

# PROJECT IDENTIFICATION FORM (PIF).

PROJECT TYPE: FULL-SIZED PROJECT TYPE OF TRUST FUND: GEF TRUST FUND

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#### PART I: PROJECT INFORMATION

| Project Title:              | Implementation of the Arafura and Timor Seas Regional and National Strategic Action Programs |                              |                |  |  |
|-----------------------------|--|------------------------------|----------------|--|--|
| Country(ies):               | Indonesia, Timor Leste, (PNG to be invited*)   | GEF Project ID: <sup>1</sup> | 6920           |  |  |
| GEF Agency(ies):            | UNDP   | GEF Agency Project ID:       | 5439           |  |  |
| Other Executing Partner(s): | Ministry of Marine Affairs and Fisheries   | Submission Date:             | 8 August 2014  |  |  |
|                             | (Indonesia); Ministry of Agriculture and   | Resubmission Date:           | 22 August 2014 |  |  |
|                             | Fisheries (Timor Leste)  |                              | 28 August 2014 |  |  |
| GEF Focal Area(s):          | Multifocal area: International Waters &  | Project Duration (Months)    | 60             |  |  |
|                             | Biodiversity   |                              |                |  |  |
| Integrated Approach Pilot   | IAP-Cities IAP-Commodities IAP-Food Security Corporate Program: SG                           |                              | ogram: SGP 🗌   |  |  |
| Name of parent program:     | Not applicable   | Agency Fee (\$)              | 925,838        |  |  |

<sup>\*</sup>PNG will be invited during the PPG and will be included at CEO endorsement as applicable. Otherwise, PNG will again be invited during implementation.

# A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES<sup>2</sup>:

|  |               | (in \$)                  |              |  |
|--|---------------|--------------------------|--------------|--|
| Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs) | Trust<br>Fund | GEF Project<br>Financing | Co-financing |  |
| IW-3: Program 6  | GEFTF         | 2,279,452                | 25,035,000   |  |
| IW-3: Program 7  | GEFTF         | 3,000,000                | 35,040,000   |  |
| BD-1: Program 2  | GEFTF         | 2,000,000                | 19,425,000   |  |
| BD-3: Program 6  | GEFTF         | 2,000,000                | 17,025,000   |  |
| BD-4: Program 9  | GEFTF         | 466,210                  | 5,025,000    |  |
| Total Project Cost   |               | 9,745,662                | 101,550,000  |  |

#### B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To enhance sustainable development of the Arafura-Timor Seas (ATS) region to protect biodiversity and improve the quality of life of its inhabitants through conservation and sustainable management of marine-coastal ecosystems (as indicated in the SAP)

|  |                                |  |               | (ir                         | <b>1 \$</b> )    |
|--|--------------------------------|--|---------------|-----------------------------|------------------|
| Project Component  | Financing<br>Type <sup>3</sup> | Project Outcomes   | Trust<br>Fund | GEF<br>Project<br>Financing | Co-<br>financing |
| 1. Regional, National<br>and Local Governance<br>for Large Marine<br>Ecosystem<br>Management | TA<br>(IW)                     | 1.1 Regional and national mechanisms for cooperation in place and operational: (i) Regional Coordination Committee and supporting Secretariat created; (ii) Improved stakeholder participation through the establishment of a Stakeholder Partnership Forum; (iii) Interministerial Committees strengthened to improve coordination. (iv) Financial mechanisms in place to support implementation of SAP and NAPs. | GEFTF         | 1,000,000                   | 8,050,000        |

<sup>&</sup>lt;sup>1</sup> Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

When completing Table A, refer to the GEF Website, <u>Focal Area Results Framework</u> which is an Excerpt from <u>GEF-6 Programming Directions</u>.

Financing type can be either investment or technical assistance.

|                       | T. A     | 1.2.5   | CEETE | 750,000   | 4 000 000       |
|-----------------------|----------|---|-------|-----------|-----------------|
|                       | TA       | 1.2 Strengthened institutional and human resource   | GEFTF | 750,000   | 4,000,000       |
|                       | (IW)     | capacity towards integrated approaches in natural   |       |           |                 |
|                       |          | resource management and biodiversity                |       |           |                 |
|                       |          | conservation: (i) Local policies harmonized with    |       |           |                 |
|                       |          | national policies in Indonesia and Timor Leste to   |       |           |                 |
|                       |          | support SAP/NAP implementation; (ii)                |       |           |                 |
|                       |          | Localization of guidelines/handbook on              |       |           |                 |
|                       |          | integrated approaches for use in national and local |       |           |                 |
|                       |          | trainings;  |       |           |                 |
|                       | TA       | 1.3 Better understanding of climate change          | GEFTF | 300,000   | 6,000,000       |
|                       | (IW)     | impacts on marine and coastal ecosystems lead to    |       |           |                 |
|                       |          | regional actions: (i) Improved understanding of     |       |           |                 |
|                       |          | climate change impacts on fisheries and             |       |           |                 |
|                       |          | marine/coastal ecosystems through scientific        |       |           |                 |
|                       |          | analysis; (ii) Climate change considerations        |       |           |                 |
|                       |          | incorporated into SAP, NAP and relevant policies    |       |           |                 |
| 2. Improving LME      | TA       | 2.1 Improved management of fisheries and other      | GEFTF | 2,000,000 | 27,100,000      |
| Carrying Capacity to  | (IW; BD) | coastal resources for livelihoods, nutrition and    |       |           |                 |
| Sustain Provisioning, |          | ecosystem health in Indonesia and Timor Leste:      |       |           |                 |
| Regulating and        |          | (i) EAFM implemented at the LME level and           |       |           |                 |
| Supporting Ecosystem  |          | localized in up to 4 priority area-specific         |       |           |                 |
| Services              |          | fisheries; (ii) Value-chain analysis and            |       |           |                 |
|                       |          | preassessment conducted to move up 3 selected       |       |           |                 |
|                       |          | fisheries towards certification; (iii) National     |       |           |                 |
|                       |          | actions strengthened in support of the Regional     |       |           |                 |
|                       |          | Action Plan for Responsible Fishing Practices       |       |           |                 |
|                       |          | resulting in reduction of IUU fishing in ATS by     |       |           |                 |
|                       |          | up to 10%; (iv) Integrated Coastal Management       |       |           |                 |
|                       |          | Plans (ICM) developed and implemented in up to      |       |           |                 |
|                       |          | 4 priority sites                                    |       |           |                 |
|                       | TA       | 2.2 Reduced marine pollution improve ecosystem      | GEFTF | 575,470   | 14,950,000      |
|                       | (IW)     | health in 4 coastal/ marine hotspots in the Arafura |       | 0.0,      | - 1,2 - 0,0 - 0 |
|                       | (211)    | and Timor Seas through: (i) Annual coastal clean    |       |           |                 |
|                       |          | ups at least once a year to reduce marine debris    |       |           |                 |
|                       |          | from various sources and raise awareness; (ii)      |       |           |                 |
|                       |          | Enhanced data and information regarding the         |       |           |                 |
|                       |          | sources and sinks for contaminants in the ATS       |       |           |                 |
|                       |          | with pollution hotspots identified; appropriate     |       |           |                 |
|                       |          | controls of point and non-point sources of          |       |           |                 |
|                       |          | pollution implemented                               |       |           |                 |
|                       | TA       | 2.3 Biodiversity conserved through rehabilitation   | GEFTF | 3,500,000 | 20,000,000      |
|                       | (BD)     | and protection of coastal and marine habitats and   | GEITI | 3,300,000 | 20,000,000      |
|                       | (BD)     | protection of species: (i) Updated information and  |       |           |                 |
|                       |          |   |       |           |                 |
|                       |          | database on coral, mangrove and seagrass beds in    |       |           |                 |
|                       |          | the ATS leading to identification of priority       |       |           |                 |
|                       |          | conservation areas in the two countries; (ii)       |       |           |                 |
|                       |          | Network of MPAs established and declared in         |       |           |                 |
|                       |          | Indonesia and Timor Leste covering about            |       |           |                 |
|                       |          | 1,750,000 ha (e.g., Southeast Aru Islands) with     |       |           |                 |
|                       |          | corresponding management plans developed and        |       |           |                 |
|                       |          | implemented; (iii) Endangered marine mega           |       |           |                 |
|                       |          | fauna such as turtles and dugongs protected         |       |           |                 |
|                       | TA       | 2.4 Ecosystem-based adaptation implemented at       |       | 660,000   | 6,000,000       |
|                       | (BD; IW) | the local level towards enhanced resilience in the  |       |           |                 |
|                       |          | coastal areas of the Arafura and Timor Seas: (i)    |       |           |                 |
|                       |          | CC adaptation incorporated in ICM plans for two     |       |           |                 |
|                       |          | most at-risk coastal and marine areas in the Timor  |       |           |                 |

|                            |                | Leste; (ii) Ecosystem-based adaptation implemented in up to two sites in Indonesia.  |       |           |             |
|----------------------------|----------------|--|-------|-----------|-------------|
| 3. Knowledge<br>Management | TA<br>(BD; IW) | 3.1 Improved monitoring of the status of the ATS and dissemination of information: (i) Holistic (SMART) indicators developed to monitor ocean health, SAP and NAP implementation; indicators used for progress evaluation, SAP and TDA updating and priority setting; (ii) Improved dissemination of information and best practices through a communications strategy, enhanced ATSEA project website, bulletins, publications and videos in English and national languages, and contributions to IWLEARN equivalent to 1% of IW grant | GEFTF | 500,000   | 10,000,000  |
|                            |                | Subtotal   |       | 9,285,470 | 96,100,000  |
|                            | ·-             | Project Management Cost (PMC) <sup>4</sup>   | GEFTF | 460,192   | 5,450,000   |
|                            |                | Total Project Cost   |       | 9,745,662 | 101,550,000 |

