



PROJECT IDENTIFICATION FORM (PIF)¹

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

| | | | |
|---|---|------------------------------|------------|
| Project Title: | Implementation of the Yellow Sea LME Strategic Action Programme for Adaptive Ecosystem-Based Management | | |
| Country(ies): | China (with RO Korea fully self-financing) | GEF Project ID: ² | 4343 |
| GEF Agency(ies): | UNDP (select) (select) | GEF Agency Project ID: | 4552 |
| Other Executing Partner(s): | UNOPS | Submission Date: | 2013-01-15 |
| GEF Focal Area (s): | International Waters | Project Duration(Months) | 48 |
| Name of parent program (if applicable): ➤ For SFM/REDD+ <input type="checkbox"/> | Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments | Agency Fee (\$): | 680,619 |

A. FOCAL AREA STRATEGY FRAMEWORK³:

| Focal Area Objectives | Expected FA Outcomes | Expected FA Outputs | Type of Trust Fund | Indicative Financing (\$) | Indicative Cofinancing (\$) |
|-----------------------|---|--|--------------------|---------------------------|-----------------------------|
| IW-2 (select) | <p>Outcome 2.1: Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles, and policy/legal/institutional reforms into national/local plans</p> <p>Outcome 2.2: Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability</p> <p>Outcome 2.3: Innovative solutions implemented for reduced pollution,</p> | <p>Output 2.1. National and local policy/legal/institutional reforms adopted/</p> <p>Output 2.2. Agreed commitments to sustainable ICM and LME cooperation frameworks</p> <p>Output 2.3: Types of technologies and measures implemented in local</p> | GEF | 7,184,430 | 213,381,766 |

¹ It is very important to consult the PIF preparation guidelines when completing this template.

² Project ID number will be assigned by GEFSEC.

³ Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.

| | | | | | |
|--------------------------------------|---|---|----------|------------------|--------------------|
| | rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measureable results | demonstrations and investments Output 2.4: Enhanced capacity for issues of climatic variability and change | | | |
| (select) | (select) | | (Select) | | |
| (select) | (select) | | (Select) | | |
| (select) | (select) | | (Select) | | |
| (select) | (select) | | (Select) | | |
| (select) | (select) | | (Select) | | |
| (select) | (select) | | (Select) | | |
| (select) | (select) | | (Select) | | |
| (select) | (select) | | (Select) | | |
| (select) | (select) | Others | (Select) | | |
| Subtotal: | | | | 7,184,430 | 213,381,766 |
| Project management cost ⁴ | | | | 378,000 | 12,500,000 |
| Total project costs | | | | 7,562,430 | 225,881,766 |

⁴ GEF will finance management cost that is solely linked to GEF financing of the project.

B. PROJECT FRAMEWORK

| Project Objective: To achieve adaptive ecosystem-based management of the Yellow Sea Large Marine Ecosystem (YSLME) by fostering long-term sustainable institutional, policy and financial arrangements in accordance with the YSLME Strategic Action Programme (SAP) | | | | | | |
|---|-------------------|---|---|---------------------------|----------------------------------|------------------------------------|
| Project Component | Grant Type | Expected Outcomes | Expected Outputs | Type of Trust Fund | Indicative Financing (\$) | Indicative Cofinancing (\$) |
| 1. Sustainable Regional and National Cooperation for Ecosystem-Based Management | TA | <p>1.1 Regional governance structure, the YSLME Commission established, operational and sustained</p> <p>1.2. Improved inter-sectoral coordination and collaboration at national level</p> <p>1.3 Wider participation in SAP implementation fostered through capacity building and public awareness</p> | <p>1.1.1 Regional agreement to establish the YSLME Commission, Management Science and Technical Panel (MSTP) and Regional Working Groups (RWGs); national and regional policies drafted and implemented</p> <p>1.2.1 National level agreements regarding ecosystem-based management actions, policies, regulations and standards promulgated, as appropriate</p> <p>1.3.1 At least 15 agreements with partners on overall environment co-operation and management, relevant fishery management, marine habitat conservation and pollution reduction, at both national and regional levels; cross sector partnerships established and operational.</p> <p>1.3.2 National public awareness in support of YSLME SAP achieved; data</p> | GEF | 1,970,043 | 2,482,508 |

