers/ private companies to whom certain tasks are outsourced based on concession agreements (made between service providers and the Ministry of Energy and Water). Out of the currently active seven concessions, some are exclusively distribution, some are mixed transmission/ distribution, and there is one production concession (Qadisha). At the end of concession agreements, facilities operated by service providers will become state ownership. Most of the current concession will end over the course of the next five years (with possibilities for extension).

Ministry of Industry (MoI): Issues licences for industrial firms and is directly involved in managing industrial chemical wastes.

Ministry of Labour (MoL): Issues health and safety measures that industries need to abide by including management of chemicals as they relate to workers safety.

Regulations pertinent to hazardous wastes and pesticides date to as early as 1960's, including, for example, laws number 6 of 08/01/1968 on Organization of the trade of fertilizers, agricultural medicines and feeds, and number 11 of 24/04/1978 on Organization of the import and the occupations of selling, filling, packaging, preparing, manufacturing and spraying pesticides and rodenticides for domestic use. Other relevant pieces of legislation include the law number 64 of 12/08/1988 on Environmental preservation against pollution from harmful wastes and hazardous materials, the decree number 13528 of 19/11/1998 on trading of pesticides, ministerial decisions banning the import of certain pesticides, and others. Moreover, general environmental legislation such as the law number 444 of 29/07/2002 on Protection of the environment and the decree number 8471 of 04/07/2012 on Environmental compliance of establishments are also relevant for POPs management. A list of pertinent legislation is provided in [Annex 1](#). Provisions of the relevant international conventions transposed into the national legislation (see section A.4) complete the legal framework for POPs management in Lebanon.

Ministry of Environment has the key responsibilities related to EIA procedures, as regulated under **Decree 8633 Fundamentals of environmental impact assessment** of 07/08/2012. The Decree and its annexes describe the requirements and the stages of the environmental assessment procedure including:

- The initial filing and screening process whereby a request to carry out a project is submitted to the MoE for screening to classify the project and indicate the type of study that is required – if it falls under Annex 1 projects then a full EIA study is required and if it falls under Annex 2 listed projects, an Initial Environmental Examination (IEE) is required;
- Baseline data collection;
- Scoping of environmental impacts;
- Carrying public participation to disclose potential impacts to the public (only required for EIAs);
- Assessment of environmental and social impacts;
- Design of adequate impact mitigation measures to avoid, reduce, or compensate and impact;

- Development of an Environmental Management Plan;
- Development of a Monitoring Plan;
- Disclosure of findings to the public (in the case of EIA).

In the course of preparation of the GEF/ WB project (GEF ID 4108), an assessment of environmental and social impacts (ESIA)¹ was carried out by the Ministry of Environment (in cooperation with EDL) with the technical assistance of the WB environmental safeguards staff. ESIA was prepared in line with the WB Operational Policies and Procedures² and it includes a generic environmental and social management plan (ESMP). The generic ESPM proposes different protocols to be adopted during project implementation to avoid and mitigate identified impacts; it also includes monitoring plans necessary to evaluate environmental quality throughout the process. Based on this ESMPs, site specific plans are prepared (by contractors) and implemented in parallel to the implementation of project activities.

In line with provisions of the **Decree 8633 Fundamentals of environmental impact assessment** and based on preliminary consultations with the Ministry of Environment, activities considered under the Child Project 1.1 Phase I will not require a full EIA study. The current EAMP and measures it identifies will be carried out during project implementation to ensure potential negative impacts linked to project interventions are avoided and/ or mitigated.

A.4 Applicable international legal framework

Lebanon is party to Barcelona, Basel, Minamata, Rotterdam and Stockholm Conventions. Overview of the status of ratification for the main international conventions relevant for chemicals and waste management for the Child Project 1.1 Phase I is provided in Table A-1.

Table A-1: Legislative framework relevant for POPs management

Country	Status of ratification (a – accession) and year				
	Barcelona	Basel	Minamata	Rotterdam	Stockholm
Lebanon	1977 (a); 2009	1994	2017 (a)	2006 (a)	2003

Key provisions of the ratification laws for Basel, Stockholm and Rotterdam Conventions are provided below (Table A-2).

¹ Ministry of Environment of the Lebanese Republic, Environmental and Social Impact Assessment Report: PCB Management in the Power Sector Project, 2015

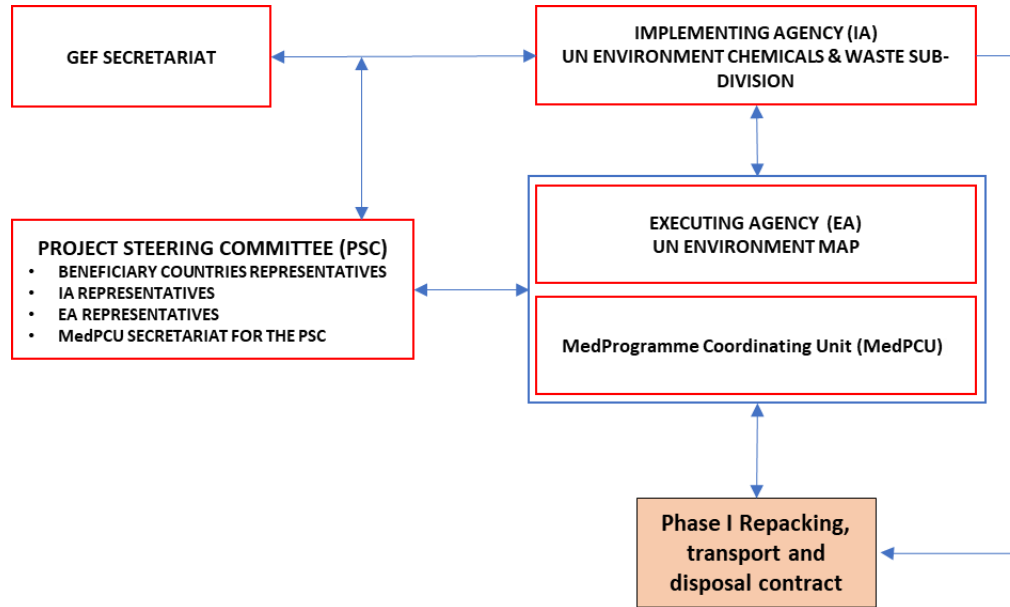
² The project concept (Project Identification Form) and project preparation grant were approved by GEF in 2011. Classified as Category “A” under the WB Operational Policy (OP) 4.01 on Environmental Assessment, the project triggered preparation of a full scale ESIA study. The study was developed in the period 2012 – 2015, with public consultations taking place in 2012 and 2013.

Table A-2: Laws on ratification of the Basel, Stockholm and Rotterdam Conventions

Legal text no.	Date	Title and relevance to POPs
Laws		
3878	04/11/1994	<p>Ratification of the Basel Convention on the control of trans-boundary movements of hazardous wastes and their disposal</p> <p>The Law transposes the Basel Convention’s text as it is, regulating <i>inter alia</i>:</p> <ul style="list-style-type: none"> - Definition of hazardous wastes; - Restriction of trans-boundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management and with a proof of acceptance of the importing country; - Restriction of the allowance of export of hazardous waste from countries without facilities, or expertise to dispose safely of certain wastes, to countries which have both facilities and expertise.
432	29/07/2002	<p>Ratification of Stockholm Convention on Persistent Organic Pollutants</p> <p>The Law transposes the Stockholm Convention’s text and annexes as they are, regulating <i>inter alia</i>:</p> <ul style="list-style-type: none"> - Elimination of listed POPs; - Support the transition to safer alternatives; - Targeting of additional POPs for action; - Clean-up of old stockpiles and equipment containing POPs; - Solidarity for a POPs-free future.
728	15/05/2006	<p>Ratification of Rotterdam Convention on the prior informed consent Procedure for certain hazardous chemicals and pesticides in international trade</p> <p>The Law transposes the Rotterdam Convention’s text and annexes as they are, regulating <i>inter alia</i>:</p> <ul style="list-style-type: none"> - Prevention of the entry of hazardous chemicals into the country; - Imports of pesticides and chemicals listed in Annex III of the Convention; - Information exchange.

A.5 Project Institutional Framework for Phase I

Figure A-2: Institutional Arrangements and Coordination for Phase I



As per the above diagram, the Implementing Agency (IA) for the overall project, including Phase I, is the UN Environment Chemicals and Waste Sub-Division. The Executing Agency (EA) is UN Environment MAP; MED POL will act as an executing partner for disposal activities. The EA will report on the project implementation progress to the IA, including on the activities performed by executing partners. The IA and EA representatives from these organizations as well as representatives from the Ministry of Environment, the lead agency for project implementation within Lebanon, alongside with representatives of other beneficiary countries, will form the Project Steering Committee (PSC). The PSC will provide overall guidance for project implementation and ensure coordination among all parties. It is intended that a coordinating unit lead by MoE and UN MAP will be attended by national stakeholders involved with the project. The IA will be the body responsible for issuing an international tender for implementation of the work.

The EA will be responsible for establishing, hosting and supervising the MedProgramme Coordinating Unit (MedPCU) and through the PCU for the overall project management, including disposal of Phase I equipment. The EA/ MedPCU will ensure that all the activities, including procurement of goods and services, are carried out in strict compliance with the rules and procedures of UN Environment and GEF, in line with the agreed work plan and budget. For the technical aspects in managing the disposal activities, MedPCU will be assisted by the MAP – MED POL project officers and/ or consultants. To support execution of disposal activities in Lebanon, a national consultant/ project manager will be selected in close cooperation with the lead national agency (the same approach will be followed in other beneficiary countries).

B. Baseline

B.1 Polychlorinated biphenyls

Polychlorinated biphenyls (PCBs) are persistent (they remain intact in the environment for a long period of time) and bio-accumulating synthetic organic chemicals that have a potential to cause adverse effects to the human health³ and environment. One of the main commercial uses of PCBs is as cooling and insulating liquids in electricity transmission and distribution equipment such as transformers and capacitors. Due to their environmental toxicity and subsequent classification as POPs, the production and uses of PCBs were restricted and they are slated for elimination under the Stockholm Convention on Persistent Organic Pollutants, adopted in 2001 and entering into force in 2004.

In **Lebanon**, PCBs are mainly found in the electric power sector. Until mid-1990s, they were widely used in power transformers and capacitors in the power plants, substations and the distribution network. As the awareness on negative impacts linked to releases of PCBs into the environment grew, gradual withdrawal of the equipment containing and/ or contaminated with PCBs took place over the course of the past two decades and the efforts to ensure its environmentally sound management were stepped up.

Despite the so far efforts, significant quantity of PCBs still remains in Lebanese power sector in 2018, including stocked and in-use equipment. A detailed inventory for power sector and military completed in June 2018 indicates a total of 1,052 t of mainly distribution transformers (including oil and metal parts) is contaminated with PCBs. Moreover, 126 t of oil in large transmission transformers needs to be treated to ensure PCBs elimination. Most of this equipment is owned by EDL, the state-owned power utility. Other companies that hold concession contracts for provision of electricity transmission and distribution services, including Qadisha, Zahleh, Jbeil and others, also operate/ own significant quantities of equipment contaminated with PCBs. Presence of PCBs in industries, public institutions and other potential owners has not been surveyed in detail.

B.2 Previous PCB safeguarding initiatives

An update of the preliminary PCBs inventory was carried out in 2011 (by the consulting company COWI⁴) under the PCBs Inventory Update and Project Preparation Study funded by the WB. The main findings of the inventory included:

- Identification of Askarel transformers in Jieh and Zouk power plants as well as PCBs capacitors in 9 of the 58 substations. 49 tonnes of PCBs from out-of-service equipment and 147 tonnes of PCB oil from in-service equipment were found.

³ Exposure to PCBs/ other persistent organic pollutants can lead to development of serious health problems including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and damages to the central and peripheral nervous systems and others.

⁴ COWI A/S is an international consulting group, specialising in engineering, environmental science and economics, based Denmark.

- Identification of widespread PCBs contamination of transformers in all parts of the network with 20-30% of all the transformers suspected of contamination. The total number of potentially contaminated transformers (to be surveyed) was 22,100, of which 19,000 were in the distribution network.
- The Bauchrieh transformers facility was identified as a contaminated site based on sampling of oil, sludge, and water from the on-site well in addition to samples of drinking water in nearby wells.

In response to the findings of the 2011 COWI inventory, Lebanese Government and the WB developed PCB Management in the Power Sector Project. Total project budget is around USD 7.5 million (2.5 million GEF contribution, 2.5 million MoE co-financing, and 2.5 million EDL co-financing). The implementation started in 2015 with the following main objectives:

- Dispose of high content PCBs equipment and waste from the power sector in an environmentally sound manner;
- Carry out a full scale national inventory of potentially contaminated equipment in the power sector (around 26,702 transformers);
- Establish an interim storage facility for PCB contaminated equipment;
- Investigation and site assessment of the Bauchrieh site;
- Strengthening the legal framework for improved PCB management;
- Training and capacity building of related stakeholders on sustainable management of PCBs equipment and storage sites;
- Information dissemination and outreach awareness programs; and
- Technical assistance of national laboratories for the analysis of PCBs dielectric oil, waste products, oil or other media.

In 2016 the project executed contractual works for the draining, packaging, and disposal of high content out of service PCBs equipment and waste. This included disposal of a total of 91 t including 17 transformers, 606 capacitors, and about 10 t of PCBs contaminated soil and debris, mainly from Zouk, Jieh and Bauchrieh sites. All activities were successfully carried out in full accordance with the Basel Convention, the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), and the International Maritime Dangerous Goods (IMDG) Code as well as other international best practices for the safe handling, management and disposal of high content PCBs waste. On 31 July 2017, the Certificate of Elimination and Destruction Report was issued by the disposal facility (Tredi) in France.

The second phase of the GEF/ WB project for the disposal of high content PCBs equipment from the power sector is due to be executed following the completion of the national inventory. Based on the inventory results, a total of 281 transformers, weighing about 233 tonnes, have been selected for disposal from the Bauchrieh and Hraiche storage sites from EDL and Qadisha Concession respectively (Table B-1).

Table B-1: Contaminated equipment to be disposed under the GEF/ WB project in 2018

<i>Owner/ locations</i>	<i>Number of transformers (>50 ppm)</i>	<i>Total weight (kg) - oil and metal</i>
EDL		
EDL – Bauchrieh	212	171,663
Drums (2)	-	-
Qadisha concession		
Hraiche Storage	69	61,696
TOTAL	281	233,359

B.3 National capacities

Capacity of national stakeholders was significantly improved, and awareness raised through the GEF/ WB project. The project supported a range of training and capacity building activities on sustainable management of PCBs, primarily for the MoE and EDL (including management and on-site workers/ technicians), but also including other stakeholders, such as customs administration. Good cooperation and coordination mechanism were developed with the owners of the equipment – principally with EDL, but also with the key concession holders. A detailed inventory was produced, and an action plan prepared for gradual removal of PCBs contaminated equipment from the grid, consulted and agreed upon with all the owners. Consultation records and endorsement of the inventory/ action plan are to be taken in lieu of declaration of ownership for the Child Project 1.1, whereas the owners of the equipment and the MoE will vouch to keep the identified equipment secured until disposal.

Capacities and cooperation/ coordination mechanisms developed through the previous initiative to manage PCBs in an environmentally sound manner represent a good starting point for the follow up work planned under Child Project 1.1, yet the overall national capacities for safeguarding and disposal of PCBs and PCBs contaminated equipment remain limited and the additional support to be provided under the project is expected to play a key role in ensuring ESM of these wastes.

An overview of the assessment of national capacities for PCBs management is presented in Table B-2, below:

	Repackaging	Transport	Storage	Disposal
Management:	<p>The Government/ Ministry of Environment does not normally play an active role in the management of projects. Expertise and remit are focussed on supervision and monitoring of activities.</p> <p>While private industry in Lebanon has had some involvement with national hazardous waste management and was involved in the previous WB project it does not have the capacity or experience with requirements of the current project.</p>	<p>If necessary, the Government/ MoE can procure and monitor transport contractors.</p> <p>Private industry within the Lebanon has the management capability to deal with the transportation element.</p>	<p>Ownership and management of the storage locations in the current project rests with the utilities and/or Govt. departments involved. Government/ MoE storage is not available and MoE cannot manage storage operations.</p>	<p>There are no adequate facilities in the country to treat/ dispose of PCBs and PCBs contaminated equipment.</p>
Supervision:	<p>MoE/ environmental inspectorate have the necessary skills and understanding of technical issues to do with PCB management to enable them to supervise the repackaging element. As with other areas (e.g. for customs administration), further capacity building is needed. The MoE is responsible for the control of many other activities and therefore availability of staff members to supervise the project to the necessary extent is limited. Consultant staff will be necessary to ensure more lasting presence/ supervision at the sites.</p>	<p>MoE/ environmental inspectorate have the necessary skills and understanding of technical issues to do with PCB management to enable them to supervise transport element of the project. The MoE is responsible for the control of many other activities and therefore availability of staff members to supervise the project to the necessary extent is limited. Consultant staff will be necessary to ensure more lasting presence/ supervision at the sites.</p>	<p>MoE/ environmental inspectorate have the necessary skills and understanding of technical issues to do with PCB management to enable them to supervise the storage element. The MoE is responsible for the control of many other activities and therefore availability of staff members to supervise the project to the necessary extent is limited. Consultant staff will be necessary to ensure more lasting presence/ supervision at the sites.</p>	
Implementation:	<p>During the WB project a number of national private waste management firms were identified with experience in the handling of hazardous wastes. Whilst these firms would not be able to assume a lead role or take financial responsibility or liability for the implementation of Child Project 1.1 disposal activities (due to limited capacities and experience), they would be able to make a contribution towards implementation of safeguarding.</p>	<p>Government/ MoE is not able to provide transportation.</p> <p>Private companies capable of performing transport operations are available. Owners of the equipment can contribute to transport operations (by e.g. collecting/ centralising the equipment).</p>	<p>Current storage locations are under the responsibility of the respective utilities and or Govt. departments. There are no hazardous waste storage facilities in Lebanon.</p> <p>The existing storage facilities for transformers are not adequate and are often considered as contaminated sites/ hot spots. The facilities to prevent spillage run off are not found at these sites.</p> <p>Emergency provisions are partially available (only fire safety equipment) and the staff managing transformers storage sites is partially capable/ trained for handling emergency situations and accidents.</p>	

Table B-2: Brief assessment of national capacities for PCBs management in Lebanon

B.4 Causes of accumulation of PCB contaminated material

Barriers to addressing PCBs

Two root causes lead to contamination of the Mediterranean by PCBs:

- in-use transformers contain PCB contaminated oil, and this oil contaminates other equipment and oils due to current top-up practices; and
- owners of decommissioned equipment containing PCB contaminated oil (power generation, transmission and distribution companies, industries, public sector institutions) store waste equipment without appropriate safety or environmental management measures, at risk of being disposed of with municipal waste or sold into local markets instead of being disposed of in an environmentally sound manner;

Key barriers to the sound environmental management of PCB contaminated equipment include respectively: the high capital cost and lack of incentives or financial mechanisms to replace in-use transformers; and the high cost and lack of local infrastructure for environmentally sound disposal of the wastes.

B.5 PCBs and contaminated equipment inventory

Based on the detailed inventory completed in June 2018, a total of 257 transformers have been identified for Child Project 1.1 Phase I. A detailed record of Phase I equipment is annexed to the EAMP (Annex 6: List of Phase I equipment). At the time of survey, the Phase I equipment was spread around large number of sites, whereas partial centralisation of the equipment will be carried out for the disposal. Phase I equipment will be concentrated at eight sites, as presented in Table B-3.

Town/district	Site	Owner	Total weight (kg)	Oil (kg)	Metal (kg)	Number of transf.	⁵ Status
Tripoli	Hraiche	Qadisha concession	165,205	36,442	128,763	151	Stock
Beirut	Bauchrieh	EDL	54,531	12,737	41,794	54	Stock
		Aley concession	3,495	698	2,797	4	Stock
			2,050	680	1,370	1	In use
Jbeil/Byblos	Jbeil concession storage	Jbeil concession	2,113	415	1,698	2	Stock
			26,865	5,777	21,088	23	In use
Beirut	Army barrack Kfarchima	Lebanese Army	7,830	2,283	5,547	5	Stock
Saida district	Zahrani oil refinery	Zahrani authority	230	85	145	1	Stock
			1,387	425	962	5	In use

⁵ Status of the equipment reported based on the inventory results; 'Stock' includes equipment recorded as 'stand by' and 'under maintenance'

Zahleh district	Midane	Zahleh concession	7,258	1,599	5,659	7	Stock
Jezzine district	Awali river hydro power plant	Litani authority	1,315	340	975	2	Stock
Jbeil district	Nahr Ibrahim hydro power plant	Nahr Ibrahim concession	180	80	100	2	In use
TOTAL			272,459	61,561	210,898	257	

Table B-3: Distribution and quantities for Phase I equipment

A total of 31 transformers that were still in use at the time of inventorying will be removed from the network and ready for disposal at the time of Phase I implementation, in line with the action plan prepared under the GEF/ WB project and endorsed by the equipment owners.

More than 90% of the Phase I equipment will be collected from the 3 sites: Hraiche, Tripoli (cca 165 t), Bauchrieh in Beirut (cca 60 t) and central storage site for the Jbeil concession in Jbeil/ Byblos (cca 29 t). They are located in the densely populated areas in major cities (Beirut, Tripoli) and tourist centres (Jbeil) and the relative risks of negative environmental and human health impacts arising at these sites are the highest. The shortest distance from Hraiche site to the sea is some 50 m, and the Bauchrieh site's well has a potential to contaminate groundwater sources used for drinking water supplies.

The three main sites are located in the vicinity (within a 40 km radius) of the two major Lebanese ports – Beirut and Tripoli, which are likely to be used for export.

Distribution transformers with the total weight of less than 1,100 kg per piece account for more than a half of identified Phase I equipment, whereas the bulk of the transformers are in the range of 230 to 2,300 kg of total weight. There are only few transformers with the weight outside this range, with only one transformer with the total weight of 3,600 kg. Dismantling or cutting down the equipment prior to transport will not be necessary as the identified units' dimensions are less than 2.5 m high and 2.3 m wide.

The total quantity of oil contained in the 257 Phase I transformers is 61.5 t; adequate number of drums is expected to be provided by the contractors.

C. Environmental impact assessment

Lebanon: Environmental Risk Indicator for PCB storage locations

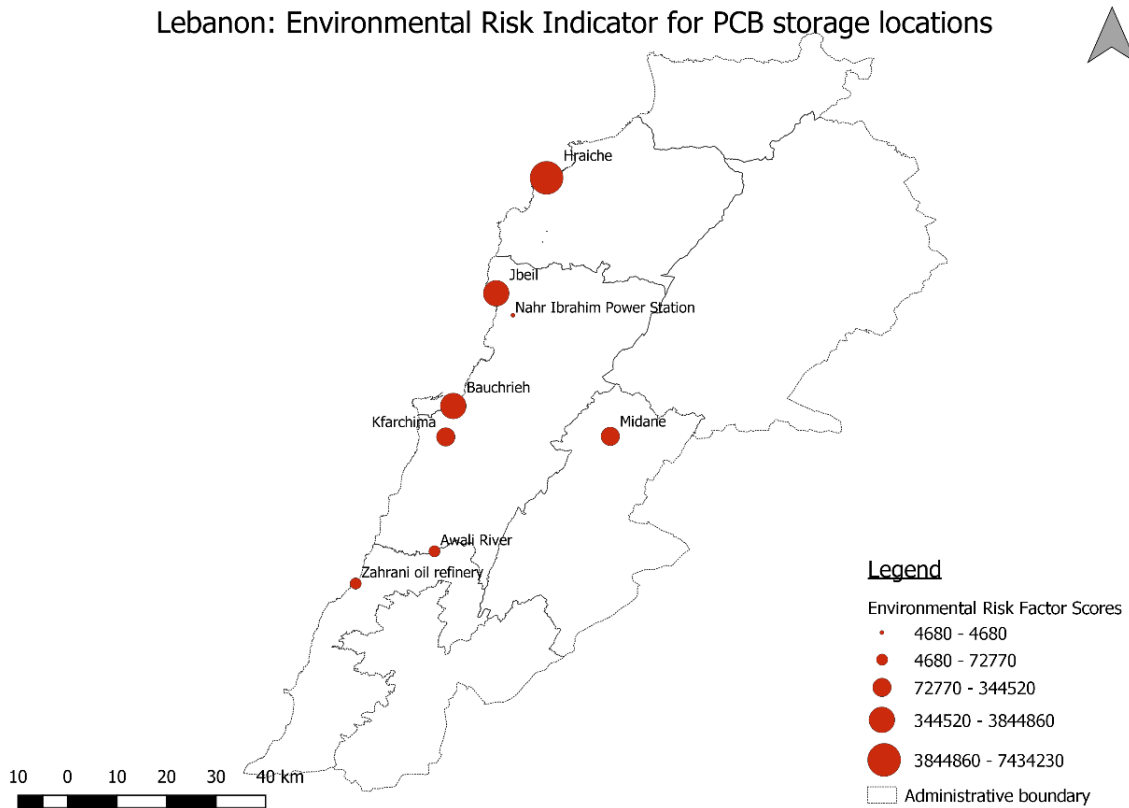


Figure C-1: Environmental risk indicator for PCB storage locations

⁶Risk assessment

An environmental risk assessment was conducted of the storage sites. Questionnaires were completed⁷ for each site recording basic information regarding the situation of the site related to environmental and human health risk factors. The answer of each question was given a score relative to its effect. The ranked product of the total score for all the sites gives a relative indication of potential environmental impacts, the F_E score; the sites with the highest score present the greatest potential risk to cause harm to the environment. The results of the risk assessment are shown in the Table C-1.

⁶ This method of risk assessment is based on the method set out in the UN Food and Agriculture Organization Environmental Management Tool Kit Volume 1. This is used for the assessment of risks posed by stocks of agrochemicals, including POPs pesticides.

⁷ Based on the findings of the country mission, inputs from the national consultants and information provided by MoE.

Table C-1: Table of potential environmental impact scores (FE)

Location	F _E
Bauchrieh	64
Hraiche	45
Zahrani oil refinery	45
Kfarchima	44
Midane	41
Awali River	40
Jbeil	32
Nahr Ibrahim Power Station	26

The Bauchrieh site demonstrates the highest potential risk to the environment. Examination of the underlying data shows that this is because the site is situated in an urban area, there is a well on the site which has not been protected and contaminated soil is present. The Hraiche and Zahrani sites are located very close to the Mediterranean Sea and the locations do not have integral concrete storage areas. Additionally, there is contaminated soil present at the Hraiche site.

Table C-2: Environmental risk indicator scores

Location	Total Quantity PCB	F _E	Environmental Risk Indicator
Hraiche	165,205	45	7,434,225
Bauchrieh	60,076	64	3,844,864
Jbeil	28,978	32	927,296
Kfarchima Barracks	7,830	44	344,520
Midane	7,258	41	297,578
Zahrani oil refinery	1,617	45	72,765
Awali River	1,315	40	52,600
Nahr Ibrahim Power Station	180	26	4,680

Further analysis is possibly by multiplying the F_E with the total quantity (kg) of PCB material stored at each site. In doing this it is possible to see the Environmental Risk Indicator which combines the environmental risk together with the quantity. A graphic representation of the Environmental Risk Indicator can be seen in Figure C-1. The scores returned for the Environmental Risk Indicator largely correspond to the quantity of stock stored at each site. Examination of the Environmental Risk Indicators for each site demonstrates that:

- Due to the large quantity of PCB stock and its poor situation, the Hraiche site presents the most acute risk amongst the storage locations in Lebanon;
- Significant risk is observed from the Bauchrieh site, which has smaller quantity of stock but a much higher FE score;
- The Kfarchima Barracks, notably has a significantly lower quantity of stock than the top three sites, however due to its higher F_E score it demonstrates a relatively high overall risk to the environment;

- Whilst the Jbeil site is relatively well situated and has a low environmental risk associated with it, due to the large quantity of PCB contaminated materials stored there, it also presents a highest risk to the environment and human health.

C.1 Description of sites

More detailed descriptions of the sites and discussion of the risks affecting each are found in the section below.

C.1.1 Hraiche, Tripoli

Phase I equipment to be collected from Hraiche site includes 151 transformers with various levels of contamination, totalling 165,205 kg, including 36,442 kg of oil. The site is located in northern part of Lebanon near Tripoli, within the complex of Hraiche power plant (see Figure C-3). The complex is used/ managed by Qadisha concession. The power plant has been decommissioned and a contract (with a French company) is in place to demolish the old structures and build a new power plant. The site is accessible from the main north highway; distance to Beirut Port is 67 km. Tripoli is one of the eight locations in Lebanon that have been classified as priority hot spots (category A) in the 2016 NAP. Population of the city is around 230,000.

To the east from the power plant, a fenced surface of around 1,500 m² (including buildings and open spaces) is used to store out of service transformers.



Figure C-2: Aerial view of Hraiche power plant with marked position of the transformers storage site

In December 2017, some 200 transformers were stored at the site (see Figure C-4).



Transformers screened and labelled in the course of the GEF/ WB project



View of transformers stored at the site



Proximity to the sea

Figure C-3: Conditions at Hraiche storage site, December 2017

The storage site is connected to electricity and water networks. As regards the emergency kits, only fire protection equipment is found on the site; emergency operational procedures are in place. The storage site is very close to the sea shore (the distance to the closest point is around 50 m) and is operated without any precautionary measures to prevent contaminants reaching the sea. The sea in the nearby areas is used for recreational purposes/ bathing. There are no other water bodies in the proximity. The area used to store contaminated transformers shows clear signs of oil leakages beneath the units into surface layers of soil and concrete (Figure C-5). Many transformers stored at the site in December 2017 were corroded, most likely because of exposure to rainwater.



Figure C-4: Storage area for contaminated transformers

The site is located in an industrial area with no housing units in the immediate surroundings. The wider area is residential suburban part of Tripoli called Anfeh, situated about 16 km from Tripoli Port.

Hraiche is located 4 km to the north from the Anfeh Hima protected area important for migratory birds.

C.1.2 Bauchrieh, Beirut

Phase I equipment that will be centralised at Bauchrieh for project implementation includes 59 transformers (owned by EDL and Aley concession) with the total weight of 60,076 kg and oil weight of 14,115 kg. The site covers a surface of 4,600 m² in a residential area in northern Beirut (see Figure C-6). It is located about 1.5 km away from main Beirut - Jounieh highway and 4.5 km from Beirut Port. Population of the neighbouring area is estimated at around 25,000; population of Beirut is 1.9 million.

Out of the total site area, approximately 4,000 m² is used for outdoors storage of transformers while the remaining 600 m² are occupied with repair workshops and closed storage facilities. Bauchrieh is the biggest transformers repair site in Lebanon, where EDL maintains and when possible, repairs its equipment. Transformers declared as scrap are stored here in open space, together with new and repaired ones. Most of the site is paved with concrete or asphalt. The site is connected to electricity and water supply networks. Basic emergency equipment is found at the site and emergency operational procedures are in place.



Figure C-5: Aerial view of Bauchrieh site

The site has an underground network to collect oil from the buildings where transformers are tested, drained and refilled. Collected effluents are channelled without any treatment to a 30 m deep well that has been in use for more than 40 years. The diameter of the well is 2.5 meters. Water effluents from the site are also pumped/ discharged into the public sewage system without any treatment.



Figure C-6: Sampled locations at Bauchrieh

A preliminary investigation of the site's contamination was carried out by COWI in 2011⁸. Eleven samples were taken from the soil and have shown an average PCBs concentration of 105 ppm. Seven samples were taken from the well – both from the liquid phase and from sediments. The results of the analysis for oil-water mix showed PCBs concentration of 2,224 µg/l and for water from the well of 7,370 µg/l. Results for the samples taken from well's sediments showed contamination level of 1,741 mg/kg. The study estimated 55 t of PCBs contaminated oil and an unknown quantity of contaminated sludge had accumulated in the well over time, posing high risks for groundwater and contamination of surrounding wells.

The study also provided an estimation of the potential total PCBs quantities on the site. It assumed the site may be contaminated at an average level of 105 mg/kg. Based on the assumption that 20 cm of surface soil (over the 4,000 m² area of the site) is contaminated, the content of pure PCBs was estimated at 200 kg. Sampled locations are presented in Figure C-7.

The 2011 COWI study outlined potential remediation activities in two phases, as presented below.

Phase 1:

- Prepare a detailed plan for the mapping and characterization of the site;
- Establish an interim storage for sludge and solid waste that would result from the cleaning of surfacing and that would be removed during this phase;
- Cleaning all surfacing of contaminated sludge and waste to minimize immediate risk from fire, contact/ inhalation and on-going contamination of surfacing, soil and groundwater;
- Systematically map the contaminations of the surfacing including the upper 50 cm of the soil underlying the surfacing;
- Perform a risk assessment of contamination in the soil and concrete and assess the need for removal of the contamination.

Phase 2 (assumed activities - to be re-assessed on the basis of the results of Phase 1):

- Expand the interim storage for soil/ concrete or establish another storage of-site;
- Abrade/demolish surfacing with high PCB content (presumably >100 mg/kg), package it and dispose it abroad (assumed 10 tonnes) – the limit quantity to be disposed of abroad to be determined on the basis of an assessment considering the risk and the available resources for disposal. If more of the concrete is highly contaminated, it may be necessary in order to keep the costs within the budget to increase the applied limit value (that is above 100 mg/kg) and dispose of more of contaminated soil locally in the interim storage for soil/ concrete until further treatment;
- Demolish surfacing with low PCBs content (10-100 mg/kg) and securely store either on-site or dispose off-site in an interim storage for soil/concrete. Concentrations < 10 mg/kg are considered uncontaminated and left on the site.

Full investigation and assessment of the site is planned to be undertaken under the GEF/ WB project.

⁸ COWI A/S, Enviro-consultant and ECODIT Liban Sarl, Sustainable POPs Management Project – Lebanon: PCB Inventory Update and Project Preparation Study, final report, September 2011

Conditions at the site and equipment stored in December 2017 are shown in figure C-8.



Transformers stored in the open, exposed to weather conditions



Water pumped out of the site into public sewage system



The oil dumping well



Soil contamination



Surrounding residential area

Figure C-7: Conditions at Bauchrieh site, December 2017

Bauchrieh storage and maintenance workshop are located in a densely populated quarter of Beirut. A significant share of the surrounding residential buildings extract water from private wells⁹, and the risk of contamination of these drinking water sources has been assessed as high (COWI, 2011). Distances to other water bodies/ sources are shown in Table C-3.

Table C-3: Water resources near the Bouchrieh site

Spring/ river	Direction from the site	Distance from the site (m)
Beirut river	W	1,500
Ain el Jdaide	NE	1,500
Ain Fraigi	E	2,400
Ain Maqsbi	E	2,300
Captured source	S	1,800
Ain er Rohbaine	SE	2,500

Source: ESIA, GEF/ WB project

There are no nature protected areas in the vicinity of the site. Data on biodiversity in Lebanon is limited in general, due to a lack of biodiversity monitoring programmes.

C.1.3 Jbeil concession storage, Jbeil/ Byblos

The central storage site of Jbeil Concession is located on the outskirts of the touristic coastal city of Jbeil/ Byblos, which is UNESCO's World Heritage Site. Location of the site is shown in Figure C-9. The site is accessed by the main coastal highway; distance to Beirut Port is around 35 km. Population of the town's is around 70,000.

A total of 25 transformers contaminated with PCBs will be brought to the site (from various facilities/ locations managed by Jbeil concession) for Phase I disposal, with a weight of 28,978 kg (including 6,192 kg of oil). The equipment on the site is stored both in closed facilities as well as in open spaces on the site.