If Multi-Trust Fund project: PMC in this table should be the total and enter trust fund PMC breakdown here (

# ( ). N/A

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

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

| Sources of Co-<br>financing | Name of Co-financier                         | Type of Co-<br>financing | Amount (\$) |
|-----------------------------|--|--------------------------|-------------|
| Recipient Government        | Ministry of Marine Affairs and Fisheries,    | Grant                    | 60,000,000  |
|                             | Indonesia (MMAF)                             |                          |             |
| Recipient Government        | MMAF, DG Coastal and Small Islands,          | Grant                    | 17,000,000  |
|                             | Indonesia                                    |                          |             |
| Recipient Government        | MMAF, Indonesia                              | In-kind                  | 400,000     |
| Recipient Government        | Ministry of Agriculture and Fisheries (MAF), | Grant                    | 20,000,000  |
|                             | Timor Leste                                  |                          |             |
| Others                      | Ministry of Environment, Australia           | Grant                    | 4,000,000   |
| GEF Agency                  | UNDP   | In-kind                  | 150,000     |
| Total Co-financing          |  |                          | 101,550,000 |

# D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS $^{\rm a)}$

|               |                     |                                 |                      |                       |                                    | (in \$)                         |                  |
|---------------|---------------------|---------------------------------|----------------------|-----------------------|------------------------------------|---------------------------------|------------------|
| GEF<br>Agency | Trust<br>Fund       | Country/<br>Regional/<br>Global | Focal Area           | Programming of Funds  | GEF<br>Project<br>Financing<br>(a) | Agency<br>Fee (b) <sup>b)</sup> | Total<br>(c)=a+b |
| UNDP          | GEFTF               | Regional                        | International Waters | (select as applicable | ` '                                | 501,548                         | 5,781,000        |
| UNDP          | GEFTF               | Indonesia                       | Biodiversity         | (select as applicable | 2,689,726                          | 255,524                         | 2,945,250        |
| UNDP          | GEFTF               | Timor Leste                     | Biodiversity         | (select as applicable | 1,776,484                          | 168,766                         | 1,945,250        |
| Total GEI     | Total GEF Resources |                                 |                      |                       | 9,745,662                          | 925,838                         | 10,671,500       |

a) No need to fill this table if it is a single Agency, single Trust Fund, single focal area and single country project.

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

b) Refer to the Fee Policy for GEF Partner Agencies.

# E. PROJECT PREPARATION GRANT (PPG)<sup>5</sup>

Is Project Preparation Grant requested? Yes \(\sigma\) No \(\sigma\) If no, skip item E.

## PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

| GEF      | Trust            | Country/        |                      | Programming            |         | (in \$)               |           |
|----------|------------------|-----------------|----------------------|------------------------|---------|-----------------------|-----------|
| Agency   | Fund             | Regional/Global | Focal Area           | of Funds               |         | Agency                | Total     |
|          |                  | 8               |                      | or r unus              | PPG (a) | $\mathbf{Fee}^{6}(b)$ | c = a + b |
| UNDP     | GEFTF            | Regional        | International Waters | (select as applicable) | 200,000 | 19,000                | 219,000   |
| UNDP     | GEFTF            | Indonesia       | Biodiversity         | (select as applicable) | 50,000  | 4,750                 | 54,470    |
| UNDP     | GEFTF            | Timor Leste     | Biodiversity         | (select as applicable) | 50,000  | 4,750                 | 54,470    |
| Total PP | Total PPG Amount |                 |                      | 300,000                | 28,500  | 328,500               |           |

# F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS<sup>7</sup>

Provide the expected project targets as appropriate.

| Corporate Results   | Replenishment Targets   | Project Targets   |
|---|---|---|
| Maintain globally significant biodiversity<br>and the ecosystem goods and services that<br>it provides to society   | Improved management of landscapes and seascapes covering 300 million hectares   | 1,750,000 ha of coral<br>reefs protected; total<br>area of ATS: 650,000<br>km <sup>2</sup>              |
| 2. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services | Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;  20% of globally over-exploited fisheries (by volume) moved to more sustainable levels | Not Applicable  Up to 150,000 tons (equivalent to about 10% reduction in IUU fishing of 1,500,000 tons) |
|   | Functional environmental information systems are established to support decision-making in at least 10 countries  | Not Applicable  |

#### PART II: PROJECT JUSTIFICATION

#### A. PROJECT OVERVIEW

#### A.1. PROJECT DESCRIPTION.

PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$1 mil; \$100k for PF up to \$3 mil; \$150k for PF up to \$6 mil; \$200k for PF up to \$10 mil; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the <u>GEF-6 Programming Directions</u>, will be aggregated and reported during midterm and at the conclusion of the replenishment period.

#### A.1.1) The global environmental problems, root causes and barriers

### **Background**

The warm tropical Arafura and Timor Seas (ATS)<sup>8</sup> are crucial globally, linking the Indian and Pacific Oceans and playing an important role in global ocean circulation. The world's climate is also greatly influenced by the El Nino-Southern Oscillation (ENSO) phenomenon and the Indian Pacific Warm Pool that exists in these seas. At the regional scale, the ecosystems of the ATS play an important economic and ecological role in the littoral nations bordering the Arafura and Timor Sea: Indonesia, Timor-Leste, Australia, and Papua New Guinea. Australia has the longest coastline followed by Indonesia and Timor Leste while a short coastline of PNG's Western Province borders on the Arafura Sea. The Torres Strait which is covered by a bilateral treaty between Australia and PNG is not part of the ATS.

The ATS region is extremely rich in living and non-living marine resources, including major fisheries and oil and gas reserves<sup>9</sup>. It has strong connectivity in oceanographic and ecological processes, such as the movement of pelagic and migratory species. Significantly, the ATS region exhibits high productivity that sustains both small-and large-scale fisheries, including several high-value, shared transboundary fish stocks, with industrial-scale fisheries, such as finfish trawl fishery, shrimp trawl fishery, and bottom long-line fishery. These fisheries provide livelihoods for millions of people in the region, and make a significant contribution to food security for both regional coastal communities and populations and also, large populations in export market countries to the north, including China. However, many of the ATS fisheries are fully exploited or over exploited.

The region is adjacent to the Coral Triangle which houses the world's highest marine biodiversity. These seas contain the most pristine and some of the most highly threatened coastal and marine ecosystems in the world. The ATS main habitats are very diverse and it contains 25% of the world's mangroves and 90% of mangrove tree species, with up to 45 species reported (from the genera Avicennia, Sonneratia, Rhizophora, Bruguiera, Ceriops, Nypa and Xylocarpus). Its seagrass beds are also very diverse with up to 15 species of seagrass recorded in Australian waters and 11 in Indonesian waters (*Halodule pinifolia, Halodule uninervis, Cymodocea rotundata, Cymodocea serrulata, Syringodium isoetifolium, Thallasodendrom ciliatum, Enhalus acoroides, Thalassia hemprichii, Halophila ovalis, Halophila ovata and Halophila spinulosa.*). Coral reefs surround the offshore islands of eastern Indonesia and Timor Leste and the Timor Sea has 160 species of coral that provide habitat for 350 species of reef fish.