| | | | | | | |
|---|----|--|--|-----|-----------|------------|
| | | | <p>and information collected; jointly managed databases; publicly accessible information for implementing management plans at the regional, national and local levels</p> <p>1.3.3 Transfer of lessons, experiences and best practices between local sites</p> <p>1.3.4 Training of at least 10 stakeholder groups on public participation on relevant management actions, in particular on fishery management, marine habitat conservation and economic assessment</p> <p>1.4 Improved compliance with regional and international treaties, agreements and guidelines</p> <p>1.4.1 Enhanced national and regional legal instruments to comply with regional & global treaties, agreements and guidelines</p> <p>1.5 Sustainable financing for regional collaboration on ecosystem-based management secured based on cost-efficient and ecologically-effective actions</p> <p>1.5.1 Periodic economic assessments of costs and ecological effectiveness</p> <p>1.5.2 Sustainable financing agreed; at least 150% increase in government financing for regional collaboration</p> | | | |
| 2. Improved Ecosystem Carrying Capacity with Respect to Provisioning Services | TA | 2.1 Recovery of depleted fish stocks as shown by increasing mean trophic level | 2.1.1 Reduction of fishing by around 10% in demonstration sites through e.g. vessel buy-back schemes | GEF | 1,437,606 | 19,020,886 |

| | | | | | | |
|--|----|---|--|-----|-----------|-------------|
| | | <p>2.2 Enhanced stocks through restocking and habitat improvement</p> <p>2.3 Enhanced and sustainable mariculture production by increasing productivity per unit area as a means to ease pressure on capture fisheries</p> | <p>over the project duration</p> <p>2.1.2 Provision of alternative livelihoods to fisher folks taking into account the contribution of women</p> <p>2.2.1 Science-based management of fisheries and mariculture</p> <p>2.3.1 Widespread practice of sustainable mariculture, where appropriate increasing productivity by up to 10%</p> <p>2.3.2 Adoption of integrated multi-trophic aquaculture (IMTA) where appropriate</p> | | | |
| 3. Improved Ecosystem Carrying Capacity with respect to Regulating and Cultural Services | TA | <p>3.1 Ecosystem health improved through reductions in pollutant (e.g., N) discharge from land-based sources</p> <p>3.2 Wider application of pollution-reduction techniques piloted at the demonstration sites</p> <p>3.3. Strengthened legal and regulatory process to control pollution</p> | <p>3.1.1 Reduced pollutant levels, e.g. reduce 10% N discharge every 5 yrs, by enforcement and control in demonstration sites</p> <p>3.1.2 Enhanced data and information regarding sources and sinks of contaminants</p> <p>3.2.1 New and innovative techniques for pollution reduction (e.g. artificial wetlands) applied at demonstration sites</p> <p>3.3.1 Strengthened legal instruments and better regulatory processes to control pollution</p> | GEF | 1,155,411 | 172,061,785 |

| | | | | | | |
|---|----|---|--|-----|-----------|------------|
| | | 3.4 Marine litter controlled at selected locations | 3.4.1 Procedures in place to control and remove marine litter at demonstration sites | | | |
| 4. Improved Ecosystem Carrying Capacity with respect to Supporting Services | TA | <p>4.1 Maintenance of current areas of habitats through relevant management actions (e.g. the Total Quantity Control of Reclamation) to strictly control land reclamation.(no new permissions granted for coastal zone reclamation)</p> <p>4.2 Stronger regional MPA network established and functioning</p> <p>4.3 Adaptive management mainstreamed to enhance the resilience of the YSLME and reduce the vulnerability of coastal communities to climate change impacts on ecosystem processes and other threats identified in the TDA and SAP</p> <p>4.4. Application of Ecosystem-based Community Management (EBCM) in preparing risk management plans to address climate variability and coastal disasters</p> | <p>4.1.1 Agreement at all levels to to implement the relevant management actions.avoid new coastal zone reclamation projects</p> <p>4.2.1 MPA networks (covering approx. 544,800 ha) strengthened in the YSLME</p> <p>4.3.1 Regional strategies adopted and goals agreed; site-based ICM plans enhancing climate resilience in place for selected sites in YSLME; conservation areas and habitats for migratory species identified</p> <p>4.4.1 Public awareness of Yellow Sea environmental problems enhanced; strong local support for and awareness of demonstration activities</p> <p>4.4.2 Established monitoring network; regular basin-wide assessments; enhanced</p> | GEF | 2,621,370 | 19,816,587 |

| | | | | | | |
|--------------------------------------|----------|--|--|----------|------------------|--------------------|
| | | | information exchange; periodic scenarios of ecosystem change | | | |
| | (select) | | | (Select) | | |
| | (select) | | | (Select) | | |
| | (select) | | | (Select) | | |
| | (select) | | | (Select) | | |
| | (select) | | | (Select) | | |
| | (select) | | | (Select) | | |
| Subtotal: | | | | | 7,184,430 | 213,381,766 |
| Project management Cost ⁵ | | | | | 378,000 | 12,500,000 |
| Total project costs | | | | | 7,562,430 | 225,881,766 |