Storage facilities and the site itself are connected to water and electricity supplies and partially equipped with emergency appliances (fire safety equipment is available at the site). Emergency operational procedures are in place. Covered part of the storage has an integral concrete floor and the roof is in a good shape. A drainage system with an oil interceptor is not found at the site.

⁹ According to the ESIA (GEF/ WB project), there are 13 wells around the site in cadastral areas of Ain Check, Anwar, Dekweneh, Fanar (Bonjus), Jdeideh, Karmid, Mar Antonios, Nacouzi, Nahr el Mawt, Rawda, Saloumeh, Zaatrieh, and Zoghzhogi.



Figure C-8: Location of the Jbeil concession storage site

The ground on the site does not appear to be contaminated. There are no water bodies or wells in the vicinity (within 500 m radius), and no protected areas. Wadi Baachta stream is located 1 km to the north of the site, and Wadi Mouhnane stream 1.5 km to the south. The site is however located in a proximity of residential areas with schools and hospitals. The closest housing units are located immediately next to the site. There are no agricultural activities in the vicinity.

C.1.4 Army barrack Kfarchima, Beirut

The army barrack Kfarchima is located in a wider area of the city of Beirut. Population living within 1 km from the site is estimated at around 10,000. The site stores 5 decommissioned Askarel transformers ready for Phase I disposal. Total weight of transformers is 7,830 kg (of which 2,283 kg oil). Position of the site is shown in Figure C-10.



Figure C-9: Location of Kfarchima army barrack

Transformers are kept in the open area on a fenced site (part of the army complex in Kfarchima). Emergency equipment is partially available (only fire safety) and the emergency procedures are in place. Transformers are kept on a concrete surface without a drainage system. The ground on the site does not appear to be contaminated.

There are no water bodies, wells or protected areas in the vicinity of the site. The principal land uses in the area surrounding the site are industrial and residential. There are also some agricultural activities nearby, with crop production taking place in the belt spreading from 100 m to 1 km distance from the site. Animals do not have access to the site/ do not graze in the vicinity.

C.1.5 Zahrani oil refinery, Saida district

Disused Zahrani oil refinery and related Zahrani power plant are located on the very shore of the Mediterranean Sea in Saida district, South Lebanon (location shown in Figure C-11). There are no settlements/ residential areas nearby the site. The closest town – Saida – has been identified as one of the NAP hot spot areas. Six transformers with the total weight of 1,617 kg (including 510 kg of oil) are located on the site and will be available for Phase I disposal. The equipment is owned by Zahrani authority – operator of Zahrani power plant.



Figure C-10: Zahrani oil refinery site

The equipment is kept in the open space on a fenced site that is connected to water and electricity networks. Fire protection equipment and emergency operational procedures are in place. There is no concrete floor in the area where transformers are kept (and no drainage system). There are however no visible signs of soil contamination on the site.

The distance from the storage site to the shore is less than 100 m, and nearby sea waters are used for recreational purposes/ bathing. There is also a well within 500 m radius from the site. Zahrani river outfall is on the southern edge of the Zahrani power plant.

The main land uses in the surrounding areas are industrial and agricultural (but crop production does not take place within 100 m radius).

C.1.6 Midane, Zahleh district

Midane is town with a population of around 150,000 in Zahleh district, Bekaa. The site indicated on Figure C-12 is managed by Zahleh concession and is used as a storage place for 7 transformers (total weight of 7,258 kg, of which 1,599 kg oil) to be collected in Phase I. The storage is located in Midane's suburban village on the Chtoura-Zahle highway, some 48 km from Beirut.

Transformers are kept in the open space and the access to the site is not restricted (no fence). Connections to water and electricity supplies are in place. The site is partially equipped with emergency tools (fire safety equipment) and the procedures for operation in emergency cases are in place. Transformers are kept on a concrete surface (without a drainage system with oil interceptor) and there are no visible signs of soil contamination.



Figure C-11: Midane storage site, Zahleh concession

The closest water course is Litani river which flows about 1.5 km south of the site. There are no wells in the vicinity, and no protected areas.

The main land uses in the surrounding areas are residential and agricultural. Crops are produced in the immediate vicinity of the site – within 100 m belt. Animals do not have access to and do not graze around the site.

C.1.7 Awali river hydro power plant, Jezzine district

Two transformers (1,315 kg total weight, 340 kg of oil) are stored at Awali hydro power plant in Jezzine district, are ready for collection in Phase I. The plant is located at the Bisri Dam on Awali river, 56 km south of Beirut and is accessed by Saida – Jezzine road. There are no major settlements near the site; location is shown in Figure C-13.

The equipment is owned by Litani authority and is kept in the open space on a fenced site (within the hydro power plant complex) connected to water and electricity supplies. Fire protection equipment is found on the site and emergency operational procedures are in place. Transformers are kept on an integral concrete surface without a drainage system/ oil interceptor. There are no signs of soil contamination around the area where transformers are kept.



Figure C-12: Awali hydro power plant

Anane lake and Awali accumulation are located in the proximity, designated as water sensitive areas. These water bodies are not used for recreational purposes. The closest well is found at a distance of 500 m. The main land uses around the site are green/ natural areas, with some housing units and agricultural activities. Crops are produced in the belt 100 m – 1 km from the site, and animals graze in its immediate vicinity (within 100 m belt).

C.1.8 Nahr Ibrahim hydro power plan, Jbeil district

PCBs inventory completed in June 2018 identified two contaminated in-use transformers at Nahr Ibrahim hydro power plant that will be available for Phase I disposal (with the total weight of 180 kg). The plant is

operated by Nahr Ibrahim concession. It is located in Jbeil district, around 47 km from Beirut on the Nahr Ibrahim river. Location of the site is shown in Figure C-14. There are no major settlements in the vicinity.

Transformers are currently kept in a closed room with good conditions. The site is connected to water and electricity supply networks, it is equipped with fire protection gear and has emergency operational procedures. The site is surrounded by forests and Nahr Ibrahim river, which is used for recreational purposes and is designated as water sensitive area. The closest well is found at a distance of 500 m.

Small-scale agricultural activities are performed in the proximity of the site: crops are produced within 100 m radius, and animals grazing next to the site has been evidenced.

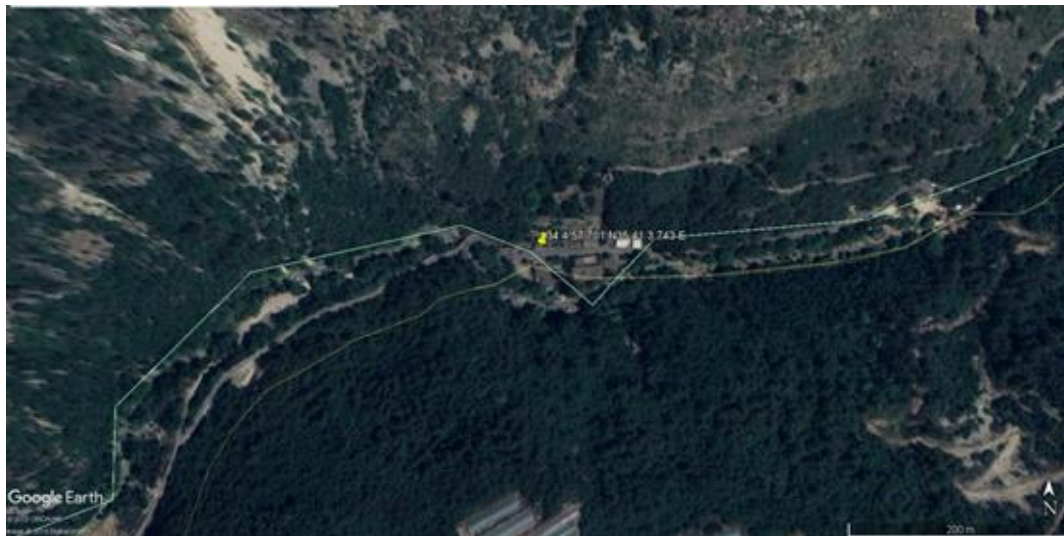


Figure C-13: Nahr Ibrahim hydro power plant

D. Assessment of alternatives

D.1 Available options for safeguarding

Hazardous waste clean-up projects, in general, have several options available for safeguarding, transport and disposal. These are set out in the Table D-1. Whilst the optimum situation would be that Government would be able to rely on 100% national capacity, either within Government or from private industry, to carry out project work, the technological ability and experience necessary for high risk projects is very often not adequate nationally. The default option has historically been for projects to select international contractors to carry out the bulk of works and have responsibility for the elements involved. Additionally, underwriters insuring projects frequently will deal only with established international contractors that are financially stable and have a track record of experience. Contrarily, employment of an International Contractor to undertake all the work involved leaves no room for the country to gain the experience necessary to undertake similar work in the future. Therefore, it is important to use any opportunity available to allow national capacity to develop.

The situation in Lebanon, as highlighted in the assessment of national capacity, is that stakeholders have had experience of PCB management in a current project (to be completed in May 2019) with the assistance of the WB. In this case work was principally implemented by an international contractor utilising sub-contractors to undertake lower risk aspects of the work. Supervision of the work was the responsibility of Government supported by expertise from the WB and the Project Implementation Unit. Crucially, by employing International Contractor, the project was able to transfer liability for the work to the contractor. As stressed in the assessment of national capacity the Lebanese Government does not see a lead role for itself in the management or implementation of work.

In the Child Project 1.1, which is also planned to have 2 phases, it is expected that a similar model will be used. It is hoped that sub-contractors will play a much larger role in the second phase of the project to allow the experience necessary for capacity development.

D.2 Assessment of options for safeguarding, transport and disposal

The principal method of assessment of available strategy options is by SWOT (Strengths, Weaknesses, Opportunities and Threats). Through SWOT, assessors can set out the key considerations involved and make a justification for selection of the final strategy. A SWOT analysis was carried out of the available safeguarding, transport and disposal options for the scenario in Lebanon, in addition to the assessment of national capacity. The following are key factors for consideration in the strategy:

- Government does not have the immediate ambition to directly manage or implement hazardous waste clean-up and is more motivated towards project management and supervision over the long-term;
- UN projects have a relatively short -term life span and agencies are keen that as much capacity is built during the project to allow hazardous waste management to be dealt with on a national basis following project closure. The opportunity for follow on projects dealing with the same waste would be limited;
- There is opportunity under the current project to follow on from capacity building that was started under the WB project;
- There is difficulty for national contractors to be underwritten by insurance companies for high risk projects;
- There would be significant reputational damage for all stakeholders in the event of an accident occurring. Accidents are far less likely to occur using an international as opposed to a national contractor;
- Budgetary requirements of using an international contractor are greater than using a local contractor. As stated in the assessment of national capacity, there are no facilities in Lebanon with the ability to treat or dispose of PCB equipment and associated PCB contaminated wastes. All waste classified as contaminated with PCB (>50ppm) must therefore be exported for treatment or disposal. [Annex 3](#) outlines a SWOT assessment of potential disposal options as a mechanism of evaluation. The detailed assessment tables setting out points of evaluation of alternatives for elements of repackaging, temporary storage and transport are set out in [Annex 2](#).

E. Safeguarding, transport and disposal strategies

The existing institutional capacities (of the Ministry of Environment) can be utilised to support management and supervisory functions in the repackaging – transport – storage steps of the process, whereas the need for project's assistance towards execution of these functions has been established (possibly through engagement of a national consultant or establishment of PMU). Options to dispose of hazardous wastes in the country are not available hence their export is needed. For the implementation of safeguarding and shipping activities, Ministry of Environment stated preference for engagement of an international contractor (qualified hazardous waste management company) to perform integrated services – draining, packaging, labelling, collection, notification, shipment and final disposal of PCB wastes – while utilising (and developing) available national capacities to the greatest possible extent. Capacity building needs (covering topics such as notification process; draining - packaging- loading on freight containers; transport ADR/IMDG/RID; etc.) for national stakeholders has been established. Technical capacities of the equipment owners (EDL and concession holders) can be utilised, in particular for transport and storage of the equipment. Notification process for transboundary movements/ shipments of hazardous waste needs to be handled in line with Basel Convention and Regulation 1013/06/EC (using common notification documents). The process is initiated by export authority – Ministry of Environment/ competent environmental authority – and is led in close cooperation with the import authority in order to secure necessary permits. The export authority appoints export/ notifying company (it can be a local company authorized for hazardous waste management or international contractor).

E.1 Repackaging, storage and transport strategies

At the commencement of works the PCB stock will be present at 8 sites across Lebanon ready for safeguarding. The contracted team will visit each site in series to carry out the necessary safeguarding. Once safeguarding has been completed shipping containers will be delivered to the sites for loading and transport.

E.1.1 Safeguarding

Safeguarding will consist of draining equipment of all oil into UN approved containers under controlled conditions and preparing the empty electrical equipment for transport. Importantly, integral equipment which contain PCB oil such as capacitors, will be made safe and ready for loading and transport but will not be drained of oil unless it is necessary. To improve capacity, it is recommended that the safeguarding team is lead by the International Contractor and that team members are comprised of representatives of both the equipment owners and also waste management companies.

E.1.2 Transport

The transportation element of the work will comprise of the safe loading and loading of the waste into ISO shipping containers followed by transport to the disposal points. The waste will be subject to road haulage from each of the 8 storage locations to the port of export, transportation by sea followed by road haulage on the European mainland to the disposal points. The international contractor will be responsible for implementation of the transport element. Again, it is proposed that local sub-

contractors are employed to provide as much resources and support to the principal contractor as possible. The international contractor will supervise packing of the shipping container according to Basel Convention guidelines and the IMDG code.

Ideally the International Contractor will initiate Basel Convention Notification procedures soon after award of the contract to allow transport to follow on from repackaging as soon as it has been completed. If necessary, the PCB oil and drained electrical equipment will remain at the storage locations until approval for movement is received.

E.2 Disposal strategy

The final choice of disposal methodologies will be left for the principal contractor to propose in bidding documentation. All proposed methods of disposal will be evaluated at tender stage to ensure compliance with the Basel and Stockholm Conventions.

E.2.1 Disposal of PCB oil

Disposal options analysis in section of available disposal methods shows that High Temperature Incineration (HTI) will be necessary for equipment and oil containing high concentrations of PCB (>10,000-15,000ppm). Equipment containing lower levels of PCB will be treated by either base catalysed reduction or sodium dispersion.

Material	Method
Oil	Dechlorination by base catalysed reduction
	Dechlorination by sodium dispersion
	High Temperature Incineration (HTI)

E.2.2 Disposal of drained equipment

Material	Method
Metal	Autoclaving
	Thermal desorption
Ceramic	Thermal desorption
Cardboard / wood	High temperature incineration

E.2.3 Management

~~Higher level m~~Management and facilitation of repackaging work will be conducted through a ~~MedProgramme Coordinating Unit (the MedPCU)~~, in cooperation with the EA technical project

officers/ consultants and national consultant/ project manager for Lebanon. Repackaging activities will be coordinated through regular meetings with necessary stakeholders. Direct management of repackaging works will be the responsibility of the principle contractor.

E.2.4 Supervision

Supervision of project work will be conducted by the Ministry of Environment with support from the Executing Agency UNE MAP and its representatives or consultants, additional technical support will be provided by UNE Chemicals and Waste Division.

F. Strategy implementation risk analysis

After evaluation and selection of the safeguarding, transport and disposal strategies the next stage of risk management is to identify principle risks affecting the project so that appropriate mitigation measures can be taken. The risks are categorized in 7 key areas of the project which include risks to health, safety and the environment also risks that affect the success of the project through project management, sustainability and consultation. The risks are set out in a tabular format – the risk identification tables. Once the risks have been identified, appropriate mitigation measures are then set out against each risk in corresponding risk mitigation planning tables. The identification of risk and specification of mitigation measures then allows for the development of the environmental monitoring plan. This plan describes in detail both risks and mitigation measures, how the mitigation measures should be monitored, and which individual or organization has the responsibility for doing so. The risk identification and mitigation plans are set in [Annex 4](#) tables.

G. Environmental monitoring and evaluation plan

The identification of risk and specification of mitigation measures in section F. allows for the development of the environmental monitoring plan. This plan describes in detail both risks and mitigation measures, how the mitigation measures should be monitored, and which individual or organization has the responsibility for doing so. The Environmental monitoring and evaluation plan is set out in [Annex 5](#).

H. Public information and stakeholder involvement

Through conducting the risk identification and mitigation planning, the following measures are emphasised:

Prior and during safeguarding works

- Set up of stakeholder meeting with local community to inform of:
 - Safeguarding works and general methods, risks and risk mitigation
 - Intended length of time of works
 - Risk level and impact on local community

Inform local hospital and nearby facilities of works due to take place.

Prior and during transportation

- Meetings held with community leaders and civil society to inform of works, particularly:
 - When transport is to take place
 - What routes (proposed routes to avoid sensitive areas (schools / hospitals / residential areas))
 - Emergency procedures
 - Contact with police and local authorities prior to transport

Annex 1: Legislative framework relevant for POPs management

Legal text no.	Date	Title and relevance to POPs
Laws		
64	12/08/1988	<p>Environmental preservation against pollution from harmful wastes and hazardous materials</p> <p>Defines the harmful wastes as being the residues and by-products resulting or released from every transformation or usage of materials containing any hazardous materials listed in its Annex 1. It also regulates the following:</p> <ul style="list-style-type: none"> - Control and minimization of POPs from HCW; - Control of all types of hazardous wastes including POPs wastes; - Control of production, transport, trade of harmful and hazardous wastes; - Rules of disposal of hazardous wastes; - Penalties of violations leading to environmental pollution
444	29/07/2002	<p>Protection of the environment</p> <p>This is the national framework law on the environment. The key regulated areas include:</p> <ul style="list-style-type: none"> - Definition of environmental principles; - Procedures of environmental planning; - Resource mobilization for environmental protection; - Procedures to monitor environmental pollution; - Environmental Impact Assessments; - Protection of all environmental media from all types of pollution, including harmful and hazardous chemicals.
Decrees		
5100	12/04/1982	<p>Identification of technical requirements for the importers and sellers of pesticides and rodenticides for domestic use</p> <p>Sets up the rules, regulations and technical requirements for occupations related to the use of pesticides and rodenticides for domestic purposes - importing, selling, filling, packaging, preparing, manufacturing and spraying.</p>
4917	24/03/1994	<p>Amendment of classification of dangerous, harmful and disturbing establishments</p> <p>Classifying dangerous, harmful and disturbing industrial establishment, including those that may use or release POPs.</p>
13528	19/11/1998	<p>Regulatory texts for trade of pesticides</p> <p>Sets the general legal rules applied for occupations related to import, selling, packaging, preparation, production and use of pesticides, as well as fines in cases of violations.</p>
8018	12/06/2002	<p>Definition of principles, procedures and conditions for construction and operation permits in industrial establishments</p>
9765	11/03/2003	<p>Monitoring, measures and penalties related to industrial establishments</p> <ul style="list-style-type: none"> - Fundamentals of monitoring the industrial establishments; - Measures and penalties for violations taking into consideration provisions of Decree 8018/2002.
11802	03/01/2004	<p>Regulating the occupational prevention, safety and health in all enterprises subject to the Code of Labour</p> <ul style="list-style-type: none"> - Prevention and safety at work; - Health conditions at work; - Safety measures for chemical usage at work; - Prevention measures for gasoline usage.

8471	04/07/2012	Environmental compliance for establishments <ul style="list-style-type: none"> - Definition of establishments, environmental audits; - Explanation of environmental compliance; - Procedures and requirements for the application of environmental compliance certificate; - Violations and penalties.
Ministerial Decisions		
52/1	29/07/1996	Definition of standards and maximum allowable limits for the reduction of air, water and soil pollution <ul style="list-style-type: none"> - Standards for drinking water; - Standards of wastewater; - ELVs for air pollution at work; ELVs for noise pollution; ELVs for air pollution resulting from waste burning; ELVs for air pollution in cement industries.
92/1	20/05/1998	Standards of pesticides labels and the information required on them Banning the import, retail and trade of pesticide unless its label includes the standards and information in accordance to the Decision's annex.
94/1	20/05/1998	Banning the import of some pesticides Banning the import of Aldrin, Chlordane, Chlordecone, DDT, Dieldrin, Endrin, HCH containing less than 99% of gamma isomer, Heptachlor, Mirex.
8/1	30/01/2001	Specifications and standards for air emissions and liquid effluents generated from classified institutions and for wastewater treatment plants Amendments of the ELVs adopted under Decision 52/1.
262/1	26/09/2001	Banning the registration of some pesticides (Lindane)
554/1	19/12/2008	Internal regulation for pesticides committee Organization and mandate of the pesticides committee to deal with all pesticides (including POPs)
570/1	24/12/2008	Banning the import of some pesticides (Hexachlorobenzene and Pentachlorophenol and its salts and esters)
79/1	13/02/2010	Registration cancellation and banning the import of some pesticides (Endosulfan)
310/1	24/06/2010	Organization of registration of imported and nationally produced pesticides and its usages
868/1	14/12/2010	Allowing the selling and using some pesticides Allowing selling and using existing Endosulfan in the country till its expiry date.
311/1	26/01/2011	Organization of import of pesticides
539/1	17/11/2015	Determination of the deadlines of applications for the environmental compliance certificates from the industrial establishments subject to Decree 8471/2012
590/1	21/12/2015	Mechanism of action, from an environmental perspective, with license applications of industrial establishments <ul style="list-style-type: none"> - Procedures for taking the decision from an environmental perspective with regard to license applications of industrial establishments within the MoE; - Mechanism to be followed by the MoE representative at the industrial permitting committee; - Mechanism of coordination between the MoE representative at the industrial permitting committee and the department of urban protection at the service of urban environment at the MoE.

Annex 2: Safeguarding strategy alternatives assessment

H.1.1 Safeguarding strategy alternatives assessment

Available safeguarding options	Option	Strengths	Weaknesses	Opportunities	Threats
	Management				
	100% International Contractor	High Competence, very quick and according to programme. No cost overruns outside agreed contract. Relatively simple to gain insurance for liability required and sufficient capital to cover bond required under Basel Convention notification process.	Very costly	Total responsibility and liability transferred	No skills transfer or capacity building.
	100% Local contractor	Flexibility on the ground, good local knowledge & cost reduction of operations	Lower technical competence difficulty in getting required insurance, insurance costs much higher	In-country completion / self-implementation, national retention of GEF funds	Pre-conceptions that national contractors are not able to carry out works effectively.
	International Contractor / Local Contractor partnership	Flexibility on the ground, good local knowledge & cost reduction of operations	Higher insurance cost. Reputational risk to project if accident were to happen	Skills & Knowledge transfer	Counterproductive for International Contractor to involve local contractor to high degree – over the long term skills transfer not in interests of International Contractor.
Govt. / international contractor partnership	International contractor to take lead.	Govt. restricted to supervision only. Govt. not willing to undertake operations. This would be as if option 1. Govt. had limited personnel and skill dedicated to PCB management.	Ability to demonstrate cooperation. Skills transfer to build national capacity.	Skills transfer or capacity building Long term view would be for Govt. to contract out hazardous waste management either to local or international contractor. Any effort spent building capacity would be lost.	

100% Government	Cost effective	Lack of technical and practical knowledge. Difficulty in underwriting liability	Self-implementation	Environmental and Health and Safety concerns
Supervision				
90% Government (Environment Agency) 10% NGO /IGO	Flexibility on the ground, good local knowledge & cost reduction	Miss communication possible.	Skills & Knowledge transfer	Lack of cooperation by agencies
100% International Contractor	High Competence	Very costly. Third party / impartial monitoring required	Total responsibility and liability contracted	No skills transfer
100% Government	Cost effective	Lack of technical and practical knowledge	Self-implementation	Environmental and Health and Safety concerns
Implementation				
100% International Contractor	High Competence	Very costly	Total responsibility and liability contracted	No skills transfer – opportunity to build capacity during GEF project is lost
International Contractor / national sub-contractor partnership	Flexibility on the ground, good local knowledge & cost reduction	Not total control for the principle contractor – non acceptance of liability in the event of an incident.	Skills & Knowledge transfer.	Non-participation or integration by agencies. Opportunity to build capacity whilst liability coverage by principle international contractor.
100% Government	Cost effective	Lack of technical and practical knowledge	Self implementation	Environmental and Health and Safety concerns

H.1.2 Transport strategy alternatives assessment

	Option	Strengths	Weaknesses	Opportunities	Threats
Available transport options	Personnel				
	International Contractor supplied (hire vehicle)	Good reliability	High cost	Income for local business	
	Sub-contractor supplied	Cost effective	Standard of vehicles possibly poor	Income for local business	International Contractor unwilling to use sub-contractor supplied vehicles
	Public transport	Very cost effective	Time table difficult to fit in with work time. Often subject to cancellation / can be very unreliable.		Project workers unwilling to use public transport.
	Government supplied	Cost effective	Govt. not willing to use its own resources for project work. Pressure on local resources. Transport usually pre-assigned to other Govt. tasks.	Income for local business	
	Equipment				
	National Contractor supplied	Increased Reliability	Weak management. Drivers may not have required qualifications.	Income for local business	Close supervision required
	International Contractor Supplied	Good Reliability	Higher cost	Risk Transfer	
	Government Supplied	Cost effective	May not be able to supply	Self-implementation	Budget and equipment may not be available
	Waste to Interim collection – waste already placed at Interim collection points prior to work starting				
	Waste to main collection point/point of export:				
	International Contractor using freight forwarder	Reliable. Use of internationally recognised operating systems ADR / IMDG	Very high cost	No management concerns/Risk Transfer	International Contractor has to rely on local services i.e. national haulage contractor in any event.
	Regional / National Haulage Contractor	Increased Reliability	Weak operational systems higher risk of problems occurring. Drivers and vehicles not	Income for local business, Contribution to nationally implemented solution	International Contractor has limited control over sub-contractors operations

			operating at standard required		
	Government Supplied	Cost effective	Govt. not willing or unable to provide resources. Weak operational systems higher risk of problems occurring. Drivers and vehicles not operating at standard required	Self-implementation	Risk for Health Safety and Environmental damage

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Annex 3: Disposal options assessment

Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
Available disposal options	High Temperature Incineration (HTI), Rotary and Static at a Western European facility	100% destruction under certified management systems. Process regulated under national and EU legislation. Long term monitoring conducted. Able to deal with all concentrations of PCB oil	Potential for environmental damage during transportation via road and sea. Capital intensive. Export under Basel Convention time consuming.	Transfer of risk to international contractor.	Public opposition to disposal of toxic waste by thermal method; both in-country and in the country of disposal.
	Local or regional Cement Kiln	Regional or local disposal of material	Inadequate scrubbing system if operated without installation giving rise to toxic off gas (containing Dioxin). Physical and systematic controls – required. High potential for environmental damage. Local regulatory and monitoring systems not robust enough. Project overtime and budget due to the required installation of control measures. Significant investment required to bring plants up to local and international standards. Not	Use of pre-existing local infrastructure and support of sustainable industry. Allows development of waste management infrastructure for other hazardous wastes over the long term.	Opposition to use of thermal technique by national stakeholders and civil society Reputational risk to stakeholders.

Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
			<p>suitable for all pesticide wastes.</p> <p>Can treat oils but infrastructure not set up to deal with transformer carcasses.</p>		
	<p>Dechlorination using base catalysed decomposition or Sodium dispersion</p>	<p>Cheaper treatment possible using established method at certified facility</p>	<p>Upper limit or 10000 ppm oil – Askarel not possible to be dealt with.</p>	<p>Could be used as part of integrated disposal strategy.</p>	

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Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
	Dechlorination using base catalysed decomposition	In-country construction of imported of technology and plant. Local disposal of treated material.	<p>Restriction on import by local govt. Technology not ready for use in project time frame. Regulatory and monitoring systems not strong enough. Production of unintended dioxin due to uncontrolled and incomplete reaction.</p> <p>Project overtime and budget. Environmental pollution. Very high set-up costs for a relatively small amount of material. Significant local legislative obstacles to overcome before importation and operation possible. Use of non-thermal technology strong benefit.</p>	Development of waste industry using novel / newer technology in Lebanon.	Not enough PCB waste over the long term to make investment case for installation.

Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
	Dechlorination using sodium catalysed decomposition	On-site use of imported technology and plant. Local disposal of treated material.	<p>Restriction on import by local govt. Technology not ready for use in project time frame. Regulatory and monitoring systems not strong enough. Production of unintended dioxin due to uncontrolled and incomplete reaction.</p> <p>Project overtime and budget. Environmental pollution. Very high set-up costs for a relatively small amount of material. Significant local legislative obstacles to overcome before importation and operation possible. Use of non-thermal technology strong benefit.</p>	Development of waste industry using novel / newer technology in Lebanon	Not enough waste over the long term to make investment case for installation.
	Thermal Desorption - Mobile Pyrolysis	Local disposal of material.	<p>Restriction on import of equipment by govt. Technology not ready for use in project time frame. Regulatory and monitoring systems not strong enough.</p> <p>Project overtime and budget. Environmental pollution. Very high set-up costs for a</p>	On-site use of imported equipment.	Opposition to use of thermal technique by national stakeholders and civil society Reputational risk to stakeholders.

Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
			<p>relatively small amount of material. Significant local legislative obstacles to overcome before importation and operation possible. Illegal disposal of wastes. Mobile systems technologically deficient in comparison to more robust static systems.</p>		

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Annex 4: Risk identification and risk mitigation planning

H.2 Risk identification table for repackaging and temporary storage activities

High Risk Stores–	Repackaging and temporary storage	
Initial Safeguarding Option Repackaging and temporary storage of pre-centralised PCB equipment	At the site:	200T of miscellaneous electrical equipment contaminated with PCB
Scope of Work	Repackaging and temporary storage of contaminated electrical equipment and PCB oil	
Risk category		
Health and Safety Chemical hazard	<ul style="list-style-type: none"> • Direct exposure to workers <ul style="list-style-type: none"> ○ Dermal contact with contaminated oil PCB ○ Oral contact with contaminated oil PCB ○ Inhalation of PCB vapour / contaminated dusts • Secondary exposure <ul style="list-style-type: none"> ○ Tracking of PCB residues by workers from workplace to home and offices 	
Health and Safety Other hazards	<ul style="list-style-type: none"> • Fire resulting from sparking electrical equipment during cutting of electrical equipment (hotworks) • Electric shock whilst using electrical equipment 	
Environmental hazard	<ul style="list-style-type: none"> • Spillage of PCB contaminated oil and leakage into outside environment over facility floor • Leaching of PCB contaminated oils through facility floor • Escape of PCB residues into environment – inadequate disposal of contaminated equipment including PPE • Tracking of PCB residue from storage facility into local environment via contaminated vehicles • Tracking of PCB residue from storage facility into local environment via contaminated footwear • Infiltration of rain into storage area to wash out PCB contaminated oil into local environment • Spread of dusts / particles during cutting of electrical equipment • Failure of packaging equipment leading to leakage • Pollution resulting from theft of electrical equipment 	
Equipment	<ul style="list-style-type: none"> • Poor quality equipment resulting in failure <ul style="list-style-type: none"> ○ Failure of lifting equipment 	

	<ul style="list-style-type: none"> • Non-availability of required equipment, for example forklift truck • Equipment breakdown, for example forklift
Project Management	<ul style="list-style-type: none"> • Project not running according to time • Lack of access to stores • Activities not conducted according to international standards • Lack of communication between principle contractor and sub-contractors leading to miss-management
Consultation	<ul style="list-style-type: none"> • Inadequate consultation with local people prior to works
Sustainability	<ul style="list-style-type: none"> • Residual contamination discovered at site • No transfer of knowledge
Budget	<ul style="list-style-type: none"> • Project over spend • Budget spent on activities / items not aligned with project activities • Government / project not honouring commitments set out in project document

H.2.1 Risk identification table for transport activities

High Risk Store–	Transport	
Initial Safeguarding Option Repackaging of pre-centralised PCB equipment and oil	At the site:	Approximately 200T of miscellaneous electrical equipment contaminated with PCB
Scope of Work	Repackaging and temporary storage of contaminated electrical equipment and PCB oil	
Risk category		
Health and Safety Chemical hazard	<ul style="list-style-type: none"> • PCB residue on exterior of packaging leading to exposure during loading and transport 	
Health and Safety Other hazards	<ul style="list-style-type: none"> • Road traffic accident due to: <ul style="list-style-type: none"> ○ Improper loading of cargo ○ Poor vehicle condition <ul style="list-style-type: none"> ▪ Tyres, trailer, lights etc. ○ Poor driving ○ Driving at busy times of day • Road traffic accident in residential area 	

Environmental hazard	<ul style="list-style-type: none"> • Road traffic accident in environmentally sensitive area • Spillage incident
Equipment	<ul style="list-style-type: none"> • Poor quality vehicle quality and / or trailer unit • Vehicles not equipped according to ADR regs
Project Management	<ul style="list-style-type: none"> • Lack of vehicles • Notifications not completed
Consultation	<ul style="list-style-type: none"> • Inadequate consultation with local people prior to works
Sustainability	<ul style="list-style-type: none"> • No transfer of knowledge
Budget	<ul style="list-style-type: none"> • Project over spend • Budget spent on activities / items not aligned with project activities • Government / project not honoring commitments set out in project document

H.2.2 Risk identification table for disposal activities

High Risk Store–	Disposal	
Initial Safeguarding Option Repackaging of pre-centralised PCB equipment and oil	At the site:	Approximately 200T of miscellaneous electrical equipment contaminated with PCB
Scope of Work		
Risk category		
Health and Safety Chemical hazard	<ul style="list-style-type: none"> • Exposure to PCB through direct and indirect exposure • Plant not operated according to design • Inadequate storage of waste materials pre and post treatment • Inadequate handling of raw materials • Mixing of wastes including PCB leading to uncontrolled reactions • Inadequate operating systems leading to indirect exposure of persons outside plant and in surrounding area (for example workers wearing dirty footwear to home and offices) 	
Health and Safety Other hazards	<ul style="list-style-type: none"> • Operating systems inadequate leading to high risk situations with machinery and plant structure 	
Environmental hazard	<ul style="list-style-type: none"> • Inadequate design of plant leading to uncontrolled emissions • Incomplete destruction of waste materials • Production of dioxin and furan in destruction process • Effluent treatment system poor or non-existent leading to leaching of contaminated rainwater outside plant 	

Equipment	<ul style="list-style-type: none"> • Plant structurally deficient • Materials handling and lifting equipment not adequate
Project Management	<ul style="list-style-type: none"> • Plant not operated by skilled personnel • Plant not large enough or has enough disposal capacity to treat wastes • Operating systems not sufficient to deal with toxic waste • Failure of monitoring systems leading to lack of knowledge about extent of emission releases to air, water and soil
Consultation	<ul style="list-style-type: none"> • Inadequate consultation with local people prior to works
Sustainability	<ul style="list-style-type: none"> • No transfer of knowledge
Budget	<ul style="list-style-type: none"> • Project over spend • Budget spent on activities / items not aligned with project activities • Government / project not honouring commitments set out in project document • Disposal company has cash flow issues leading to non destruction of wastes

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H.2.3 Mitigation planning for safeguarding and temporary storage