These habitats are also critical for supporting migratory, rare, threatened and endangered marine species, such as nesting colonies of shorebirds and seabirds, cetaceans, dugongs, sharks and rays, turtles and sea snakes. The most commonly found marine turtles in the Arafura Timor Sea are the green turtle (Chelonia mydas), hawksbill turtle (Eretmochelys imbricata), and leatherback turtle (Dermochelys coriacea). Marine turtles of the Cheloniidae Family and Dermochelydae Family are listed in CITES Appendix I. At least 14 species of Cetacean have been reported in the surrounding waters of Komodo, Rinca and Flores islands, These species include *Delphinus delphis* (Common dolphin), Feresa attenuata (Pygmy killer whale), Grampus griseus (Risso's dolphin), Lagenodelphis hosei (Fraser's dolphin), Peponocephala electra (Melon-headed whale), Pseudorca crassidens (False killer whale), Stenella longirostris (Long-nosed spinner dolphin), S. Attenuata (Pan-tropical spotted dolphin), Tursiops truncatus (Bottlenose dolphin), Steno bredanensis (Rough-toothed dolphin), Ziphius cavirostris (Cuvier's beaked whale), Kogia sp, Balaenoptera edeni and Physeter macrocephalus (Sperm whale). Elasmobranchs are common in the ATS and sharks are found in up to 15 Families with 64 species, and rays are identified in up to 11 Families with 41 species, while Chimaera are known of only one Family with 2 species. Dugongs are associated with the abundance of seagrasses. However, many of these marine species are now threatened by a combination of overfishing and loss of habitat, underscoring the urgent need for collective regional action and transboundary management of shared fish stocks, critical habitats and marine mega fauna.

#### Threats to the ATS and root causes

<sup>&</sup>lt;sup>8</sup> Includes the Northern Australian Shelf.

<sup>&</sup>lt;sup>9</sup> The oil and gas activities in PNG would not affect ATS region but the Gulf of Papua facing the Coral Sea.

Poorly managed or unmanaged extraction of fish, prawns and other biota, coupled with other pressures such as pollution and disease, has led to overexploitation and, in many instances, to a decline in living resources within some areas of the Arafura and Timor Seas. The fisheries are very complex and diverse, reflecting the region's extraordinarily heterogeneous geography and species richness. While small-scale fishing predominates in the ATS, industrial fisheries contribute considerably more in terms of economic value since they target high-value shrimp and demersal fish species. Recent studies in the Arafura Sea have identified several signs of overfishing, including a decline in the abundance index for economic important shrimp, as well as decline in average size of individuals; an increase in sailing days of the commercial fishing fleet; and a shift in species composition towards non-economic by-catch and small crabs per catch unit. However, great uncertainty exists with respect to the status of local fish stocks due to high levels of Illegal, Unreported and Unregulated (IUU) fishing in the ATS. Reef fisheries are important to subsistence and artisanal fishers in some parts of the region. Many coral reefs have been heavily and chronically overfished. Overfishing and unsustainable practices have led to declining fish stocks, promoting many fishers to resort to destructive practices, such as bomb and cyanide fishing, which is especially evident in Indonesia. Overexploited stocks include many species of groupers, as well as benthic invertebrates, such as sea cucumbers and clams.

Modification of coastal habitats has resulted in major changes in population structure as well as functional group composition, notably on coral reefs, and massive changes in ecosystem services of coral reefs, seagrass beds and mangroves. For instance, the important nursery and feeding ground role of mangroves as well as seagrass beds for fish and marine mammals have been lost over extensive areas. Habitat modification and loss have also contributed to the decline in populations of marine mammals such as dugong. Habitat degradation has significant transboundary implications in terms of reduced fish recruitment and impacts on migratory species as well as on biodiversity throughout the region. Due to the lack of major urban settlements in the ATS region, major marine and land-based pollution impacts are largely localized and confined to coastal mining activities, poor catchment practices, offshore oil/gas exploration, and the effects of fisheries (e.g., marine debris, discarded fishing nets, etc.). The coastal and marine ecosystems of northern Australia are regarded as intact, containing some of the most pristine ecosystems in the world, due principally to low human population density. In contrast, the Indonesian part of the ATS is polluted in many coastal areas.

Unsustainable direct harvesting and also indirect harvesting (via fisheries by-catch) is having a significant impact on populations of key marine species in the ATS region, particularly globally threatened coastal marine megafauna including migratory, rare, and threatened species (i.e. turtles, dugongs, seabirds/shorebirds, sea snakes, cetaceans, sharks and rays). Sea turtle populations are declining due to exploitation and habitat degradation resulting from coastal construction, commercial trade and mortality through incidental capture in fisheries, which have accelerated the decline of sea turtle populations. The area encompassing northern Australia and eastern Indonesia supports significant direct harvest of green turtles, and currently represents a significant threat to the conservation of Australian green turtle stocks. In Timor-Leste, illegal turtle harvesting for meat and shell remains a major issue. Populations of hawksbill turtle face major threats from direct harvest, with the northeast Australian hawksbill turtle stock in decline. Dugongs are declining due to by-catch mortality, entanglement in lost or discarded nests, as well as loss of habitat, especially seagrass beds. Elasmobranchs are declining due to target fisheries, primarily by artisanal fishers using nets, long-lines and drop-lines, but also by industrial fish trawlers.

Low profile coasts, shallow continental shelves and macro-tidal conditions mean that the coastal and marine environments of the ATS region are particularly vulnerable to the impacts of climate change. By 2100, global sealevel is projected to rise by between 18 and 59 cm. In the coast of West Papua, the trend in sea level rise has been predicted to be between 0.75 - 0.765 cm/year. Such a rise in sea level is expected to increase the salinity of coastal groundwater as aquifers are affected by salt water intrusion. Predicted rises in sea-level up to nearly 80cm by the end of the century will impact rocky intertidal, mud- and sand-flats, coral reef, seagrass and mangrove communities. The pattern of coral bleaching across the Arafura-Timor Seas region is unlikely to be uniform owing to spatial and seasonal differences in sea surface temperatures and currents, and the influence of the Indian Pacific Warm Pool. There have been at least seven major coral bleaching events in the adjacent Coral Triangle between 1979 and 2005, all associated with ENSO events. Coral bleaching strongly affects local and regional species

distributions and densities of nearly all hermatypic corals; species replacement may also occur resulting in range shifts in the most affected coral species. Climate change is also threatening key marine species, such as marine turtles and sea snakes.

However, not all impacts of higher, and more variable, temperatures may be negative. For instance, mangrove photosynthesis may increase leading to increased growth of forests. Any functional enhancement of mangrove forests may however be counter-balanced by responses to other changes in climate, such as ocean acidification and extreme events (rainfall, cyclones). In the ATS, acidification will lead to declining numbers of calcareous organisms, most spectacularly, of coral reefs. Pelagic and other benthic communities will also be affected as a lowering of pH will affect the metabolic energy balance of many marine organisms. The community composition of plankton will be altered because pteropods, foraminiferans, coccolithophores and crustaceans, such as pelagic copepods and shrimp, will find it much more difficult to calcify under lower pH conditions. The same is envisioned for benthic communities on both hard and soft substrates, with the loss of some species of echinoderms, molluscs and crustaceans, especially many commercially-viable and artisanal species. More intense storms and cyclones will result in fewer organisms less able to tolerate and adapt to shallow tropical waters, especially intertidal organisms, and will result in scouring of many biota from hard substrates. Conversely, drier conditions will increase salinities to intolerable levels for many species; either scenario would lead to a decline in densities as well as species diversity.

#### Barriers to sustainable management of the ATS

The key challenges and barriers in the ATS region in addressing the priority environmental concerns outlined above are linked to:

Lack of a strong regional mechanism for collective regional action and transboundary management of the ATS The ATS region lacks a strong regional mechanism for transboundary cooperation on key priority issues. However, it has benefitted from cooperation under the Arafura and Timor Seas Experts Forum (ATSEF), which is a UN Type-2 non-binding forum to foster collaboration between government and non-governmental organisations in Australia, Indonesia, Papua New Guinea and Timor-Leste. The objective of ATSEF is to provide opportunities to improve information sharing arrangements between the littoral states of the Arafura and Timor Seas. It provides an informal mechanism to identify cooperative research agendas and arrangements to enhance the nations' capacity to sustainably manage the Arafura and Timor Seas. However, due to its informal status it suffers from inadequate financial resources, insufficient equipment, and trained staff, as well as weak stakeholder participation in some respects. There is a need to ensure strong local participation in all countries while also engaging with relevant national and international sectors, institutions and processes with a mandate in coastal and marine management to strengthen the regional governance of the ATS.

### Weak inter-sectoral coordination and collaboration, and law enforcement at national and local level

In Indonesia Provincial and District governments are responsible for management of environmental resources according to Indonesian Law No. 32 /2004) concerning Local Government and Regulation No.25/2000 concerning Government Authority and Province Authority as an Autonomic Region . Government Regulation (PP) No. 19/2010, stipulates that as representative of the Central Government, the Governor is responsible for coordinating implementation of governance activities within Districts. Minister of Home Affairs Regulation (Permendagri) No. 30 /2010 concerning Guidance of Marine Resources Management, gives local government regulatory powers for management of ocean resources. Consequently, there are several challenges faced by local government (district or/and provincial) in managing resources and the environment, among others: (i) better coordination on planning and development of marine and coastal resources and environmental management among sectors; (ii) improvement of budget, human resources and institutional capacity; (iii) balancing of economic values and environment consideration; and (iv) improvement of development on policy, law and regulation concerning marine and coastal resources utilization.