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

| Sources of Cofinancing | Name of Cofinancier | Type of Cofinancing | Amount (\$) |
|--------------------------|---------------------|---------------------|--------------------|
| National Government | China | Grant | 9,812,480 |
| (select) | | In-kind | 82,842,580 |
| National Government | RO Korea | Grant | 16,973,332 |
| (select) | | In-kind | 112,361,374 |
| GEF Agency | UNDP | Grant | 2,092,000 |
| Others | WWF | Grant | 1,800,000 |
| (select) | | (select) | |
| (select) | | (select) | |
| (select) | | (select) | |
| (select) | | (select) | |
| Total Cofinancing | | | 225,881,766 |

⁵ Same as footnote #3.

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

| GEF Agency | Type of Trust Fund | Focal Area | Country Name/Global | Project Amount (a) | Agency Fee (b)² | Total c=a+b |
|------------------------------|---------------------------|----------------------|----------------------------|---------------------------|-----------------------------------|--------------------|
| UNDP | GEF TF | International Waters | China | 7,562,430 | 680,619 | 8,243,049 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| Total Grant Resources | | | | 7,562,430 | 680,619 | 8,243,049 |

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

² Please indicate fees related to this project.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 the [GEF focal area/LDCF/SCCF](#) strategies /[NPIF](#) Initiative:

This project is consistent with GEF's International Waters strategy as described in the Final GEF-5 Programming Document (GEF/R.5/25/CRP.1). Objective 2 aims to catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and LMEs while considering climatic variability and change. The proposed project is well-aligned with the outcomes and targets of Objective 2, in particular:

Outcome 2.1: *Implementation of agreed Strategic Action Programmes incorporates ecosystem-based approaches to management of LMEs. ICM principles, and policy-legal/institutional reforms into national/local plans.* The project focuses on the implementation of the YSLME SAP that has been endorsed by all the YS countries. The SAP is anchored on ecosystem-based approaches to the management of the YSLME

Outcomes 2.2: *Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability.* The proposed creation of the YSLME Commission will address the needs for multi-lateral institutions and programmes of action to enhance fish stocks, encourage the implementation of the Code of Conduct for Responsible Fisheries, engage the fishing and mariculture industries in sustainable management solutions that provide profit to these stakeholders, while avoiding negative impacts on the Yellow Sea marine ecosystem.

Outcome 2.3: *Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measurable results.* Innovative measures to reduce nutrient loads will be undertaken, in fulfilment of the articles in pollution-related conventions; through translating monitoring results into policies and providing mechanisms to exchange data among agencies and across borders. IW-Objective 2 is closely linked to protection of critical habitats through improving and/or establishing management plans and marine protected areas. With the proposed Regional Monitoring Network, regular monitoring of the impacts of pollutants on habitats, surrounding areas, and assessment of affected stakeholders will be covered and the project will utilize ecosystem-based approaches and adaptive management schemes to manage these transboundary water problems. The potential impacts of, and adaptation to climate change will be embedded in the management actions directed towards ecosystem carrying capacity as the central theme of the project.

The project will also deliver additional outcomes such as enhanced public awareness, strengthened stakeholder capacity to carry out actions, and institutional sustainability that ensures the SAP and the Commission will be self-sufficient in the long-term. The involvement of all coastal countries in the YS (with DPRK as observer in the Project Steering Committee), will contribute to regional environment management, as well as regional peace and stability.

A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

n/a

A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund:

n/a

- A.2. national strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The countries' approval of the SAP and development of National SAPs demonstrate their willingness and commitments to better manage the YS ecosystem, using the regional SAP as a guide. Many targets listed in the SAP are included in the nationally-approved action plans that apply to the entire country (e.g. a 30% reduction in fishing boats over the next 20 years) underscoring the catalytic impacts of the YSLME SAP. In order to ensure consistency with national plans, the Chinese National SAP is included in the next 5 year national development plan and the RO Korea National SAP is implemented within respective national frameworks. The establishment of the YSLME Commission also illustrates the willingness of the region to examine how to improve governance issues to support the technical management actions required to enhance the health of the Yellow Sea. The countries are already signatories to many global environmental international and bilateral treaties and agreements, and will continue to operate the Inter-ministerial Co-ordinating Committees in order to better harmonise policies and communication between the various government agencies for effective SAP implementation. This proposed project and the YSLME SAP Implementation Facility will co-ordinate the interactions and linkages among scientific research, ecosystem-based management, legislation and policy-making to ensure that the YS continues to provide ecosystem services to the countries and the region.