Risk Analysis	Identified risks	Mitigation measures
<p>Health and Safety Chemical hazard</p>	<ul style="list-style-type: none"> • Dermal contact with contaminated oil PCB • Eye contact • Oral contact with contaminated oil PCB • Inhalation of PCB vapour / contaminated dusts, particularly during cutting operations • Tracking of PCB residues from workplace to home and offices 	<ul style="list-style-type: none"> • Health monitoring of workers • Use of correct PPE, introduction of Risk Assessment and Standard Operating Procedures during Storage / Repackaging Operations <ul style="list-style-type: none"> ○ Chemical resistant boots / non-lace with steel midsole toe caps ○ PVC or nitrile gloves ○ Organic vapour protective respiratory wear <ul style="list-style-type: none"> ▪ Full face during pumping operations ▪ ¾ face during handling of solids or newly packaged liquids ○ Disposable type 5/6 coveralls during movement of contaminated equipment or drums ○ Semi disposable type 4 coveralls during pumping of contaminated oils • Use of non-rotary / reciprocating blades during cutting of electrical equipment • Use of site zoning (clean / intermediate / dirty areas / change of clothes and footwear before entry or leaving site) <ul style="list-style-type: none"> ○ Installation and use of three stage changing area • Collection of contaminated refuse • Incorporation of designated break / eating area away from operational area • Introduction of no smoking at work policy in operating procedures • Ensure adequate ventilation • Installation of emergency shower / ensure access to water for emergency • Development of Emergency Plan • Writing of Health, Safety and Environment Plan for storage operations • Writing of Health, Safety and Environment Plan for repackaging operations • Submission of HSE Plan for technical approval to PCU • Training of all operatives in the working methodology • Briefing and training in operatives of Emergency Plan
<p>Health and Safety Physical / mechanical hazards</p>	<ul style="list-style-type: none"> • slips, trips and falls • crush injuries from poorly stacked falling equipment • crush injuries / impact injury from building collapse 	<ul style="list-style-type: none"> • Introduction of Risk Assessment and Standard Operating Procedures during Storage / Repackaging Operations • Introduction of clean working methods • Tidy placement of electrical equipment • Introduction of maximum stacking height for drums of two pallets high, • No stacking of electrical equipment • Workers to wear safety helmets

	<ul style="list-style-type: none"> • head injury resulting from mechanical impact with electrical equipment • impact / crush injuries during handling of heavy equipment • manual lifting of heavy equipment resulting in bodily injury • injury / mechanical damage during vehicle collision • vibration injury during cutting of electrical equipment (white finger) • Fall from heights / fall from large electrical item • Hearing damage due to very loud noise 	<ul style="list-style-type: none"> • No manual handling of >25kg per person • Use of certified lifting equipment • Use of impact resistant gloves during cutting • Use of low vibration cutting equipment during cutting • Use of ladders for working at height • Ensure adequate lighting in design • Use of ear defence equipment when necessary – ear defenders and ear plugs • Use of trained drivers to drive forklift or other lifting equipment
Health and Safety Other hazards	<ul style="list-style-type: none"> • Fire resulting from sparking electrical equipment during cutting of electrical equipment (hotworks) • Electric shock during use of electrically powered equipment 	<ul style="list-style-type: none"> • Use of non-sparking tools • Non-sparking ATEX rated 110v electrical generation equipment • 110v electrical supply either through generator / transformer or static supply • Prohibition of use of flame cutting torch (oxyacetylene or otherwise) • Prohibition of electric arc welding during storage or maintenance • Designated storage area for fuels and solvents, (away from PCBs) • All equipment used by International Contractor to show evidence of maintenance and monitoring programme
Environmental	<ul style="list-style-type: none"> • Spillage of PCB contaminated oil and leakage into outside environment over facility floor • Leaching of PCB contaminated oils through facility floor • Escape of PCB residues into environment – inadequate disposal of contaminated equipment including PPE • Tracking of PCB residue from storage facility into local 	<ul style="list-style-type: none"> • Collection of all contaminated materials and equipment for proper disposal during repackaging operations <ul style="list-style-type: none"> ◦ Installation of designated refuse storage area • Use of steel bund / drip trays under PCB contaminated electrical equipment during repackaging • Use of designated forklift truck / lifting equipment inside working area • Guarantee that forklift to be used not to be used in food production or agriculture (i.e. not to come from general hire company) • Use of security measures to eliminate theft • Use of non-rotary cutting methods • Introduction of site zoning / clean / intermediate / dirty areas • Contractor to have ISO 14001 certification

	<p>environment via contaminated vehicles</p> <ul style="list-style-type: none"> • Tracking of PCB residue from storage facility into local environment via contaminated footwear • Infiltration of rain into storage area to wash out PCB contaminated oil into local environment • Spread of dusts / particles during cutting of electrical equipment • Pollution resulting from theft of electrical equipment 	
Equipment	<ul style="list-style-type: none"> • Poor quality storage / repackaging / lifting equipment resulting in failure 	<ul style="list-style-type: none"> • International contractor to specify design and quality of safeguarding equipment <ul style="list-style-type: none"> ○ PPE ○ UN packaging materials ○ Steel drip tray construction ○ Electrical equipment required for repackaging • Inspection of all equipment prior to use • Use of trained drivers to drive forklift
Project Management	<ul style="list-style-type: none"> • Project not running according to time • Activities not conducted according to international standards • Lack of communication leading to breakdown 	<ul style="list-style-type: none"> • Project management oversight • Technical oversight of project activities • Regular project management meetings <ul style="list-style-type: none"> ○ Steering committee meetings ○ MedPCU meetings ○ Oversight by IA • Contactor to have ISO 9001 certification
Consultation	<ul style="list-style-type: none"> • Inadequate consultation with local people prior to works 	<ul style="list-style-type: none"> • Set up of stakeholder meeting with local community to inform of: <ul style="list-style-type: none"> ○ Safeguarding works and general risks ○ length of time of works ○ risk level and impact on local community ○ Inform stakeholders of risk reduction measures • Inform local hospital and nearby facilities of works due to take place
Sustainability	<ul style="list-style-type: none"> • Residual contamination discovered at site following 	<ul style="list-style-type: none"> • Adherence to EAMP and HSE plan • Project to ensure training

	<p>demolition rendering site not able to be used for original use</p> <ul style="list-style-type: none"> • Non transfer of skills 	<ul style="list-style-type: none"> • Project to try to ensure responsibility of tasks given to sub-contractor
Budget	<ul style="list-style-type: none"> • Project over spend • Budget spent on activities / items not aligned with project activities • Government / project not honouring commitments set out in project document 	<ul style="list-style-type: none"> • Project budgeting • Financial oversight by IA and EA • Procurement planning • Regular communication / reporting regarding budgetary issues

H.2.4 Mitigation planning table for transport activities

Risk category	Identified risks	Mitigation measures
Health and Safety Chemical hazard	<ul style="list-style-type: none"> • PCB residue on exterior of packaging leading to exposure during loading and transport 	<ul style="list-style-type: none"> • Careful repackaging • Inspection of packages during / after repackaging and during loading onto ISO container
Health and Safety Other hazards	<ul style="list-style-type: none"> • Road traffic accident due to: <ul style="list-style-type: none"> ○ Improper loading of cargo ○ Poor vehicle condition <ul style="list-style-type: none"> ▪ Tyres, trailer, lights etc. ○ Poor driving ○ Driving at busy times of day • Road traffic accident in residential area 	<ul style="list-style-type: none"> • Inspection of vehicle prior to departure • Use of trained drivers only • Adherence to ADR during road transport • Loading of containers according to IMDG • Use of steel drip tray under equipment • Generation of transport plan to avoid driving during busy times and through residential areas • Submission of transport plan for technical approval to PCU prior to transport
Environmental hazard	<ul style="list-style-type: none"> • Road traffic accident in environmentally sensitive area 	<ul style="list-style-type: none"> • Generation of transport plan to avoid driving through protected / environmentally sensitive areas
Equipment	<ul style="list-style-type: none"> • Poor quality vehicle quality and / or trailer unit • Vehicles not equipped according to ADR regulations 	<ul style="list-style-type: none"> • Inspection of tractor unit and trailer prior to departure (use of inspection check list) • Training of driver in ADR

Project Management	<ul style="list-style-type: none"> • Lack of vehicles • Notifications not completed 	<ul style="list-style-type: none"> • Supervision of contractor project management
Consultation	<ul style="list-style-type: none"> • Inadequate consultation with local people prior to works 	<ul style="list-style-type: none"> • Meetings held with community leaders and civil society to inform of works, particularly: <ul style="list-style-type: none"> ○ When transport is to take place ○ What routes (proposed routes to avoid sensitive areas (schools / hospitals / residential areas) ○ Emergency procedures ○ Contact with police and local authorities prior to transport
Sustainability	<ul style="list-style-type: none"> • No transfer of knowledge 	<ul style="list-style-type: none"> • Use of sub-contractor where possible
Budget	<ul style="list-style-type: none"> • Project over spend 	<ul style="list-style-type: none"> • Designation of responsibilities between contractor and sub-contractor in contractual agreement • Supervision of contractor project management • Clear contract and BOQ

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Annex 5: Environmental monitoring and evaluation plan

	Mitigation measures	Parameters to be monitored	Location	Data measurements and/or methods and equipment)	Frequency of monitoring	Responsibility for M&E (incl. and reporting) review
Safeguarding and temporary storage	Health monitor of workers	Fitness for work prior to starting	Clinic	General medical test	Once	Contractor to implement, MedPCU
	International Contractor to have personnel with sufficient experience	<ul style="list-style-type: none"> • No. years' experience • Qualifications • Experience of working in foreign country 	Bid documents	<ul style="list-style-type: none"> • No. years' experience • Qualifications • Experience of working in foreign country 	Once	Project officers

	<p>Principle contractor to write HSE plan for high risk sites, Generic plan to be included for low risk sites.</p>	<ul style="list-style-type: none"> • Overview • Contacts • Detailed risk assessment for each working method • Standard operating procedures • Packaging materials • General equipment <ul style="list-style-type: none"> ○ Type ○ Certification ○ Maintenance • Lifting equipment • PPE • Site map • Emergency plan • Transport planning • Training • Gant chart and project planning • Package list 	HSE Plan	Presence or absence	Continual	Review by project technical officers/ MedPCU designated supervisor
	<ul style="list-style-type: none"> • Training of personnel 	<p>Check training agenda Check training has been conducted</p>	Class room / site	<p>Length of training Training agenda Pass mark</p>	<p>Once prior to work starting / use of tool box talk system and briefing of workers during work</p>	MedPCU designated supervisor
	<ul style="list-style-type: none"> • Set-up and use of site zoning 	Dirty / intermediate / clean section	Site	<p>Ensure site zoning in place and is used correctly</p>	<p>Check tender for design of area Continual monitoring to ensure in place</p>	MedPCU designated supervisor

	<ul style="list-style-type: none"> • Check working area for safety equipment 	<ul style="list-style-type: none"> • Eyewash • Fire extinguishers • Spill kit • Drip trays and bunding • Safety signs • Emergency water • Emergency shower • Earthing cable during pumping 	Site	Presence or absence	Check tender for design of area and supply of appropriate equipment Continual	MedPCU designated supervisor
	<ul style="list-style-type: none"> • Installation of sign system 	<ul style="list-style-type: none"> • Hazard warning • Chemical hazards • Physical hazards • Prohibition signs • No entry • No smoking • No eating / drinking • Working area signs • PPE required • Non-working area signs • Emergency exit signs 	Tender documentation / HSE Plan / Site	Check tender for design of area Continual	MedPCU designated supervisor	site
	<ul style="list-style-type: none"> • Use of designated break / eating area away from operational area 	Designated break eating area	Site	Presence or absence	Continually during works	MedPCU designated supervisor

	<ul style="list-style-type: none"> • Ensure adequate ventilation 	Adequate ventilation	Site	Presence or absence	Continually during works	MedPCU designated supervisor
	<ul style="list-style-type: none"> • Electrical supply either through generator / transformer or static supply considering installation and operational safety 	Design	HSE plan and Site	Presence or absence	Inspection of HSE plan and equipment list – check on-site	MedPCU designated supervisor
	<ul style="list-style-type: none"> • Storage of fuels and solvents away from PCB 	Location	Site	Presence or absence	Once during design Construction Quality check during supervisory checks of construction	MedPCU designated supervisor

	<ul style="list-style-type: none"> Designated refuse storage and collection of all contaminated wastes 	Presence absence	Site	Presence absence	Continual	MedPCU designated supervisor
	<ul style="list-style-type: none"> Inspection of equipment 	<ul style="list-style-type: none"> Lifting equipment Electrical equipment Mechanical equipment PPE 	HSE plan / site	Certification and condition	Check certification and conduct physical inspection during works	MedPCU designated supervisor
	<ul style="list-style-type: none"> Use of forklift and other equipment 	<ul style="list-style-type: none"> Ensure contaminated wheels only to be used on industrial areas – not to be used in food or farming 	Site		Physical inspection during works	MedPCU designated supervisor

	Mitigation measures	Parameters to be monitored	Location	Data and/or measurements (incl. methods and equipment)	Frequency of monitoring	Responsibility for (incl. and reporting)	M&E review
Transport	Qualification of International Contractor representative in ADR & IMDG	Certificate	Bid documents	Presence / absence	Once at tender stage	Project technical officers	
	Development of transport plan	Route, times of travel, emergency procedures, proposed manifest	Office	Check plan	2 weeks before departure	MedPCU designated supervisor	
	Drip trays in containers under packages containing liquids	Drip tray presence and condition	All shipping containers transporting liquid	Drip tray presence and condition	Prior to transport	MedPCU designated supervisor	
	Use of suitable and road worthy vehicle under supervision of international contractor	Tender questionnaire / Inspection of vehicles prior to departure: <ul style="list-style-type: none"> - vehicle registration documents and all service/maintenance records; - driver licence and training certificates along with a record of performance; - vehicle inspection checklists; - Vehicle equipment checklists - Waste manifest and transport documentation 	Site	Visual	Inspection of tender questionnaire / Continual assessment during works	MedPCU designated supervisor	

	Supervised loading	Performance	Site	Visual oral	Continual assessment during works	MedPCU designated supervisor
	Escort of loaded vehicles to port of export	Escort	During transport	Presence / absence	During transport	MedPCU designated supervisor
	Prenotification of emergency services by International Contractor prior to departure		Site	Completed or not	Prior to transport	MedPCU designated supervisor
Disposal	Approval of proposed disposal facility by specialised technical unit	Bid documents	Tender	Tender process	Once	Project officers
	Disposal company to have environmental and project management systems <ul style="list-style-type: none"> • ISO 9000 • ISO 14000 	Bid documents	Tender	Tender process	Once	Project officers
	Disposal company to have proven track record of operations	Bid documents	Tender	Tender process	Once	Project officers

	Disposal company to have proven value and cash flow to ensure ability to deal with all wastes	Bid documents	Tender	Tender process	Once	Project officers
	Use of Regional / International contractor to take on liability	Bid documents		Inspection of bid documents	Once	Project officers
	Operation of disposal facility according to international and national legislation and guidelines	Incinerator performance monitored with respect to environmental legislation and monitoring standards <ul style="list-style-type: none"> • EU waste incineration directive or equivalent 	Facility	Audit	Continual	Contractor / Environment agency of country where facility is located
Communications	Development & Implementation of communications strategy	Audit	Facility	Audit	Once	MedPCU
Budget	Obtain firm bid from Regional or International Contractor detailing pricing structure	Pricing structure		Examination of bid document	Once	MedPCU
	Health Monitoring	Blood criteria – examination of medical certificates and health monitoring plan of plant workforce	Facility	Audit	Once	MedPCU
	Monitoring and tracking of waste disposal at final disposal facility	Verification of handover of waste to facility. Cert. of destruction	Facility	Audit	Once	MedPCU

Annex 6: List of Phase I equipment

MEANING OF THE COLORS/ SHADINGS

SDGs and related indicators of particular relevance for TDA

Grey ink

Indicators repeat in several rows/ columns

SDG Indicators	CORRESPONDING BARCELONA CONVENTION SYSTEM INDICATORS						ADDITIONAL DRIVERS INDICATORS (PB)
	MSSD	MAP Reporting System	IMAP	NAP/ H2020	SCP	Offshore, pollution from ships	
1.4.1 Proportion of population living in households with access to basic services	Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard) Indicator 14: Share of population with access to an improved sanitation system (total, urban, rural) (Mediterranean SD Dashboard) Indicator 17: Proportion of urban population with access to a decent dwelling (Mediterranean SD Dashboard)						
1.4.2 Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure	Number of rural development programs that include sustainability considerations, including in relation to women and youth (indicator recommended by the MSSD) Number of rural development programs that include support for traditional agricultural practices and landrace (indicator recommended by the MSSD)						
2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size 2.3.2 Average income of small-scale food producers, by sex and indigenous status	Number of rural development programs that include sustainability considerations, including in relation to women and youth (indicator recommended by the MSSD) Number of rural development programs that include support for traditional agricultural practices and landrace (indicator recommended by the MSSD)						
2.4.1 Proportion of agricultural area under productive and sustainable agriculture	Indicator 11: Global Food Security Index (Mediterranean SD Dashboard) Indicator 15: Proportion of agriculture quality products and Share of the agricultural land area used by organic farming (Mediterranean SD Dashboard)				Proportion of agricultural area under productive and sustainable agriculture (SCP AP) Agricultural area organic, total (SCP AP) Global food loss index (SCP AP, link to SDG 12.3.1)		
2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities 2.5.2 Proportion of local breeds	Number of seed banks operating in the region (Indicator recommended by the						

<p>3.9.1 Mortality rate attributed to household and ambient air pollution</p> <p>3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)</p> <p>3.9.3 Mortality rate attributed to unintentional poisoning</p>	<p>MSSD)</p> <p>Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard)</p> <p>Indicator 14: Share of population with access to an improved sanitation system (total, urban, rural) (Mediterranean SD Dashboard)</p>			<p>3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS)</p> <p>3.2: Proportion of population using safely managed sanitation services (SMSS)</p> <p>5.2 Bathing water quality</p> <p>6.2.1. Total heavy metals load released from industrial installations to the Mediterranean marine environment</p> <p>6.2.2. Furans and dioxins load released from industrial installations to the Mediterranean marine environment</p> <p>6.2.3. Polycyclic aromatic hydrocarbons (PAH) load released from industrial installations to the Mediterranean marine environment</p> <p>6.2.4. Volatile organic compounds (VOC) load released from industrial installations to the Mediterranean marine environment</p>	<p>Annual mean level of fine particulate matter (e.g. PM2,5 and PM10) in cities (SCP indicator)</p>	<p>Sulphur oxides (SOx) emission control area technical and feasibility study carried out, and roadmap put in place</p> <p>Number of ratifications of MARPOL Annex VI</p>	
<p>4.1.1 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex</p>	<p>Indicator 4: Youth literacy rate (Mediterranean SD Dashboard)</p> <p>Indicator 5: Girl/ boy primary and secondary school registration ratio (Mediterranean SD Dashboard)</p>						
<p>4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex</p>	<p>Indicator 4: Youth literacy rate (Mediterranean SD Dashboard)</p>						
<p>4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment</p>	<p>Status of implementation of the Mediterranean Strategy on Education for Sustainable Development (Indicator recommended by the MSSD)</p> <p>Number of countries that have launched national strategies on education for sustainable development (Indicator recommended by the MSSD)</p>						

5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure	Number of rural development programs that include sustainability considerations, including in relation to women and youth (indicator recommended by the MSSD)						
5.a.2 Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control							
6.1.1 Proportion of population using safely managed drinking water services	Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard)						
6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water	Indicator 14: Share of population with access to an improved sanitation system (total, urban, rural) (Mediterranean SD Dashboard)			3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS) 3.2: Proportion of population using safely managed sanitation services (SMSS)			
6.3.1 Proportion of wastewater safely treated	Percentage of wastewater treated by country (target is 90 per cent by 2025) (indicator recommended by the MSSD)		CI 13: Concentration of key nutrients in water column CI 14: Chlorophyll-a concentration in water column (IMAP) CI 17: Concentration of key harmful contaminants measured in the relevant matrix	4.1 Municipal wastewater collected and wastewater treated 4.2 Direct use of treated municipal wastewater 4.3 Release of nutrients from municipal wastewater 5.1 Nutrient concentrations in transitional, coastal and marine waters 5.2 Bathing water quality 6.1.1. Total BOD load discharged from industrial installations to the Mediterranean marine environment 6.1.2. Total Nitrogen load discharged from industrial installations to the Mediterranean marine environment 6.1.3. Total Phosphorus load discharged from industrial installations to the Mediterranean marine environment 6.2.1. Total heavy metals load released from industrial installations to the Mediterranean marine environment 6.2.2. Furans and dioxins load released from industrial installations to the Mediterranean marine environment 6.2.3. Polycyclic aromatic hydrocarbons (PAH) load released from industrial installations to the Mediterranean marine environment 6.2.4. Volatile organic compounds (VOC) load released from industrial installations to the Mediterranean marine environment	CI 18: Level of pollution effects of key contaminants where a cause and effect relationship has been established CI 20: Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood CI 21: Percentage of intestinal enterococci concentration measurements within established standards	CI 19: Occurrence, origin (where possible), extent of acute pollution events (e.g. slicks from oil, oil products and hazardous substances), and their impact on biota affected by this pollution Common standards, on the use and discharge of harmful or noxious substances and material, in line with relevant international standards and conventions defining inter alia limits and prohibitions at regional level formulated and adopted Common standards on the disposal of oil and oily mixtures and on the use and disposal of drilling fluids and cutting formulated and adopted All Contracting Parties to have established systems and procedures for national and sub-regional monitoring and surveillance including, where practicable, regular individual or coordinated aerial surveillance in the waters under their jurisdiction, if the Parties so agree All Mediterranean coastal States to have ensured the existence of a national legal framework (regulations) as a basis for prosecuting discharge offenders for infringements of MARPOL or of any national legal framework implementing it	
6.3.2 Proportion of bodies of water with good ambient water quality	Percentage of wastewater reused by country (indicator recommended by the MSSD)						
6.4.1 Change in water-use efficiency over time	Indicator 8: Water efficiency index (Mediterranean SD Dashboard)				Freshwater withdrawal as a proportion of available freshwater resources (also known as withdrawal intensity) (SCP AP)		
6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	Indicator 12: Water demand, total and by sector, compared to GDP (Mediterranean SD Dashboard)				Water Productivity (SCP AP) Water footprint (SCP AP)		

6.5.1 Degree of integrated water resources management implementation (0–100)	Number of river basins with integrated water resources management schemes in place (indicator recommended by the MSSD)						
6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation	Participation of countries in cross border integrated water resources management processes (indicator recommended by the MSSD)					Degree of integrated water resources management (IWRM) implementation (0-100) (SCP AP)	
6.6.1 Change in the extent of water-related ecosystems over time	Percentage of Mediterranean coastal wetlands protected						
7.2.1 Renewable energy share in the total final energy consumption	Indicator 21: Energy consumption (related to GDP) (Mediterranean SD Dashboard) Renewable energy rate (indicator recommended by the MSSD)					Renewable energy share in the total final energy consumption (SCP AP)	Installed capacity of offshore wind energy Electricity produced by offshore wind energy (Maritime) Renewable energy share in the total primary energy consumption (%) Number of renewable marine R&D projects, e.g. in biofuel/ biomass production from algae Installed capacity of onshore wind energy in coastal zones Installed capacity from tidal energy at the coast Installed capacity from wave and tidal energy at the coast
7.3.1 Energy intensity measured in terms of primary energy and GDP	Indicator 21: Energy consumption (related to GDP) (Mediterranean SD Dashboard)						Employment in offshore oil and gas Economic value offshore oil and gas sector (GDP contribution) Offshore oil and gas produced Number of exploration drills for oil and gas Desalination capacity installed Number of energy infrastructures in coastal areas Employment in energy sector Length of pipelines projects crossing the Mediterranean Sea Size/ economic value/ capacity of refineries at MED shores
8.1.1 Annual growth rate of real GDP per capita	Indicator 3: Gross Domestic Product (GDP) (Mediterranean SD Dashboard)						
8.4.1 Material footprint, material footprint per capita, and material footprint per GDP	Indicator 1: Ecological footprint (Mediterranean SD Dashboard)					Ecological footprint (SCP AP)	
8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Indicator 22: Material intensity of the economy (Mediterranean SD Dashboard)					Material footprint, per GDP and per capita (SCP AP) Domestic material consumption, per GDP and per capita (SCP AP) Green patents (Patents of Importance to Green Growth and Development of environment-related technologies, % of all technologies) (SCP AP)	

8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate								Employment in tourism sector (FTE, % total) Economic value of tourism sector (USD, GDP contribution) International Tourism Arrivals (per capita) Tourist resident ratio (tourism intensity) Number of overnight stays in tourist accommodation (tourism intensity) Ratio of national tourists Tourism density along the coast Quality of tourism accommodation Value / revenue of tourism taxes Seasonality of tourism in the coastal zones Evolution of tourism accommodation Cost of tourism accommodation
8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs				3.C.3 Are there policies to support sustainable tourism?		All Contracting Parties to have reported to the Secretariat on the measures they undertook to implement the Guidelines concerning Pleasure Craft Activities and the Protection of the Marine Environment in the Mediterranean		
9.4.1 CO ₂ emission per unit of value added	Indicator 20: Green House Gas emissions (related to GDP) (Mediterranean SD Dashboard)					Carbon footprint (SCP AP) CO ₂ emission per unit of value added (SCP AP)		
9.5.1 Research and development expenditure as a proportion of GDP	Indicator 25: Public and private expenses for research and development in percentage of GDP (Mediterranean SD Dashboard)							
9.5.2 Researchers (in full-time equivalent) per million inhabitants								
11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing	Indicator 17: Proportion of urban population with access to a decent dwelling (Mediterranean SD Dashboard)							
11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Percentage of the urban population using public transport (Indicator recommended by the MSSD) Number of private vehicle ownership per urban inhabitant (Indicator recommended by the MSSD)							
11.3.1 Ratio of land consumption rate to population growth rate				CI 16: Length of coastline subject to physical disturbance due to the influence of manmade structures Land use change (candidate indicator)				
11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically	Number of countries with participatory mechanisms enshrined in urban planning legislation (Indicator recommended by the MSSD)							

11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designation), level of government (national, regional and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector and sponsorship)	Indicator 18: Status of UNESCO world heritage sites (Mediterranean SD Dashboard)						
11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities	Indicator 19: Waste generated and treated by type of waste and treatment type (Mediterranean SD Dashboard)			2.A.1 Waste collection coverage 2.A.2 Waste captured by the formal waste sector 2.B.1 % of waste to uncontrolled dumpsites 2.B.2 Uncontrolled dumpsites in Coastal Areas 2.B.3 Waste going to dumpsites in Coastal Areas	Generation of waste (SCP AP) Annual mean level of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted) (SCP indicator)		
11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	Status of the assessment (of high- and low-tech solutions that have been successfully implemented to achieve waste reduction) initiative (Indicator recommended by the MSSD)						
11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	Number of countries and large cities with initiatives to improve public open space (Indicator recommended by the MSSD) Urban public open space per capita (m2 per capita) (Indicator recommended by the MSSD) Istanbul Environment Friendly City Award put in place (Indicator recommended by the MSSD)						
11.a.1 Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city	Population trends in large, medium and small urban settlements by country (Indicator recommended by the MSSD)						
11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030	Sustainable urban toolbox put in place Number of harmonised indicators and tools for climate change vulnerability and mitigation assessments (Indicator recommended by the MSSD)						
11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Number of collaborative workshops, and capacity building activities on indicators and harmonisation (Indicator recommended by the MSSD)						

12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies				3.C.1 Are there Sustainable Consumption and Production plans or strategies? 3.C.4 Are there policies to support eco-labelling and eco-design?	Number of countries with SCP national action plans or SCP mainstreamed as a priority or a target into national policies (SCP indicator)		
12.2.1 Material footprint, material footprint per capita, and material footprint per GDP 12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Indicator 1: Ecological footprint (Mediterranean SD Dashboard) Indicator 22: Material intensity of the economy (Mediterranean SD Dashboard)			3.B.1 Is there a National Plan or Strategy for Waste Prevention? 3.B.2 Are there mandatory targets for recycling - recovery of packaging waste? 3.B.3 Are there EPR or Deposit- Return schemes for packaging waste? 3.B.4 Are there national policies to eliminate or reduce single-use plastics? 3.B.5 Are there financial incentives for reuse – resource recovery activities?	Ecological footprint (SCP AP) Material footprint, per GDP and per capita (SCP AP) Domestic material consumption, per GDP and per capita (SCP AP)		
12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement 12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment		Compliance with relevant BC Protocols		6.3.1. Total quantity of generated hazardous waste from industrial installations 6.3.2. Quantity of industrial hazardous waste disposed in environmentally sound manner relative to total quantity of generated hazardous waste from industrial installations 6.4.1. Number of industrial installations reporting periodically loads of pollutants discharged to the marine and coastal environments relative to the total number of industrial installations 6.4.2. Number of environmental inspections carried out by enforcement authorities in which industrial installations were found to be in breach of laws and regulations relative to the total number of executed inspections 6.4.3. Number of eliminated hotspots identified in the updated NAPs relative to the 2001 and 2015 baselines	Signatory if 1 to 3 international multilateral environmental agreements (Basel, Rotterdam and Stockholm Conventions) on hazardous waste, and other chemicals (SCP AP)	Number of ports providing adequate reception facilities Measures or initiatives taken for the delivery of ship-generated wastes Measures undertaken to implement the Guidelines and relevant provisions of the MARPOL Convention and of the Barcelona Convention Regional Plan on Marine Litter	
12.5.1 National recycling rate, tons of material recycled	Indicator 19: Waste generated and treated by type of waste and treatment type (MSSD SD Dashboard)			1.A Municipal waste composition 1.B Plastic waste generation per capita 2.C.1 % of plastic waste generated that is recycled 3.B.2 Are there mandatory targets for recycling - recovery of packaging waste? 3.B.3 Are there EPR or Deposit- Return schemes for packaging waste? 3.B.4 Are there national policies to eliminate or reduce single-use plastics?			
12.7.1 Number of countries implementing sustainable public procurement policies and action plans	Share of green or sustainable public procurement (Indicator recommended by the MSSD) National legislation on sustainable/green public procurement (MSSD Flagship initiative – Action 5.6.5)			3.C.2 Are there green procurement rules for the public sector in place?	SPP/ GPP as a percentage of total public procurement (in terms of monetary value) (SCP AP) Green patents (Patents of Importance to Green Growth and Development of environment-related technologies, % of all technologies) (SCP AP)		

<p>12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment</p>	<p>Status of implementation of the Mediterranean Strategy on Education for Sustainable Development (Indicator recommended by the MSSD)</p> <p>Number of countries that have launched national strategies on education for sustainable development (Indicator recommended by the MSSD)</p>						
<p>12.c.1 Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels</p>					<p>Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as proportion of total national expenditure on fossil fuels (SCP AP)</p>		
<p>13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)</p>	<p>Status of implementation of the commitments and obligations under the new UNFCCC climate agreement (Indicator recommended by the MSSD)</p> <p>Status of implementation of relevant regional climate change strategies and policies (Indicator recommended by the MSSD)</p>						
<p>13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula</p> <p>13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions</p>	<p>Science Policy Interface put in place (Indicator recommended by the MSSD)</p> <p>Number of regional climate change adaptation and mitigation knowledge-sharing platforms and support mechanisms aimed at fostering collaborative R&D and innovation programmes set up (Indicator recommended by the MSSD)</p> <p>Status of project disseminating regional climate knowledge (Indicator recommended by the MSSD)</p>						

14.1.1 Index of coastal eutrophication and floating plastic debris density			<p>CI 13: Concentration of key nutrients in water column CI 14: Chlorophyll-a concentration in water column CI 17: Concentration of key harmful contaminants measured in the relevant matrix CI 18: Level of pollution effects of key contaminants where a cause and effect relationship has been established CI 20: Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood CI 21: Percentage of intestinal enterococci concentration measurements within established standards CI 22: Trends in the amount of litter washed ashore and/or deposited on coastlines CI 23: Trends in the amount of litter in the water column including microplastics and on the seafloor CI 24: Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds, and marine turtles</p>	<p>1.A Municipal waste composition 1.B Plastic waste generation per capita 1.C % of population living in Coastal Areas 1.D % of Tourists in Coastal Areas 3.A.1 Is there a National Assessment for ML and its impacts? 3.A.2 Is there a National Plan or Strategy for ML? 3.A.3 Is there a National Plan or Strategy for Waste Management? 3.A.4 Is there a National Law on Waste? 3.A.5 Is there a national plan or target to close the dumpsites before 2030? 3.A.6 Is there a National Information system for waste management in place?</p>	Index of coastal eutrophication and floating plastic debris density (SCP AP)	<p>CI 19: Occurrence, origin (where possible), extent of acute pollution events (e.g. slicks from oil, oil products and hazardous substances), and their impact on biota affected by this pollution Number of marine pollution prevention and control regulatory instruments and policies updated or developed Measures undertaken for the establishment of places of refuges (for ships in need of assistance) Number of decision support tools (in case of marine pollution incidents) developed, updated and maintained Number of National oceanic-meteorological institutes to have joined the MONGOOS (Mediterranean Operational Network for the Global Ocean Observing System) Number of persons trained (for response to incidents involving oil and other harmful or noxious substances) Number of exercises carried out (to test national response capacity) Number of Guidelines revised, developed and integrated in national procedures (concerning accidental marine pollution preparedness)</p>	<p>Employment in ports and on ships Economic value of the maritime transport sector (GDP contribution) Volume of passenger traffic Volume of port/ freight traffic % of MED maritime freight/ total MED freight</p>
14.2.1 Proportion of national exclusive economic zones managed using ecosystem-based approaches			<p>CI 15: Location and extent of the habitats impacted directly by hydrographic alterations CI 16: Length of coastline subject to physical disturbance due to the influence of man-made structures Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals (candidate indicator) Levels of continuous low frequency sounds with the use of models as appropriate (candidate indicator)</p>			<p>Number of Contracting Parties that have disseminated the Guidelines for the control and management of ships' biofouling to the shipping industry and other interested parties All Contracting Parties to have applied the 2011 Guidelines to minimise the transfer of invasive aquatic species and report to IMO accordingly</p>	
14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations			CI 13: Concentration of key nutrients in water column				

14.4.1 Proportion of fish stocks within biologically sustainable levels			<p>CI 7: Spawning stock biomass</p> <p>CI 8: Total landings</p> <p>CI 9: Fishing mortality</p> <p>CI 10: Fishing effort</p> <p>CI 11: Catch per unit of effort (CPUE) or Landing per unit of effort (LPUE) as a proxy</p> <p>CI 12: Bycatch of vulnerable and non-target species</p>		<p>Proportion of fish stocks within biologically sustainable levels (SCP AP)</p> <p>Marine Trophic Index (also called Mean Trophic Level (TL) of fisheries landings (SCP AP)</p>	<p>Economic value of fisheries and aquaculture (GDP contribution)</p> <p>Total landed value</p> <p>Employment in fisheries sector</p> <p>Amount of fish caught</p> <p>Percentage of Fish Stock exploited over sustainable levels</p> <p>Farm production</p> <p>Number/production/ratio of certified organic aquaculture farms</p> <p>Number of personnel on semi-static aquaculture farms and related activities</p> <p>Number of jobs in large-scale fisheries</p> <p>Effective management of protected areas: share of coastal and marine habitats and species listed under international agreements (SPA protocol) that are in good condition (favourable, unfavourable etc.)</p> <p>Farm production values (Revenue)</p> <p>Fish farms (number of fish farms)</p> <p>Number of large shipping vessels</p> <p>Number of jobs in processing industry</p>
14.5.1 Coverage of protected areas in relation to marine areas	Indicator 7: Percentage of protected coastal and marine areas [under national jurisdiction] (Mediterranean Sustainability Dashboard)		<p>CI 1: Habitat distributional range</p> <p>CI 2: Condition of the habitat's typical species and communities</p> <p>CI 3: Species distributional range (EO1 related to marine mammals, seabirds, marine reptiles)</p> <p>CI 4: Population abundance of selected species (EO1, related to marine mammals, seabirds, marine reptiles)</p> <p>CI 5: Population demographic characteristics (EO1, e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles)</p>		<p>All Contracting Parties have ascertained whether there are maritime areas within their jurisdiction which need the protection afforded by their designation as Particularly Sensitive Sea Areas (PSSAs) and, if so ascertained, have initiated the process of requesting IMO to enable such designation</p> <p>Offshore common standards and guidelines for special restrictions or conditions for specially protected areas defined and adopted</p>	
14.6.1 Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing	Relevant national legislation adopted (MSSD Strategic direction 1.2)		<p>CI 7: Spawning stock biomass</p> <p>CI 8: Total landings</p> <p>CI 9: Fishing mortality</p> <p>CI 10: Fishing effort</p> <p>CI 11: Catch per unit of effort (CPUE) or Landing per unit of effort (LPUE) as a proxy</p> <p>CI 12: Bycatch of vulnerable and non-target species</p>			
14.a.1 Proportion of total research budget allocated to research in the field of marine technology						Number of R&D projects and activities shared and level of data sharing (related to accidental marine pollution prevention, preparedness and response)
14.b.1 Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries	<p>Percentage of contribution of maritime-related activities to the gross national product (MSSD Action 1.2.1)</p> <p>Number of countries with actions to improve access of small scale producers to markets (MSSD Action 2.5.1)</p>					<p>Jobs in artisanal fisheries</p> <p>Number of small scale fisheries vessels</p>