In Timor Leste, the general situation of the environment sector remains weak and the capacity to overcome existing problems is limited both in the short to medium term. The common challenges within the environmental sector are:

(i) incomplete environmental laws and regulation related to environmental management and weak implementation and enforcement of existing ones; (ii) limited financial support; (iii) lack of laws and regulations related to protected areas and endangered species (iv) limited human resources and expertise; and (v) lack of information and reporting systems, and lack of capacity in monitoring and evaluation.

The population of the entire Western province in PNG is estimated at 46,000 and the South Fly region is sparsely populated, underdeveloped and economic activities is constrained by access to local markets with population centers located 200 km away. Poverty incidence in this province is believed to be increasing rather than decreasing although there are no surveys to support this. Exploitation of coastal and marine resources is very limited although there have been reports of poaching and cross border trade of shark fins, freshwater turtles and Saratoga fingerlings around the border of PNG-Papua Province (Indonesia) inside the Tonda Wildlife Management Area. In other areas of PNG outside the ATS, however, fisheries overexploitation and degradation of coastal and marine resources have been reported. The major economic activity in the Western province is the Ok Tedi Mine (copper and gold) in the North Fly District. While there are environmental issues related to mining, the Ok Tedi river drains in the Gulf of Papua and not in the ATS. Decentralization has put the responsibility on provincial governments on regulation of nearshore areas while the national government agencies retains most of the responsibilities. The key challenge for PNG as it relates to ATS is the remoteness and inaccessibility that makes governance difficult.

# Lack of access to environmental planning tools, technologies and approaches for sound environmental management of the ATS

Progress has been made in introducing integrated coastal management (ICM) plans and approaches in Indonesia and Timor Leste, through e.g. collaboration with the Partnership in Environmental Management for the East Asian Seas (PEMSEA). However, ICM interventions have mainly focused on the more populous areas of the Indonesian Sea bordering Southeast Asia, and not the more remote ATS region, although the pressures on the coastal environment and its globally significant biodiversity are mounting, due to growing populations coupled with climate change. Moreover, as bordering seas are becoming better surveyed, IUU fishing is moving into the ATS where incentives for sustainable fisheries is lacking, as fishery value chains are not well documented and certification through, e.g. MSC is in its infancy. In addition, the ecosystem approach to fisheries management is poorly understood by local authorities and local communities. There has historically also been poor data collection and research on the ATS ecosystems to inform management decisions, and all this combined has led to the application of technologies and approaches to coastal and marine management that are not environmentally friendly and lack resilience to climate change, and now threaten the rich biodiversity of the ATS region.

#### ATSEA SAP has identified measures to address the barriers

The above barriers can be tackled through a coordinated implementation of the Strategic Action Program (SAP) that was developed for the ATS with support from GEF-5. The SAP has identified priority action at regional and national levels to remove the key barriers to sustainable ecosystem-based management of the ATS that will address the priority environmental concerns of unsustainable fisheries, modification, degradation and loss of coastal and marine habitats, marine and land-based pollution, decline and loss of biodiversity and key marine species, and impacts of climate change.

#### A.1.2 The baseline scenario and any associated baseline projects

#### Regional, national and local governance:

As discussed above, the baseline for the proposed project is the ATSEF established in 2003 and since its inception funded by the four participating countries and UNDP. Based on this baseline, GEF agreed in 2009 to fund the <u>Arafura and Timor Seas Ecosystem Action Program (ATSEA)</u>. ATSEA was included under the GEF Coral Triangle Initiative (CTI) with considerable co-funding from governments of Australia, Indonesia, Timor Leste with UNDP and other partners. UNDP served as the implementing agency. ATSEA has completed a Transboundary Diagnostic Analysis (TDA) for the Arafura and Timor Seas (ATS) that was approved by the Project Board and published in 2012. This was followed by development of a Strategic Action Program (SAP) that was adopted at the ministerial level on May 15, 2014 by Indonesia and Timor Leste and Australia's Ambassador to Indonesia, as well

as National Action Programs (NAPs) for Indonesia and Timor Leste. The SAP responds to the findings of the TDA for the ATS. The 10-year vision for the ATS and the long-term objective of the SAP is 'to promote sustainable development of the Arafura-Timor Seas region to improve the quality of life of its inhabitants through conservation and sustainable management of marine-coastal ecosystems'. This corresponds to the desired status of the ATS ecosystem, which will be pursued through achievement of five medium-term environmental quality objectives:

- Recovering and sustaining fisheries
- Restoring degraded habitats for sustainable provision of ecosystem services
- Reducing land-based and marine sources of pollution
- Protecting key marine species
- Adaptation to the impacts of climate change

PNG participated in the TDA exercise through the allocation of resources from the foundational phase of the ATSEA project. A PNG representative attended the project board meetings in 2011 and 2012, however, the participation was not sustained into the formulation of the SAP for various reasons. Despite PNG's marginal impact on and reliance upon the ATS, this proposed project will seek their re-engagement as indicated in the cover page of this PIF.

The mid-term evaluation of the ATSEA project concluded that, if specified milestones are met, GEF support to a follow-up SAP implementation project is justified and should be provided in a timely manner. The terminal evaluation of ATSEA conducted in July 2014 reinforces the implementation of the SAP. The report indicated an overall performance of Satisfactory with the key intended outputs reasonably achieved. From the point of view of country ownership, the project is rated highly satisfactory, culminating with the acceptance of the TDA and the ministerial signing of the SAP in May 2014. ATSEA is well anchored in other regional projects and initiatives that the proposed SAP implementation project will build on and develop synergies with, especially the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF). The ATS SAP shares the same general objectives as the Regional Plan of Action (RPOA) of the CTI and CTI National Plans of Action for Indonesia and Timor-Leste, and geographically, the implementation areas of the two initiatives overlap. The actions and activities in the ATS SAP are aligned with, and can serve to give effect to, the CTI RPOA and NPOAs. The countries, including Australia as a partner to the CTI, will ensure that their engagement in the two forums is well coordinated. Close collaboration with the CTI working groups on fisheries, marine protected areas (MPAs), threatened species, as well as CTI-CFF permanent secretariat will be established.

The baseline in Indonesia and Timor Leste with weak inter-sectoral coordination and collaboration, and law enforcement at national and local level has been analysed in the SAP and NAPs that were developed by the ATSEA project. They propose actions and activities that will bring about institutional strengthening and policy reform in support of integrated and ecosystem-based management of the ATS. However, without further donor support at regional and national level to overcome implementation barriers, the SAP as well as the NAPs will remain only weakly implemented.

#### Environmental management:

The baseline for the fisheries component of the SAP and fishery related activities in the proposed project is the Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region (RPOA-IUU). The objective of the RPOA is to enhance and strengthen the overall level of fisheries management in the region, in order to sustain fisheries resources and the marine environment, and to optimize the benefit of adopting responsible fishing practices. The actions cover:

- CONSERVATION OF FISHERIES RESOURCES AND THEIR ENVIRONMENT;
- MANAGING FISHING CAPACITY, AND COMBATING ILLEGAL, UNREPORTED AND UNREGULATED (IUU) FISHING IN THE AREAS OF THE SOUTH CHINA SEA, SULU-SULAWESI SEAS (CELEBES SEA) AND THE ARAFURA-TIMOR SEAS.

The ATS SAP countries are all members of the RPOA-IUU, and have established an Arafura and Timor Seas subforum on monitoring, control and surveillance under the RPOA-IUU. The Fisheries component of the ATS SAP will largely be implemented through the RPOA-IUU. A Fisheries Management Plan (FMP) for the Arafura Sea has

already been launched and the SAP will complement this through a focus on the ecosystem impacts of and approaches to fisheries.

The habitat component of the SAP and habitat rehabilitation activities in the proposed project will build on the experiences in Integrated Coastal Management (ICM) that have been coordinated at regional level in the East Asian Seas since 1998 by <u>PEMSEA</u> (Partnership in Environmental Management for the Seas of East Asia). PEMSEA coordinates the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) that provides an overarching framework for the EAS. The SDS-SEA has the following foci:

- Ensure sustainable use of coastal and marine resources;
- PRESERVE SPECIES AND AREAS OF THE COASTAL AND MARINE ENVIRONMENT THAT ARE PRISTINE OR ARE OF ECOLOGICAL, SOCIAL OR CULTURAL SIGNIFICANCE;
- PROTECT ECOSYSTEMS, HUMAN HEALTH AND SOCIETY FROM RISKS OCCURRING AS A CONSEQUENCE OF HUMAN ACTIVITIES:
- DEVELOP ECONOMIC ACTIVITIES IN THE COASTAL AND MARINE ENVIRONMENT THAT CONTRIBUTE TO ECONOMIC PROSPERITY AND SOCIAL WELL-BEING WHILE SAFEGUARDING ECOLOGICAL VALUES;
- IMPLEMENT INTERNATIONAL INSTRUMENTS RELEVANT TO THE MANAGEMENT OF THE COASTAL AND MARINE ENVIRONMENT; AND
- COMMUNICATE WITH STAKEHOLDERS TO RAISE PUBLIC AWARENESS, STRENGTHEN MULTISECTORAL PARTICIPATION AND OBTAIN SCIENTIFIC SUPPORT FOR THE SUSTAINABLE DEVELOPMENT OF THE COASTAL AND MARINE ENVIRONMENT.