B. PROJECT OVERVIEW:

- B.1. Describe the baseline project and the problem that it seeks to address:

The semi-enclosed nature of the Yellow Sea (YS) and the rapid economic development of the surrounding areas have resulted in an increasingly polluted and over-exploited sea. This large marine ecosystem (LME) faces major transboundary problems, including: fisheries depletion resulting from the dramatic increase in fish landings that has grown from 400,000 tonnes to 2.3 million tonnes in the past 20 years; continuing increases in the discharge of pollutants; changes to ecosystem structure and functions leading to an increase in jellyfish and harmful algal blooms; and a 40% loss of coastal wetlands from reclamation and conversion projects representing a major loss of habitat for many species resulting in a significant degradation of biological diversity. On top of these immediate threats lie the potential impacts of climate change such as sea level rise and the changes in basin circulation and the extent of the Yellow Sea Cold Water Mass. The Transboundary Diagnostic Analysis (TDA 2008) for the YSLME and the associated causal chain analysis provide an analysis of the root causes of the environmental issues and problems of the Yellow Sea and identify the priorities for management action. Nine transboundary environmental concerns have been identified that fall into five major problem groupings. The effects of these problems are synergistic and compounded since for example fish catch is not only impacted by overfishing, but by loss of important habitats, land-based pollution impacts on water quality, and by the environmental impacts of improper mariculture activities in the coastal zone. Addressing these issues and problems therefore requires an ecosystem-based approach to their management as detailed in the Strategic Action Programme (2009).

Through their endorsements and support for the TDA and SAP that were formulated in the first phase of the project, the participating countries have recognised that scientific knowledge needs to be translated into policy, legal and management actions for the entire region and not restricted to each nation, as environmental problems are not limited by geographic boundaries. The SAP identifies 11 tangible regional targets aimed at maintaining the YSLME's capacity to provide the four ecosystem services (provisioning, regulating, cultural and supporting) to the region and beyond. It provides adaptive ecosystem-based management actions to reach these targets.

Government Contributions to the Baseline Project: The YSLME countries have jointly committed about \$226 million towards achieving the priority commitments made in the SAP. For ecosystem-based fishery management, the SAP commitment is to reduce 25-30% fishing effort in the coastal countries of the Yellow Sea through vessel buy-back and retraining, stock assessments, etc., valued at over \$19 million. For pollution reduction, the SAP commitment is to reduce nutrient discharges from the Yellow Sea countries by 10% every 5 years through enhanced wastewater treatment, reducing fertilizer use and industrial discharges, etc., valued at about \$172 million. For biodiversity conservation, the main commitments of the SAP are to protect coastal habitats, establish regional MPA network, and promote civil society participation in the coastal countries of the Yellow Sea, valued at almost \$20 million. Under the SAP, the countries have also committed to the establishment of a permanent YSLME Commission. The major function of the Commission will be to oversee joint actions to address the transboundary issues as well as ensure coordination of complementary national actions. It will ensure achievement of regional targets through the implementation of the “on-the-ground” management actions, including capacity building activities, stakeholder participation and public awareness activities, all of which are documented in the SAP. The Commission will, at a later stage, become self-sufficient and sustainable through establishment of appropriate financial mechanisms that will be mutually agreed by the countries.

UNDP Contributions to the Baseline Project: UNDP will contribute almost \$2.1 million in this project. UNDP’s Ocean Governance Programme has mobilized \$0.4 m. of (non-GEF) resources and commenced implementation of a key baseline project aimed at consolidating key results and outcomes from the GEF YSLME IW project. This baseline project is supporting a number of critical activities that will enable the successful commencement of SAP implementation through the subject project of this PIF. Additional UNDP contributions to the baseline project under the Pollution Control component include the Improved Water Resources Management and Drinking Water Safety in Rural Regions of China (WRM) project (\$ 1.692 millions). A series of sound water resources management, drinking water safety and environmental protection technologies are being offered, including efforts to build up policy mechanisms to support improved water resources management and drinking water safety. One of the four demonstration areas under the WRM project (in Liaoning province) is part of the Yellow Sea drainage basin and aims at improving access to safe drinking water in a target community in Shenyang city of Liaoning province. Further details of UNDP cofinancing are described Section C.1.