14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	Indicator 6: Number of ratifications and level of compliance as reported by BC Contracting Parties (Mediterranean SD Dashboard)	Number of ratifications (of the Convention and its Protocols) and level of compliance as reported by BC Contracting Parties				Number of ratifications MARPOL Convention and its Annexes Number of ratifications of other IMO relevant international conventions Number of ratifications of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) Number of ratification of the Barcelona Convention Offshore Protocol	
15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	Indicator 9: Number of protected areas participating in the Green list initiative (Mediterranean SD Dashboard)						
15.2.1 Progress towards sustainable forest management	Share of Mediterranean forests under sustainable management (Indicator recommended by the MSSD)				Index of sustainable forest management (SCP AP) Area of certified forest (SCP AP)		
15.3.1 Proportion of land that is degraded over total land area	Status of action plans for the restoration of land from extractive activities (Indicator recommended by the MSSD)						
15.5.1 Red List Index	Indicator 16: Number of Mediterranean threatened species included in legal documents (Mediterranean SD Dashboard) Number of States supporting and/or benefitting from the Mediterranean Trust Fund for MPAs (MSSD)		CI 1: Habitat distributional range CI 2: Condition of the habitat's typical species and communities CI 3: Species distributional range CI 4: Population abundance of selected species CI 5: Population demographic characteristics CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species CI 12: Bycatch of vulnerable and non-target species				
15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species		Number of countries with National Action Plans concerning species introductions and non-indigenous species	CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species				
15.9.1 Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020		Number of Parties reporting on the implementation of the Barcelona Convention and its Protocols					
15.a.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems	Indicator 10: Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems (Mediterranean SD Dashboard) Number of States supporting and/or benefitting from the Mediterranean Trust Fund for MPAs (MSSD)						

16.10.2 Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information	Indicator 26: Existing mechanisms to ensure public participation and access to environmental publication (Mediterranean SD Dashboard) Number of countries adopting the Aarhus Convention (indicator recommended by the MSSD) Number of countries with legal provisions in place for public participation in decision-making that affects the environment (indicator recommended by the MSSD)						
17.13.1 Macroeconomic Dashboard	Indicator 2: Human Development Index (Mediterranean SD Dashboard) Indicator 3: Gross Domestic Product (Mediterranean SD Dashboard)						
17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development	Indicator 23: Number of National Strategies for Sustainable Development adopted or updated [and number of updates since first edition] (Mediterranean Sustainability Dashboard) Number of countries where capacity development programmes on issues related to implementation and compliance with environmental obligations and agreements are put in place (Indicator recommended by the MSSD)						
17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals	Number of times Mediterranean Commission on Sustainable Development presented at the United Nations High-Level Political Forum on sustainable development (Indicator recommended by the MSSD)						
17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics	Status of the Mediterranean Sustainability Dashboard (MSSD)						

ADDITIONAL SDGs INDICATORS OF POTENTIAL RELEVANCE FOR TDA (WITHOUT DIRECT LINKAGES TO THE CURRENT SET OF INDICATORS OF THE BARCELONA CONVENTION SYSTEM)

- 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
- 5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex
- 5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments
- 5.5.2 Proportion of women in managerial positions
- 5.6.2 Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education
- 6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management
- 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
- 8.5.2 Unemployment rate, by sex, age and persons with disabilities
- 12.b.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools

SDG Indicators	CORRESPONDING BARCELONA CONVENTION SYSTEM INDICATORS, GROUPED IN THE GEF CATEGORIES		
	Process	Stress reduction	Environmental status
2.4.1 Proportion of agricultural area under productive and sustainable agriculture		Indicator 15: Proportion of agriculture quality products and Share of the agricultural land area used by organic farming (Mediterranean SD Dashboard) Agricultural area organic, total (SCP AP)	
6.1.1 Proportion of population using safely managed drinking water services		Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard)	
6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water		3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS) 3.2: Proportion of population using safely managed sanitation services (SMSS)	
6.3.1 Proportion of wastewater safely treated	Common standards, on the use and discharge of harmful or noxious substances and material, in line with relevant international standards and conventions defining inter alia limits and prohibitions at regional level formulated and adopted Common standards on the disposal of oil and oily mixtures and on the use and disposal of drilling fluids and cutting formulated and adopted	4.1 Municipal wastewater collected and wastewater treated 4.2 Direct use of treated municipal wastewater 4.3 Release of nutrients from municipal wastewater 5.1 Nutrient concentrations in transitional, coastal and marine waters 5.2 Bathing water quality 6.1.1. Total BOD load discharged from industrial installations to the Mediterranean marine environment 6.1.2. Total Nitrogen load discharged from industrial installations to the Mediterranean marine environment 6.1.3. Total Phosphorus load discharged from industrial installations to the Mediterranean marine environment	
6.3.2 Proportion of bodies of water with good ambient water quality	All Contracting Parties to have established systems and procedures for national and sub-regional monitoring and surveillance including, where practicable, regular individual or coordinated aerial surveillance in the waters under their jurisdiction, if the Parties so agree All Mediterranean coastal States to have ensured the existence of a national legal framework (regulations) as a basis for prosecuting discharge offenders for infringements of MARPOL or of any national legal framework implementing it	6.2.1. Total heavy metals load released from industrial installations to the Mediterranean marine environment 6.2.2. Furans and dioxins load released from industrial installations to the Mediterranean marine environment 6.2.3. Polycyclic aromatic hydrocarbons (PAH) load released from industrial installations to the Mediterranean marine environment 6.2.4. Volatile organic compounds (VOC) load released from industrial installations to the Mediterranean marine environment	
6.4.1 Change in water-use efficiency over time		Indicator 8: Water efficiency index (Mediterranean SD Dashboard) Indicator 12: Water demand, total and by sector, compared to GDP (Mediterranean SD Dashboard)	
6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources		Freshwater withdrawal as a proportion of available freshwater resources (also known as withdrawal intensity) (SCP AP) Water Productivity (SCP AP) Water footprint (SCP AP)	

<p>6.5.1 Degree of integrated water resources management implementation (0–100)</p> <p>6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation</p>	<p>Degree of integrated water resources management (IWRM) implementation (0-100) (SCP AP)</p> <p>Participation of countries in cross border integrated water resources management processes (indicator recommended by the MSSD)</p>		
<p>6.6.1 Change in the extent of water-related ecosystems over time</p>	<p>Percentage of Mediterranean coastal wetlands protected</p>		
<p>7.2.1 Renewable energy share in the total final energy consumption</p>		<p>Renewable energy share in the total final energy consumption (SCP AP)</p> <p>Installed capacity of offshore wind energy</p> <p>Electricity produced by offshore wind energy (Maritime) Renewable energy share in the total primary energy consumption (%)</p> <p>Number of renewable marine R&D projects, e.g. in biofuel/ biomass production from algae</p> <p>Installed capacity of onshore wind energy in coastal zones</p> <p>Installed capacity from tidal energy at the coast</p> <p>Installed capacity from wave and tidal energy at the coast</p>	
<p>7.3.1 Energy intensity measured in terms of primary energy and GDP</p>		<p>Energy intensity measured in terms of primary energy and GDP (SCP AP)</p> <p>Employment in offshore oil and gas</p> <p>Economic value offshore oil and gas sector (GDP contribution)</p> <p>Offshore oil and gas produced</p> <p>Number of exploration drills for oil and gas</p> <p>Desalination capacity installed</p> <p>Number of energy infrastructures in coastal areas</p> <p>Employment in energy sector</p> <p>Length of pipelines projects crossing the Mediterranean Sea</p> <p>Size/ economic value/ capacity of refineries at MED shores</p>	
<p>8.4.1 Material footprint, material footprint per capita, and material footprint per GDP</p> <p>8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP</p>		<p>Ecological footprint (SCP AP)</p> <p>Material footprint, per GDP and per capita (SCP AP)</p> <p>Domestic material consumption, per GDP and per capita (SCP AP)</p>	

<p>8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate</p> <p>8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs</p>	<p>3.C.3 Are there policies to support sustainable tourism?</p> <p>All Contracting Parties to have reported to the Secretariat on the measures they undertook to implement the Guidelines concerning Pleasure Craft Activities and the Protection of the Marine Environment in the Mediterranean</p>	<p>Employment in tourism sector (FTE, % total)</p> <p>Economic value of tourism sector (USD, GDP contribution)</p> <p>International Tourism Arrivals (per capita)</p> <p>Tourist resident ratio (tourism intensity)</p> <p>Number of overnight stays in tourist accommodation (tourism intensity)</p> <p>Ratio of national tourists</p> <p>Tourism density along the coast</p> <p>Quality of tourism accommodation</p> <p>Value / revenue of tourism taxes</p> <p>Seasonality of tourism in the coastal zones</p> <p>Evolution of tourism accommodation</p> <p>Cost of tourism accommodation</p>	
<p>9.4.1 CO₂ emission per unit of value added</p>		<p>Indicator 20: Green House Gas emissions (related to GDP) (Mediterranean SD Dashboard)</p> <p>Carbon footprint (SCP AP)</p> <p>CO₂ emission per unit of value added (SCP AP)</p>	
<p>11.3.1 Ratio of land consumption rate to population growth rate</p>			<p>CI 16: Length of coastline subject to physical disturbance due to the influence of manmade structures</p> <p>Land use change (candidate indicator)</p>
<p>11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically</p>	<p>Number of countries with participatory mechanisms enshrined in urban planning legislation (Indicator recommended by the MSSD)</p>		
<p>11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities</p> <p>11.6.2 Annual mean levels of fine particulate matter (e.g. PM_{2.5} and PM₁₀) in cities (population weighted)</p>	<p>Status of the assessment (of high- and low-tech solutions that have been successfully implemented to achieve waste reduction) initiative (Indicator recommended by the MSSD)</p>	<p>Indicator 19: Waste generated and treated by type of waste and treatment type (Mediterranean SD Dashboard)</p> <p>2.A.1 Waste collection coverage</p> <p>2.A.2 Waste captured by the formal waste sector</p> <p>2.B.1 % of waste to uncontrolled dumpsites</p> <p>2.B.2 Uncontrolled dumpsites in Coastal Areas</p> <p>2.B.3 Waste going to dumpsites in Coastal Areas</p>	<p>Annual mean level of fine particulate matter (e.g. PM_{2.5} and PM₁₀) in cities (population weighted) (SCP indicator)</p>
<p>11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030</p> <p>11.b.2 Proportion of local</p>	<p>Sustainable urban toolbox put in place</p> <p>Number of harmonised indicators and tools for climate change vulnerability and mitigation assessments (Indicator recommended by the MSSD)</p> <p>Number of collaborative workshops, and capacity building activities</p>		

<p>12.1.1 Number of countries that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies</p>	<p>Number of countries with SCP national action plans or SCP mainstreamed as a priority or a target into national policies (SCP indicator)</p> <p>3.C.1 Are there Sustainable Consumption and Production plans or strategies?</p> <p>3.C.4 Are there policies to support eco-labelling and eco-design?</p>		
<p>12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement</p> <p>12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment</p>	<p>Compliance with relevant BC Protocols</p> <p>Signatory if 1 to 3 international multilateral environmental agreements (Basel, Rotterdam and Stockholm Conventions) on hazardous waste, and other chemicals (SCP AP)</p> <p>6.4.1. Number of industrial installations reporting periodically loads of pollutants discharged to the marine and coastal environments relative to the total number of industrial installations</p> <p>6.4.2. Number of environmental inspections carried out by enforcement authorities in which industrial installations were found to be in breach of laws and regulations relative to the total number of executed inspections</p> <p>6.4.3. Number of eliminated hotspots identified in the updated NAPs relative to the 2001 and 2015 baselines</p> <p>Number of ports providing adequate reception facilities</p> <p>Measures or initiatives taken for the delivery of ship-generated wastes</p> <p>Measures undertaken to implement the Guidelines and relevant provisions of the MARPOL Convention and of the Barcelona Convention Regional Plan on Marine Litter</p>	<p>6.3.1. Total quantity of generated hazardous waste from industrial installations</p> <p>6.3.2. Quantity of industrial hazardous waste disposed in environmentally sound manner relative to total quantity of generated hazardous waste from industrial installations</p>	
<p>12.5.1 National recycling rate, tons of material recycled</p>		<p>1.A Municipal waste composition</p> <p>1.B Plastic waste generation per capita</p> <p>2.C.1 % of plastic waste generated that is recycled</p>	

<p>12.7.1 Number of countries implementing sustainable public procurement policies and action plans</p>	<p>Share of green or sustainable public procurement (Indicator recommended by the MSSD) National legislation on sustainable/green public procurement (MSSD Flagship initiative – Action 5.6.5) 3.C.2 Are there green procurement rules for the public sector in place? SPP/ GPP as a percentage of total public procurement (in terms of monetary value) (SCP AP) Green patents (Patents of Importance to Green Growth and Development of environment-related technologies, % of all technologies) (SCP AP)</p>		
<p>13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)</p>	<p>Status of implementation of the commitments and obligations under the new UNFCCC climate agreement (Indicator recommended by the MSSD) Status of implementation of relevant regional climate change strategies and policies (Indicator recommended by the MSSD)</p>		
<p>13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions</p>	<p>Science Policy Interface put in place (Indicator recommended by the MSSD) Number of regional climate change adaptation and mitigation knowledge-sharing platforms and support mechanisms aimed at fostering collaborative R&D and innovation programmes set up (Indicator recommended by the MSSD) Status of project disseminating regional climate knowledge (Indicator recommended by the MSSD)</p>		

<p>14.1.1 Index of coastal eutrophication and floating plastic debris density</p>	<p>3.A.1 Is there a National Assessment for ML and its impacts? 3.A.2 Is there a National Plan or Strategy for ML? 3.A.3 Is there a National Plan or Strategy for Waste Management? 3.A.4 Is there a National Law on Waste? 3.A.5 Is there a national plan or target to close the dumpsites before 2030? 3.A.6 Is there a National Information system for waste management in place? Number of marine pollution prevention and control regulatory instruments and policies updated or developed Measures undertaken for the establishment of places of refuges (for ships in need of assistance) Number of decision support tools (in case of marine pollution incidents) developed, updated and maintained Number of National oceano-meteorological institutes to have joined the MONGOOS (Mediterranean Operational Network for the Global Ocean Observing System) Number of persons trained (for response to incidents involving oil and other harmful or noxious substances) Number of exercises carried out (to test national response capacity) Number of Guidelines revised, developed and integrated in national procedures (concerning accidental marine pollution preparedness)</p>	<p>1.C % of population living in Coastal Areas 1.D % of Tourists in Coastal Areas Employment in ports and on ships Economic value of the maritime transport sector (GDP contribution) Volume of passenger traffic Volume of port/ freight traffic % of MED maritime freight/ total MED freight</p>	<p>CI 13: Concentration of key nutrients in water column CI 14: Chlorophyll-a concentration in water column CI 17: Concentration of key harmful contaminants measured in the relevant matrix CI 18: Level of pollution effects of key contaminants where a cause and effect relationship has been established CI 20: Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood CI 21: Percentage of intestinal enterococci concentration measurements within established standards CI 22: Trends in the amount of litter washed ashore and/or deposited on coastlines CI 23: Trends in the amount of litter in the water column including microplastics and on the seafloor CI 24: Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds, and marine turtles CI 19: Occurrence, origin (where possible), extent of acute pollution events (e.g. slicks from oil, oil products and hazardous substances), and their impact on biota affected by this pollution Index of coastal eutrophication and floating plastic debris density (SCP AP)</p>
<p>14.2.1 Proportion of national exclusive economic zones managed using ecosystem-based approaches</p>	<p>Number of Contracting Parties that have disseminated the Guidelines for the control and management of ships' biofouling to the shipping industry and other interested parties All Contracting Parties to have applied the 2011 Guidelines to minimise the transfer of invasive aquatic species and report to IMO accordingly</p>		<p>CI 15: Location and extent of the habitats impacted directly by hydrographic alterations CI 16: Length of coastline subject to physical disturbance due to the influence of man-made structures Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals (candidate indicator) Levels of continuous low frequency sounds with the use of models as appropriate (candidate indicator)</p>
<p>14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations</p>			<p>CI 13: Concentration of key nutrients in water column</p>

<p>14.4.1 Proportion of fish stocks within biologically sustainable levels</p>		<p>Economic value of fisheries and aquaculture (GDP contribution) Total landed value Employment in fisheries sector Amount of fish caught Percentage of Fish Stock exploited over sustainable levels Farm production Number/production/ratio of certified organic aquaculture farms Number of personnel on semi-static aquaculture farms and related activities Number of jobs in large-scale fisheries Effective management of protected areas: share of coastal and marine habitats and species listed under international agreements (SPA protocol) that are in good condition (favourable, unfavourable etc.) Farm production values (Revenue) Fish farms (number of fish farms) Number of large shipping vessels Number of jobs in processing industry</p>	<p>CI 7: Spawning stock biomass CI 8: Total landings CI 9: Fishing mortality CI 10: Fishing effort CI 11: Catch per unit of effort (CPUE) or Landing per unit of effort (LPUE) as a proxy CI 12: Bycatch of vulnerable and non-target species Proportion of fish stocks within biologically sustainable levels (SCP AP) Marine Trophic Index (also called Mean Trophic Level (TL) of fisheries landings (SCP AP)</p>
<p>14.5.1 Coverage of protected areas in relation to marine areas</p>	<p>All Contracting Parties have ascertained whether there are maritime areas within their jurisdiction which need the protection afforded by their designation as Particularly Sensitive Sea Areas (PSSAs) and, if so ascertained, have initiated the process of requesting IMO to enable such designation</p> <p>Offshore common standards and guidelines for special restrictions or conditions for specially protected areas defined and adopted</p>		<p>Indicator 7: Percentage of protected coastal and marine areas [under national jurisdiction] (Mediterranean Sustainability Dashboard) CI 1: Habitat distributional range CI 2: Condition of the habitat's typical species and communities CI 3: Species distributional range (EO1 related to marine mammals, seabirds, marine reptiles) CI 4: Population abundance of selected species (EO1, related to marine mammals, seabirds, marine reptiles) CI 5: Population demographic characteristics (EO1, e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles)</p>
<p>14.6.1 Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing</p>	<p>Relevant national legislation adopted (MSSD Strategic direction 1.2)</p>		
<p>14.a.1 Proportion of total research budget allocated to research in the field of marine technology</p>	<p>Number of R&D projects and activities shared and level of data sharing (related to accidental marine pollution prevention, preparedness and response)</p>		

<p>14.b.1 Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries</p>	<p>Percentage of contribution of maritime-related activities to the gross national product (MSSD Action 1.2.1)</p> <p>Number of countries with actions to improve access of small scale producers to markets (MSSD Action 2.5.1)</p>	<p>Jobs in artisanal fisheries</p> <p>Number of small scale fisheries vessels</p>	
<p>14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources</p>	<p>Indicator 6: Number of ratifications and level of compliance as reported by BC Contracting Parties (Mediterranean SD Dashboard)</p> <p>Number of ratifications MARPOL Convention and its Annexes</p> <p>Number of ratifications of other IMO relevant international conventions</p> <p>Number of ratifications of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention)</p> <p>Number of ratification of the Barcelona Convention Offshore Protocol</p>		
<p>15.5.1 Red List Index</p>	<p>Indicator 16: Number of Mediterranean threatened species included in legal documents (Mediterranean SD Dashboard)</p>		<p>CI 1: Habitat distributional range</p> <p>CI 2: Condition of the habitat's typical species and communities</p> <p>CI 3: Species distributional range</p> <p>CI 4: Population abundance of selected species</p> <p>CI 5: Population demographic characteristics</p> <p>CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species</p> <p>CI 12: Bycatch of vulnerable and non-target species</p>
<p>15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species</p>	<p>Number of countries with National Action Plans concerning species introductions and non-indigenous species</p>		<p>CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species</p>
<p>15.a.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems</p>	<p>Indicator 10: Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems (Mediterranean SD Dashboard)</p> <p>Number of States supporting and/or benefitting from the Mediterranean Trust Fund for MPAs (MSSD)</p>		

<p>17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development</p>	<p>Indicator 23: Number of National Strategies for Sustainable Development adopted or updated [and number of updates since first edition] (Mediterranean Sustainability Dashboard)</p> <p>Number of countries where capacity development programmes on issues related to implementation and compliance with environmental obligations and agreements are put in place (Indicator recommended by the MSSD)</p>		
<p>17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics</p>	<p>Status of the Mediterranean Sustainability Dashboard (MSSD)</p>		

ADDITIONAL SDGs INDICATORS OF POTENTIAL RELEVANCE FOR TDA (WITHOUT DIRECT LINKAGES TO THE CURRENT SET OF INDICATORS OF THE BARCELONA CONVENTION SYSTEM)

- 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
- 5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex
- 5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments
- 5.5.2 Proportion of women in managerial positions
- 5.6.2 Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education
- 6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management
- 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
- 8.5.2 Unemployment rate, by sex, age and persons with disabilities
- 12.b.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools

SDG Indicators	CORRESPONDING BARCELONA CONVENTION SYSTEM INDICATORS, GROUPED IN THE GEF CATEGORIES		
	Process	Stress reduction	Environmental status
2.4.1 Proportion of agricultural area under productive and sustainable agriculture		Indicator 15: Proportion of agriculture quality products and Share of the agricultural land area used by organic farming (Mediterranean SD Dashboard) Agricultural area organic, total (SCP AP)	
6.1.1 Proportion of population using safely managed drinking water services		Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard)	
6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water		NAP/ H2020 indicator: 3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS)	
6.3.1 Proportion of wastewater safely treated 6.3.2 Proportion of bodies of water with good ambient water quality	Offshore/ pollution from ships: All Contracting Parties to have established systems and procedures for national and sub-regional monitoring and surveillance including, where practicable, regular individual or coordinated aerial surveillance in the waters under their jurisdiction, if the Parties so agree	NAP/H2020 indicators: 4.2 Direct use of treated municipal wastewater 4.3 Release of nutrients from municipal wastewater 5.1 Nutrient concentrations in transitional, coastal and marine waters 5.2 Bathing water quality 6.1.1. Total BOD load discharged from industrial installations to the Mediterranean marine environment 6.1.2. Total Nitrogen load discharged from industrial installations to the Mediterranean marine environment 6.1.3. Total Phosphorus load discharged from industrial installations to the Mediterranean marine environment 6.2.1. Total heavy metals load released from industrial installations to the Mediterranean marine environment 6.2.2. Furans and dioxins load released from industrial installations to the Mediterranean marine environment 6.2.3. Polycyclic aromatic hydrocarbons (PAH) load released from industrial installations to the Mediterranean marine environment 6.2.4. Volatile organic compounds (VOC) load released from industrial installations to the Mediterranean marine environment	
6.4.1 Change in water-use efficiency over time 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources		Indicator 8: Water efficiency index (Mediterranean SD Dashboard) Water footprint (SCP AP)	

<p>6.5.1 Degree of integrated water resources management implementation (0–100)</p> <p>6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation</p>	<p>Degree of integrated water resources management (IWRM) implementation (0-100) (SCP AP)</p>		
<p>6.6.1 Change in the extent of water-related ecosystems over time</p>	<p>Percentage of Mediterranean coastal wetlands protected</p>		
<p>7.2.1 Renewable energy share in the total final energy consumption</p>		<p>Renewable energy share in the total final energy consumption (SCP AP) Drivers indicators: Installed capacity of offshore wind energy Electricity produced by offshore wind energy</p>	
<p>7.3.1 Energy intensity measured in terms of primary energy and GDP</p>		<p>Drivers indicators: Employment in offshore oil and gas Economic value offshore oil and gas sector (GDP contribution) Offshore oil and gas produced Number of exploration drills for oil and gas Length of pipelines projects crossing the Mediterranean Sea Size/ economic value/ capacity of refineries at MED shores</p>	
<p>8.4.1 Material footprint, material footprint per capita, and material footprint per GDP</p> <p>8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP</p>		<p>Ecological footprint (SCP AP)</p> <p>Material footprint, per GDP and per capita (SCP AP)</p> <p>Domestic material consumption, per GDP and per capita (SCP AP)</p>	
<p>8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate</p> <p>8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs</p>	<p>NAP/ H2020 indicators:</p> <p>3.C.3 Are there policies to support sustainable tourism?</p>	<p>Drivers indicators:</p> <p>Economic value of tourism sector (USD, GDP contribution) Tourism density along the coast</p>	

9.4.1 CO ₂ emission per unit of value added		Carbon footprint (SCP AP) CO ₂ emission per unit of value added (SCP AP)	
11.3.1 Ratio of land consumption rate to population growth rate			CI 16: Length of coastline subject to physical disturbance due to the influence of manmade structures
11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities 11.6.2 Annual mean levels of fine particulate matter (e.g. PM _{2.5} and PM ₁₀) in cities (population weighted)	Status of the assessment (of high- and low-tech solutions that have been successfully implemented to achieve waste reduction) initiative (Indicator recommended by the MSSD)	Indicator 19: Waste generated and treated by type of waste and treatment type (Mediterranean SD Dashboard) NAP/ H2020 indicators: 2.A.1 Waste collection coverage	
11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Sustainable urban toolbox put in place (MSSD) Number of harmonised indicators and tools for climate change vulnerability and mitigation assessments (Indicator recommended by the MSSD)		
12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies	Number of countries with SCP national action plans or SCP mainstreamed as a priority or a target into national policies (SCP indicator)		
12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement 12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment		NAP/ H2020 indicators: 6.3.1. Total quantity of generated hazardous waste from industrial installations 6.3.2. Quantity of industrial hazardous waste disposed in environmentally sound manner relative to total quantity of generated hazardous waste from industrial installations	

12.5.1 National recycling rate, tons of material recycled		NAP/ H2020 indicators: 1.A Municipal waste composition 1.B Plastic waste generation per capita 2.C.1 % of plastic waste generated that is recycled	
12.7.1 Number of countries implementing sustainable public procurement policies and action plans	Share of green or sustainable public procurement (Indicator recommended by the MSSD)		
13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)	Status of implementation of relevant regional climate change strategies and policies (Indicator recommended by the MSSD)		
13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions	Number of regional climate change adaptation and mitigation knowledge-sharing platforms and support mechanisms aimed at fostering collaborative R&D and innovation programmes set up (Indicator recommended by the MSSD)		

<p>14.1.1 Index of coastal eutrophication and floating plastic debris density</p>	<p>NAP/ H2020 indicators:</p> <p>3.A.1 Is there a National Assessment for ML and its impacts?</p> <p>3.A.3 Is there a National Plan or Strategy for Waste Management?</p>	<p>NAP/ H2020 indicators:</p> <p>1.C % of population living in Coastal Areas</p> <p>1.D % of Tourists in Coastal Areas</p>	<p>CI 13: Concentration of key nutrients in water column</p> <p>CI 14: Chlorophyll-a concentration in water column</p> <p>CI 17: Concentration of key harmful contaminants measured in the relevant matrix</p> <p>CI 18: Level of pollution effects of key contaminants where a cause and effect relationship has been established</p> <p>CI 20: Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood</p> <p>CI 23: Trends in the amount of litter in the water column including microplastics and on the seafloor</p> <p>CI 19: Occurrence, origin (where possible), extent of acute pollution events (e.g. slicks from oil, oil products and hazardous substances), and their impact on biota affected by this pollution</p> <p>Index of coastal eutrophication and floating plastic debris density (SCP AP)</p>
<p>14.2.1 Proportion of national exclusive economic zones managed using ecosystem-based approaches</p>			<p>CI 15: Location and extent of the habitats impacted directly by hydrographic alterations</p> <p>Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals (candidate indicator)</p> <p>Levels of continuous low frequency sounds with the use of models as appropriate (candidate indicator)</p>
<p>14.4.1 Proportion of fish stocks within biologically sustainable levels</p>		<p>Drivers indicators:</p> <p>Amount of fish caught</p> <p>Percentage of Fish Stock exploited over sustainable levels</p> <p>Number/production/ratio of certified organic aquaculture farms</p> <p>Number of jobs in large-scale fisheries</p> <p>Effective management of protected areas: share of coastal and marine habitats and species listed under international agreements (SPA protocol) that are in good condition (favourable, unfavourable etc.)</p> <p>Number of large shipping vessels</p>	<p>CI 7: Spawning stock biomass</p> <p>CI 8: Total landings</p> <p>CI 9: Fishing mortality</p> <p>CI 10: Fishing effort</p> <p>CI 11: Catch per unit of effort (CPUE) or Landing per unit of effort (LPUE) as a proxy</p> <p>CI 12: Bycatch of vulnerable and non-target species</p> <p>Proportion of fish stocks within biologically sustainable levels (SCP AP)</p> <p>Marine Trophic Index (also called Mean Trophic Level (TL) of fisheries landings (SCP AP)</p>

14.5.1 Coverage of protected areas in relation to marine areas			<p>Indicator 7: Percentage of protected coastal and marine areas [under national jurisdiction] (Mediterranean Sustainability Dashboard)</p> <p>CI 1: Habitat distributional range CI 2: Condition of the habitat's typical species and communities CI 3: Species distributional range (EO1 related to marine mammals, seabirds, marine reptiles) CI 4: Population abundance of selected species (EO1, related to marine mammals, seabirds, marine reptiles) CI 5: Population demographic characteristics (EO1, e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles)</p>
14.b.1 Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries	<p>Number of countries with actions to improve access of small scale producers to markets (MSSD Action 2.5.1)</p>	<p>Drivers indicators: Number of small scale fisheries vessels</p>	
14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	<p>Indicator 6: Number of ratifications and level of compliance as reported by BC Contracting Parties (Mediterranean SD Dashboard)</p>		
15.5.1 Red List Index			<p>CI 12: Bycatch of vulnerable and non-target species</p>
15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species	<p>Number of countries with National Action Plans concerning species introductions and non-indigenous species - MAP reporting system</p>		<p>CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species</p>
15.a.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems	<p>Indicator 10: Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems (Mediterranean SD Dashboard)</p>		

Annex I: UNEP Environmental Social and Economic Review Note (ESERN)

I. Project Overview

Identification	GEF ID: 9684
Project Title	<i>Reducing pollution from harmful chemicals and wastes in Mediterranean hotspots and measuring progress to impacts</i>
Managing Division	<i>UN Environment – Chemicals and Health GEF Unit (Implementing Agency) and Ecosystems Division (Implementing Agency)</i>
Type/Location	<i>Regional</i>
Region	<i>Mediterranean</i>
List Countries	<i>Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Morocco, Montenegro, Tunisia, Turkey</i>
Project Description	<p><i>The objective of this project is to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas. This objective will be achieved through a multi-focal area collaboration between the GEF Chemicals and Waste and International Waters focal areas.</i></p> <p><i>Component 1 links with the other Child Projects of the MedProgramme which focus on reductions of the other main source of Mediterranean pollution, namely excess nutrients. The cross-cutting IW component will support monitoring of all types of pollution in Mediterranean coastal hot spots.</i></p> <p><i>This Full Size Project is comprised of two substantive components (one for CW and one for IW), and a M&E component, with the following outcomes/ outputs:</i></p> <p><i>Component 1: Chemicals and Waste (CW)</i> <i>Outcome 1. Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas</i></p> <ul style="list-style-type: none"> <i>• Output 1.1: Management and disposal of POPs</i> <i>• Output 1.2: Management and safe storage of mercury</i> <i>• Output 1.3: Long term POPs reduction through pilot activities on new POPs alternatives</i> <i>• Output 1.4: Hg reduction through pilot activities on new Hg alternatives</i> <p><i>Component 2: International Waters (IW)</i> <i>Outcome 2: Littoral countries enabled to identify trends and progress to impacts</i></p> <ul style="list-style-type: none"> <i>• Output 2.1: Updated TDA including gender assessment</i> <i>• Output 2.2: Report on progress to impacts</i>

	<ul style="list-style-type: none"> • <i>Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations</i> • <i>Output 2.4: Data sharing policy for the Mediterranean</i>
Estimated duration of project:	<i>60 months</i>
Estimated cost of the project	<i>USD 14,250,000</i> <i>(IW = 3,000,000 CW = 11,250,000)</i>

II. Environmental Social and Economic Screening Determination

A. Summary of the Safeguard Risks Triggered

Safeguard Standard Triggered by the Project	Impact of Risk ¹ (1-5)	Probability of Risk (1-5)	Significance of Risk (L, M, H)
SS 1: Biodiversity, natural habitat and Sustainable Management of Living Resources	2	1	L
SS 2: Resource Efficiency, Pollution Prevention and Management of Chemicals and Wastes	3	2	M
SS 3: Safety of Dams	1	1	L
SS 4: Involuntary resettlement	1	1	L
SS 5: Indigenous peoples	1	1	L
SS 6: Labor and working conditions	1	1	L
SS 7: Cultural Heritage	1	1	L
SS 8: Gender equity	1	1	L
SS 9: Economic Sustainability	1	1	L
Additional Safeguard questions for projects seeking GCF-funding (Section IV)			

B. ESE Screening Decision² (Refer to the UNEP ESES Framework (Chapter 2) and the UNEP's ESES Guidelines.)

¹ Refer to UNEP Environment, Social and Economic Sustainability (ESES): Implementation Guidance Note to assign values to the Impact of Risk and the Probability of Risk to determine the overall significance of Risk (Low, Moderate or High).

² **Low risk:** Negative impacts negligible: no further study or impact management required.

Moderate risk: Potential negative impacts, but less significant; few if any impacts irreversible; impact amenable to management using standard mitigation measures; limited environmental or social analysis

Low risk Moderate risk High risk Additional information required

C. Development of ESE Review Note and Screening Decision:

Prepared by: Name: _____ Eloise Touni _____ Date: _____
 Safeguard Advisor: Name: _____ Date: _____
 Project Manager: Name: _____ Date: _____

The project component on chemicals and waste includes repackaging, transport and environmentally sound destruction of hazardous wastes, namely POPs and mercury. An efficient and successful implementation of these activities will directly improve the environment of the Mediterranean Sea.

The environmental and social risks of the project relate to the possibility of an accident or spill during the field operations. In the event of poor site management, an accident or spill or exposure of workers to the chemicals could occur. The environmental and social risk management framework of the project is therefore well established and sets out a relevant risk assessment and initial environmental management plan (EMP) for each site where operations will be conducted. Health and environmental management capacity is a criterion for the selection of the international contractor who will be appointed to manage the operations. Finally, the contractor is required to produce a Health and Safety Plan for each site, detailing the precautionary and emergency measures to be in place before operations begin, including ongoing monitoring of worker exposure, air quality, and other relevant measures depending on the specific wastes being handled.

The project design includes a Phase 1 of disposal activities in two countries (Algeria and Lebanon), and the site-specific EMPs for these two countries have been included as an annex to the CEO Endorsement Request. The EMP was shared with the Safeguard Advisor prior to submission for PRC.

may be required to develop a ESEMP. Straightforward application of good practice may be sufficient without additional study.