In addition, for conservation of migratory, vulnerable, threatened and endangered species, the project builds on the work supported by Australia, Indonesia and Timor Leste related to the <u>Convention on Migratory Species (CMS)</u>. The CMS aims to conserve migratory species, their habitats and migration routes. A number of globally and regionally important migratory species listed under the CMS inhabit the ATS, and memoranda of understanding and action plans are in place to support collaborative management among range states. This includes species of turtles, dugong, whales, sharks and seabirds. The actions in these memoranda of understanding and action plans are broadly aligned with the objectives of the SAP, and in implementing the SAP, the countries will seek to make use of such existing platforms and efforts.

Within Australia, the objectives and actions of the SAP will inform the implementation of established plans and policies, including Marine Bioregional Plans for the north and northwest regions, management plans for Australia's MPA network, and threatened species recovery plans. Australia will prepare and keep updated a document that outlines the key activities being undertaken at national level that support the achievement of SAP objectives.

# **Baseline funding**

The proposed project will build on baseline support provided by Australia US\$4 million over five years to enhance regional collaboration and coordination in the Arafura and Timor Seas through ATSEF. To this will be added US\$400,000 in funding from Indonesia for hosting the new regional mechanism that will be established and office premises are already under construction. To implement the FMP for the Arafura Sea, the Agency for Marine Affairs and Fisheries Research and Development, linked to MMAF in Indonesia, provides US\$45 million in baseline support and the Directorate General for Capture Fisheries provides US\$15 million over five years. Over the same period, the Department of Fisheries at MAF in Timor Leste provides US\$20 million in baseline support to the RPOA-IUU. The Directorate of Coastal and Small Islands (MMAF) in Indonesia provides US\$17 million in baseline funding to design, implement and monitor a new MPA in the Southeast Aru Islands in the Arafura Sea. In addition, baseline support to implement the ATS SAP and its different components will be provided by UNDP, NGOs and the private sector to a total amount of US\$101.55 million.

A.1.3) The proposed alternative scenario, with a brief description of expected outcomes and components of the project.

The project will address the five priority transboundary environmental problems identified by the TDA, e.g. (i) unsustainable fisheries and decline and loss of living coastal and marine resources; (ii) modification, degradation and loss of coastal and marine habitats; (iii) marine and land-based pollution; (iv) decline and loss of threatened and migratory species; and (v) impacts of climate change on the ATS, by removing the key barriers to sustainable management of the ATS related to lack of a strong regional mechanism for collective regional action and transboundary management of the ATS, weak inter-sectoral coordination and collaboration, and law enforcement at national and local levels, and lack of access to environmental planning tools, technologies and approaches for sound environmental management, exacerbated by limited access to financing at different levels. The objective to enhance sustainable development of the Arafura-Timor Seas region to protect biodiversity and improve the quality of life of its inhabitants through restoration, conservation and sustainable management of marine-coastal ecosystems, will be achieved through four interlinked project components:

#### Component 1: Regional, National and Local Governance for Large Marine Ecosystem Management

The objective of this component is to strengthen the governance and ecosystem-based management of the ATS by establishing regional and national implementation mechanisms for cooperation and implementation (Outcome 1.1) created to promote and implement regional and national planning. These will be supported by a Regional Coordination Committee (RCC) and a Secretariat created to promote regional level planning, cooperation and monitoring in the implementation of the SAP and NAPs. The RCC will be composed of government representatives. This involves adoption of a formal regional cooperation agreement that will be implemented in a stepwise manner, with the RCC being constituted first and the RCC creating the Secretariat followed by the Stakeholder Participation Forum (SPF). Stakeholder participation will be improved at the regional and national, including at the local levels through the establishment of the SPF. The SPF will replace ATSEF which aims to strengthen the overall participatory processes at all geopolitical levels, resulting in better integration into the Regional Coordination Committee and the Secretariat. Thus, the SPF will carry forward all the existing members of ATSEF although it will be more inclusive to include relevant private sector groups engaged in oil and gas, fisheries, forestry/logging, tourism and other businesses of relevance to the ATS. Intersectoral coordination at the national and local levels in support of the implementation of integrated approaches to marine and coastal management and biodiversity conservation will be improved through the national inter-ministry committees established by the ATSEA project, contributing to the implementation of the SAP and NAPs developed for the ATS and the national NBSAPs.

To ensure sustainability of the regional and national mechanisms, financial mechanisms will be put in place to support the implementation of the SAP and NAPs and the replication and upscaling of demonstration projects (SAP). Funding will be mobilized from a multiplicity of sources including national and local governments and where feasible to be assessed during project design, from the private sector (e.g., oil and gas, fishing industry, tourism sector, forestry/logging, etc.), multilateral and bilateral donors, NGOs and foundations, as well as from market-based mechanisms, such as Payments for Ecosystem Services (PES) and Public Private Partnerships (PPPs).

This component will also strengthen the institutional and human resource capacity towards integrated approaches in natural resource management (Outcome 1.2) through harmonization of formulation and implementation of national and local policies and programs in Indonesia<sup>10</sup> and Timor Leste<sup>11</sup>, through inter-ministry committees, to strengthen the regulatory and institutional frameworks in support of SAP/NAP implementation (NAPs) with

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In Indonesia, these will be primarily national sectoral laws in fishery (e.g., Act 45/2009 on IUU; Ministerial Decree No. 1/2009 on Fisheries Management Area covering Arafura Sea and Timor Sea), on environment (e.g., Law No. 32/2009 concerning environmental protection and management); on CC (Presidential Regulation No. 24/2008). The NAP will be integrated into the National Policy on Marine Fisheries developed by BAPPENAS (National Planning Agency) for the Midterm Development Framework (Rencana Pembangunan Jangka Menengah). It will also be used by MoMAF to develop its midterm strategies. At the subnational level, the Kabupaten (district) will develop their respective strategic plans drawing from the BAPPENAS and MoMAF policy documents mentioned. These will also cover emerging national and subnational policies and programs to be verified during project design.

<sup>&</sup>lt;sup>11</sup> In Timor Leste, these will include Ministry of Agriculture and Fisheries Organic Law No. 8/2008; Government Decree Law No. 6/2004 on management and regulation of fisheries and aquaculture. NAP will be integrated into the National Planning Strategy to be adopted by the Ministry of Agriculture and Fisheries. This national strategy is directly applied at the district level. Emerging national and subnational policies and programs to be verified during project design will also be covered.

synergies and linkages developed with the National Biodiversity Strategies and Action Plans (NBSAPs). Guidelines and/or handbook on integrated approaches to natural resource management, conservation of marine and coastal biodiversity as well as climate change adaptation will be developed in local languages by building on existing guidebooks/handbooks and using these materials in trainings of trainers to benefit at least 100 participants in Indonesia and 60 in Timor Leste.

In response to the priorities in the SAP, , the project will contribute to improved understanding of climate change impacts on fisheries and marine/coastal ecosystems through scientific analysis, including resource assessment and climate modeling (Outcome 1.3). It will also ensure that expected climate change and ocean acidification are incorporated into the regional SAP and national policy instruments. Concrete ecosystem-based adaptation actions will be identified and implemented at the regional level, linked to component 2 that will enhance ecosystem resilience.

As in the first phase of the ATSEA project, this succeeding phase will seek the participation of PNG immediately at the start of the project. Contingent on their participation the project will support the following: (i) inclusion of PNG in the SAP through the issuance of an 'addendum' that will define the scope of their full participation; (ii) preparation of the PNG National Action Program (NAP); (iii) initiate the early- implementation of NAP as may be applicable and agreed by the Project Board. The project targets will be revised accordingly with their participation and will be reported in the annual project implementation reports and the midterm evaluation. Subject to the agreement of the other countries, the participation of PNG in the Regional Coordination Committee and the SPF will be supported by the project.