- B. 2. [incremental /Additional cost reasoning](#): describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated [global environmental benefits](#) (GEF Trust Fund/NPIF) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

Incremental Reasoning. The GEF funding will: enable regionally co-ordinated implementation of the SAP through the YSLME SAP Implementation Facility (IF), and in the longer term through establishment of the YSLME Commission; facilitate participation of all the coastal countries; and foster the removal of sectoral barriers to integrated management of ecosystem carrying capacity.

The Yellow Sea represents a marine environmental resource shared across at least 3 national boundaries. GEF involvement is critical in overcoming the geopolitical complexities and potential conflict among resource users in the Yellow Sea, through the YSLME SAP IF, that is the only body capable of coordinating the implementation of the SAP.

The current sectoral management of the marine environment in the countries bordering the

Yellow Sea prevents implementation of co-ordinated, integrated and ecosystem-based management as defined in the SAP. GEF assistance in the institutional, policy and management reforms will move the process from the business-as-usual approach to integrated management across sectors. Managing to improve ecosystem carrying capacity will be a novel process for the region to engage in, and there is an urgent need to move the region's perception of marine environmental management in this direction. As a result of the SAP implementation, the capacity of individual agencies to play a pivotal role in facilitating more holistic, ecosystem-based management will be improved. Use of GEF resources together with UNDP and national financial commitments will also support the sharing of experiences and lessons-learned on national and regional scales, ultimately aimed at increasing the replication potential for the project's impacts.

The above justification for GEF support is supported by the significant progress in the first phase of the project, whereby an effective intergovernmental mechanism has shown strong political support through dialogues, negotiations and decision making by the countries at the inter-ministry level. The adoption of internally-accepted procedures and practice in inter-governmental negotiations is a major contribution of the GEF in building regional cooperation particularly among the YSLME countries. The GEF support will ensure monitoring and evaluation to assess the effectiveness of the management actions particularly at the regional (LME) level. The GEF support will establish a regional network to which the participating countries have attached high priority as shown by the approximate US\$ 387 million they have allocated in support of related activities. Along the line of critical regional activities, the GEF support will ensure the establishment of a YSLME Commission, which will ensure the long-term cooperation among the riparian countries. The Commission will be the formal regional coordination mechanism that is envisioned to build mutual trust and help in securing regional stability.

GEF funding will be catalytic in generating the substantial cofinancing from the riparian countries as in the case of the vessel-buy-back SAP commitments in China and RO Korea which require regional cooperation and would not proceed from unilateral action. The GEF's involvement will ensue not only effective co-operation between the participating countries but also act as necessary condition for the governments to provide co-financing resources for the implementation of the scheme and the entire SAP.

Implementation of YSLME SAP will also support implementation of the "Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)" at the regional level. This will provide valuable benefits to strengthen regional infrastructure established under GEF's efforts.

Global Environmental Benefits. Under the guidance of the proposed project, it is expected that the global environmental benefits would include: restoration of globally important fisheries by reducing within four years up to around 10 % of the current fishing effort; increased uptake of innovative (IMTA) sustainable mariculture techniques in a region responsible for 1/3 of global mariculture production; improved management of globally significant habitats for migratory birds and mammals; decreased eutrophication through reduction in nutrient discharges of about 10% after the 4-year project duration; and thus, significant progress towards restoration of ecosystem carrying capacity. The project will report annually using the IW Tracking Tool to monitor the delivery of global environmental benefits.

The project's unique approach to formulating a SAP based on ecosystem services (in the first phase) can serve as a model for other LMEs that are developing SAPs, and in this proposed second phase, the approach could similarly be a model for effective regional LME management that encompasses science and governance.

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the

achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read [Mainstreaming Gender at the GEF.](#)":

Socioeconomic benefits for the target communities in the riparian countries will be realized from a number of interventions proposed in the project. It is expected that the incomes of fishermen will improve in the medium to the long-term as overfishing is effectively addressed through the vessel buy-back schemes. At the same time, alternative livelihoods will be provided primarily to displaced fishermen to soften the impacts of the buy-back scheme. The adoption of integrated multi-trophic aquaculture (IMTA) will improve production and incomes. Improved production from both aquaculture and capture fisheries will also come from the protection of habitats through the MPA network and the improvement of water quality through pollution reduction. Based on the experiences obtained from the demonstration projects, substantial economic valuation activities have been planned to assess the economic benefits of the management actions identified in the YSLME SAP.