High risk: Potential for significant negative impacts, possibly irreversible, ESEA including a full impact assessment may be required, followed by an effective safeguard management plan.

ANNEX M: ABBREVIATIONS AND ACRONYMS

3F	Fluorine Free Foams
CHB	Chemicals and Health Branch
CP	Child Project
CW	Chemicals and Waste
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EO	Ecological Objective
EPR	Extended Producer Responsibility
EPS/XPS	Expanded Polystyrene/ Extruded Polystyrene
ESM	Environmentally Sound Management
EU	European Union
GEF	Global Environment Facility
HBCD	Hexabromocyclododecane
ICZM	Integrated Coastal Zone Management
IMAP	Integrated Monitoring and Assessment Programme
IW	International Waters
LBS	Land Based Sources of Pollution
LME	Large Marine Ecosystem
MAP	UN Environment Mediterranean Action Plan
MED POL	Mediterranean Pollution Assessment and Control Programme
MIA	Minamata Initial Assessment
NAP	National Action Plan (Barcelona Convention)
NBB	National Baseline Budget
NIP	National Implementation Plan (Stockholm Convention)
PFD	Programme Framework Document
PFOS/PFAS (PFAS)	Perfluorooctanesulfonic acid and other per- and polyfluorinated alkylated substances
POPs	Persistent Organic Pollutants
SAP MED	Strategic Action Programme to combat Pollution from Land Based Sources
SCP	Sustainable Consumption and Production
SCPRAC	Regional Activity Centre – Sustainable Consumption and Production
SDG	Sustainable Development Goals
SEIS	Shared Environmental Information System
TDA	Transboundary Diagnostic Assessment
WWTP	Waste Water Treatment Plant

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2.2. TDA methodology

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2.2.2. Analysis of causal chains

2.2.3. Selection and implementation of thematic assessments

Thematic assessments are implemented to inform the TDA development, in particular for areas where lack of data is pronounced. The final set of thematic assessments to be carried out within the TDA process will be decided in project implementation phase by the TDA team. A preliminary proposal (for further consideration by the TDA team) is to carry out:

a) Gender assessment;

b) Assessment of the impact of marine pollution/ litter on biodiversity, including:

- impacts of maritime traffic-related pollution on marine ecosystems (possibly accompanied with an assessment of harmful impacts of introduction of Non-Indigenous and/ or Invasive Alien Species),
- impacts of operational releases of oil and other contaminants from offshore activities;

c) Assessment of the costs of degradation of the Mediterranean coastal and marine ecosystems and of the blue economy potential

d) Assessment of ecosystem and socio-economic vulnerabilities related to climate variability and change

2.2.4. Stakeholder analysis

2.2.5. Governance analysis

2.2.6. Prospective studies and scenario analysis

Building up on the existing prospective studies and work on the development of the MED 2050 report, the TDA should explore potential for systemic and transformational change at the 2050 horizon through cross-sectoral foresight scenarios

2.3. Indicators for a data driven TDA and SAP implementation

Decision on the TDA indicators should be made in the project implementation stage. To facilitate the selection process, mapping of all the indicators used in the MAP – Barcelona Convention system against the relevant SDGs was performed in the preparatory phase. The most relevant indicators, including IMAP Common Indicators, were then selected and structured under three GEF categories (process

indicators, stress reduction indicators and environmental status indicators) to form an initial list for further consideration by the TDA team (Annex K contains potential TDA indicators and their linkages with SDGs). The preliminary proposal/ short list of TDA indicators (annex K) is made having in mind their relevance and data availability for the TDA development, as well as their potential use to monitor and evaluate implementation of the future Strategic Action Programme (to be developed following the TDA findings). The indicators selected in the TDA process should serve a dual purpose: to describe the baseline (TDA) i.e. to assess the Mediterranean Large Marine Ecosystem; and to form a basis for the SAP implementation.

3. Baseline information on the Mediterranean

3.1. Geographical scope

3.2. Climate

3.3. Natural resources

3.4. Quality of the coastal and marine environment

3.5. Socio-economic characteristics

3.5.1. The main drivers of environmental change

3.5.1.1. Tourism

3.5.1.2. Fisheries

3.5.1.3. Marine aquaculture

3.5.1.4. Maritime transport

3.5.1.5. Energy

3.5.1.5.1. Oil and gas

3.5.1.5.2. Renewable energy (offshore wind farms)

3.5.1.6. Marine mining (extraction of non-living resources)

3.5.1.7. Water abstraction

3.5.1.8. Use of marine waters for wastewater and waste disposal

3.5.1.9. Infrastructure (underwater cables and pipelines, ports and marinas)

3.5.1.10. Coastal development

3.5.2. Population and migrations

3.5.3. Focus on gender

4. The main findings of thematic assessments

5. Priority transboundary problems

5.1. Introduction

Identification of transboundary problems is one of the key steps in the consultative TDA process and will be performed in project implementations phase. Based on the recent Mediterranean assessments (reviewed in the course of project preparation), potential list of transboundary problems for further consideration by the TDA team has been identified as follows:

- a) Land and sea-based pollution (including airborne depositions)
- b) Marine litter and microplastics
- c) Non-indigenous species
- d) Habitat destruction and loss of biodiversity
- e) Declining trend of fish stocks/ exploitation of living resources

f) Climate change related vulnerabilities and risks in the marine and coastal zone (as a transboundary or a problem that affects other identified transboundary problems)

5.2. Transboundary problem 1

5.2.1. Description of the problem and its transboundary importance

5.2.2. Major environmental impacts and socio-economic consequences (including gender aspects)

5.2.3. Linkages with other transboundary problems

5.2.4. Immediate, underlying and root causes (with diagrams)

5.2.5. Knowledge gaps

5.2.6. Conclusions and recommendations

5.3. Transboundary problem 2 etc.

5.3.1. Description of the problem and its transboundary importance

5.3.2. Major environmental impacts and socio-economic consequences (including gender aspects)

5.3.3. Linkages with other transboundary problems

5.3.4. Immediate, underlying and root causes (with diagrams)

5.3.5. Knowledge gaps

5.3.6. Conclusions and recommendations

6. Gender assessment

7. Stakeholders analysis

8. Governance analysis

9. Scenario analysis and potential for long-term transformational change

10. Preliminary recommendations for the Strategic Action Programme (SAP) development

11. TDA (and SAP) indicators and their linkages to SDGs

12. Summary conclusions and recommendations

Annex O: Implementation Arrangements and Technical Support

The institutional arrangements as described in the CEO Endorsement Request (section A.6) are further detailed in this annex, which provides further detail on the roles of the MedPCU and the Executing Partners.

Table 1 below also sets out the deliverables for MedPCU technical assistance and consultants to be hired.

MedPCU

The detailed list of services to be provided by the MedPCU are as follows:

Project management services:

- Manage the flow of information from the field and produce periodic monitoring reports, namely quarterly financial expenditure reports; annual expenditure forecasts and procurement plans; half-yearly narrative reports of progress including the annual Project Implementation Review; annual cofinance report;
- Initiate, validate, sign and implement legal instruments with all bilateral partners including executing partners and countries where appropriate;
- Organize travel and payment of DSA for staff and consultants as needed;
- Coordinate and support the project activities of MED POL and SCP/RAC (Component 1), and MED POL and Plan Bleu (Component 2);
- Organize the meetings of the Project Steering Committee (PSC) and serve as its Secretariat;
- Ensure the Project governance and oversight of the financial resources from the GEF investment and the co-financing delivered by the Project stakeholders.

Programmatic coordination:

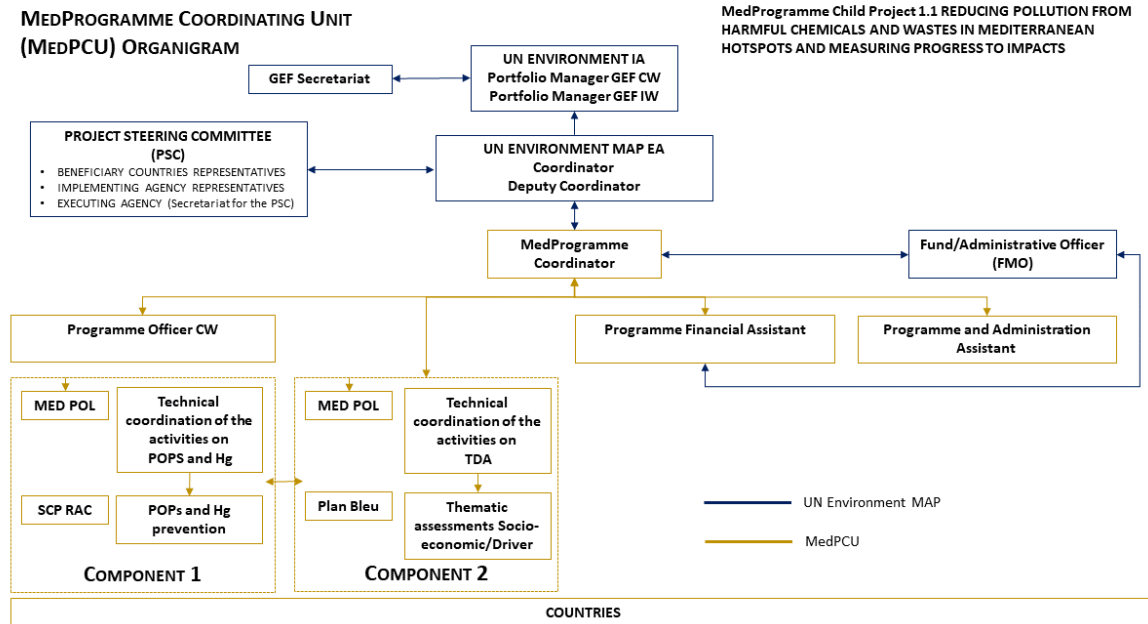
- Ensure that the execution of the entire MedProgramme is aligned and integrated with the priorities of the Contracting Parties to the Barcelona Convention, its 2016-2021 Mid-Term Strategy and biennial Programmes of Work;
- Ensure that the execution of the MedProgramme Gender and Knowledge Management Strategies is consistent across the entire Programme and adequately support and include the Child Project 1.1.
- Record-keeping and facilitation of the delivery of the Programme monitoring and evaluation plan to allow reporting of progress towards the objectives of the MedProgramme as a whole by the Executing and Implementing Agencies.

MedProgramme Visibility:

- Represent the MedProgramme in global events and initiatives.
- Ensure that the Programme Annual Stocktaking Meeting is organized in a coordinated manner to efficiently serve the countries, IA, EA and stakeholders;
- Share the Project achievements, products/outputs with the Project and MedProgramme's stakeholders;

Technical support (please refer to detailed deliverables in Table 1 below).

The proposed organigram for the PCU is:



It is anticipated that the MedPCU will be staffed with the following core positions:

- MedProgramme Coordinator (P4)
- Programme Officer CW (P3)
- Programme Financial Assistant (G5)
- Programme and Administration Assistant (G5)

In addition to this, the MedPCU operations will be supported during specific periods of the lifespan of the Child Project 2.1, by one Gender Specialist and one Knowledge Management Specialist to be engaged through out-sourced contracts. The MedPCU will be established and hosted by UN Environment/MAP in Athens, Greece, following the successful model of the MedPartnership Project.

Executing Partners

The responsibilities and roles of each of the Executing Partners is described in the current document and linked to specific actions, outcome and outputs.

MED POL and SCP/RAC will be Co-Executing Agencies for the national and regional activities foreseen under Component 1 of the project. MED POL and Plan Bleu will be the Co-Executing Agency for regional activities foreseen under Components 2 of the project.

The EPs will report on the project implementation progress to the EA and will take part in and contribute to the PSC as observers. The main roles of Executing Partners are to:

- Provide technical advice and engage with the countries for all aspects of the execution of activities under the relevant Components of the Child Project 1.1;
- Provide staff time and expertise in guiding their respective project activities;
- Supervise experts hired to ensure on time, high-quality deliverables;
- Manage the flow of financial resources earmarked for the implementation of activities;
- Review technical and substantive inputs by partners and countries on workplans etc.;
- Support the MedPCU and provide inputs for the preparation of the CP1.1 workplans, budgets, reports and other documents as relevant;
- Review the technical quality of the Child Project 1.1 outputs in coordination with the MedPCU.

The EP will meet periodically with the MedPCU to: 1) discuss emerging issues and challenges in order to prepare timely contingency plans and measures; 2) update the MedPCU and the other EP on the progress made in the execution of their respective activities; 3) to prepare the working and information documents for the PSC and key events of the Project and the MedProgramme; and 5) to ensure effective coordination during the execution of the activities.

Table 1: Deliverables and costing of PCU technical support and consultants to be hired

<i>Position Titles</i>	<i>\$ / Person Month, Est Person Month</i>	<i>Tasks to Be Performed / Deliverables</i>	<i>Related workplan activity</i>
PCU Technical support			
Chemical and Waste			
P3 Chemicals and Waste Programme Officer	12,000 / 3 months	<ul style="list-style-type: none"> • Provision of technical inputs for tender preparation related to Phase 1 Disposal of POPs in Algeria and Lebanon, based on UNEP C&W IA team formats. • Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor. 	1.1.1: Phase 1 POPs disposal
	12,000 / 5	<ul style="list-style-type: none"> • Provision of technical inputs for tender related to Phase 2 POPs Inventory and Prioritization, based on UNEP C&W IA team formats. • Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor with regards to the following deliverables: <ul style="list-style-type: none"> ○ National POPs inventory teams ○ National site assessment and remediation studies ○ Laboratory services for POPs and mercury analysis ○ MapX platform ○ Environmental Management Plans for stockpiles 	1.1.2: Phase 2 POPs inventory and prioritization
	12,000 / 4	<ul style="list-style-type: none"> • Provision of technical inputs for tender related to Phase 2 Disposal of POPs, based on UNEP C&W IA team formats. • Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor. 	1.1.3: Phase 2 POPs disposal

	12,000 / 4 – 5 months	<ul style="list-style-type: none"> • Provision of technical inputs for tender related to POPs Remediation and Assessment in Algeria and Lebanon, based on UNEP C&W IA team formats • Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor with regards to the following deliverables: <ul style="list-style-type: none"> ○ National site assessment and remediation studies ○ Laboratory services for POPs and mercury analysis ○ MapX platform ○ Environmental Assessments contaminated sites 	1.1.4: POPs remediation and assessment
	12,000 / 6 - 7	<ul style="list-style-type: none"> • Provision of technical inputs for tender related to Confirmation and Planning of mercury stocks for disposal (Algeria and Lebanon), based on UNEP C&W IA team formats. • Provision of input for the technical evaluation of submitted bids by consultants in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress (in the field?) and reporting on percentage achievements. 	1.2.1: Confirmation of mercury stocks for disposal 1.2.2: Planning and disposal of mercury
	12,000 / 12 - 13	<ul style="list-style-type: none"> • Ensure consistency with Stockholm Convention best practices and networks, including through liaison with UNEP Chemicals and Health branch • Technical review of POPs and mercury publications and knowledge products 	1.3.1: Pilot demonstration projects in three countries
	12,000 / 8 - 9	<ul style="list-style-type: none"> • Develops capacity building and awareness raising programme in cooperation with regional consultants and oversees its execution • Technical inputs and delivery of presentations to project steering committees and Annual Stock-taking Meetings 	Cross-cutting (all POPs and Hg workplan activities)
International Waters			
MED POL P4 (technical support, 25% of the salary)	4,583 /60	<ul style="list-style-type: none"> • Overall/ strategic guidance, development of Terms of Reference and review of consultants' deliverables for: <ul style="list-style-type: none"> ○ TDA update ○ Preparation of report on progress to impacts ○ Extension of monitoring to offshore areas ○ Data sharing policy • Collecting and providing inputs for and delivery of presentations to project steering committees and Annual Stock-taking Meetings 	Cross-cutting (all IW workplan activities)

		<ul style="list-style-type: none"> • Providing inputs to MedPCU for technical elements of project reports, information for MedProgramme knowledge management platform and for communication purposes 	
Consultants			
Chemical and Waste			
Regional Chemicals training consultants	3,500 / 50	<ul style="list-style-type: none"> • Conducting agency analysis to determine points of weaknesses within agencies to be in charge of implementation of programmes for management and disposal of POPs and Mercury • Drafting tender documents related to Phase 1 Disposal of POPs in Algeria and Lebanon, based on UNEP C&W IA team formats. • Sub-contracting specialized agencies/ institutions with experience in mercury and POPs management to prepare training courses and design capacity building programmes for supporting government agencies and building their capacities based on determined weaknesses which will be in charge with POPs and Mercury disposal • Preparing rosters of people to be trained • Preparing lists of materials and equipment to be procured for supporting agencies • Following up on implementation of capacity building/training programmes • Preparing progress reports on status of implementation of capacity building programme. • Under the overall guidance of P3 Chemical and Waste Programme Officer, develops a capacity building and awareness raising programme on safe management and disposal of PCBs and mercury wastes • Ensures delivery of capacity building and awareness raising programme to selected national stakeholders, including delivery of training sessions 	Cross-cutting (all POPs and Hg workplan activities)
Regional POPs Technical Experts	7,500 / 33 - 34	<ul style="list-style-type: none"> • Review technical documents prepared by contractor for implementation of activities related to management and disposal of POPs and provide feedback to P3 Chemicals and Waste Programme Officer accordingly • Regularly monitor implementation of planned activities as per contractual arrangements between UNEP and the Contractor and provide technical reports on quality of work and observed issues to be addressed • Provide regular reports to the P3 Chemicals and Waste Programme Officer on the status of implementation of work progress in the field and percentage completion of works/activities as per the plan of implementation of the contractor • Coordinate with national agencies in order to ensure that they have no issues to raise with 	Cross-cutting (all POPs and Hg workplan activities)

		<p>the contractor during implementation</p> <ul style="list-style-type: none"> Sort out any issues that might arise during implementation between the contractor and the national agency, and bring such issues if necessary to the attention of the P3 Chemicals and Waste Programme Officer Design/ maintain POPs inventory for Phase 2 stocks, extend support to national consultants working on inventories Preparation of Environmental Management Plans for Phase 2 POPs disposal sites Provision of inputs for Terms of References for remediation/ assessment studies in Lebanon, Montenegro Environmental assessments for remediation works/ contaminated sites Supervision of POPs disposal and EMPs implementation Supervision of remediation works Lebanon 	
Regional Mercury Technical Experts	7,500 / 33 - 34	<ul style="list-style-type: none"> Review technical documents prepared by contractor for implementation of activities related to management and disposal of POPs and provide feedback to P3 Chemicals and Waste Programme Officer accordingly Regularly monitor implementation of planned activities as per contractual arrangements between UNEP and the Contractor and provide technical reports on quality of work and observed issues to be addressed Provide regular reports to the P3 Chemicals and Waste Programme Officer on the status of implementation of work progress in the field and percentage completion of works/activities as per the plan of implementation of the contractor Coordinate with national agencies in order to ensure that they have no issues to raise with the contractor during implementation Sort out any issues that might arise during implementation between the contractor and the national agency, and bring such issues if necessary to the attention of the P3 Chemicals and Waste Programme Officer Mercury removal environmental assessments and management plans Provision of inputs for Terms of References for Assessment and management plan for Kasserine site Tunisia Supervision of mercury disposal and EMPs implementation 	<p>1.2.1 and 1.2.2</p> <p>1.4.1, 1.4.2, 1.4.3 and 1.4.4</p>
Consultants International Waters			
	7500 / 12	<ul style="list-style-type: none"> Deliver TDA trainings (based on GEF IW:LEARN training materials) 	Cross-cutting (all)

Regional consultants IW - TDA		<ul style="list-style-type: none"> Develop capacity building programme on indicators and socio-economic assessments; deliver targeted trainings to TDA working group members and other national stakeholders 	IW TDA workplan activities)
	7500 / 23	<ul style="list-style-type: none"> Coordinates TDA team/ TDA working groups Leads work on identification and prioritisations of issues, determination of impacts and causal chain analysis In cooperation with MED POL P4, prepares Terms of References for thematic assessments Reviews thematic reports Synthesises inputs from TDA working groups and thematic reports (prepared by Plan Bleu, consultants) to draft TDA Provides materials and inputs for the PSC 	2.1.1 Establishment of TDA team, 2.1.2 Identification and analysis of issues and 2.1.4 TDA drafting
	7500 / 6	<ul style="list-style-type: none"> Carry out selected thematic assessments Prepare thematic reports 	2.1.3 Preparation of thematic assessments
	7500 / 6	<ul style="list-style-type: none"> Carry out selected thematic assessments of the progress to impact Prepare thematic reports on progress to impact Utilization of Programme's knowledge management tools and data to assess progress; Combining MAP/ Mediterranean and SGDs reporting to assess progress and identify project's impacts; Preparation of the report. 	2.2.1, 2.2.2 and 2.2.3 Progress to impact.
	7500 / 6	<ul style="list-style-type: none"> Examines spatial and temporal scope of existing national offshore monitoring programmes Prepares offshore monitoring strategy, including methodology for establishment of national monitoring stations in offshore areas Designs and support implementation of selected IMAP indicators at pilot offshore stations 	2.3.1 Offshore monitoring strategy, 2.3.2 Identification of sites for offshore monitoring stations and 2.3.3 Implementation of pilots
	7500 / 4	<ul style="list-style-type: none"> Assessment of regional (including Info-MAP System) and national databases/ IT platforms Recommends design of IT model (node) to connect national in a regional network/ platform 	2.4.1 and 2.4.2 Assessment of existing databases, and 2.4.3 Design of IT model

	7500 / 2	<ul style="list-style-type: none"> • Assessment of existing regional governance mechanisms and data sharing approaches • Proposal of regional data sharing policy to facilitate reporting and use of IMAP data collected by the Barcelona Convention Contracting Parties 	2.4.1 Assessment of regional approaches and 2.4.4 Data sharing policy development
<i>Cross-cutting</i>			
Gender Specialist	6,500 / 3	<ul style="list-style-type: none"> • design social factors and gender-focused survey questionnaire for selected sites, with a strong participatory and inclusive focus 	1.2.1 and 1.2.2 2.2.1, 2.2.2 and 2.2.3



The Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security

Report of the First Regional Consultation

Athens, Greece
7 – 8 March 2018

MedProgramme
Report of the First Regional Consultation
(Athens, Greece 7 – 8 March 2018)

Conclusions

1. The GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia took note of the progress achieved on the preparation of the Child Projects and validated the proposed activities, the sites chosen for their execution at national level and the timelines for the submission of the Child Projects to the GEF Secretariat for CEO endorsement.
2. The implementing and executing partners agreed to evaluate the feasibility of the specific requests of the countries for additional activities (namely those of Algeria under Child Project 2.1 and Bosnia and Herzegovina and Montenegro under Child Projects 1.1 and 1.3).
3. UN Environment/MAP committed to keep the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia fully informed of the progress on the development of the Child Projects and to provide the advanced versions of the project documents for comments at the appropriate time to the GEF Operational Focal Points and the country's nominated national thematic experts, if any.
4. The GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia committed to coordinate the gathering of comments from competent national institutions and thematic experts, and to provide UN Environment/MAP with a single set of official comments.
5. Regarding the letters of co-financing, the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia expressed their preference for a single letter detailing the co-financing contributions for each of the Child Projects of the MedProgramme. The UN Environment / GEF Task Managers for International Waters (IW) and Chemicals and Waste (CW) agreed to seek guidance from the GEF Secretariat and to inform them about how to proceed.
6. The implementing and executing partners and the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia agreed to take the necessary steps to ensure effective coordination with their respective counterparts in the programme (interministerial bodies, stakeholder groups, etc).
7. UN Environment/MAP took due note of the countries' call to ensure effective coordination among all Child Projects and to consider as much as possible cross-cutting issues like climate change and biodiversity.

Next steps

1. UN Environment/MAP will provide the GEF Operational Focal Points with:
 - a. an overview of the national and regional activities of the MedProgramme foreseen in each of the participating countries.
 - b. a responsibility matrix indicating the executing structure for each Child Project, including the implementing and executing partners and their respective roles.
 - c. the contact information for each of the implementing and executing partners.
 - d. clear indications about how to proceed with the preparation of co-financing letters including a template.
 - e. an overview of the national stakeholders engaged during the development of the project documents.

(Note: Items a, b and c will be submitted with the final meeting report of the First Regional Consultation. Items d and e will be provided in due course.)
2. The GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia will provide UN Environment/MAP with:
 - a. a list of national thematic experts including specific focal points for IW and CW to whom the advanced draft of the project documents will be sent for comments.
 - b. co-financing letters from any relevant national partners, including supporting coordination for combined letters across different child projects as needed.
3. The technical execution partners will support the GEF Operational Focal Points and national focal points in the identification of relevant initiatives which can contribute to the co-financing support by countries. They will also provide UN Environment/ MAP with their own organizational co-financing letters.

Background information

1. The objective of the MedProgramme is to accelerate the implementation of agreed upon priority actions to reduce the 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 MedProgramme was endorsed by the GEF Council in October 2016 and is comprised of seven Child Projects which will contribute to the GEF's focal areas of International Waters (IW), Chemicals and Waste (CW), and Biodiversity (BD) (Table 1). Nine countries have endorsed the MedProgramme: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, and Tunisia. It will be executed over a period of six years starting in 2019.
2. The First Regional Consultation for the MedProgramme was convened by UN Environment/MAP to bring together the participating countries and the implementing and executing agencies to: (i) take stock of progress on the development of the Child Projects; (ii) discuss next steps for completion of the submission package, including letters of co-financing; and (iii) agree upon a timeline for the submission of documents to the GEF Secretariat. The agenda of the consultation is provided in Annex 1.

Table 1 Overview of the MedProgramme components, Child Projects, Executing Agencies and GEF Focal Areas

Mediterranean Sea Programme (MedProgramme)			
MedProgramme Component	Child Project	Indicative lists of executing Agencies	GEF Focal Areas
1. Reduction of Land Based Pollution In Priority Coastal Hotspots, and measuring progress to impacts	1.1 Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts	UNEP/MAP	IW and CW
	1.2 Mediterranean Pollution Hot Spots Investment Project.	EIB UNEP/MAP	IW and CW
	1.3 Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC).	EBRD UNEP/MAP	IW and CW
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone	2.1 Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection.	UNEP/MAP UNESCO-IHP GWP-Med	IW
	2.2 Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS.	GWP-Med UNEP/MAP	IW
3. Protecting Marine Biodiversity	3.1 Management Support and Expansion of Marine Protected Areas in Libya.	UNEP/MAP IUCN WWF Med	BD
4. Knowledge Management and Programme Coordination	4.1 Mediterranean Sea Basin Environment and Climate Regional Support Project.	UNEP/MAP	IW and CW

Attendance

3. The regional consultation brought together 40 participants, including representatives from eight of the nine countries that endorsed the MedProgramme and all seven of the implementing and executing agencies. The complete list of participants is set forth in Annex 2.
4. The names, titles and affiliations of the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia and their nominated representatives that participated in the regional consultation are provided in Table 2. It should be noted that the GEF Operational Focal Point of Libya, Mr. Mustafa Soliman, confirmed his wish to attend the consultation, but was unable to do so as a result of difficulties encountered in the organization of his travel by UN Environment/MAP.

Table 2 Names, titles and affiliations of the GEF Operational Focal Points and the nominated representatives that participated in the First Regional Consultation for the MedProgramme

Country	Representative(s)	Title and affiliation
Albania	Ms. Ornela Çuçi*	Vice Minister, Ministry of Tourism and Environment
Algeria	Ms. Samira Hamidi	Inspectrice Centrale de l'Environnement et du Développement Durable, Ministère des Ressources en Eau et de l'Environnement Direction Générale de l'Environnement et du Développement Durable
Bosnia and Herzegovina	Dr. Senad Oprašić*	Head of Environmental Protection Department, Ministry of Foreign Trade and Economic Relations
Egypt	Mr. Mohamed Shehab AbdelWahab*	Chief Executive officer of Egyptian Environmental Affairs Agency, Ministry of Environment
	Dr. Mohamed Osman	Undersecretary, Head of Sector, Environmental Management Sector, Ministry of Environment
	Mr. Moustafa Fouda	Advisor to the Minister on Biodiversity
Lebanon	Ms. Olfat Hamdan	Head of Protection of Urban Environment Department, Ministry of Environment
	Mr. Adel Yacoub	Head of Department, Protection of Natural Resources Department, Ministry of Environment
	Mr. Paul Moussa	Agricultural Engineer, Department of Natural Resources Protection, Ministry of Environment
Montenegro	Mr. Esef Husic	Acting General Director for Climate Change and Mediterranean Affairs, Ministry of Sustainable Development and Tourism
	Ms. Ivana Stojanovic	Advisor, Department for Mediterranean Affairs, Ministry of Sustainable Development and Tourism
Morocco	Ms. Nassira Rheyati	Chef de Service Coopération Multilatérale, Division de la Coopération Internationale, Direction du Partenariat, de la communication et de la Coopération, Secrétariat d'Etat chargé du Développement Durable
Tunisia	Mr. Karim Sahnoun	Directeur du suivi des conventions et des projets de coopération avec les partenaires étrangers, Direction Générale des Relations Extérieures, Ministère des Affaires Locales et de l'Environnement

* GEF Operational Focal Point

Presentations

5. Presentations were delivered for each of the MedProgramme's seven Child Projects and the GEF Special Climate Change Fund (SCCF) Project, in addition to three presentations on the development process for the MedProgramme. The present report does not attempt to summarize these presentations, but focuses rather on the discussions they prompted.
6. All of the presentations delivered during the regional consultation are available at: <https://www.dropbox.com/sh/zp1kqx6jl9ss8jk/AAD-1U2ik3rfHt5RKOkKza6Za?dl=0>.

Welcoming remarks and initial discussions

7. Mr. Lorenzo Galbiati, UN Environment/MAP Secretariat (hereafter the Secretariat), welcomed the participants to Athens on behalf of the Coordinator of the Barcelona Convention Mr. Gaetano Leone. The Secretariat recalled the 40 year collaboration among the Convention's Contracting Parties, partners and UN Environment/MAP towards a shared vision for "a healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse contributing to sustainable development for the benefit of present and future generations." The Secretariat observed that the assessments, diagnostics, planning and experimentation carried out during this time had led to a consensus on priority areas for further intervention, and that together, the countries, UN/Environment MAP, the European Investment Bank, UNESCO-IHP, GWP-Med, WWF MedPO and IUCN have responded to this need by developing the Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security. The MedProgramme will support countries by providing a comprehensive response to the provisions of the Barcelona Convention and its Protocols, of other legally binding agreements and other instruments and programmes, among them the Stockholm and Minamata Conventions and the UN Environment Global Programme of Action. The Secretariat reminded participants that the GEF Council approved the MedProgramme at the end of 2016 and will support its execution through grants from the International Waters, Chemical and Waste and Biodiversity Focal Areas. In conclusion, the Secretariat stated that the focus of the regional consultation was to update the countries on the status of the development of the MedProgramme and to agree together on the next steps to complete the process.
8. Participants were also welcomed by the MedProgramme's two implementing agencies: UN Environment and the European Bank for Reconstruction and Development (EBRD).
9. Mr. Yegor Volovic, the UN Environment GEF Task Manager for International Waters (IW), recalled the longstanding collaboration among GEF and the countries in the region, through the Barcelona Convention (for the Mediterranean Sea) and the Bucharest Convention (for the Black Sea). He also noted the forward-thinking vision of the MedProgramme (approved under GEF-6) which has environment security as its focus, a theme that is now well-established in GEF-7.
10. Ms. Eloise Touni, the UN Environment GEF Task Manager for Chemicals and Waste (CW), spoke about the multi-focal area approach of the MedProgramme and explained that this will be the GEF's strategy going forward. She explained that the GEF's activities on CW in the MedProgramme would support countries in efforts to meet obligations for POPs and mercury under the Stockholm, Basel and Minamata Conventions.
11. Ms. Dana Kupova, Principal of Resource Efficiency Investments at EBRD, explained EBRD's 10 year collaboration with the GEF Secretariat, which to present has focused on climate change

adaptation and mitigation, and expressed her positive anticipation about expanding the Bank's activities to the IW and CW focal areas.

12. The Secretariat reviewed the agenda of the consultation with participants and briefly outlined the desired outcomes of the two-day event.
13. The representatives of several countries (Bosnia and Herzegovina, Egypt and Lebanon) asked for clarification on the modality for execution of activities at the national level. The Secretariat first clarified the distinction between GEF implementing and executing agencies. Implementing agencies of the GEF are responsible for delivering project proposals to the GEF Secretariat and liaising with the Secretariat and countries at the GEF Council, in addition to providing general oversight and quality control. Executing agencies of GEF projects are responsible for carrying out project preparation and execution of the activities on the ground with national, regional and international organizations, as appropriate, to achieve the expected results of the project. For the MedProgramme, the two implementing agencies are UN Environment and EBRD, and the seven executing agencies are UN Environment/MAP, EIB, EBRD, UNESCO-IHP, GWP-Med, IUCN and WWF-Med.
14. The Secretariat added that activities would be executed at the national level through a variety of arrangements, including through UN Environment's Regional Activity Centres (RACs), through international organizations like UNESCO, WWF and GWP-Med, and through other execution modalities. The Secretariat informed the participants that consultations organized with the countries to date on individual Child Projects (Annex 3) had clarified these arrangements in a number of cases and that future consultations would provide further opportunities to do so. Ultimately, it is up to the participating countries to express their wishes on the best approach to executing activities at the national level, in a manner that is compatible with the rules and regulations of the GEF Secretariat and the executing UN agencies, as well as the available resources for each Child Project.
15. In response to a question about the need to reflect emerging issues in the MedProgramme, the partners explained that GEF funds are earmarked for specific priority areas. For example, the issue of marine litter was not eligible under GEF-6 and was therefore not reflected in the MedProgramme. The issue of marine litter nevertheless will be tackled in the region thanks to complementary initiatives of the MAP system, and will furthermore be eligible under GEF-7. The UN Environment GEF Task Manager for IW reminded the participants that Mediterranean countries express their priorities on environmental issues via three consultative bodies (the UN Environment Assembly, the GEF Council and the Barcelona Convention) and on chemical-specific issues via their participation as Contracting Parties to the Stockholm and Minamata Conventions.
16. Mr. Esef Husic, Acting General Director for Climate Change and Mediterranean Affairs of Montenegro, also intervened to greet the participants of the meeting on behalf of the Ministry of Sustainable Development and Tourism of Montenegro and Mr. Igor Gradjevic, the GEF Operational Focal Point of Montenegro. He pointed out the positive experience of Montenegro during implementation of the MedPartnership and reminded of the exceptional results achieved in that process such as the preparation and adoption of the National Strategy for Integrated Coastal Zone Management (NS ICZM), preparation of the Integrated Resources Management Plan (IRMP) for the Buna/Bojana Area, vulnerability assessment of the coastal area to climate change including the sea-level rise, and the mapping of the valuable coastal habitats, etc. On the basis of these results and in line with NS ICZM, and the National Action Plan (NAP) for the implementation of the LBS Protocol and NAP for protection of the coastal biodiversity, Montenegro reiterated its priorities for the MedProgramme, including:

- Disposal of harmful waste containing PCBs and remediation of the hotspots, in the framework of the Child project 1.1 and in synergy, if possible, with Child project 1.2;
- Preparation of the local plans which mainstream the adaptation measures to climate change as part of the SCCF Project;
- Realization of priorities determined in the IRMP for the Buna/Bojana Area related to mapping of vulnerability of groundwater, identification of the level of pollution of the groundwater in aquifers, and establishment of the regular monitoring of groundwaters together with their baseline assessment.