#### Under Outcome 1.1, the outputs are listed below:

- 1.1.1 Regional Coordination Committee and a supporting Secretariat created to promote regional level planning, cooperation and monitoring in the implementation of the SAP and NAPs; formal regional cooperation agreement adopted and implemented where feasible (SAP)
- 1.1.2 Improved stakeholder participation at the regional and national levels through the establishment of a Stakeholder Partnership Forum for the implementation of the SAP and NAPs (SAP) with representation of indigenous peoples' and women's groups
- 1.1.3 Improved intersectoral coordination at the national and local levels in support of the implementation of integrated approaches to NRM, water resources, biodiversity conservation and climate change adaptation, through national inter-ministry committees in Indonesia and Timor Leste
- 1.1.4 Financial mechanisms in place to support the implementation of the SAP and NAPs and the replication and upscaling of demonstration projects (SAP)

#### Under Outcome 1.2, the Outputs are listed below:

- 1.2.1 Harmonization of national and local policy in Indonesia and Timor Leste to strengthen the regulatory and institutional frameworks in support of SAP/NAP implementation and linkages to NBSAPs through support to national inter-ministry committees
- 1.2.2 Localization and translation of guidelines and/or handbook on integrated approaches to marine and coastal management, biodiversity conservation and climate change adaptation in local language by building on existing/completed initiatives; implementation of training of trainers benefitting at least 100 participants in Indonesia and 60 in Timor Leste

#### Under Outcome 1.3, the Outputs are:

- 1.3.1 Improved understanding of climate change impacts on fisheries and marine/coastal ecosystems through scientific analysis, including resource assessment and climate modeling (SAP)
- 1.3.2 Expected climate change and ocean acidification incorporated into the regional SAP and national policy instruments, identifying concrete CC adaptation actions at the regional level (Regional SAP)

# Component 2: Improving LME Carrying Capacity to Sustain Provisioning, Regulating and Supporting Ecosystem Services

This component will implement the priorities identified in the SAP and the Indonesia and Timor Leste NAPs. As a first step, during the design (PPG) phase, one national consultation each in Indonesia and Timor Leste to present the SAP/NAP for strategic review which will serve as the inception for the PPG. Participants will be from the government (all 3 littoral provinces and 13 Kabupatens in Indonesia and all 13 districts in Timor Leste) and the academe, NGOs and other stakeholders. The outcome will serve to refine the outcomes/outputs/activities proposed in this component.

The objective of this component is to improve the status of the ATS ecosystem through improved management of fisheries and other coastal resources for livelihoods, nutrition and ecosystem health, and implementation of ICM plans (Outcome 2.1). It will implement an ecosystem approach to fisheries management (EAFM) at the LME level for shared stocks and in area-specific fisheries in Indonesia, mainly in the Fisheries Management Area 718 (Arafura Sea) including demersal, shark, red-snapper and shrimp fisheries, and demersal and Reef fisheries in Timor Leste, such as in the Los Palos and Com Districts. Profiles of three selected fisheries in the ATSEA will be developed, followed by value-chain analysis and pre-assessment to move selected fisheries towards certification/eco-labelling with the aim of reducing IUU fishing and by-catch, and improve the status of threatened, vulnerable and endangered non-target species. Moreover, national actions will be strengthened in support of the Regional Plan of Action for Responsible Fishing Practices, including promotion of alternative fishing gear and strategies, such as techniques to reduce by-catch from long-lines and fish aggregating devices (FADs), and the use of vessel monitoring systems (VMS), resulting in reduction of the very high level of IUU fishing in the ATS by around 150,000 tons (SAP). The reduction is equivalent to 10% of the total estimated IUU fishing in ATS, which needs to be refined during project design.

Integrated Coastal Management (ICM) plans that integrates SAP/NAP priorities and biodiversity concerns in line with recommendations in the NBSAPs and in conjunction with EAFM, will be developed and implemented through formulation and enactment of local regulations in at least 6 learning sites in the ATS region (4 in Indonesia including Southeast Aru, Kaimana, Rote and Tanimbar; 2 in Timor Leste including Com and Los Palos), covering about 470,000 ha of mangroves, 51,000 ha of coral reefs and 2,000 ha of seagrass beds. Replication sites will be covered from year 3 of the project - at least 2 in Indonesia and at least another one in Timor Leste. Marine pollution and litter will be reduced to improve ecosystem health (Outcome 2.2), which requires enhanced data and information regarding the sources and sinks of contaminants in the ATS, and the identification of pollution hotspots. Pollution will be reduced in three pollution hotspots, two in Indonesia and one in Timor Leste, through implementation of ICM plans in collaboration with PEMSEA. Coastal cleanups to be financed from non-GEF sources will be undertaken at least once a year to reduce marine litter by around 10% in pollution hotspots and marine debris from various sources.

Outcome 2.3 will focus on the biodiversity conservation elements of the SAP. Based on improved information and database on coral reefs, mangroves and seagrass beds in the ATS, and identification of priority conservation areas in Indonesia and Timor Leste and area-based management measures based on marine spatial planning guidelines<sup>12</sup> developed by the CBD and GEF. This will inform the establishment of a network of marine protected areas in the ATS covering an estimated 1,500,000 ha of coral reefs, such as Southeast Aru Islands in Indonesia. Management plans will be prepared including preliminary implementation. The management plans will look into financing aspects assessing the entire range of conservation finance. Finally, endangered flagship species such as turtles and dugongs will also be protected (in conjunction with Outputs 2.1.1 and 2.3.2), fully in line with the NBSAPs in both countries and the focus on establishment of MPAs and halting the loss of biodiversity.

Outcome 2.4 will support the implementation of ecosystem-based adaptation at the local level to enhance resilience in the coastal areas. In Timor Leste, management plans for at most two at-risk coastal and marine areas along the Timor Sea will be developed and implemented in a way that builds on results of 3.1.1 and is complementary to the

<sup>&</sup>lt;sup>12</sup> Secretariat of the Convention on Biological Diversity and the Scientific and Technical Advisory Panel – GEF (2012). Marine Spatial Planning in the Context of the Convention on Biological Diversity: A study carried out in response to CBD COP10 decision X/29. Montreal Technical Series No. 68, 44 pages.

LDCF project on building shoreline resilience in Timor Leste discussed in Section A.4. Concrete adaptation measures will be supported such as, but not limited to, preservation and rehabilitation of mangrove forests, native riparian vegetation and hill slope vegetation (TL NAP) to build climate-resilient ecosystems in line with the recommendations of the country NBSAP and NAPA (see section B.1). Management plans for at least two demonstration sites on climate change resilience will also be implemented in Indonesia (Indonesia NAP) that will focus on enhancing connectivity of habitats to protect shorelines and conserve biodiversity.

Participatory processes will be undertaken as a requirement in the preparation of ICM plans, MPA management plans and climate change adaptation measures. The ICM and MPA planning processes and implementation of these plans are participatory. The communities will drive these processes with the project and government providing facilitation to ensure strong ownership thereby empowering them in terms of making decisions for themselves and implementing actions that directly affect them.

#### Under Outcome 2.1, the Outputs are listed below:

- 2.1.1 Ecosystem approach to fisheries management (EAFM) implemented at the LME level for shared stocks and in area-specific fisheries in Indonesia including demersal, shark, red-snapper and shrimp fisheries) and demersal and Reef fisheries in Timor Leste
- 2.1.2 Development of profiles of 3 fisheries in the ATSEA, value-chain analysis and preassessment to move selected fisheries towards certification/eco-labelling
- 2.1.3 National actions strengthened in support of the Regional Plan of Action for Responsible Fishing Practices, e.g., through better surveillance, enforcement and monitoring, resulting in reduction of IUU fishing in the ATS by around 150,000 tons (SAP)
- 2.1.4 Integrated coastal management plans (ICM) that support SAP/NAP implementation and integrate biodiversity concerns as stated in NBSAPs developed and implemented through formulation and enactment of local regulations initially in 6 learning sites in the ATS region covering approximately 470,000 ha of mangroves, 51,000 ha of coral reefs, and 2,000 ha of seagrass beds, to be followed by 3 replication sites.