Gender will be mainstreamed in this project through the active engagement of women to optimize the impacts of the interventions. For instance under component 2 the contribution of women in household income will guide the provision of alternative livelihoods and the development and implementation of IMTA. In component 3, the role of women will be harnessed in formulating procedures to control and remove marine litter at demonstration sites, in recognition of the role of women in managing household waste that could find its way in coastal waters. The collection of information will also be gender sensitive to the extent possible to ascertain the role of women in the environmental management. The project will seek and engage women experts in constituting the local, national and regional scientific committees and in the project management team.

The socioeconomic benefits and gender mainstreaming will serve to strengthen the impacts of the interventions on the management of the Yellow Sea LME. There is a mutually reinforcing effect between and among the objectives of improving the environment, optimizing economic benefits and improving the role of women in project formulation and implementation.

B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

| Risk | Risk Type | Risk Mitigation Measures |
|--|------------------|--|
| Potential conflicts between the participating countries could occur over project resources and the use and management of the shared resources of the Yellow Sea LME. | Political | This risk is considered medium-low, as China have had experience in conflict resolution through negotiations such as the successful implementation of co-operative cruises of the YSLME project. With the countries' signatures agreeing to co-operate in the SAP and a YSLME SAP Implementation Facility overseeing SAP implementation, any conflicts should be resolved at a high policy level through regional co-operation. |
| Lack of governance reforms might prevent implementation of management actions and impede the objective of sustaining ecosystem carrying capacity. | Operational | This is considered a low risk. Governance analyses have been carried out in Project Phase I and governance-related management actions are recommended in the SAP to ensure effective implementation of governance reforms. Governance reforms will support long-term sustainability of the Commission and the entire ecosystem-based management process. |

| | | |
|---|---------------|--|
| Environmental variability and climate change could alter ecosystem functions and reduce ecosystem services. | Environmental | This is considered low risk. An SAP demonstration activity has already been carried out to evaluate the impacts of climate variability and change on the YS, and its full implementation is scheduled under the proposed project. The Commission will guide adaptive management to meet such global changes. |
|---|---------------|--|

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

The major government stakeholder institutions include:

| |
|---|
| People’s Republic of China |
| Ministry of Foreign Affairs |
| Ministry of Finance |
| State Oceanic Administration |
| Ministry of Environment Protection |
| Ministry of Communication |
| Ministry of Agriculture |
| Provincial and Municipal Governments |
| Republic of Korea |
| Ministry of Foreign Affairs and Trade |
| Ministry of Land, Transport and Maritime Affairs |
| Ministry of Food, Agriculture, Forestry and Fisheries |
| Ministry of Environment |
| Ministry of Unification |

Other stakeholders including parliamentary organisations, international NGOs such as WWF and local ones together with private sector groups such as mariculture associations have participated in the regional governance less actively than other stakeholder groups to date and their continuing participation will be sought in the next phase. In the RO Korea, NGOs such as Birds Korea; Citizens Institute for Environmental Studies, the Eco-horizon Institute, Korea Marine Rescue Center, Shihwa Lake Saver, and the PGA Wetlands Ecology Institute, and in China the Global Village of Beijing, have all undertaken activities during the first phase under the small grants programme. Incorporation of stakeholders into the various decision-making systems related to marine resource management, coastal zone management, pollution management and other aspects of SAP implementation will be encouraged. At the national level co-ordination between scientists, managers, fishermen, farmers, and government officers will be pursued.

Several international organisations have participated in the past in aspects of regional governance. UNDP has actively participated in the regional governance mechanisms while UNEP has been involved through the Regional Seas Programme and NOWPAP and the IMO through the operation of the various phases of PEMSEA.

The scientific and academic communities will continue to participate at both the regional and national levels in conducting aspects of the regional analyses and in providing scientific and technical advice to the political decision makers represented in the Project Steering Committee and in the Yellow Sea Large Marine Ecosystem Commission that will be established.

B.6. Outline the coordination with other related initiatives:

The project will co-ordinate its activities with other on-going endeavours in the region namely: Northwest Pacific Action Plan (NOWPAP) as part of the UNEP regional seas programme; implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) through the Partnership for Environmental Management of the Seas of East Asia (PEMSEA);

and the Yellow Sea Eco-region Support Project (YSESP) by WWF and Korea Ocean Research and Development Institute in order to avoid duplication of efforts and to share resources working towards a common goal of appropriate governance for ecosystem-based adaptive management. Co-ordination with these programmes will ensure synergy with other GEF and non-GEF activities. In addition, fisheries and pollution management (e.g. monitoring jellyfish blooms) in neighbouring geographic areas will have impacts in the Yellow Sea

As a part of the programmatic approach in the EAS region, the YSLME project will closely work together with other projects in the wider geographic area extending to nearby seas and countries, such as the Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas, the Arafura and Timor Seas Ecosystem Action Program: Participation of Papua New Guinea, and PEMSEA.