Day 1 Agenda Item 1: Setting the scene and objectives of the consultation

17. The Secretariat emphasized that the MedProgramme was designed to accelerate the implementation of agreed actions identified from a series of transboundary diagnostic analyses of the Mediterranean Sea and subsequent strategic action programmes (SAP-MED and SAP-BIO) elaborated in the context of the Barcelona Convention at the request of its Contracting Parties. The MedProgramme is a direct contribution to the implementation of the UN Environment/MAP's Mid-term Strategy 2016 – 2021.

Day 1 Agenda Item 2: Report on progress for preparation of the MedProgramme documents

18. The Secretariat provided an update on the status of the logframes and project documents for each of the Child Projects and the SCCF Project (Table 3)

Table 3 Status of the logframes and project documents for the MedProgramme and the SCCF Project

Project	Logframe status	Project document status
Child Project 1.1	Preliminary draft prepared	Preliminary draft under preparation
Child Project 1.2	Intermediate draft prepared	Preliminary draft prepared
Child Project 1.3	Intermediate draft prepared	Intermediate draft under preparation
Child Project 2.1	Advanced draft prepared	Advanced draft prepared
Child Project 2.2	Preliminary draft prepared	Preliminary draft under preparation
Child Project 3.1	Preliminary draft prepared	Not yet initiated
Child Project 4.1	Intermediate draft prepared	Intermediate draft prepared
SCCF Project	Advanced draft prepared	Advanced draft prepared

19. The Secretariat provided an overview of the national and regional interventions planned for all countries (Annex 4). A matrix of responsibilities of the executing partners is set forth in Annex 5.

20. The representative from Egypt congratulated the partners on the progress achieved towards preparation of the MedProgramme, and expressed his view that biodiversity and climate change were not adequately addressed in the planned activities. The Secretariat explained that the MedProgramme reflected the GEF Council's priorities and was funded primarily with earmarked funds from the IW and CW focal areas, but that these issues were being addressed through complementary activities in the region. For biodiversity, this includes the MED MPA Project, the 2020 MPA Roadmap, and the technical support activities of SPA/RAC; and for climate change, this includes a variety of GEF interventions, including the Special Climate

Change Fund Project that will address climate change adaptation in six Mediterranean countries. The Secretariat acknowledged that the MedProgramme cannot address every issue, and for this reason it was better to focus on priority areas to achieve greater impacts. The UN Environment GEF Task Manager for IW offered to work with the countries to develop medium-sized projects to address other priorities, as this type of project can be approved faster than full-size projects or programmes.

21. The representative of SPA/RAC thanked the representative of Egypt for drawing attention to the need to strengthen efforts to protect biodiversity in the region, and noted that many other countries have raised this point in other contexts. In the opinion of the representative of SPA/RAC, this is a sign that the GEF Secretariat needs to consider including a regional biodiversity component in all regional projects/programmes, in view of its link to other areas including pollution and coastal zone management. The representative of SPA/RAC asked UN Environment to consider approaching the GEF Secretariat on this issue. The UN Environment GEF Task Manager for IW indicated that there were good opportunities for this in GEF-7 since its priorities include the blue economy and marine biodiversity, and that IW was a good entry point for transboundary MPAs, for example.
22. The representative of Morocco, speaking about her experience in the preparation of the Child Projects of the MedProgramme and the SCCF Project, pointed out that there is a need for the country to nominate a specific focal point for each of the projects, since the GEF Operational Focal Point and the MAP Focal Point (the same person in this case) cannot manage the entire portfolio of projects. The Secretariat suggested that each country could have a national focal point for each specific technical issue and that these focal points could be consulted (along with the GEF Operational Focal Point) when needed and invited to attend steering committee meetings for the projects that fall under their area of expertise. The UN Environment GEF Task Manager for IW agreed that each country needed specific focal points for the various projects.

Day 1 Agenda Item 3: Next steps and timeline for submission of documents to the GEF Secretariat

23. The Secretariat described the next steps for completion of the project documents, including the gathering of additional baseline information, organization of national consultations, preparation of co-financing letters, and validation of project documents by the GEF Operational Focal Points.
24. The Secretariat then presented the tentative timeline for submission of the project documents to the GEF Secretariat (Table 4).

Table 4 Targets for submission of project documents for review and endorsement

Project	Target for submission of project document to GEF for CEO endorsement
Child Project 1.1	July 2018
Child Project 1.2	August 2018
Child Project 1.3	July 2018
Child Project 2.1	June 2018
Child Project 2.2	August 2018
Child Project 3.1	October 2018
Child Project 4.1	June 2018
SCCF Project	June 2018

25. The Secretariat recalled that each country would need to indicate clearly the different co-financing contributions for each of the relevant Child Projects, and that these contributions would be monitored on an annual basis. Furthermore, the modality for the preparation of co-financing letters in the context of a programmatic approach needs to be discussed with the GEF Secretariat, considering that normally one co-financing letter would be required per project per country (the MedProgramme would require more than 50 co-financing letters under this arrangement). There is clearly a need to simplify this process for the MedProgramme. The UN Environment IW Task Manager agreed to liaise with the GEF Secretariat to clarify this issue and propose an acceptable solution.

Day 1 Agenda Item 4: Child Project 1.1

26. Child Project 1.1 will be executed by UN Environment/MAP, in coordination between MED POL and two of UN Environment/MAP's Regional Activities Centres – SCP/RAC and Plan Bleu. The project is expected to deliver the following main outcomes:

- In coastal hot spots, measurable reduction of wastes and hazardous chemicals (POPs, mercury) impacting human health and coastal habitats is achieved;
- Update of the baseline situation (TDA), harmonization of monitoring protocols, methodologies and procedures in compliance with Integrated Monitoring and Assessment Programme (IMAP) of the Barcelona Convention, including design of offshore reference network and gender assessment.

27. The discussion ensuing the project's presentation by the representatives of MED POL and SCP/RAC touched upon various aspects, including requests for clarifications on the selection of countries, sites and options prioritized in the preliminary proposal for disposal (POPs/PCBs and mercury) activities. Another important question raised by the participating countries was about coordination between various implementing/ executing agencies within MedProgramme as well as with other implementing agencies of related (GEF-funded or not) projects.

28. The representative from Montenegro highlighted the need for cooperation and coordination between Child Projects 1.1 and 1.3 to address national priorities, including contaminated sediments at the former shipyard Bijela (categorized as the hot spot B in the Barcelona Convention National Action Plan – NAP) and provision of incentives to phase out in use PCBs in the aluminum plant in Podgorica. Furthermore, country missions were called for in order to discuss matters in greater detail. The need for coordination with the GEF-UNDP project for safe removal of PCBs was also highlighted.

29. The Secretariat explained that a partner coordination meeting would follow the two-day country consultations to address, among other things, specific issues raised by Montenegro. Missions to countries would be planned based on the partners' meeting discussions. The Secretariat emphasized the need for cooperation within the MedProgramme and with sister agencies, while avoiding double-counting and overlapping between different activities. The representative of UN Environment/MAP - MED POL reminded that endorsement letters for the PCBs management were issued by Montenegrin authorities to both UN Environment/MAP and UNDP. Missions to countries (possibly joint for Child Projects 1.1 and 1.3) could take place in April 2018, to be facilitated by national authorities.

30. The representative of Bosnia and Herzegovina informed of the progress with preparation of the mercury initial assessment (MIA) and pointed out two locations where pronounced mercury contamination problems were identified. A plea was made to include Bosnia and

Herzegovina in the MedProgramme mercury removal activities. The representative of UN Environment/MAP - MED POL explained the reasons for not including Tuzla site in the preliminary plan for mercury disposal under Child Project 1.1, including its location (far outside the Mediterranean watershed) and the fact it was not addressed in the country's NAP, as well as MED POL Focal Point's confirmation of these facts. The representative of Bosnia and Herzegovina was invited to provide the MED POL with the MIA report.

31. The Secretariat considered that the feasibility of inclusion of the sites outside the Mediterranean watershed should be checked with the GEF Secretariat. The UN Environment GEF Task Manager for CW emphasized the importance of the national priorities (as identified in the relevant plans prepared under the Stockholm and Minamata Conventions) for the development of the MedProgramme interventions and welcomed more detailed proposals by the countries. A reference was made to Child Project 1.1 presentation on new POPs prevention opportunities and a recommendation was made to ascertain that calculations of any quantities to be offset through project interventions were acceptable to GEF Secretariat.
32. The representative of Lebanon expressed an agreement with presented criteria for preliminary selection of countries and sites for Child Project 1.1 disposal interventions and enquired about inclusion of specific locations and disposal options for Lebanon. As regards new POPs and mercury prevention, ideas were exchanged on how to validate the baseline data; working with lamps containing mercury was singled out as a viable prevention (and disposal) option.
33. The representative of Tunisia endorsed in principle the national activities included in the preliminary plan/ presentation for Child 1.1 (as well as for Child Project 1.2), emphasizing at the same time the need for assistance with remediation of POPs/ PCBs contaminated sites in the country.
34. The representative of Morocco pointed out the use of the PCBs management platform located in Casablanca could lower disposal costs for the proposed activities (compared to exports to the EU).

Day 1 Agenda Item 5: Child Project 1.2

35. European Investment Bank (EIB) is the main executing agency for the Child 1.2 project, with a contribution from UN Environment/MAP for the regional level activities (development of standards). The following main results are planned to be achieved through the project's components that will be executed by the EIB:
 - Reduction of organic pollution reaching the Mediterranean Sea causing coastal ecosystem degradation;
 - Depollution and water resources management at the level of catchments which are draining into the Mediterranean, in order to improve the human, environmental and health situation and reduce the contaminants loads entering the Mediterranean Sea;
 - Reduction and control of chemical and organic pollution from past and present industrial activities in coastal areas impacting human health and livelihoods, and coastal ecosystems, thereby reducing pollution discharges to the Mediterranean Sea;
 - Preparation of pre-investment studies for mercury decontamination and conversion of industrial processes.

36. Under Child Project 1.2 project, a 7 million USD GEF grant¹ will be utilized to support preparation of investments and strengthen capacities needed to reduce pollution in the Mediterranean hot spots. In the course of the preparation of the programme framework document (PFD), Child Project 1.2 was projected to mobilize up to 500 million USD in co-financing. The representative of EIB presented specific sites and type of interventions considered for technical assistance under the GEF grant, including three projects in Egypt (wastewater treatment plants - WWTPs - and drains depollution), upgrade of a wastewater collection and treatment system (for the city of Tripoli) in Lebanon, upgrade of 10 WWTPs in Tunisia, and mercury depollution projects in Morocco and Tunisia. Following the EIB's presentation, the Secretariat asked whether the initially identified co-financing amount was still applicable.
37. The representative of EIB explained the background to the selection of areas of work presented at the meeting, including linkages to the Horizon 2020 goal of depolluting the Mediterranean and the pipeline of projects identified through the EU-funded Mediterranean Hot Spots Investment Programme (MeHSIP), the latter serving as the starting point for identification of specific projects to be developed through Child Project 1.2. The Barcelona Convention NAPs were also used as references, in particular for identification of hot spots (and in some instances for consideration/ cross-checking of specific projects). The representative of EIB reported that the co-financing is currently assessed at the level of 510 – 550 million USD, depending on bankability of the projects to be developed and willingness of the countries/ project promoters to borrow to implement specific interventions. Without the bankability of the selected projects, and the willingness of the countries to borrow, the co-financing would be not possible.
38. The representative of Lebanon raised a question on the possibility to add Saida WWTP and other projects (referring to reuse of treated wastewater and aquifer recharge) identified by national stakeholders to the MedProgramme/Child Project 1.2 selection process. The representative of EIB explained the selection started from the MeHSIP approved list of 24 projects and that there were delays in signing the cooperation agreement with Lebanon. Nevertheless, the Bank remains open for proposals of other projects for Lebanon (including Saida WWTP) provided that eligibility criteria are met.
39. The representative of Tunisia asked for clarification on the GEF grant funding for the MedProgramme Component 1 projects versus loans planned for specific projects implementation. UN Environment/MAP clarified the loan component (shown in the approved PFD as the Child Project 1.2 co-financing) referred to hard loans/ EIB funding to be approved for mature projects while as the in-kind portion of the total Child Project 1.2 co-financing referred to the share of the EC funds extended for the same purpose. The representative of Tunisia confirmed that the national projects (upgrade of 10 WWTPs in different regions, mercury depollution at SNCPA plant in Kasserine) considered under the Child Project 1.2 were in line with the national priorities, as outlined in the country's NAP and mercury initial assessment/ action plan.
40. The UN Environment/MAP - MED POL presented its work on Child Project 1.2 related to the outcome on standards, i.e. development of common environmental standards for desalination, aquaculture and wastewater treatment. The intent is to develop, in the course of Child Project 1.1 implementation, a set of regional standards to enable better regulation (including eventual adoption of the new/updated Regional Plans) of activities and sectors where the gaps in the Barcelona Convention's regional measures to achieve Good Environmental Status (GES) in the Mediterranean have been identified.

¹ Five million USD from International Waters Focal Area and 2 million USD from Chemicals and Waste.

41. The interventions of the representatives from Lebanon and Egypt emphasized the existence of strong national standards in some of the areas that will be subject to standards development and the sensitivities/ difficulties with adoption of regional ones (including the need for regional standards to be tuned with national ones). For wastewater and sludge management, preparation of guidelines was seen as more pertinent than the development of standards. The need to mobilize and use all the existing technical knowledge in the region in the course of implementing this set of regional activities was recommended.
42. The representative of UN Environment/MAP - MED POL reiterated the development of standards was planned for the areas where the existing regional/ Barcelona Convention measures were assessed as insufficient to reach the GES. The outputs of the Child Project 1.2 activities will feed into the process of updating the existing and/or developing new Barcelona Convention Regional Plans, whereas the decision making process will be fully conducted in line with standard procedures of the Convention and its governing bodies. The work on the development of standards and new/updated Regional Plan is integrated in the UN Environment/MAP Programme of Work for the current biennium.
43. The representative of WWF pointed out the new INTERREG project implemented by WWF France (including work on aquaculture) should be consulted in the course of development of aquaculture standards.

Day 1 Agenda Item 6: Child Project 1.3

44. As the GEF Implementing Agency, the EBRD is leading on the preparation of Child Project 1.3 which will produce the following outcomes:
 - Public/ private investments enable pollution reduction in priority coastal and catchment areas through the improvement of water and waste water management systems and the introduction of modern and efficient technologies and practices;
 - Prevention or elimination of POPs.
45. Compared to Child Projects 1.1 and 1.2, preparation and implementation of the Child Project 1.3 has certain specificities due to the EBRD's different work approaches. The focus will be on municipalities and on private sector, with a dynamic project pipeline identified based on project selection criteria. The IW component of the project will focus primarily at municipal wastewater treatment projects. The areas of interest for the CW component (POPs elimination) will be electricity distribution companies, industries (where POPs/ PCBs disposal and prevention activities are likely to be linked to larger modernization loans/ packages) and potentially agri-business (for possible substitution and disposal of POPs pesticides that are still in use). Due to the dynamic nature of developing the project pipeline, sites and companies (potential beneficiaries of the project), will not be known at this stage, and the Bank's internal rules limit options for their disclosure to third parties.
46. The representative of Montenegro pointed out that no information on the Child Project 1.3 development activities had been received by the country so far and expressed interest/need to hold consultations and learn more about the scope of work of the consultants conducting pertinent assessments for the EBRD. A similar intervention was made by the representative of Albania, emphasizing the need to meet the consultants and discuss priorities with them. The representative of Bosnia and Herzegovina highlighted the need for more detailed discussion as regards prevention of new POPs, and suggested the Child Project 1.1 and Child Project 1.3 activities should be combined. In addressing these interventions, the representative of EBRD explained the work conducted so far was aiming to generate a

snapshot of the countries' situation and that the National Implementation Plans (NIPs) for the Stockholm Convention have been analyzed. Based on these analyses, project selection criteria would be defined and project pipeline built.

47. The representative of EBRD explained the GEF funding would be used for technical assistance (including project preparation) and potentially for grants to overcome specific market barriers associated with the implementation of environmental technologies. Another potential use of the GEF funds is provision of technical assistance (including project preparation). For the time being, EBRD is not considering use of intermediary banks in the projects' implementation phase.
48. The representative of Montenegro pointed out the links between Child Projects 1.1. and 1.3 and expressed interest to explore possibilities to address two priority sites (Aluminum plant and former shipyard Bijela) through the MedProgramme and in coordination with the ongoing UNDP and the World Bank projects (the former funded by the GEF, the latter through the World Bank loan). The representative of EBRD took note of the interventions, flagged the two sites as potential Child Project 1.3 project sites, and emphasized the Bank could provide loans for the larger investment interventions while using GEF funds for technical assistance and grants. Further discussions and coordination are necessary to define possible interventions.
49. The representative of Lebanon raised the question about potential overlap concerning what Child Projects 1.1 and 1.3 are aiming to deliver. The Secretariat pointed out the differences in the targets of the two projects while the representative of EBRD highlighted the difference in the funding approaches: for example, potential disposal of PCBs supported through Child Project 1.3 funding would be coupled with the Bank's loan for new investments leading to improved management of chemicals and wastes.
50. The question of expected submission date of the Child Project 1.3 to the GEF Secretariat was raised. The representative of EBRD explained the process was challenging nevertheless the completion of project preparation phase was planned for mid-summer.
51. The representative of Albania asked for clarification on potential beneficiaries of the projects to be funded through Child Project 1.3. The representative of EBRD explained sovereign lending was not considered for the time being, while as municipal and private sectors were identified as the key potential recipients (municipalities in particular for the IW component and waste water management improvements).
52. Regarding the regional level activities, the representative of EBRD explained the strategy was to ensure that experiences with successful national interventions would be disseminated across the region and potentially replicated in partnership with participating and other companies.
53. The representative of Tunisia emphasized the necessity for coordination between different executing Agencies, since some activities concern three child projects (1.1, 1.2 and 1.3).

Day 2 Agenda Item 2: Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection"

54. Child Project 2.1 will be executed jointly by UN Environment/MAP and two of its RACs (PAP/RAC and Plan Bleu) and by UNESCO-IHP and GWP-Med. The Child Project will achieve the following outcomes:
 - Coastal zone sustainability enhanced through the adoption of comprehensive ICZM strategies, coastal plans and instruments (MedProgramme Outcome 4).

- Increased resilience to climate variability and change, and enhanced water security of coastal populations through improved sustainability of services provided by coastal aquifers and by groundwater related coastal habitats (MedProgramme Outcome 5).
55. The representative of Algeria expressed interest in discussing the possibility of Algeria benefitting from national level activities in the context of Child Project 2.1. The Secretariat responded that Algeria had endorsed the MedProgramme in December 2017, when the preparation of Child Project 2.1 was already well advanced. Algeria will benefit from the regional activities foreseen in this Child Project (e.g., training and capacity building including on submarine groundwater discharges, gender and conjunctive management of water resources; awareness raising; support to ICZM Protocol ratification; etc.). The executing partners agreed to evaluate the possibility of accommodating Algeria's request. However, the representative of UNESCO-IHP expressed concerns about the constraint of the budget available for the MedProgramme Outcome 5 and the risk of jeopardizing the successful implementation of initially foreseen activities by increasing the number of national activities.
56. The representative of Egypt observed that the execution of a project with four partners would be challenging and also pointed out the need to consolidate the monitoring framework for Child Project 2.1. In response, the executing partners first recalled their successful joint execution of activities for the MedPartnership, including the development of the [Integrative Methodological Framework](#) (IMF), a practical tool to integrate considerations of integrated coastal zone management, integrated water resources management and groundwater management. This tool will guide the partners in the integration of their individual and joint activities for Child Project 2.1. Next, with respect to monitoring, the executing partners recalled that the project would benefit from an existing monitoring framework established for the Barcelona Convention, including the Integrated Monitoring and Assessment Programme (IMAP) for the achievement of good environmental status in the Mediterranean, and indicators related to implementation of the ICZM Protocol, the Mediterranean Strategy for Sustainable Development, and the ecosystem approach, amongst others. Finally, the Secretariat reminded the participants that one of the objectives of Child Project 4.1 was to ensure the effective coordination among all projects and partners, including through the organization of yearly stocktaking meetings, communication tools such as the MedProgramme website and the establishment of a Programme-wide results monitoring framework.
57. The representative of Montenegro took the opportunity to request assistance on transboundary cooperation with Albania related to Child Project 2.1 and to draw attention to some additional priorities regarding the focus of groundwater activities. First, the representative of Montenegro reminded the participants that the Buna/Bojana area had been officially confirmed as Montenegro's priority area for Child Project 2.1 and that an integrated resource management plan had been developed for this area in the context of the MedPartnership. A framework agreement between Montenegro and Albania for the sustainable development of Skadar Lake and Buna/Bojana was subsequently drafted and is currently awaiting signature by the two countries. The plan includes the establishment of a joint commission between Montenegro and Albania to support its implementation. In view of this, the representative of Montenegro requested that efforts be made under Child Project 2.1 to support the establishment of the joint commission with Montenegro and Albania, once the agreement has been officially adopted. On a related note, the representative of Montenegro also stated that the integrated resource management plan for the Buna/Bojana area called for the preparation of vulnerability maps for the area's aquifer as well as monitoring of groundwater parameters. The representative of UNESCO-IHP congratulated the representatives of Montenegro and Albania on their cooperation and confirmed UNESCO's willingness to work with both countries on the joint commission, and to address the requested

aquifer vulnerability mapping within its activities for Child Project 2.1. UNESCO-IHP highlighted at the same time its concerns about the limitation of available funds.

58. The representative of Morocco recalled the country's request to monitor hydrographic indicators in the context of Child Project 2.1 and to ensure effective coordination between the activities of Child Project 2.1 on ICZM and those of the SCCF Project on climate change adaptation in the coastal zone. The representative of Morocco also thanked the executing partners for integrating its expressed priorities into the design of the activities for Child Project 2.1.
59. The representative of Tunisia indicated that an official letter documenting the country's priorities for Child Project 2.1 would soon be transmitted to UN Environment/MAP, and also confirmed that the priorities of Tunisia for this Child Project are: for the aquifer, it is the Ras Jebel coastal aquifer, and for ICZM, the region of coastal area of the Gulf of Monastir and the Kerkennah Archipelago.
60. As at 7 March 2018, official letters expressing priorities for activities under Child Project 2.1 have been received from the GEF Operational Focal Points of Egypt, Morocco and Lebanon.

Day 2 Agenda Item 3: Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

61. Child Project 2.2 will be executed jointly by UN Environment/MAP and GWP-Med, and will achieve the following outcomes:
 - Enhanced water, food, energy and ecosystems integrated governance, security and sharing of benefits;
 - Reduced trade-offs among sectors and more balanced competing water uses;
 - Sustainability of basin/aquifers and coastal and marine zones as well as supported economic activities and biodiversity.
62. Following an overview of the Child Project, the representative of GWP-Med informed the participants that two sub-regional consultations would be organized in the coming months: one in the Adriatic and one in the MENA region. These consultations will provide ample opportunities for the countries to express their priorities with respect to the planned activities, which include assessments and plans based on the nexus approach.
63. The representative of Albania expressed interest in participating in the activities of this Child Project, provided that the outputs are action-oriented and do not simply involve the elaboration of strategies. The representative of GWP-Med confirmed that the outputs include action plans, but reminded the participants that it was ultimately the country's responsibility to ensure their implementation.
64. The representative of Lebanon inquired about the possibility of undertaking national level activities of this Child Project in Lebanon. The representative of GWP-Med indicated that this was a possibility, especially in view of the strong synergies that could be achieved with the activities foreseen in Lebanon for Child Project 2.1, including sustainable management of the Damour aquifer and the preparation of the National ICZM Strategy.
65. The representative of Morocco expressed interest in exploring the possibility of taking part in the activities of this Child Project, recalling that Morocco has many strategies for water, energy, food and ecosystems and that opportunities existed for improved integration among these domains. Furthermore, Morocco's National Sustainable Development Strategy recognizes each of these domains as priority area, and the activities of Child Project 2.2 could

assist the country in meeting the relevant commitments under this strategy. The representative of Morocco informed the participants that the relevant institutions would be consulted about the country's potential participation in national level activities for this Child Project.

Day 2 Agenda Item 4: Child Project 3.1 “Management Support and Expansion of Marine Protected Areas in Libya”

66. Child Project 3.1 will be executed jointly by UN Environment/MAP, SPA/RAC, IUCN, and WWF-Med, and will achieve the following outcome:
- Expansion of seascapes under protection in Libya, and improved protected area management through the implementation of the Libyan Marine Protected Areas (MPAs) National Strategy, mapping of marine key habitats, monitoring of marine megafauna (mammals, seabirds, turtles and cartilaginous fish), capacity support mechanisms and adoption of permanent solutions.
67. Following a presentation of the activities of Child Project 3.1, the representative of SPA/RAC explained that development of the project document would soon begin in earnest, with the recruitment of a national expert and the organization of an inception meeting with the relevant stakeholders in Libya. UN Environment/MAP explained that the development of this Child Project had been placed on hold for a specific reason, namely to conduct discussions with other donors about the possibility of expanding activities to countries other than Libya. Finally, however, it was decided in February 2018 to proceed with the development of the project for Libya as originally planned. UN Environment/MAP indicated that the development of the project document would proceed swiftly, in view of the fact that the project involves only one country, and that executing partners have already gathered substantial information for the baseline situation.
68. In terms of the identification of the 24 sites of conservation interest that will comprise the Libyan network of MPAs to be established under Child Project 3.1, the representative of SPA/RAC indicated that the executing partners have made a preliminary assessment based on existing data from SPA/RAC and WWF in Libya as well as through desk studies. The next step will be to conduct a rapid assessment of Libya's coast to identify additional candidate areas and to agree upon a final list of sites to be included in the national network of MPAs.
69. The representative of Egypt cited the country's extensive experience in the management of MPAs and invited the executing partners to consider the organization of capacity building workshops for Libyan experts at MPAs in Egypt. The representative of SPA/RAC thanked the representative of Egypt for this suggestion and explained that capacity building within Child Project 3.1 would focus on the 'train the trainer' approach and would provide opportunities for trainees to apply MPA management strategies in small-scale projects conducted outside of the scope of the MedProgramme. The representative of SPA/RAC observed that the design of training activities – including the possibility of travel – was subject to the available budget.
70. In view of potential synergies between Child Project 3.1 and Child Project 2.1, the representative of UNESCO-IHP recalled to the participants that UNESCO will undertake activities related to submarine groundwater discharge with Libya, in the form of regional trainings and capacity building in collaboration with the General Water Authority.

Day 2 Agenda Item 5: Child Project 4.1 “Mediterranean Sea Basin Environment and Climate Regional Support Project”

71. Child Project 4.1 will be executed by UN Environment/MAP, and will achieve the following outcomes:
- Increased uptake of lessons and of cutting-edge knowledge generated across the portfolio of interventions, and the active participation in IW LEARN activities, Communities of Practice, and events; improve the capacity of key regional stakeholders and of the global IW community to build climate resilience, maintain coastal resources, protect biodiversity and restore coastal ecosystems.
 - The effective coordination and learning among all Child Projects, consistency with the Programme objectives, and synergies among projects and partners, ensured.
72. The Secretariat informed the participants that a key element of Child Project 4.1 is the Knowledge Management Strategy and associated tools that will facilitate information sharing and promotion of the Programme's results among the partners, the region's stakeholders and beyond. He added that a Knowledge Management Specialist would be recruited in April 2018 to provide guidance on this aspect of the Child Project, including on the requirements for the creation of an appropriate knowledge platform and for populating this platform with appropriate data from the countries and partners. A successful example of an effective knowledge platform was cited: the case of the platform for the GEF's Caribbean Regional Fund for Wastewater Management (GEF-CREW) (<http://www.gefcrew.org/>).
73. With respect to the Knowledge Management Strategy and the related platform, the UN Environment GEF Task Manager for CW requested that the Knowledge Management Specialist reflect all indicators of all child projects in the establishment of the relevant tools and frameworks. It was furthermore explained that the GEF's Chemical and Waste Focal Area has created a proof-of-concept platform to assist countries in meeting the reporting requirements of the Stockholm and Basel Conventions (<https://m.youtube.com/watch?v=BMyc6alVeh0>).
74. The representative of Egypt asked that special attention be given to designing data collection and management tools that support policy development, while at the same time responding to the needs of the GEF Secretariat and the Programme partners. The Secretariat confirmed that one of the aims of the Child Project 4.1 was to strengthen the science-policy interface, and that a great deal of relevant data has already been generated by the countries. Furthermore, the knowledge platform proposed under Child Project 4.1 could be used to aggregate and promote these data, with the clear understanding that no data would be disseminated without the permission of its owner. The Secretariat noted that this knowledge platform could one day become a tool of the Contracting Parties of the Barcelona Convention.
75. The representative of Albania noted that many countries lacked data and asked whether the Programme would support generation of data for the Integrated Monitoring and Assessment Programme (IMAP). The Secretariat confirmed that certain data generated from the MedProgramme could indeed assist countries in meeting the IMAP reporting requirements.
76. In response to the representative of Albania's suggestion to employ social media tools to promote the Programme, the Secretariat confirmed that the use of modern communication tools – including social media, YouTube and thematic videos – would be fully integrated in the Programme's communication and outreach strategy.

Day 2 Agenda Item 6: GEF Special Climate Change Fund (SCCF) Project

77. The SCCF Project will be executed by UN Environment/MAP and GWP-Med and will achieve the following outcomes:

- Stakeholder engagement on climate change adaptation is strengthened and partnerships are enhanced.
- Adaptation mainstreamed into IZCM strategies and coastal plans.
- Public spending relative to climate change adaptation in the coastal zone prioritized and national resources mobilized.
- Facilitated access to international climate change adaptation financing.
- Strengthened science-policy interface, accessibility of related knowledge and enhanced regional climate information.

78. The Secretariat recalled that the SCCF Project is a medium-sized project that will mainstream climate change adaptation into coastal planning using a proven approach that was successfully implemented in a past GEF intervention in the region. New funding opportunities under the GEF-7 Replenishment may provide opportunities for replication of this approach in the region.
79. Regarding the geographic scope of the national level activities foreseen in Morocco for the SCCF Project, the representative of Morocco reiterated her wish to maintain the same scope as Child Project 2.1, namely the Tanger-Tétouan-Al Hoceima region. The representative of Morocco recalled that it would be most efficient to work in this manner, as the same stakeholders would be engaged for both projects. The representative of PAP/RAC (the executing agency that will lead the ICZM activities in Child Project 2.1 and the integration of climate change adaptation in coastal plans for the SCCF Project) concurred that it would be best to work at the regional level.
80. During the discussion of execution modalities for activities foreseen at the national level in the SCCF Project, the representatives of Montenegro and Morocco reiterated their wishes to have PAP/RAC and Plan Bleu execute the planned activities in their respective countries on the preparation of recommendations for integrating climate change adaptation in local coastal planning processes.
81. The representative of Egypt recalled that his country was among the countries most vulnerable to climate change and inquired about why the country was not participating in the SCCF Project. The Secretariat recalled that Egypt had been invited to contribute to and endorse the Project Identification Form (PIF) of the GEF SCCF Project but that unfortunately this did not occur. The Secretariat recalled that an official letter was transmitted to the GEF Operational Focal Points of all GEF eligible countries on 9 September 2016 to inform about the opportunity to participate in the SCCF Project and to request inputs and advice from the countries on the development of the PIF. This communication was followed by a second letter on 30 September 2016 to formally request the endorsement of the PIF by the countries prior to the submission to the GEF Secretariat. Six countries issued letters of endorsement for the SCCF Project, namely Albania, Algeria, Libya, Montenegro, Morocco and Tunisia.
82. The representative of PAP/RAC recalled that a large project entitled “Enhancing climate change adaptation in the North coast and Nile Delta Regions in Egypt” had recently been approved by the Green Climate Fund for execution by UNDP Egypt and the Ministry of Water Resources and Irrigation. The PAP/RAC National Focal Point for Egypt has already undertaken a consultation with the Ministry of Water Resources and Irrigation and with UNDP Egypt and they agreed to build synergies with the GEF MedProgramme CP 2.1.

Day 2 Agenda Item 7: Discussion on timeline for completion of the development phase

83. Following discussions, the GEF Operational Focal Points, the nominated representatives and the implementing and executing partners agreed on the tentative timelines proposed for the completion of the project documents and their submission to the GEF Secretariat for endorsement, as set forth in Table 4 of the present report.

Day 2 Agenda Item 8: Conclusions of the first regional consultation

84. In the closing of the consultation, the GEF Operational Focal Points, the nominated representatives and the implementing and executing partners agreed on a set of conclusions and next steps, which have been reformulated for clarity and are set forth on pages 2 and 3 of the present report.