## Under Outcome 2.2, the Outputs are listed below:

- 2.2.1 Enhanced data and information regarding the sources and sinks of contaminants in the ATS; pollution hotspots identified; appropriate controls of point and non-point sources of pollution initiated
- 2.2.2 Coastal cleanup undertaken at least once a year to reduce marine litter by around 10% in pollution hotspots and marine debris from various sources and raise awareness (marine debris reduction to be funded from non-GEF sources)

# Under Outcome 2.3, the Outputs are listed below:

- 2.3.1 Updated information and database on coral, mangrove and seagrass beds in the ATS; priority conservation areas identified in Indonesia and Timor Leste
- 2.3.2 Network of marine protected areas established and declared in Indonesia and Timor Leste; covering about 1,750,000 ha of coral reefs, (e.g. Southeast Aru Islands); with corresponding management plans prepared and implemented
- 2.3.3 Endangered marine megafauna such as turtles and dugongs protected (in conjunction with Outputs 2.1.1 & 2.3.2)

#### Under Outcome 2.4, the Outputs are:

- 2.4.1 ICM plans for at most two at-risk coastal and marine areas along the Timor Sea developed and implemented in Timor Leste (building on results of 2.1.4 and 3.1.1 and complementary to the LDCF project on building shoreline resilience in Timor Leste) leading to concrete measures such as, but not limited to, preservation and rehabilitation of mangrove forests, native riparian vegetation and hill slope vegetation (TL NAP);
- 2.4.2 ICM plans for at most two demonstrations on ecosystem-based adaptation implemented in Indonesia (Indonesia NAP)

#### **Component 3: Knowledge Management**

The objective of this component is to support replication and scaling up of experiences and best practices generated by the project and the implementation of the SAP and NAPs. This will be achieved through improved monitoring of the status of the ATS and dissemination of information, which involves development of holistic and SMART (Specific, Measurable, Achievable, Relevant, Time-bound) indicators, using the GEF Process, Stress Reduction and Environmental/Socioeconomic Status framework, to monitor ocean health in the context of climate change, and indicators used for SAP/NAP progress evaluation and priority setting. The SAP has already identified preliminary indicators for monitoring of process, stress reduction and status of the ATS, but these indicators will be further refined during the first six month of the project, to strengthen the integration of biodiversity concerns into the monitoring of the implementation of the SAP. The project will also support the establishment of a regional monitoring mechanism as part of strengthening of regional governance under Component 1.

Dissemination of information and best practices will be improved through formulation and implementation of a communications strategy including, but not limited to, an enhanced ATSEA project website, bulletins, publications and videos in English and national languages, and contributions to IWLEARN equivalent to 1% of the IW grant. Making information accessible to local communities would contribute to their empowerment that would lead to meaningful participation in national and local planning and implementation processes. The communication strategy will include a regional information system that will address the long-term needs in the management of the ATS region. The communication strategy will be maintained by the Secretariat and its implementation will be overseen by the Regional Coordination Committee.

#### The Outputs are:

- 3.1.1 Holistic (SMART) indicators developed, using GEF Process, Stress Reduction and Environmental/Socioeconomic Status framework to monitor ocean health, SAP and NAP implementation; indicators used for progress evaluation, SAP and TDA updating and priority setting
- 3.1.2 Improved dissemination of information and best practices through formulation and implementation of a communications strategy, including but not limited to an enhanced ATSEA project website, bulletins, publications and videos in English and national languages, and contributions to IWLEARN equivalent to 1% of IW grant

# A.1.4) Incremental cost reasoning and expected contributions from the baseline, the GEFTF, LDCF/SCCF and co-financing

#### Component 1: Regional, National and Local Governance for Large Marine Ecosystem Management

GEF incremental support will be used to change the baseline situation with an informal regional mechanism for cooperation and coordination (ATSEF) into a situation with an operational regional mechanism, based on a formal regional cooperation agreement. The weaknesses in the environmental frameworks as well as implementation capacity in Indonesia and Timor Leste will be strengthened through inter-ministry committees established by ATSEA and by using GEF support to develop guidelines, and for training and capacity building of technical and government staff. Australia's co-financing from its baseline, mainly to improving regional governance, as part of its ongoing support to ATSEF, will amount to US\$3 million over the duration of the project. Indonesia will provide support to the new regional mechanism and host it in newly built office premises in Bali. Indonesia's total baseline support from Timor Leste amounts to US\$2 million for this component.

#### Component 2: Improving LME Carrying Capacity to Sustain Ecosystem Services

Incremental funding from GEF will be used to implement the ecosystem approach to fisheries management (EAFM) for shared stocks in the ATS, such as red snapper and shrimp fisheries. GEF support is also expected to catalyse work on fishery value chains and certification/eco-labelling, such as MSC (Marine Stewardship Council) certification. Implementation of ICM plans that integrate biodiversity conservation concerns will receive GEF support, and networks of MPAs will be established, using the marine spatial planning approach, as in for example the recently designated MPA in the Southeast Aru Islands. GEF funds will also target the conservation of

endangered marine megafauna, such as turtles and dugongs. Baseline support to introduction of EAFM in the ATS is linked to Indonesia's, Timor Leste's and Australia's support to the implementation of the RPOA-IUU, while the support to implementation of ICM plans and conservation of biodiversity is linked to PEMSEA, CTI and actions linked to the implementation of the CMS. Total baseline support to this component amounts to US\$50 million from Indonesia and US\$10 million from Timor Leste. In addition, value-chain analysis and work on certification for selected fisheries receives baseline funding from NGOs and the private sector as well.

#### **Component 3: Knowledge Management**

Monitoring of ATS ecosystem health will receive GEF incremental funding and is supported by a baseline that consists of on-shore and off-shore monitoring of selected ecosystem parameters by the three countries, especially in Australia. GEF support will ensure that impact monitoring is conducted related to the implementation of the SAP. 1% of the IW funds will contribute to IWLearn and participation in its conferences and contribution to newsletters for sharing of experiences. Total baseline support to this component amounts to US\$1 million from Australia, US\$8 million from Indonesia and US\$1 million from Timor Leste.

## A.1.5) Global environmental benefits (GEFTF, NPIF) and adaptation benefits (LDCF/SCCF)

The project will generate global environmental benefits in the International Waters and the Biodiversity focal areas, which will include:

- Two functioning national inter-ministry committees (in Indonesia and Timor Leste, respectively) ensure coordination of policy reform and adoption of ICM plans to:
  - o Reduce pollution, including littering and marine debris, in 4 coastal/marine hotspots in the ATS (IW)
  - o Improve management and enhance the protection of coastal and marine habitats including 470,000 ha of mangroves, 51,000 ha of coral reefs and 2,000 ha of seagrass beds (BD, IW)
- Introduction of sustainable fishing practices in the ATS, including:
  - o Development and implementation of Fisheries Management Plans for the Arafura and Timor seas and introduction and adoption of EAFM among target fisher communities (IW, BD)
  - o 3 fisheries in the ATS moved toward certification/eco-labelling leading to reduction of IUU fishing by around 10% and associated reduction of by-catch (IW, BD)
- Increase in Marine Protected Areas (MPAs) in the ATS with 1,750,000 ha of coral reefs being protected, contributing to protection and improved status of 3 species of threatened marine megafauna of global significance (BD)
- Improved management effectiveness of new MPAs according to GEF METT effectiveness score. The baseline will be determined during the PPG phase (BD)

The global environmental benefits will be underpinned by socio-economic benefits, such as improved livelihoods and food security, accruing from improved delivery of ecosystems services from integrated natural resources management and sustainable fisheries.

#### A1.6) innovativeness, sustainability and potential for scaling up

The project is the first that promotes collective regional action in the Arafura Timor Seas. The approach to bring together two developing countries (Indonesia and Timor Leste) with a history of conflict, with a developed country (Australia) that brings technical knowledge and scientific expertise to assess, analyse and solve regional natural resource management problems, is unique, and resulted in a swift TDA/SAP process that also included joint cruises

to assess the status of the ATS ecosystem as well as regional demonstration projects with regional sharing of lessons and experiences. The proposed SAP implementation project adds new innovative elements related to the mainstreaming of biodiversity concerns, as identified in the NBSAPs, into the SAP and NAPs for the ATS as well as integrated coastal management (ICM) plans to protect some of the most valuable and threatened marine biodiversity on earth in the eastern part of the coral triangle. The mechanism for stakeholder participation that involves establishing a Stakeholder Partnership Forum that brings together representatives from local communities, NGOs, academia and scientific institutions, and governments is also innovative. It will ensure a continued input of science as well as local knowledge into the SAP implementation processes, and the active involvement of indigenous local communities and women's groups.

Institutional strengthening at regional, national and local levels coupled with a strong resource mobilization strategy and establishment of financial mechanisms will contribute to the sustainability of the project interventions at regional and national levels and gradual rolling out of the SAP and NAPs. In addition, the project's win-win approach to generating interlinked global environmental and socio-economic benefits will ensure sustained support and interest from local communities to adopt measures such as EAFM and area-based management of critical habitats for provision of ecosystem services important for food security and the environmental status of the ATS.

Experiences and lessons learned from the demonstration projects in the ATSEA project, which formed part of the development of the TDA and SAP, will be replicated and scaled up as appropriate, as best practices examples of how to address common concerns related to coastal and marine management in the ATS, which provides a cost-effective way of implementing the SAP. The national and regional demonstration projects implemented as part of the TDA and SAP development process included: (i) management of mangrove areas as a buffer zone for coastal ecosystem, seaweed farming and mud crab rearing in Indonesia; (ii) coastal livelihood project in Timor-Leste; and (iii) regional community-based management project and sustainable livelihood development. Best practices for possible scaling up will be expanded by the proposed project to include experiences from governance reforms supporting ecosystem-based management, establishment of MPAs, and ecosystem-based adaption to climate change in coastal areas. The knowledge management component of the project will support the dissemination of best practices generated to national and regional partners and, through IWLearn, to a wider international audience.