As one of the several projects in the GEF IW portfolio that will progress from TDA/SAP formulation to implementation, the project will provide valuable lessons to similar projects that are about to go through these GEF ‘foundational’ processes, e.g., Sulu-Celebes Seas and Arafura-Timor Seas in the Asia Pacific region and other LMEs in other parts of the world. The project will thus actively engage in knowledge sharing primarily through IW:LEARN and through other fora. The Project will set aside about 1% of the GEF project budget to support IW LEARN activities, such as: set up and run a project website consistent with the IW LEARN guidance and tool kit; participation of project staff in IW LEARN activities (IWC's and relevant regional conferences); and production of at least 2 project experience notes.

Wider co-ordination between partners, stakeholders, NGOs, and regional and global initiatives is inherent to project implementation. The “Yellow Sea Partnership (YSP)”, with about 20 members, has been a distinctive feature of the 1st phase of the YSLME Project’s achievements. Activities implemented with parliamentary organisations, local government officers and NGOs have increased stakeholder involvement in the project and will continue under the proposed project, by engaging all sectors into the management processes, including allowing stakeholders to take the lead in implementing actions under their geographical jurisdiction.

C. DESCRIBE THE GEF AGENCY’S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

UNDP’s Strategic Plan for 2008-2013 approved by the UNDP Executive Board includes *Managing Energy and the Environment for Sustainable Development* (Goal 4), and includes the outcome *Strengthened national capacities to mainstream environment and energy concerns into national development plans and implementation systems*. UNDP has taken further internal steps to operationalize the mainstreaming elements of the Strategic Plan at a subsidiary level through its **Water Governance Strategy** endorsed by the UNDP Management Group in 2007. The Water Governance Strategy for includes as one of its three Strategic Priorities **Regional and Global Cooperation** and the associated Outcome, *Enhanced regional and global cooperation, peace, security and socio-economic development through adaptive governance of shared water and marine resources*, and the principal Output, *Assist countries to develop and implement cooperation on transboundary waters through multi-country agreements on priority concerns, governance reforms, investments, legal frameworks, institutions and strategic action programmes*.

Notably, UNDP’s work on improving governance of shared water and ocean resources incorporates both freshwater and marine waterbodies and has for some time applied a “ridge-to-reef” approach recognizing the freshwater-marine continuum and important linkages between upstream water and land management and the health and integrity of downstream coastal and marine ecosystems. The YSLME, with over 600 million people living in the drainage basin and major challenges with both land-based pollution and ocean-based ecosystem stressors, represents an ideal setting for piloting and refining such basin-wide approaches to marine ecosystem restoration. Underscoring this approach is UNDP’s poverty reduction mandate and commitment to preserving and enhancing food security and livelihoods of the nearly 1 billion

people who depend on healthy, functioning marine ecosystems like the YSLME.

In managing its LME and transboundary fisheries programmes, UNDP's Ocean Governance Programme (www.undp.org/water/ocean-coastal-governance.shtml) draws on a wide range of staff expertise in marine ecosystems, fisheries and marine/coastal resources management at HQ, in its Regional Centers, and through its network of Country Offices. Senior advisors at HQ and in regional centers all have relevant Ph.D.'s (fisheries economics, marine biology, environmental management/policy, marine resource economics, etc.). UNDP's cumulative LME portfolio, working in 11 different LMEs in all 5 UNDP regions covering over 100 countries, represents \$528 m. in total financing from GEF, UNDP, governments, donor partners and others. This represents the largest investment of any kind in advancing the sustainable, integrated, ecosystem-based management of LMEs, from which over 85% of the world's fisheries are harvested, which contribute \$12.6 trillion/year in goods and services to the global economy, and which provide livelihoods for nearly half a billion people, many in the world's poorest countries.

In terms of implementing GEF IW projects, UNDP has consistently delivered results through a broad range of international transboundary water interventions including the high-level adoption of 17 SAPs (8 in LMEs), eight of which are currently being implemented. In addition to providing vital technical, financial and capacity building support for the establishment of the world's first post UN Fish Stocks conservation and management organization for highly migratory fish stocks, the Western and Central Pacific Fisheries Commission (WCPFC), UNDP has strengthened or established 20 multi-country marine/coastal, river and lake basin management agencies or commissions including establishment of the world's first two LME commissions, the Benguela Current and Guinea Current LME Commissions.