Annex 1
Agenda of the First Regional Consultation of the MedProgramme

Day 1: 7 March 2018	
9:00 – 9:30	<i>Registration</i>
9:30 – 9:45	Welcoming remarks: UN Environment
9:45 – 10:30	1. Setting the scene and objectives of the consultation: UN Environment/MAP
10:30 – 11:00	2. Report on progress for preparation of the MedProgramme documents: UN Environment/MAP
11:00 – 11:30	<i>Coffee Break</i>
11:30 – 12:00	3. Next steps and timeline for submission of documents to the GEF Secretariat: UN Environment/MAP
12:00 – 13:00	4. Update on Child Project 1.1: Project partners (MED POL, SCP/RAC, Plan Bleu)
13:00 – 14:30	<i>Lunch</i>
14:30 – 15:30	5. Update on Child Project 1.2: Project partners (EIB and MED POL)
15:30 – 15:45	<i>Coffee Break</i>
15:45 – 16:45	6. Update on Child Project 1.3: Project partner (EBRD)
16:45 – 17:00	7. Conclusions of Day 1
17:00	<i>End of Day 1</i>

Day 2: 8 March 2018	
9:30 – 9:45	1. Opening remarks: UN Environment/MAP
9:45 – 10:45	2. Update on Child Project 2.1: Project partners (PAP/RAC, UNESCO-IHP, GWP-Med and Plan Bleu)
10:45 – 11:15	<i>Coffee Break</i>
11:15 – 12:15	3. Update on Child Project 2.2: Project partner (GWP-Med)
12:15 – 13:45	<i>Lunch</i>
13:45 – 14:45	4. Update on Child Project 3.1: Project partners (SPA/RAC, WWF and IUCN)
14:45 – 15:15	5. Update on Child Project 4.1: UN Environment/MAP
15:15 – 15:45	6. Update on the GEF Special Climate Change Fund Project
15:45 – 16:15	<i>Coffee Break</i>
16:15 – 17:15	7. Discussion: Timeline for completion of the development phase
17:15 – 17:30	8. Conclusions of the first regional consultation
17:30	<i>Closing of the consultation</i>

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Annex 3
List of consultations organized to date in the context of the MedProgramme

Project/programme	Type of consultation/activity	Location	Dates
Child Project 1.1	Regional Workshop on "Improved and Harmonized POPs Inventories and Action Plan" organized by the Stockholm Convention Regional Centre for North Africa	Rabat, Morocco	30 October to 3 November 2017
Child Project 1.1	Technical mission to Lebanon to identify potential interventions and sites for PCBs disposal/remediation	Beirut, Tripoli, Lebanon	17 - 21 December 2017
Child Project 1.1	Technical mission to Tunisia to identify potential interventions and sites for PCBs and mercury disposal/remediation	Tunis, Tunisia	31 January - 2 February 2018
Child Project 1.1	Technical mission to Algeria to identify potential interventions and sites for PCBs and mercury disposal/remediation	Algiers, Tizi Ouzu, Algeria	12 - 15 February 2018
Child Project 1.2	Meeting mission with promotor and GEF focal point in relation to upgrading and extension of 10 WWTP	Tunis, Tunisia	23-24 March 2017
Child Project 1.2	Technical mission to meet the promotor and GEF focal point in relation to COELMA project	Tetouan, Morocco	24-26 July 2017
Child Project 1.2	Meeting with promoter, GEF focal point and project consultants to kick off technical assistance for project preparation	Rabat, Morocco	5 February 2018
Child Project 1.2	Meeting with promoter, GEF focal point and stakeholders to present COELMA project	Tétouan, Morocco	6 February 2018
Child Project 1.2	Stakeholder consultation and pre-appraisal of the project by EIB	Tripoli, Lebanon	On going
Child Project 1.2	Feasibility studies are on-going for the three projects. A baseline data have been collected and available information on the institutional/policy framework has been prepared for Alexandria West WWTP.	Egypt	On going
Child Project 2.1	Sub-regional consultation with the Adriatic countries	Tivat, Montenegro	26 September 2017
Child Project 2.1	Sub-regional consultation with the Southern Mediterranean countries	Rabat, Morocco	12 - 13 December 2017
SCCF Project	First Regional Consultation	Rabat, Morocco	13 - 14 December 2017
SCCF Project	National consultation with Morocco	Rabat, Morocco	8 - 9 February 2018

Annex 3

List of consultations organized to date in the context of the MedProgramme

Project/programme	Type of consultation/activity	Location	Dates
SCCF Project	National consultation with Montenegro	Podgorica, Montenegro	12 – 13 February 2018
MedProgramme	First Regional Consultation	Athens, Greece	7 – 8 March 2018

Annex 4
Overview of the national and regional interventions planned for all countries in the MedProgramme

(ATTACHED)

Annex 5
Matrix of responsibilities of the executing partners for the MedProgramme

MedProgramme – Overview of responsibilities for execution

Partner countries: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, State of Libya, Montenegro, Morocco, and Tunisia

Lead GEF Agency: UN Environment

Other GEF Agency: EBRD

Executing Partners: UN Environment/MAP, EIB, UNESCO-IHP, GWP-Med, WWFMedPO, IUCN

Component 1: Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 “Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts”

Type of activity	Plan Bleu	SCP/RAC	MED POL	UN Environment MAP
Disposal		✓	✓	
Remediation			✓	
Prevention		✓		
Other		✓	✓	
Measuring progress to impacts	✓		✓	
Programme-wide communication and knowledge management				✓

Child Project 1.2 “Mediterranean Pollution Hotspots Investment Project”

Type of activity	EIB	MED POL	UN Environment MAP
WWTP extension and upgrade (incl. reuse)	✓		
Depollution of catchment areas	✓		
Reduction and control of industrial pollution	✓		
Reduction of mercury releases	✓		
Other activities	✓		
Environmental standards		✓	
Programme-wide communication and knowledge management			✓

Child Project 1.3 “Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)”

Type of activity	EBRD	UN Environment MAP
Water management systems upgrades	✓	
Reduction and prevention of POPs	✓	
Other activities	✓	
Dissemination/ replication	✓	
Programme-wide communication and knowledge management		✓

Annex 5
Matrix of responsibilities of the executing partners for the MedProgramme

Component 2: Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 “Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection”

Type of activity	GWP-Med	Plan Bleu	PAP/RAC	UNESCO IHP	UN Environment MAP
Coastal zone management	✓	✓	✓		
Management of Coastal Aquifers and Related Ecosystems				✓	
Programme-wide communication and knowledge management					✓

Child Project 2.2 “Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus”

Type of activity	GWP-Med	UN Environment MAP
Nexus assessments, related capacity building and institutional support	✓	
Identification of bankable nexus interventions	✓	
Communication and outreach	✓	✓
Programme-wide communication and knowledge management		✓

Component 3: Protecting Marine Biodiversity

Child Project 3.1 “Management Support and Expansion of Marine Protected Areas in Libya”

Type of activity	IUCN	SPA/RAC	WWF MedPO	UN Environment MAP
Inventory of marine and coastal sites of conservation interest in Libya	✓	✓		
Strengthening the governance of marine protected areas		✓		
Reduction and control of industrial pollution				
Effective management of MPAs	✓	✓	✓	
Civil society engagement	✓	✓	✓	
Capacity building	✓	✓	✓	
Awareness raising and communication	✓	✓	✓	✓
Programme-wide communication and knowledge management				✓

Annex 5
Matrix of responsibilities of the executing partners for the MedProgramme

Component 4: Knowledge Management and Programme Coordination

Child Project 4.1 “Mediterranean Sea Basin Environment and Climate Regional Support Project”

Type of activity	UN Environment MAP	All partners
Knowledge sharing and dissemination of results	✓	✓
Coordination and synergies	✓	

GEF Special Climate Change Fund (SCCF) Project²

SCCF Project “Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas”

Partner countries: Albania, Algeria, State of Libya, Montenegro, Morocco and Tunisia

GEF Agency: UN Environment

Executing partners : UN Environment/MAP, PAP/RAC, Plan Bleu, GWP-Med

Type of activity	GWP-Med	PAP/RAC	Plan Bleu	UN Environment MAP
Stakeholder engagement, capacity building and cooperation	✓	✓	✓	
Mainstreaming climate change adaptation in coastal planning		✓	✓	
Access to financing mechanisms for climate change adaptation	✓			
Knowledge management, communication and dissemination				✓

² The SCCF Project “Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas” was approved after the adoption of the MedProgramme as an external intervention. However, it was agreed with the GEF Secretariat and the participating countries that the project, would be executed as part of the Programme to maximize synergies and efficient use of resources.



The Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security

Report of the Second Regional Consultation

Paris, France
20 and 21 September 2018



Photo credit : Chloé Meyer (UNESCO IHP) and Lucilla Minelli (UN Environment/MAP)

Final version 25 October 2018



MedProgramme

Report of the Second Regional Consultation

(Paris, France – 20 and 21 September 2018)

Conclusions

1. The GEF Operational Focal Points (or their representatives) of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia confirmed the importance of the MedProgramme for their countries and for the region, and endorsed the proposals of UN Environment/MAP on (i) the timeline for finalization of the Child Projects of the MedProgramme and their submission to the GEF Secretariat for endorsement; (ii) the development of the overarching strategies for Knowledge Management and Gender Mainstreaming; and (iii) the arrangements for execution of the MedProgramme through the MedProgramme Coordinating Unit (MedPCU).
2. Following final comments from the GEF Operational Focal Points and the UN Environment Project Review Committee (PRC), Child Project 2.1 and the SCCF Project will be submitted to the GEF for endorsement in October 2018.
3. Child Projects 1.1, 1.2, 1.3, 2.2, 3.1 and 4.1 will be submitted to the GEF for endorsement between October and December 2018.

Next steps

	Action item	Responsibility	Deadline
1.	Circulate links to project documents and substantive annexes for Child Project 2.1 and the SCCF Project via DropBox	UN Environment/MAP	21/09/2018
2.	Circulate link to presentations via DropBox	UN Environment/MAP	21/09/2018
3.	Provide deadlines for comments on Child Project 2.1 and the SCCF Project	UN Environment/MAP	24/09/2018
4.	Initiate discussions with the GEF Operational Focal Points on co-financing for Child Projects 1.1, 2.2 and 3.1	UN Environment/MAP	24/09/2018
5.	Prepare and circulate draft report of the 2 nd Regional Consultation	UN Environment/MAP	28/09/2018
6.	Provide the list of national focal points for the UN Environment/MAP Regional Activity Centres to GEF Operational Focal Points	UN Environment/MAP	28/09/2018
7.	Provide Knowledge Management and Gender Mainstreaming Strategies to GEF Operational Focal Points and all partners for comments	UN Environment/MAP	08/10/2018
8.	Provide advanced draft of Child Project 4.1 to GEF Operational Focal Points and all partners for comments	UN Environment/MAP	15/10/2018
9.	Submit co-financing letters for Child Projects 1.1, 2.2 and 3.1	GEF Operational Focal Points	31/10/2018

Background information

1. The Second Regional Consultation was organized by the Coordinating Unit of the UN Environment Mediterranean Action Plan (UN Environment/MAP) and the implementing and executing agencies of the MedProgramme to update the GEF Operational Focal Points about progress on the preparation of the Child Projects, to present the main features of the MedProgramme’s overarching strategies for Knowledge Management and Gender Mainstreaming, and to agree on the next steps for the finalization of all project documents prior to their submission to the GEF for endorsement. The agenda of the Second Regional Consultation is provided in Annex 1.
2. The objective of the MedProgramme is to accelerate the implementation of agreed upon priority actions to reduce the 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 MedProgramme was endorsed by the GEF Council in October 2016 with seven Child Projects contributing to the GEF’s focal areas of International Waters (IW), Chemicals and Waste (CW), and Biodiversity (BD) (Table 1). An additional project financed by the GEF’s Special Climate Change Fund (SCCF) was subsequently developed and is now also considered one of the Child Projects of the MedProgramme, in support of the GEF focal area on Climate Change (CC). Hence, there is a total of eight Child Projects in the MedProgramme.
3. Nine countries have endorsed the MedProgramme: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, and Tunisia. It will be executed over a period of five years starting in 2019.

Table 1 Overview of the MedProgramme components, Child Projects, Executing Agencies and GEF Focal Areas

Mediterranean Sea Programme (MedProgramme)			
MedProgramme Component	Child Project	Indicative lists of executing Agencies	GEF Focal Areas
1. Reduction of Land Based Pollution In Priority Coastal Hotspots, and measuring progress to impacts	1.1 Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts.	UN Environment/MAP	IW and CW
	1.2 Mediterranean Pollution Hot Spots Investment Project.	EIB, UN Environment/MAP	IW and CW
	1.3 Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC).	EBRD, UN Environment/MAP	IW and CW
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone	2.1 Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection.	UN Environment/MAP, PAP/RAC, Plan Bleu, UNESCO-IHP, GWP Med	IW
	2.2 Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS.	GWP Med, UN Environment/MAP	IW
	SCCF Project: Enhancing Regional Adaptation to Climate Change in	UN Environment/MAP, PAP/RAC, Plan Bleu, GWP Med	CC

	Mediterranean Marine and Coastal Areas.		
3. Protecting Marine Biodiversity	3.1 Management Support and Expansion of Marine Protected Areas in Libya.	UN Environment/MAP IUCN, SPA/RAC WWF Med	BD
4. Knowledge Management and Programme Coordination	4.1 Mediterranean Sea LME Environment and Climate Regional Support Project.	UN Environment/MAP	IW and CW

Attendance

- The Second Regional Consultation brought together 50 participants, including representatives from eight of the nine countries that endorsed the MedProgramme and all 11 of the implementing and executing agencies. Also in attendance were representatives of the Permanent Delegations to UNESCO of Albania, Egypt, Lebanon, Montenegro and Tunisia. The complete list of participants is set forth in Annex 2.
- The names, titles and affiliations of the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia (or their nominated representatives) that participated in the regional consultation are provided in Table 2.

Table 2 Names, titles and affiliations of the GEF Operational Focal Points and the nominated representatives that participated in the Second Regional Consultation for the MedProgramme

Country	Representative(s)	Title and affiliation
Albania	Ms. Jula Selmani	Chief of Projects Unit, National Agency of Protected Areas, Ministry of Tourism and Environment
Algeria	Ms. Samira Hamidi*	Inspectrice Centrale de l'Environnement et du Développement Durable, Ministère des Ressources en Eau et de l'Environnement, Direction Générale de l'Environnement et du Développement Durable
Bosnia and Herzegovina	Mr. Senad Oprašić*	Head of Environmental Protection Department, Ministry of Foreign Trade and Economic Relations
Egypt	Mrs. Abir Abu Zeid	Undersecretary for International Cooperation and Technical Assistance at EEAA, Ministry of International Cooperation
Lebanon	Ms. Olfat Hamdan	Head of Protection of Urban Environment Department, Ministry of Environment
Libya	Mr. Mustafa Soliman*	Management Committee Member, Environment General Authority
Montenegro	Ms. Ivana Stojanovic	Advisor, Department for Mediterranean Affairs, Ministry of Sustainable Development and Tourism
Tunisia	Mr. Karim Sahnoun	Directeur du suivi des conventions et des projets de coopération avec les partenaires étrangers, Direction Générale des Relations Extérieures, Ministère des Affaires Locales et de l'Environnement

* GEF Operational Focal Point

Presentations

6. Presentations were delivered for the eight Child Projects of the MedProgramme, as well as a progress report on the preparation of all projects and interventions on the development of the MedProgramme's overarching strategies for Knowledge Management and Gender Mainstreaming. The present report does not attempt to summarize these presentations, but focuses rather on the discussions they prompted.
7. All of the presentations delivered during the Second Regional Consultation are available at: https://www.dropbox.com/sh/544agsnimsbag3m/AAB9dRSpwR9Ur5qRkTzNpPO_a?dl=0.

Welcoming remarks and initial discussions

8. Ms. Alice Aureli, Chief of the Section on Groundwater Systems and Settlements at UNESCO's International Hydrological Programme (IHP), welcomed participants on behalf of UNESCO and declared that the preparation of the MedProgramme was an excellent example of effective collaboration between countries, UN organizations, nongovernmental organizations and associations. Ms. Aureli recalled that implementing solutions to the complex environmental challenges in the Mediterranean will require a multi-sector, multi-disciplinary strategy, consistent with the programmatic approach used in the design of the MedProgramme.
9. Mr. Gaetano Leone, Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat, welcomed participants and thanked UNESCO for hosting the event. Mr. Leone observed that the decision to prepare a multi-focal area programme with the GEF had been a risk, but one that was carefully considered and necessary to amplify the positive impacts of the work of the many stakeholders in the region that had joined forces in 2016 to realize a collective vision: "A healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse contributing to sustainable development for the benefit of present and future generations". Mr. Leone recalled that the MedProgramme builds on the work undertaken in the region by the Contracting Parties, the UN Environment/MAP Regional Activity Centres and other partners, as well as on the foundations of an important set of tools developed in the framework of the Barcelona Convention, including its Protocols, the Transboundary Diagnostic Analysis, and regional and national action plans, amongst others. Mr. Leone recognized the GEF for its twenty years of investments in the region, many of which directly supported these activities. In closing, Mr. Leone informed participants that significant progress had been made since the First Regional Consultation in March 2018, noting that two Child Projects of the MedProgramme are ready for submission to the GEF, that two additional Child Projects are nearing finalization, and that the remaining four Child Projects will be completed by the close of 2018.
10. Mr. Yegor Volovic, the UN Environment GEF Portfolio Manager for International Waters (IW), declared that the MedProgramme was one of UN Environment's flagship initiatives due to its wide-reaching activities, its innovative programmatic approach, and its ability to convene a diverse set of stakeholders to design interventions on the ground, including international finance institutions, development banks, the MAP system with its Regional Activity Centres, and technical experts. He recalled that the implementation of actions on the ground represents one of the key comparative advantages of UN Environment and the Regional Seas Programme (RSP) that it administers. Mr. Volovic noted that the Barcelona Convention and the Mediterranean Action Plan, which form the legal and policy framework for the MedProgramme, were developed in the context of the RSP for the Mediterranean, one of the first that was established.

11. Ms. Eloise Touni, the UN Environment GEF Task Manager for Chemicals and Waste (CW), recalled that the MedProgramme’s activities on CW would support countries in efforts to meet their commitments on Persistent Organic Pollutants (POPs) and mercury under the Stockholm, Basel and Minamata Conventions and announced the corresponding targets for the MedProgramme: removal of 50 tons of mercury and 3,250 tons of POPs. In terms of progress with the development of the MedProgramme’s CW activities, Ms. Touni informed participants that quantities of wastes had been confirmed in the participating countries and that life cycle analyses had been undertaken to identify strategies for the prevention of new wastes, especially the new POPs recently added to the Stockholm Convention. Ms. Touni also highlighted a challenge concerning the mercury removal activities intended to assist countries meet obligations under the Minamata Convention: since the Convention only recently entered into force, many countries have still not ratified it, thereby affecting their ability to take part in the mercury removal activities foreseen under the MedProgramme. Ms. Touni asked the representatives of the participating countries to indicate any assistance they may require to ratify the Minamata Convention, and offered the full support of UN Environment in this regard.

Day 1 Agenda Item 1: GEF and the Mediterranean – 20 years of support, and expectations under GEF-7

12. Mr. Steffen Hansen, Environmental Specialist on International Waters for the Europe and Central Asia regional team at the GEF Secretariat (hereafter the representative of the GEF Secretariat), reconfirmed that the MedProgramme is a flagship for the GEF in the region and outlined the interventions leading up to its development that the GEF had financed in the Mediterranean over the past 20 years. These have included the preparation of the previous Transboundary Diagnostic Analyses (TDAs) and of the Strategic Action Programmes on pollution (SAP MED) and biodiversity (SAP BIO) in the Mediterranean. He noted that several factors were creating momentum that will increase the MedProgramme’s chances for success, including the update by countries of their National Action Plans (NAPs) for the prevention of land-based pollution; the scaling up of these action plans; and capacity building for institutional reforms. Responding to an earlier statement about the risk involved in developing an ambitious multi-focal area programme, the representative of the GEF Secretariat recalled that the GEF is committed to doing “what is difficult, what might fail” but to ensure that this process leads to positive results for countries.
13. In 2018, countries pledged US\$ 4.1 billion for the seventh replenishment of the Global Environmental Facility (GEF) trust fund. This new four-year investment cycle (GEF-7) will provide funds to protect the planet and human wellbeing through activities in the GEF focal areas of Biodiversity, Chemicals and Waste, Climate Change, International Waters, Land Degradation, and through other programs.
14. The GEF has set three strategic objectives for the International Waters focal area under GEF-7: (i) strengthening the Blue Economy opportunities, (ii) improving management in the Areas Beyond National Jurisdiction, and (iii) enhancing water security in freshwater ecosystems. Enhancing water security is one of the primary objectives of the MedProgramme, and is reflected in the Child Projects of Component 2 and the activities to promote the sustainable management of coastal aquifers, integrated water resources management, adaptation to climate change, and the nexus approach for evaluating competing demands for water, energy, food and ecosystem goods and services.
15. Further information about the GEF-7 programming framework and the associated global environmental benefits can be found in the GEF Council Document GEF/R.7/19 [GEF-7 Replenishment Programming Directions](#).

Day 1 Agenda Item 2: Remarks from the Permanent Delegations to UNESCO

16. The representative of UNESCO IHP opened the floor to interventions from the Permanent Delegations to UNESCO, recalling that one of the assets of UNESCO's participation in the MedProgramme was its direct voice with the representatives of the countries, who will be able to support implementation of the programme by providing information and facilitating contacts with institutions, scientist and technicians.
17. H. E. Mr. Ferit Hoxha, Ambassador Extraordinary and Plenipotentiary, Permanent Delegate of Albania to UNESCO, thanked the partners of the MedProgramme for their work to protect the Mediterranean Sea and its coastal areas, and confirmed that the activities of the MedProgramme would assist Albania in its efforts to achieve progress through sustainable development and protection of the environment. The Ambassador recalled that Albania was facing increasing risks associated with climate change and natural hazards and that the country's coastal zone was most vulnerable to these risks, which were affecting water supplies, agriculture and tourism in these areas. The Ambassador also cited a number of expectations for the MedProgramme, including strong coordination, effective exchange of information and opportunities for capacity building, increased resilience to climate change in coastal communities, assistance with the management of groundwater resources, and the protection of biodiversity.
18. H. E. Ms. Dragica Ponorac, Ambassador Extraordinary and Plenipotentiary of Montenegro to France, Permanent Delegate of Montenegro to UNESCO, also thanked the partners and expressed Montenegro's satisfaction with participating in the MedProgramme. The Ambassador underlined the importance of the MedProgramme to Montenegro, which is currently working to meet its obligations under Chapter 27 (Environment) for its accession to the European Union (EU), which will require more than US\$ 1.7 billion in investments. The Ambassador reminded participants that Montenegro is defined as an ecological state in its Constitution, and reiterated the country's commitment to meet the objectives of the MedProgramme especially through the activities foreseen in the hotspot areas of the Kotor Bay and the Bijela shipyard.
19. H.E. Mr. Ghazi Gherairi, Ambassador Extraordinary and Plenipotentiary, Permanent Delegate of Tunisia to UNESCO, thanked the partners for their collaboration to implement the MedProgramme, and expressed appreciation for the fact that the programme will address the role of the environment in ensuring security. The Ambassador noted that the overarching challenge for the region is to transmit a healthy Mediterranean to the next generation, and that Tunisia is aware of the stakes at hand and has placed environmental values at the heart of its strategy of growth for the future. The Ambassador also took the opportunity to recognize the IHP for its work with the Government of Tunisia. In closing, the Ambassador pledged the willingness of the Government of Tunisia to provide the tools necessary for the success of the MedProgramme.
20. The Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat thanked the ambassadors for their remarks and recalled that the MedProgramme is being prepared under the leadership of the participating countries and that their guidance is important to move the programme towards success. The Coordinator highlighted that all participating countries of the MedProgramme are Contracting Parties of the Barcelona Convention, and many are participating in the Bureau including Egypt, Montenegro and Tunisia as well as Albania which currently holds the presidency. In closing, the Coordinator expressed gratitude to all countries present and contributing to the MedProgramme.

Day 1 Agenda Item 3: Setting the scene and objectives of the consultation

21. Mr. Lorenzo Galbiati, Project Pool Manager at the UN Environment/MAP-Barcelona Convention Secretariat (hereafter the Secretariat), reviewed the agenda of the consultation with participants and outlined the main objectives of the two-day event: (i) update the GEF Operational Focal Points on the status of the development of all Child Projects; (ii) request their feedback on outstanding issues; (iii) agree on the next steps for finalization of the preparation phase of the MedProgramme; and (iv) present the main features of the Knowledge Management and Gender Mainstreaming Strategies that will be applied to all Child Projects.
22. The Secretariat recalled that the MedProgramme builds on the strong foundations established in the region from more than US\$ 70 million in investments from the GEF over 20 years for activities supporting the implementation of the Barcelona Convention. These investments have led to the development of the initial Transboundary Diagnostic Analysis for the Mediterranean Large Marine Ecosystem (TDA-MED) as well as its 2005 update and 2015 supplement on coastal aquifers; Strategic Action Programmes to Address Pollution from Land-based Activities (SAP-MED) and for the Conservation of Biological Diversity (SAP-BIO), as well as their associated National Action Plans (NAPs); and the Protocol on Integrated Coastal Zone Management (ICZM).
23. The Secretariat also informed the participants about the delays encountered in the development of the Child Projects and explained that the period for submission to the GEF would be extended to December 2018. However, this should not affect the anticipated initiation of execution of the MedProgramme, which is foreseen in the first or second quarter of 2019.

Day 1 Agenda Item 4: Progress report on preparation of the MedProgramme Child Projects and their submission to the GEF

24. The Secretariat provided the milestones of the MedProgramme (Figure 1), an update on the status of action items from the First Regional Consultation in March 2018 (Table 3), the status of the development of each of the Child Projects (Table 4), the national and regional consultations foreseen between October and December 2018 (Table 5), the schedule for the completion of the preparation phase of the MedProgramme (Table 6) and the tentative timeline for the initiation of activities (Table 7).

Figure 1 Milestones of the MedProgramme (2016 – 2019)

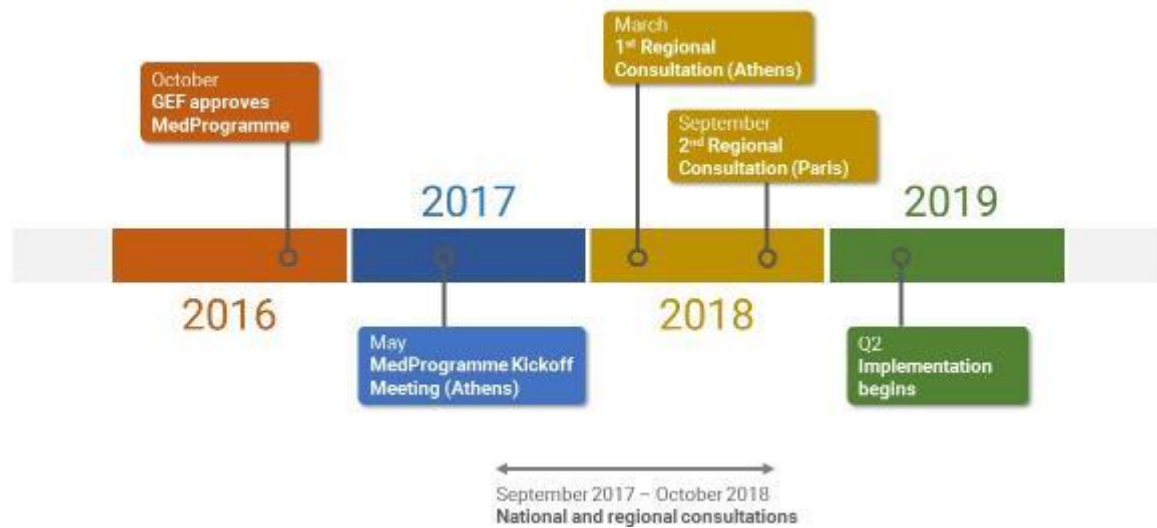


Table 3 Status of action items from First Regional Consultation for the MedProgramme

Action item	Responsibility	Status
1. An overview of national and regional activities in each country	UN Environment/MAP	Complete
2. A responsibility matrix for the executing structure of each Child Project	UN Environment/MAP	Complete
3. Contact information for all implementing and executing partners	UN Environment/MAP	Complete
4. Instructions on the preparation of co-financing letters	UN Environment/MAP	Complete
5. An overview of national stakeholders engaged during project preparation	UN Environment/MAP	Ongoing
6. A list of national thematic experts for CW and IW that will review project documents	GEF Operational Focal Points	Complete
7. Letters of co-financing for Child Projects 1.2, 2.1 and 4.1	GEF Operational Focal Points	7 of 9 received
8. Support the GEF Operational Focal Points in the identification of initiatives that can constitute co-financing contributions to the Child Projects	Executing partners	Complete
9. Provide letters of co-financing for Child Projects 1.2, 2.1 and 4.1	Executing partners	Complete

Table 4 Status of the development of the Child Projects (CP) of the MedProgramme

Project	Draft application package complete? (Yes/No)	Final application package complete? (Yes/No)	Anticipated timeframe for PRC ¹	Anticipated timeframe for submission to GEF
CP 1.1	Yes	No	November 2018	December 2018
CP 1.2	Yes	No	November 2018	November 2018
CP 1.3	Yes	No	(Not applicable)	December 2018
CP 2.1	Yes	Yes	October 2018	October 2018
SCCF	Yes	Yes	October 2018	October 2018
CP 2.2	Yes	No	December 2018	December 2018
CP 3.1	Yes	No	December 2018	December 2018
CP 4.1	Yes	No	November 2018	November 2018

Table 5 National and regional consultations foreseen between October and December 2018

Project	Type of consultation	Timeframe
CP 1.1	Virtual (comments gathered via email)	November 2018
CP 1.2	Virtual (comments gathered via email)	October 2018
CP 1.3	Virtual (comments gathered via email)	December 2018
CP 2.2	Regional meeting for all countries	November 2018
CP 2.2	Virtual (comments gathered via email)	December 2018
CP 3.1	National meeting	October 2018
CP 4.1	Virtual (comments gathered via email)	October 2018

Table 6 Schedule for the completion of the preparation phase of the MedProgramme

Timeframe	Actions
September – December 2018	<ul style="list-style-type: none"> • Finalize all application packages • Complete all PRCs • Submit all application packages to GEF for review • Obtain GEF CEO endorsement • Prepare all final reports and expenditure statements for PPG
January – March 2019	<ul style="list-style-type: none"> • Close all legal agreements for PPG phase with implementing and executing partners • Formal closure of the PPG phase

¹ PRC: UN Environment’s Project Review Committee, the internal review undertaken for all GEF projects prior to their submission to the GEF Secretariat for CEO endorsement. EBRD, as an implementing agency for the GEF, is not subject to this review.

Table 7 Tentative timeline for the initiation of activities of the MedProgramme

Timeframe	Actions
November – December 2018	<ul style="list-style-type: none"> • Establish the legal and procedural frameworks for the Programme execution • Evaluate needs for the new legal agreements that will be established with implementing and executing partners, national institutions, etc. • Prepare terms of reference for staff that will be involved in the Programme
January – March 2019	<ul style="list-style-type: none"> • Establish new legal agreements • Set an operative budget in the UN Environment Enterprise Resource Planning System (Umoja) • Allocate funds for each Child Project
April – June 2019	<ul style="list-style-type: none"> • Initiate preparation of the inception report and workshop • Arrange consultations with the countries • Staff the Child Projects

25. Ms. Olfat Hamdan, the representative of the GEF Operational Focal Point of Lebanon (hereafter the representative of Lebanon), inquired about one of the action items from the First National Consultation, namely the nomination by the GEF Operational Focal Points of national CW and IW focal points, indicating that Lebanon had not provided this information. The Secretariat informed that the selection of national focal points for CW and IW for the purposes of the MedProgramme was an internal matter for each country, and that all communications from the Secretariat regarding project development would continue to be directed to the GEF Operational Focal Point. As agreed at the First Regional Consultation, the GEF Operational Focal Point will coordinate the review of project documents with their national experts and provide a single set of comments to the executing agency that is responsible for the preparation of the Child Project.

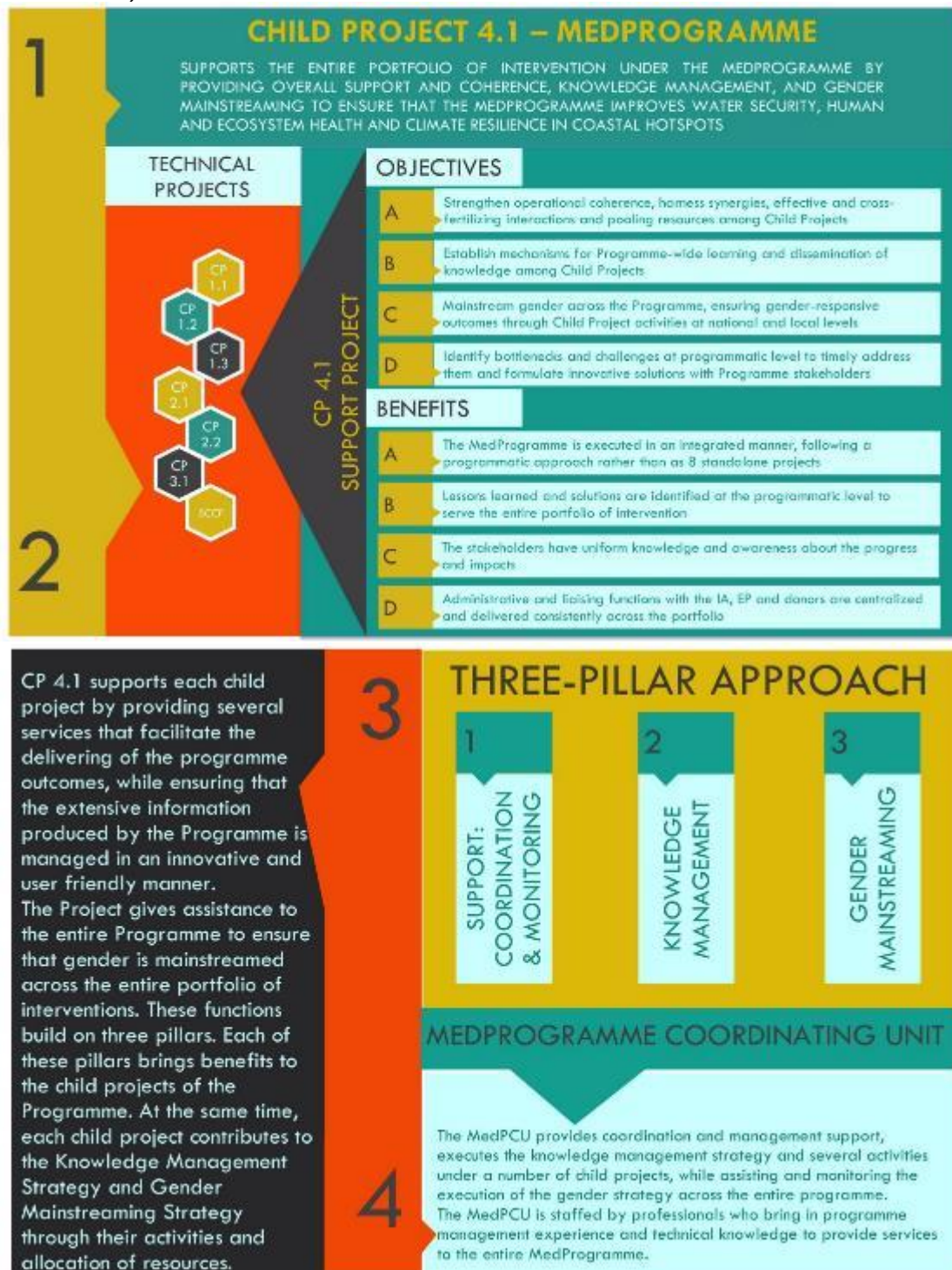
26. Mr. Karim Sahnoun, the representative of the GEF Operational Focal Point of Tunisia (hereafter the representative of Tunisia), asked for clarification about the national activities for Child Project 2.2 presented in the overview of national and regional activities of the Child Projects for each country. Mr. Dimitris Faloutsos, Deputy Regional Coordinator of GWP Med, the leading executing agency for this Child Project, explained that a nexus assessment for the North West Sahara aquifer was foreseen in the context of a project funded by Sida, and that this assessment would contribute to the overall results of Child Project 2.2, but that no GEF funds would be used to finance national level activities in Tunisia for this Child Project.

Day 1 Agenda Item 5: Update on Child Project 4.1

27. Child Project 4.1 will play a key role in the MedProgramme, as it will: (i) monitor the progress of the entire portfolio of projects towards the programme’s overarching goal of enhancing environmental security, and (ii) provide essential support functions to all Child Projects of the MedProgramme through three main lines of action: coordination and monitoring; knowledge management; and gender mainstreaming. In addition, Child Project 4.1 will produce technical activities, including the development of databases, the implementation of the Knowledge Management Strategy, as well as preparation of communication materials and the Annual Stocktaking Meetings. A conceptual overview of the objectives, benefits and structure of Child Project 4.1 is provided in Figure 2.

28. The project document and substantive annexes for Child Project 4.1 will be provided to the GEF Operational Focal Points and the partners for comments by 15 October.

Figure 2 Infographic on the objectives, benefits and structure of Child Project 4.1 (Credit: Debasmita Boral)



29. The Secretariat emphasized that the development of programme-level strategies for knowledge management and gender mainstreaming has not been attempted before in the context of a GEF programmatic approach, and therefore represents an important innovation

for the GEF portfolio. These strategies for the MedProgramme will be provided to the GEF Operational Focal Points and the partners by 8 October for comments.