Lastly, UNDP builds on its field presence in China where a strong country office is located that will provide oversight in project design and implementation. In addition, the project will be directly supported by an experienced UNDP Regional Technical Advisor based in the region and by the UNDP Principal Technical Advisor at UNDP Headquarters with responsibility for global oversight of the UNDP Ocean Governance programme.

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

The total UNDP cofinancing is \$2,092,000 broken down into \$0.4 million from UNDP Ocean Governance Program and \$1.692 million from a UNDP project.

UNDP's Ocean Governance Programme has mobilized \$0.4 million in (non-GEF) resources and commenced implementation of a baseline project aimed at consolidating key results and outcomes from the GEF YSLME IW project (see II.B.1). This baseline project is supporting a number of critical activities that will enable the successful commencement of SAP implementation through the subject project of this PIF.

Additional UNDP co-financing is provided by the Improved Water Resources Management and Drinking Water Safety in Rural Regions of China (WRM) project (\$1.692 m). The project seeks to improve human development outcomes among targeted groups through strengthening institutional support mechanism and linkages to facilitate and encourage needs-based responses at the community level. A series of sound water resources management, drinking water safety and environmental protection technologies are being offered, including efforts to build up policy mechanisms to support improved water resources management and drinking water safety. One of the four demonstration areas under the WRM project (in Liaoning province) is part of the Yellow Sea basin and aims at improving access to safe drinking water in a target community in Shenyang city of Liaoning province. This contribution to the baseline project, by improving drinking water safety (through improved basin management, water treatment, policy development, communications/awareness, etc.) is in turn reducing pollution into the Liao and Hun rivers which drain to the Yellow Sea. Pollution, particularly nutrients from poorly or

untreated wastewater discharges and agriculture, is one of the priority transboundary problems identified in the YSLME TDA and addressed through the YSLME SAP. The project that is subject of this PIF thus builds on this and the other contributions to the baseline project by promoting a comprehensive, integrated, ecosystem-based approach to restoration of the highly degraded Yellow Sea.

C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

This project supports the UNDAF for China (2011-2015) through its contribution to the following UNDAF outcomes:

- a) Outcome 1: Government institutions and other stakeholders ensure environmental sustainability, address climate change, and promote a green, low carbon economy. Of relevance are outcome 1.2: Policy and implementation mechanisms to manage natural resources are strengthened, with special attention to poor and vulnerable groups, and outcome 1.3: China's vulnerability to climate change is better understood and adaptation responses are integrated into Government policy.
- b) Outcome 3: China's enhanced participation in the global community brings wider mutual benefits. The relevant specific outcomes are Outcome 3.1: International conventions, treaties and compacts are implemented; Outcome 3.2: China's response to regional issues is enhanced.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)






A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

| NAME | POSITION | MINISTRY | DATE (MM/dd/yyyy) |
|---------------|--|---|-------------------|
| Ms. Jiandi YE | Director, IFI Division III, International Department, GEF National Operational Focal Point | MINISTRY OF FINANCE, PEOPLE'S REPUBLIC OF CHINA | 11/19/2012 |
| | | | |
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B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation. Following the new project cycle, UNDP will submit a fully prepared project document and Endorsed by the CEO no later than 18 months after council approval of PIF.

| Agency | DATE | Project | Email Address |
|--------|------|---------|---------------|
|--------|------|---------|---------------|

| Coordinator, Agency name | Signature | <i>(MM/dd/yyyy)</i> | Contact Person | Telephone | |
|---|--|---------------------------------------|---------------------------|---------------------|--|
| John Hough, UNDP-GEF Deputy Executive Coordinator |  | 9 September 2010 | Jose Erezo Padilla | +66 (2) 288 2730 | jose.padilla@undp.org |
| John Hough, UNDP-GEF Deputy Executive Coordinator |  | RE- SUBMISSION 14 March 2011 | Jose Erezo Padilla | +66 (2) 288 2730 | jose.padilla@undp.org |
| John Hough, UNDP-GEF Deputy Executive Coordinator |  | RE- SUBMISSION 10 May 2011 | Jose Erezo Padilla | +66 (2) 288 2730 | jose.padilla@undp.org |
| Adriana Dinu Deputy Executive Coordinator |  | RE- SUBMISSION 30 Nov 2012 | Jose Erezo Padilla | +66 (2) 288 2730 | jose.padilla@undp.org |
| Adriana Dinu Deputy Executive Coordinator |  | RE- SUBMISSION 15 Jan 2013 | Jose Erezo Padilla | +66 (2) 288 2730 | jose.padilla@undp.org |