30. The representative of Lebanon confirmed that Child Project 4.1 has an important role in the MedProgramme, especially for overall coordination and to identify synergies with other initiatives and projects at the regional and international level. The representative of Lebanon then asked for clarification about the link between the MedProgramme Coordinating Unit (MedPCU) and the implementation of activities at the national level. The Secretariat explained that the national activities will be developed by the executing partners of the corresponding Child Projects and that the MedPCU – in the framework of Child Project 4.1 – will monitor progress on all Child Projects and help them to promote their knowledge tools at the level of the programme, in addition to providing other services. The specific modalities for execution of national level activities will be discussed during the inception phase of each Child Project. The Secretariat emphasized that the execution of activities with the relevant national and sub-national institutions for all countries will be coordinated by the executing partners (the approach successfully used in the MedPartnership) and that there was no expectation for the governments of the participating countries to create a national coordination structure for the MedProgramme.
31. Ms. Ivana Stojanovic, the representative of the GEF Operational Focal Point of Montenegro (hereafter the representative of Montenegro), expressed support for the cross-cutting approach proposed for the design of Child Project 4.1 and thanked the partners for reflecting the national priorities of Montenegro in the design of Child Project 2.1 and the SCCF Project. Making reference to the activities of Child Project 2.1 on coastal observation, the representative of Montenegro expressed her point of view about how these activities could be linked to Child Project 4.1. Given that the Child Project 2.1 could not address Montenegro's priority related to the development of a coastal database and observatory with the aim of connecting relevant stakeholders and managers of coastal data, Child Project 4.1 is therefore seen as an opportunity to assist the country with this request (in the context of the execution of the Knowledge Management Strategy and its development of knowledge tools).
32. The Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat declared that a centralized approach to knowledge management for the MedProgramme would be more effective and yield more positive impacts than the decentralized approach employed for the MedPartnership, and stated that the knowledge management platform foreseen under Child Project 4.1 would be important to the MAP system during and after the lifespan of the MedProgramme.
33. Mr. Mohamad Kayyal, MED POL Programme Management Officer, observed that the management function of the MedPCU in Child Project 4.1 had been underemphasized with respect to coordination services, and that this management function would require significant efforts across the various Child Projects. The Secretariat explained that this was provided for in the design of the MedPCU, which would ensure traditional management functions for the Child Projects (such as establishment of legal agreements, financial management and procurement), as well as monitoring functions to measure progress to impacts and to prepare the Project Implementation Reports (PIR) of each Child Project for the GEF. The Project Management Cost (PMC) of each Child Project will support the overall management, coordination and monitoring functions delivered by the MedPCU. It was also noted that the MedPCU will execute technical activities under the Child Projects 2.1, 2.2, 3.1 and 4.1 as well as the SCCF Project. This is not the case for the Child Projects 1.1 and 1.2 where dedicated and specific technical assistance will be identified and supported by the project grants for the execution of the activities.

34. Prof. Michael Scoullos, the Chair of GWP Med, recognized the important step taken by the designers of the MedProgramme to coordinate knowledge in the region, and noted the challenge of harnessing all the knowledge generated by activities on the ground in many countries and with many partners. Prof. Scoullos asked what could be done to facilitate the understanding of the countries about the locations of activities and the potential for synergies. The Secretariat indicated that relevant information on this point would be provided during the presentation on the MedProgramme's Knowledge Management Strategy.

Day 1 Agenda Item 6 – Knowledge Management in the MedProgramme

35. Ms. Lucilla Minelli, the Knowledge Management Expert for the preparatory phase of the MedProgramme, recalled that the overall objective for the Knowledge Management Strategy (KM Strategy) is to "provide a structured and centralized approach to leverage and share knowledge assets generated by the Child Projects of the MedProgramme with the intended beneficiaries and audiences." The KM Strategy was developed through analysis of the Programme Framework Document and background documentation, surveys, exchanges with project designers, desk studies, and contact with relevant technical counterparts regarding performance and functionality of information technologies.
36. The representative of Lebanon recognized that a diverse set of ideas and activities must be accounted for under the KM Strategy and that it will be important to develop indicators to track the progress towards operational objectives and targets associated with specific knowledge management activities. The Secretariat explained that objectives and activities had been established for knowledge management and that an appropriate number of indicators for these would be reflected in the design of Child Project 4.1. The Secretariat reminded the participants, however, that the decision to implement a KM Strategy represents an additional task that goes above and beyond what is required by the Programme Framework Document approved by the GEF for the MedProgramme.
37. The Chair of GWP Med urged the Secretariat to ensure that the knowledge management tools of the MedProgramme are tailored to the needs of policy makers in particular, and not only to those of the coordinating and/or executing agencies. This sentiment was reiterated by Ms. Daria Povh Skugor, Senior Programme Officer at the Priority Actions Programme Regional Activity Centre (PAP/RAC), who also inquired about the source of the human and financial resources that would be necessary to implement the KM Strategy. The Secretariat confirmed that governments and policy makers are the primary client for the knowledge tools of the MedProgramme, and that the MedProgramme will dedicate sufficient resources to operationalize the strategy, including through the recruitment of a knowledge management expert for the MedPCU and through trainings for partners on how to generate and package data. The Secretariat reminded participants that the KM Strategy is modular in nature, and will start with simple tools and expand to meet the needs of the programme.
38. The representative of the GEF Secretariat noted that the KM Strategy represents an effective tool for the GEF to distill results from the MedProgramme, and asked if the knowledge products of the MedPartnership could be further disseminated via the Knowledge Management Platform, especially to private sector stakeholders. The Knowledge Management Expert confirmed that the results of the MedPartnership would be promoted on the platform, and that the private sector was a targeted audience and beneficiary of the KM Strategy, as well as a potential provider of knowledge. The Secretariat indicated that efforts could be made under the MedProgramme to create partnerships with the private sector.
39. The Chair of GWP Med added that the private sector holds a great amount of data (sometimes of higher quality than that of governments) and recommended that efforts be taken from the

onset of the MedProgramme to clearly define the requirements for data gathering, to determine with countries what data can be shared, and with whom. The representative of UNESCO IHP recalled that in the context of the Barcelona Convention stakeholders have rights to seek data from the private sector, and that the MedProgramme could support these efforts by creating awareness and encouraging the private sector to communicate more.

40. The Secretariat informed participants that the Integrated Monitoring and Assessment Programme (IMAP) of the Barcelona Convention would be considered in the design of the Knowledge Management Platform, and that relevant data from the MedProgramme would be integrated in the IMAP platform.
41. Ms. Abir Abu Zeid, the representative of the GEF Operational Focal Point of Egypt (hereafter the representative of Egypt), expressed satisfaction with the KM Strategy and its goal to integrate all projects and share lessons across the programme, adding that this will be important for all countries. In response to her question about how data would be collected at the national level, the Secretariat explained that the executing partner of each Child Project will have resources to develop activities with the countries and to support national institutions, and that each Child Project will have a dedicated budget for knowledge management activities to produce and manage harmonized data specific to the focus of each Child Project. This includes if appropriate, the use of raw data on specific issues provided by national institutions to contribute to the MedProgramme KM Strategy. The Secretariat reassured participants that data could be shared in an aggregated manner, but that raw data belonging to the countries would not be made available unless the owners of the data agreed to this.

Day 1 Agenda Item 7: Coordination with IW:LEARN and LME:LEARN

42. Mr. Mish Hamid, Project Manager for the GEF International Waters Learning Exchange and Resources Network (IW:LEARN), recalled that the IW:LEARN platform was created to provide knowledge management services to the GEF's International Waters project managers, since International Waters is the only GEF focal area for which an overarching convention or agreement does not exist. LME:LEARN is a cousin initiative of IW:LEARN, providing services to GEF IW projects in coastal and marine areas, with the goal of strengthening global governance of Large Marine Ecosystems (LME). Mr. Hamid outlined the main services of these initiatives, including knowledge sharing and partnership building, information management, programmatic support, and training (biennial International Waters Conferences, GEF project twinnings, ...). Further information on both initiatives is available at <https://iwlearn.net/>.
43. The Secretariat confirmed that the outputs of the Child Projects of the MedProgramme will feed into the IW:LEARN platform, and that information exchanges with IW:LEARN and LME:LEARN are foreseen in the KM Strategy.

Day 1 Agenda Item 8: Gender Mainstreaming in the MedProgramme

44. Ms. Debasmita Boral, the Gender Expert for the preparatory phase of the MedProgramme, provided a brief history of the evolution of gender considerations in development policies and described the benefits of gender mainstreaming before presenting the MedProgramme's Gender Mainstreaming (GM) Strategy. The GM Strategy comprises three lines of action: (i) address gender-blind hurdles with gender-differentiated consequences; (ii) mitigate gender-specific barriers and discriminatory norms; and (iii) scale up gender-sensitive policies and deliver gender-responsive outcomes. The MedProgramme is operationalizing the GM Strategy in the preparatory phase by conducting tailored gender assessments and preparing

costed gender action plans for each Child Project. Specific activities on gender will be defined and approved during the inception phase with all stakeholders.

45. The Secretariat recalled that Child Project 4.1 will ensure overall monitoring of the implementation of the GM Strategy and that executing partners will receive training on how to mainstream gender in project activities.
46. The Chair of GWP Med suggested that in some cases, project activities should also be designed to consider the specific needs of marginalized groups, in addition to considerations for gender.

Day 1 Agenda Item 9: Update on Child Project 2.1

47. Child Project 2.1 encompasses activities on Integrated Coastal Zone Management (ICZM), protection of coastal aquifers and groundwater-related ecosystems, as well as integrated management of water resources management, including conjunctive management of surface water and groundwater resources. A joint presentation on the development of the project and its activities was made by representatives of the four executing partners: PAP/RAC (Ms. Daria Povh), Plan Bleu (Mr. Antoine Lafitte), GWP Med (Mr. Dimitris Faloutsos) and UNESCO IHP (Mr. Youssef Filali-Meknassi).
48. Mr. Amr Abdallah Morsy, First Secretary of the Permanent Delegation of the Arabic Republic of Egypt to UNESCO, informed the Secretariat that the Government of Egypt will provide written comments to IHP to be reflected in the final version of the project document for Child Project 2.1.
49. The representative of Lebanon also indicated that Lebanon would provide comments on the project document and furthermore asked for clarification on the activities foreseen in the Damour area of Lebanon, including on the management approach that would be employed for the Damour area and on responsibilities for the implementation of the management that will be produced for this area. The executing partners confirmed that a river basin management approach will be used in the design of an integrated resources management plan for the Damour area (taking into account upstream activities that affect the coast) and that the implementation of the plan will be the responsibility of the country.
50. The representative of Montenegro raised a concern about one of the activities of Child Project 2.1 foreseen in Montenegro, "Preparation of the Management Plan for the Buna-Bojana Transboundary Aquifer", noting that the title of this plan was similar to the existing plan for the Buna-Bojana area prepared under the MedPartnership. The Secretariat promised to address this concern in the final project document, based on the comments that the representative of Montenegro will provide.
51. Ms. Samira Hamidi, the GEF Operational Focal Point of Algeria (hereafter the representative of Algeria) expressed a wish to see more reference in the project document to the activities on ICZM already undertaken in Algeria (preparation of a coastal strategy and a coastal plan for the Reghaia area) and to discuss the possibility of having activities on ICZM in Algeria that were more concrete than those described in the project document (support for ratification of the ICZM Protocol). The representative of PAP/RAC recalled that the adoption of the ICZM tools already developed in Algeria would support the adoption of the ICZM Protocol, and that efforts would be made to seek additional investments to support Algeria in this work. The Secretariat clarified that no promises could be made however at this stage about the development of bankable projects and access to loans under the activities of Child Project 2.1.

Day 1 Agenda Item 10: Update on the GEF Special Climate Change Fund (SCCF) Project

52. Mr. Matthew Lagod, Consultant for UN Environment/MAP, outlined the progress achieved on the preparation of the SCCF Project and its activities. The SCCF Project will enhance regional adaptation to climate change in Mediterranean marine and coastal areas through four lines of action: (i) stakeholder engagement and capacity building; (ii) application of best practices for climate resilience in the coastal zone; (iii) access to climate financing mechanisms; and (iv) knowledge management and project coordination. The project document for the SCCF Project is complete and will be submitted to UN Environment's Project Review Committee in October 2018.

Day 2 Agenda Item 1: Update on Child Project 1.1

53. A joint presentation on the development the Child Project 1.1 and its activities was made by representatives of the implementing and executing agencies – Ms. Eloise Touni of the Chemicals and Health Branch/ GEF Team at UN Environment and Ms. Marina Markovic of the UN Environment/ MAP – MED POL. Project activities under the CW component are designed to remove existing stockpiles of persistent organic pollutants (POPs) and mercury, and to prevent the generation of new wastes containing these pollutants. Disposal activities will be carried out in two phases. Phase 1 will target stockpiles verified during the current preparation phase of the project as being ready for immediate disposal, and Phase 2 will entail further inventories and data gathering to identify the remaining stockpiles that can be eliminated to meet the project's disposal targets. Prevention activities will focus on strategies for avoiding further generation of wastes containing mercury and two types of new POPs (PFOS and HBCD). An additional set of activities will be undertaken under the IW project component to produce an updated TDA for the Mediterranean (including gender assessment), a report on progress to impacts, a data sharing policy and an offshore monitoring strategy. The project document for Child Project 1.1 will be submitted to the GEF for endorsement in December 2018.

54. The representative of Lebanon inquired about the modalities for implementation of the activities, whether the new POPs targeted under the project could be expanded to include other chemicals (such as SCCP, a priority chemical for Lebanon), and also about how countries had been consulted about the International Waters (IW) activities. In terms of implementation modalities, Ms. Touni explained for each Phase 1 disposal site an environmental management plan (EMP) would be developed to establish responsibilities, identify national capacities and determine the need to bring in outside assistance. Regarding the possibility of considering additional new POPs for prevention activities, Ms. Touni indicated that it could be discussed, but recalled the existing proposals for Lebanon were designed to address the POPs identified in the country's NIP. Regarding the consultations on the IW activities, Ms. Markovic explained the meetings organized within the MAP system were used to consult the Contracting Parties of the Barcelona Convention (on, for example, national needs for IMAP – Integrated Monitoring and Assessment Programme – implementation, indicators and other relevant topics); proceedings of such meetings were used as a starting point in developing relevant sections of the project document. The Secretariat reconfirmed that the countries would have ample opportunity to review and comment on the project document prior to its submission to the GEF.

55. The representative of Egypt recalled that Egypt had expressed interest in participating in the national project activities, and had recently provided UN Environment with its NIP, the list of relevant national institutions and an indication of candidate companies for the development of prevention pilots. The representative of Egypt inquired about how the country could catch

up to the others in the project, about the possibility of reinforcing national capacities, and about the criteria for allocation of funds to the countries. She also expressed interest to receive more information on the forums used to consult the countries on the needs for the development of IW activities, in particular proceedings of the meeting held in July 2018 in Rome on the IMAP implementation. Ms. Touni, taking the questions in turn, explained that Egypt could not participate in Phase 1 for disposal but that this may be possible for Phase 2. In terms of enhancing national capacities, the EMP process for each disposal site will include an assessment of national capacities, and national experts will gain expertise by participating in execution of the EMP and inspection activities under the supervision of UN Environment consultants. Criteria for allocation of resources to priority sites is based on the presence of verified stockpiles that are ready for immediate disposal and also on the co-financing contribution that countries may bring to dispose additional quantities of waste. Priorities for disposal sites will be reviewed each year during the project's steering committee. Finally, Ms. Markovic assured that the requested information on the Rome meeting deliberations will be shared with the Government of Egypt.

56. The representative of Algeria underlined the importance of the project to the Government of Algeria, its wish to participate in the activities on mercury disposal and its need for capacity building with respect to mercury elimination and implementation of its NAP (National Action Plan). The representative of Algeria also informed participants that experts from UN Environment were currently being hosted in Algeria for a technical mission for the project and that all necessary information would be provided.
57. The representative of Montenegro confirmed that Montenegro's priorities for the project were well represented in the activities considered for the project, while inquiring whether the priorities for Phase 2 had been confirmed and expressing interest for hearing about possible synergies with Child Project 1.3. Ms. Touni responded that the project document would not make reference to sites for Phase 2. The first step of Phase 2 will be to confirm the presence of the chemicals reported in the national inventories/ accounted for in the project document, followed by decisions about site selection during the second or third steering committee meetings.
58. Mr. Roland Weber, Associated Expert of SCP/RAC, called on the GEF to consider activities on POPs that were not in NIPs but that were particularly dangerous, difficult and expensive to remove, and which are seriously affecting drinking water supplies.

Day 2 Agenda Item 2: Update on Child Project 1.2

59. Mr. Mark Pevsner, Senior Advisor – Strategy and Coordination Division Advisory Services Department/Projects Directorate of the European Investment Bank (EIB), explained that the primary objective of Child Project 1.2 is to prepare investments for physical infrastructure projects to reduce the discharges of untreated or partially treated wastewater that impact the sea. The target countries for Child Project 1.2 are Egypt, Lebanon and Tunisia, and the project document is nearly complete. The representative of UN Environment/ MAP – MED POL, Ms. Markovic, presented a component of the project that will support development of regional standards (wastewater management, sludge management, desalinization and aquaculture) for consideration and adoption by the Contracting Parties of the Barcelona Convention.
60. The representative of Tunisia recalled the country's strong involvement in the project. He asked about developments related to his recommendation (expressed at the First Consultation meeting from March 2018) for a coordinated approach in the implementation of the activities on mercury in Child Projects 1.1 and 1.2, including how Tunisia would benefit from these. Ms. Touni explained that analysis was ongoing about whether mercury activities

originally foreseen under Child Project 1.2 would be taken up by Child Project 1.1, whereas Child Project 1.1 is not aiming to facilitate access to investments for decontamination, but rather focuses on removal of mercury from those countries that had ratified the Minamata Convention. Child Project 1.1 activities in Tunisia will thus be limited to removal of mercury stockpiles. The representative of EIB added that EIB would consider granting a loan for any well-prepared project on mercury decontamination that a country was prepared to undertake. The Secretariat recalled that the priorities of the Child Projects are set in the Programme Framework Document for the MedProgramme approved by the GEF in 2016, and that the first priority is to meet the targets set forth therein for disposal/removal and co-financing.

61. The representative of Lebanon indicated that the country has an important need for wastewater projects and capacity building in this domain, and asked for capacity building activities to be included in the project. Regarding the regional standards to be developed under the project, the representative of Lebanon emphasized the high relevance of regional wastewater and sludge management standards for her country. As regards desalination, the advice was to also take into account/address small and medium sized enterprises in Lebanon and their small-scale desalination capacities.
62. The Chair of GWP Med stated that the Mediterranean region needed active encouragement to shift towards non-conventional water resources, and considered that the regional standards to be developed under the project could contribute to this shift. Ms. Maria Diamanti, Environmental Expert of EIB, agreed that water reuse is important but noted that society's perception of this was poor. EIB works to raise awareness about the quality of treated wastewater, but ultimately it is a country's choice to encourage acceptance for the use of treated wastewater. As water becomes more scarce, the public's opinion about the use of treated wastewater may change. The Chair of GWP Med noted that there has been a rapid shift in the mentality of people regarding non-conventional water resources – including through efforts of religious leaders that have expressed support for the use of these kinds of water resources – and that the partners and countries of the MedProgramme should collectively step up efforts to encourage the use of these resources.

Day 2 Agenda Item 3: Update on Child Project 1.3

63. Two representatives of European Bank for Reconstruction and Development (EBRD) – Ms. Astrid Motta, Principal, Energy Efficiency and Climate Change, and Ms. Claudia Neuschulz, Analyst – presented the progress on the development of activities for Child Project 1.3, which is designed to reduce land-based sources of pollution in hotspots through a combination of technical assistance and investment grants to rehabilitate wastewater treatment plants and increase the volume of wastewater treated in the region. Under the CW component of the project, activities are being developed aiming to reduce and prevent 1,250 t of POPs. Like UN Environment, EBRD is an accredited GEF agency and has its own modalities for project preparation. EBRD intends to submit the project document for Child Project 1.3 to the GEF by December 2018.
64. Two examples of existing on-the-ground support from EBRB were presented. The first is a technology transfer platform designed to assist countries adopt best technologies; EBRD provides a loan to the countries to finance the implementation of the technology and countries later recover up to 25% of the loan from grants. The second example is an infrastructure project preparation facility.
65. The representative of Egypt inquired about the business model for the implementation of Child Project 1.3. Ms. Motta indicated that the project will be implemented through a combination of technical assistance and investment grants. EBRD assists companies to

identify the best technologies for their needs and proposes loans to enable companies to finance implementation of these technologies (for example to shift to PBC-free production methods, to promote water efficiency, ...). Following successful implementation of the technologies, EBRD will reimburse a portion of the implementation cost. Countries are eligible for this assistance only if they are bankable (i.e., able to borrow money).

66. The representative of Lebanon asked for clarification about the specific activities foreseen in the project. The Secretariat responded that a portfolio of potential investments will be developed during the project preparation phase, but that it was not possible to commit to specific investments at present. The Secretariat also recalled that EBRD is an implementing agency of the GEF and as a development bank, has different working modalities than UN Environment regarding budgeting, reporting and execution of activities. In the MedProgramme, EBRD will also have its own project management budget which is separate from that of UN Environment. The management of projects in the UN Environment portfolio will be ensured through Child Project 4.1.
67. In response to a question from the representative of Egypt, the Secretariat clarified that the GEF funds provided for Child Project 1.3 are not for loans but rather for pre-investment studies to prepare investments. The representative of the GEF confirmed that the GEF provides seed money to institutions that can scale-up investments to deliver global environmental benefits.
68. The representative of Montenegro inquired about the consultations with countries for Child Project 1.3 that were announced during the First Regional Consultation, and indicated that the Government needed more details about activities (including on possible synergies between Child Projects 1.1 and 1.3) before preparing its letter of co-financing. The representative of EBRD explained that the consultations will take place in the coming weeks to inform the countries about the potential activities and the opportunities for investments/loans in the context of this project.
69. The representative of Tunisia asked whether the technical assistance activities of the project included pilot projects for the private sector to demonstrate the effectiveness of new technologies. The representative of EBRD confirmed that demonstration of new technologies is one of the key objectives for this work and that pilot projects could be financed.

Day 2 Agenda Item 4: Update on Child Project 3.1

70. Mr. Atef Limam, MedMPAnet Project Officer at SPA/RAC, described the main lines of action for Child Project 3.1, a project devoted to enhancing the management of Marine Protected Areas (MPAs) in Libya. These include capacity building for managers of MPAs in Libya, the revision of Libya's National Strategy on MPAs and its draft law on protected areas, and an inventory of marine and coastal sites of ecological importance. A consultation with Libyan stakeholders is planned for October 2018, and the project document will be submitted to the GEF in December 2018.
71. Mr. Mustafa Soliman, the GEF Operational Focal Point for Libya (hereafter the representative of Libya), indicated satisfaction with the proposed intervention in Libya and positive anticipation about the implementation of activities on the ground. Regarding the consultation with Libyan stakeholders, the representative of Libya indicated that his presence will be beneficial and that he will also extend the invitation to the Environment General Authority.
72. In response to a question raised about the possibility of MPAs imposing on navigation rights in the high seas, the representative of SPA/RAC confirmed that none of the MPAs in Libya are beyond national jurisdiction. However, efforts are underway in the context of the Barcelona

Convention to create a framework for the creation of MPAs that are beyond national jurisdiction.

Day 2 Agenda Item 5: Update on Child Project 2.2

73. Mr. Dimitris Faloutsos, Deputy Regional Coordinator of GWP Med, provided an overview of the design of activities for Child Project 2.2 and recalled its overarching objective: fostering water-food-energy security and the reduction of land based nutrient pollution and other pressures, through the adoption of the water-food-energy-ecosystems nexus approach. The project activities will follow four main lines of action: strengthening the capacities of institutions on the nexus approach; addressing nexus issues affecting the Mediterranean Sea LME; testing and upscaling nexus solutions; and engaging stakeholders in these processes. A consultation with the participating countries to confirm interest and priorities in the project will be organized in Beirut, Lebanon on the sidelines of the First MENA Nexus Roundtable that will take place from 26-28 November 2018.

Day 2 Agenda Item 6: Discussion

74. In summary, the representatives of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia confirmed the importance of the MedProgramme for their countries and for the region, and endorsed the proposals of UN Environment/MAP on (i) the timeline for finalization of the Child Projects of the MedProgramme and their submission to the GEF Secretariat for endorsement; (ii) the development of the overarching strategies for Knowledge Management and Gender Mainstreaming; and (iii) the arrangements for execution of the MedProgramme through the MedProgramme Coordinating Unit (Med PCU).

75. Ms. Jula Selmani, the representative of the GEF Operational Focal Point of Albania (hereafter the representative of Albania), congratulated the partners and acknowledged the excellent quality of the workshop. She also indicated that although she had not been involved in the previous meetings and the development of the MedProgramme, she now had a clear vision of the process, thanks to the organization of the consultation. In closing, the representative of Albania declared that the strategy for the implementation of the MedProgramme appeared to be effective and would serve the needs of the countries.

76. The representative of Algeria asserted that the MedProgramme is an important opportunity for the region and predicted that it would result in success for countries and partners alike. She emphasized that the effective coordination among the countries and project partners during the preparation phase of the MedProgramme represented a positive start to the process. The representative of Algeria also announced that a coordination mechanism at the national level in Algeria will be implemented to ensure effective interaction with the regional coordination mechanism of the MedProgramme. In closing, the representative of Algeria confirmed that the country is committed to involving government institutions, the private sector and the media in the MedProgramme, and thanked the partners and the GEF for their assistance in depolluting the Mediterranean Sea.

77. Mr. Senad Oprašić, the GEF Operational Focal Point of Bosnia and Herzegovina (hereafter the representative of Bosnia and Herzegovina) thanked the partners for the excellent presentations and asserted that the two regional consultations had provided a solid foundation for the effective implementation of the projects of the MedProgramme. He furthermore recalled the priority that the Government of Bosnia and Herzegovina places on the alignment of all activities and results of the MedProgramme with national legislation, EU Directives and the requirements of EU acquis, as well as the SDGs. In closing, the

representative of Bosnia and Herzegovina wished success to all partners for the implementation of activities, and thanked UNESCO for hosting the meeting.

78. The representative of Egypt thanked the partners for the meeting and confirmed that the presentations had provided a clear indication of the links between the projects and how the MedProgramme is being implemented in a holistic manner. She promised to work to ensure effective communication among national partners involved in the activities, and expressed satisfaction with the fact that the countries sharing the Mediterranean were sitting around the same table and working together for the common good of the Sea. In closing, the representative of Egypt indicated her interest in the implementation of the Knowledge Management and Gender Mainstreaming Strategies and indicated her belief that these will assist countries in dealing with environmental challenges.
79. The representative of Lebanon thanked the partners for a fruitful meeting and reconfirmed the country's commitment to contribute to the MedProgramme and to share the necessary knowledge and information to support its successful execution. She underlined the importance of involving national stakeholders, of ensuring effective coordination and management, and of seeking synergies in the MedProgramme. In closing, the representative of Lebanon expressed her satisfaction with the progress achieved to date, and her positive anticipation for the initiation of the activities of the MedProgramme.
80. The representative of Libya recognized the partners for the progress achieved on the preparation of the MedProgramme, and confirmed that the consultation had been extremely useful for gaining a deeper understanding of the activities and how they will be carried out. He furthermore expressed appreciation for the chance to cooperate with the other countries in the region on the protection of the Mediterranean Sea. At the same time, the representative of Libya shared his concern about the MedProgramme's integrated approach to environmental challenges spanning several GEF focal areas, indicating that this can complicate activities on the ground. In closing, the representative of Libya wished all the partners success in the execution of their activities.
81. The representative of Montenegro thanked the partners for the all the work completed to date, and recalled that one of the benefits of a regional programme is the opportunity for activities covering many thematic areas at both the national and regional levels, which has great value for the countries. She recalled that Montenegro is in the stage of pre-accession to the EU and does not have the resources to finance all the corresponding obligations, and that for this reason it is important to identify additional sources of assistance. Besides the MedProgramme, the Government of Montenegro is also participating in the GEF Adriatic Project and the UN Environment Vienna biodiversity assessment in coastal and marine areas, which will lead to the establishment of three new MPAs in Montenegro. The representative of Montenegro also highlighted the synergies that were identified during the design of the MedProgramme, and notably the integration of activities between Child Project 2.1 and the SCCF Project in Montenegro, maintaining that without a programmatic approach this kind of synergy and integration would not have occurred. In closing, the representative of Montenegro acknowledged the effectiveness of the programmatic approach in terms of communication with partners on the design of activities, and her interest in the future implementation of the Knowledge Management and the Gender Mainstreaming Strategies.
82. The representative of Tunisia thanked the MedProgramme team for the progress achieved on the preparation of the projects and recalled the contributions of Tunisia throughout the process. He also underlined the importance of initiating efforts to establish the implementing modalities at the national level with the relevant institutions to avoid delays and to ensure that the objectives of the MedProgramme are achieved. In closing, the representative of Tunisia

stressed the need to identify synergies and complementarities among the activities of the MedProgramme, and more importantly, with other ongoing and future initiative in the region, such as Horizon 2020 and post-Horizon 2020 activities.

Day 2 Agenda Item 7: Conclusions and closing of the meeting

83. The Secretariat presented the conclusions and next steps recorded during the proceedings of the Second Regional Consultation and asked the GEF Operational Focal Points (or their representatives) for their comments and approval. The GEF Operational Focal Points (or their representatives) endorsed these conclusions and approved the next steps, which appear on page 1 of the present report.
84. The Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat declared that the presentations and discussions had been illuminating and had helped to clarify for everyone once again the importance of the MedProgramme and the complex challenges that would be tackled by this ambitious and innovative joint initiative. He asserted that the overall level of buy-in and interest are high for the MedProgramme and assured that all the concerns raised by the Contracting Parties would be duly addressed in the final project documents, prior to their submission to the GEF Secretariat. The Coordinator thanked all participants for their continued commitment of energy, time and resources and expressed positive anticipation for the continued collaboration. In closing, the Coordinator recognized the contributions of the countries, the partners, the UN Environment team, the GEF and UNESCO, a gracious host for the event and an important partner of the programme.
85. The representative of UNESCO IHP expressed UNESCO's pleasure in hosting the participants of the consultation. Recalling that 21 September is the International Day of Peace, the representative of UNESCO IHP explained that people of all cultures and beliefs were present at UNESCO on this day to discuss peace, and declared that peace can also be built on science and environmental sustainability.
86. The Second Regional Consultation for the MedProgramme was closed at 17.00 on 21 September 2018.

Annex 1
Agenda of the Second Regional Consultation of the MedProgramme

Day 1: 20 September 2018	
9:00 – 9:30	<i>Registration</i>
9:30 – 10:00	Welcoming remarks: UNESCO-IHP, UN Environment/MAP and UN Environment/GEF
10:00 – 10:15	1. GEF and the Mediterranean Sea: 20 years of support and expectations under GEF-7
10:15 – 11:00	2. Remarks from the Permanent Delegations of UNESCO
11:00 – 11:30	<i>Coffee Break</i>
11:30 – 12:00	3. Setting the scene and objectives of the consultation: UN Environment/MAP
12:00 – 12:30	4. Progress report on preparation of the MedProgramme Child Projects and on their submission to the GEF: UN Environment/MAP
12:30 – 13:00	5. Update on Child Project 4.1: UN Environment/MAP
13:00 – 14:30	<i>Lunch</i>
14:30 – 15:00	6. Knowledge Management in the MedProgramme: UN Environment/MAP
15:00 – 15:30	7. Coordination with the GEF's established knowledge management platforms: IW:LEARN and LME:LEARN
15:30 – 16:00	8. Gender Mainstreaming in the MedProgramme: UN Environment/MAP
16:00 – 16:15	<i>Coffee Break</i>
16:15 – 17:00	9. Update on Child Project 2.1: GWP-Med, PAP/RAC, Plan Bleu and UNESCO-IHP
17:00 – 17:30	10. Update on the GEF Special Climate Change Fund Project: UN Environment/MAP
17:30 – 17:45	11. Conclusions of Day 1
17:45	<i>End of Day 1</i>

Day 2: 21 September 2018	
9:00 – 9:15	Opening remarks: UN Environment/MAP
9:15 – 10:00	1. Update on Child Project 1.1: UN Environment/Chemicals and Waste, MED POL, SCP/RAC, Plan Bleu
10:00 – 10:45	2. Update on Child Project 1.2: EIB and MED POL
10:45 – 11:15	<i>Coffee Break</i>
11:15 – 12:00	3. Update on Child Project 1.3: EBRD
12:00 – 12:30	4. Update on Child Project 3.1: SPA/RAC, WWF and IUCN
12:30 – 14:00	<i>Lunch</i>
14:00 – 14:30	5. Update on Child Project 2.2: GWP-Med
14:30 – 16:00	6. Discussion: <ul style="list-style-type: none"> • Added-value of GEF programmatic approach; • Complementarities among the Child Projects; • Feedback from the GEF Operational Focal Points.
16:00 – 16:30	<i>Coffee Break</i>
16:30 – 17:00	7. Conclusions and closing of the meeting – UN Environment/MAP, UN Environment/GEF and UNESCO-IHP
17:00	<i>End of the consultation</i>

Annex 2
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Annex 2

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Annex Q: M&E Plan

Project start:

A Project Inception Workshop will be held within the first 8 months of project start, with participation of those with assigned roles in the project organization structure. The Inception Workshop is crucial to building ownership for the project results and to plan the annual work plans for the first 2 project years. It is anticipated that the Inception Workshop will also be the de facto first meeting of the Project Steering Committee.

The Inception Workshop will address a number of key issues including:

1. Assisting all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UN Environment, MAP and MedPCU staff vis à vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms.
2. Based on the Project Results Framework and the Chemicals and Waste and International Waters GEF Tracking Tools, the Annual Work Plans for the first two years will be finalized. Indicators, targets and their means of verification will be reviewed, revised (as needed) and agreed, and assumptions and risks will be re-checked.
3. A detailed overview of reporting, monitoring and evaluation (M&E) requirements will be provided. The Monitoring and Evaluation work plan budget will be agreed and scheduled.
4. Financial reporting procedures and obligations will be discussed.

Project governance meetings will be planned and scheduled, and the overall project governance mechanisms will be reviewed and further fine-tuned, giving particular attention to cost-efficiency, enhanced stakeholder ownership, and the continuity of efforts towards SAP implementation beyond the project life span. Roles and responsibilities of all project organization structures will be clarified, and a meeting/reporting calendar will be elaborated

Together with the GEF approved Project Document, the Inception Workshop Report will constitute a key reference document for the Project and will be prepared and shared with participants to clarify and formalize various agreements and plans decided during the meeting.

Annually

Project Implementation Report (PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (1 July to 30 June). The PIR combines both UN Environment and GEF reporting requirements. The PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative);
- Project outputs delivered per project outcome (annual);
- Lesson learned/good practice;
- Annual Work Programme (AWP) and other expenditure reports;
- Risk and adaptive management; and
- GEF Chemicals and Waste and International Waters Tracking Tool indicators.

Mid-term of project cycle

~~The Evaluation Office will determine, whether an independent Mid-Term Evaluation (MTE) is required at the mid-point of project implementation. If decision is made by the Evaluation Office The IA Task Managers will organize and coordinate an independent to run the Mid-Term Evaluation Review, this will to~~ determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; it will highlight issues requiring decisions and actions, and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the Mid-Term Evaluation Review will be decided after consultation between the parties. The Terms of Reference for this Mid-Term Evaluation Review will be prepared by the Implementing Agencies in line with the guidance provided by the UN Environment Evaluation Office.

The Evaluation Office will determine whether an independent Mid Term Evaluation (MTE) is required at the mid-point of project implementation, based on significant delays or implementation issues at that time. This is a more exhaustive and in-depth process which is conducted by the UN Environment Evaluation Office in collaboration with the Implementing Agencies.

Information in the GEF Chemicals and Waste and International Waters Tracking Tools will also be updated during the mid-term evaluation cycle.

End of Project

In-line with UN Environment Evaluation Policy and the GEF's Monitoring and Evaluation Policy the project will be subject to a Terminal Evaluation.

The Evaluation Office will be responsible for the Terminal Evaluation (TE) and will liaise with the Task Manager and Executing Agency(ies) throughout the process. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UN Environment, the GEF, executing partners and other stakeholders. The direct costs of the evaluation will be charged against the project evaluation budget. The Terminal Evaluation will be initiated no earlier than six months prior to the operational completion of project activities and, if a follow-on phase of the project is envisaged, should be completed prior to the submission of the follow-on proposal. Terminal Evaluations must be initiated no later than six months after operational completion.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized and further reviewed by the GEF Independent Evaluation Office upon submission. The evaluation report will be publicly disclosed and may be followed by a recommendation compliance process.