A.2. Stakeholders. Will project design include the participation of relevant stakeholders from civil society and indigenous people? (yes  $\boxtimes$  /no $\square$ ) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation:

In order to strengthen the involvement of all stakeholders in the implementation of the ATSEA SAP, a Stakeholder Partnership Forum will be established that will hold annual meetings as a forum for exchange of ideas/information and evaluation of the implementation of the agreed program. In addition, to facilitate the communication among the stakeholders, a web-based information system accessible to all parties will be established. Special attention will be paid to engaging with indigenous peoples' and women's groups active at the project sites in Indonesia and Timor Leste (see below) in implementation of demonstrations on sustainable fisheries management, ecosystem-based adaptation, ICM, etc.

National and local stakeholders in Indonesia and Timor Leste were extensively consulted during the development of the National Action Programs (NAPs) for the ATS and the main stakeholders identified in the respective NAPs are summarized below:

#### Indonesia

The stakeholders in Indonesia are those that have expressed interest in implementing sustainable development in the Arafura and the Timor Seas region through the SAP. Around thirty institutions have expressed interest:

### Government:

The Ministry of Marine Affairs and Fisheries (MoMAF) will coordinate the implementation of the project, involving: DG of Surveillance of Marine and Fisheries Resources - MoMAF, DG of Aquaculture - MoMAF, DG of Coastal and Small Islands - MoMAF, DG of Capture Fisheries - MoMAF, East Nusa Tenggara Provincial Government, Maluku Provincial Government, Papua Provincial Government, Rote Ndao District Government,

Kupang district government, South Central Timor district government, Belu district government, Southeast Maluku district government, Maluku Tenggara Barat district government, Mimika Merauke district government, the Ministry of Foreign Affairs, Ministry of Research and Technology.

#### Universities:

Bogor Agricultural University (IPB), Bandung Institute of Technology (ITB), Nusa Cendana University (UNDANA), Patimura University (UNPATI), Muhamadiyah University, Fisheries Polytechnic Tual, Papua University, and Cendrawasih

University.

#### Research Centres:

Agency for Marine and Fisheries Research and Development – MoMAF, Agency for the Assessment and Application of Technology (BPPT), National Coordinator for Survey and Mapping Agency (BAKOSURTANAL), National Institute of Aeronautics and Space (LAPAN), Indonesian Hydro-Oceanografic Office (DISHIDROS), Research Center for Oceanography – Indonesian Institute of Science (P2O-LIPI).

#### Non-Government Organization:

World Wild Fund (WWF) Indonesia, the Nature Conservancy (TNC)-Indonesia, and local NGOs including Women's Associations/Groups such as Baileo and Sitakena

### <u>International or multilateral organization:</u>

Japan International Cooperation Agency (JICA), National Oceanic and Atmospheric Administration (NOAA), Australian Fisheries Management Authority (AFMA), (United Nations Development Programme (UNDP).

#### Private sector (fishing industry):

Indonesian Shrimp and Fish Trawl Associations Others (from mining, oil and gas, tourism to be identified during PPG)

#### **Timor Leste**

#### Government

The Ministry of Agriculture and Fisheries (MAF) has the major role in managing the ATS and coordinate the implementation of the SAP. Within the MAF, the main actor is National Directorate of Fisheries and Aquaculture (NDFA). Other than NDFA, several government institutions also have a stake in managing the marine resources:

- 1) Ministry of Defense and Security (State Secretary of Defense and State Secretary of Security/ Navy and Police) the task relates to surveillance and enforcement; legal affairs (establish fishing zone, development of fisheries);
- and legislation (assist with licensing mechanism).
- 2) Ministry of Economic and Development(State Secretariat of Environment, Department of Environmental Impact Assessment) the task includes protection of biodiversity and environment watch dog
- 3) Ministry of Tourism, Commerce and Industry this institution has concerns in marine biodiversity and habitat conditions for the purpose of tourism industry.
- 4) Ministry of Economics and Development the key actor is National Directorate of Environment that is responsible for environmental management in Timor-Leste through authority delegate to it based on Decree Law 3/2005 which specifies that it will encourage environmental protection to support the Secretaries State for Regional Coordination.
- 5) Ministry of Finance responsible for allocating government funding and coordinate contacts with major potential donors.

#### Universities/research centers

University National Timor Leste; Universitas Dili; Universitas Continental

Private sector (oil and gas, tourism, fishing to be identified during PPG)

#### **NGOs**

Haburas; Yayasan HAK; Belum

There are also numerous international and regional stakeholders that will to some degree be involved in the implementation of the ATS SAP and their roles and interest are listed in the table below.

| Stakeholder                  | Role/Interest   |
|------------------------------|---|
|                              | International stakeholders  |
| GEF                          | ATSEA Funder  |
| UNDP                         | Administration and management of ATSEA  |
| ADB/World Bank               | CTI –FFP programme funders  |
| FAO                          | Active in ATS region on similar projects, IUU fishing                                 |
| IMO                          | Pollution conventions and protection  |
| UNEP                         | Global environment in development agenda setting for sustainable (marine and coastal  |
|                              | ) development   |
| WWF                          | Active in marine conservation ATS region  |
| IUCN                         | Global approaches to NRM, tools, policy   |
| CI                           | Active in marine conservation in Arafura Sea and in Timor Sea                         |
|                              | Regional stakeholder  |
| ATSEF                        | Improved information sharing and collaborative research for sustainable management    |
|                              | and poverty alleviation of ATS region.  |
| CTI                          | Related program active in the adjacent Coral Triangle region                          |
| PEMSEA                       | Coordinating role in the exchange of data and knowledge on management of LMEs in      |
|                              | the East Asian Seas, including ATSEA.   |
|                              | Cooperation on implementation of ICM demonstration activities, especially in Timor    |
|                              | Leste with specific collaboration on land-based pollution and oil spill early warning |
|                              | system  |
| UNDP                         | Administration and management of ATSEA  |
| APEC Fisheries Working Group | Supporting sectoral work programmes in fisheries in ATSEA region countries            |
| Indonesia-Australia Working  | Multi-departmental cooperation on shared stocks of fisheries, aquaculture, training,  |
| Group on Marine Affairs and  | MOU Box Traditional fishing, and IUU fishing  |
| Fisheries)                   |   |
| NOAA                         | Wide-ranging support to Indonesia and Timor Leste through the International Coral     |
|                              | Reef Program in the Coral Triangle Initiative (MPA management, CC adaptation,         |
|                              | etc.),  |

A.3. Gender Considerations. Are gender considerations taken into account? (yes  $\boxtimes$  /no $\square$ ). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

Gender considerations will be mainstreamed into the project through:

- 1. Special stakeholders consultations with women's associations active ate the project's ICM and other field sites that were identified in the TDA/SAP preparation project (see above);
- 2. Consideration of gender differences in labour utilization when designing detailed project field activities, such as for example, the different roles of men and women in fisheries where women play an important role in local processing and marketing;
- 3. Design of training activities targeting women on enhancing resilience of coastal ecosystems to improve livelihoods and nutrition at selected sites in Indonesia and Timor Leste;
- 4. Development of gender disaggregated indicators for monitoring project impacts, especially with respect to socioeconomic benefits and livelihood improvements

A.4 Risk. Indicate risks, including climate change, potential social and environmental 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 (table format acceptable):

Key project risks and proposed mitigation measures are summarized below:

| Risk  | Rating | Risk Mitigation Measures  |
|---|--------|---|
| Changes in policy and decision makers lead to changes in support for the Project objective of implementing the ATS SAP and related governance reforms that will enhance the sustainable development of the ATS and protect its biodiversity   | Low    | The Project is in line with the agreed SAP and NAPs, and other relevant strategies and action programs at regional, sub-regional and national levels and is thus strongly anchored in existing policies.  Strong stakeholder participation in the project will further reinforce support from policy and decision makers at all levels.   |
| Financial sustainability of project activities are threatened by inadequate allocation of funding by governments.   | Low    | The baseline funding to the project is already impressive and the project as well as SAP/NAP objectives will be further mainstreamed into national institutions and policies relevant to marine and costal management, and fisheries in the ATS, leading to sector budget allocations to implementation of ICM, EAFM and establishment of MPAs.   |
| Impacts of climate change and variability in<br>the ATS undermines the sustainability of<br>marine and coastal management, by<br>adversely impacting biological processes<br>underpinning provisioning, regulating and<br>supporting ecosystem service important for<br>food security | Medium | The project will introduce measures to enhance the resilience of coastal and marine ecosystems, involving improved habitat management, and adaptive management of fish stocks through training of key technical staff in ecosystem-based adaptation. It will also enhance the awareness of policy and decision makers of climate change threats to the ATS ecosystems through information dissemination and outreach. |

#### A.5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives:

The project implementation arrangements will be finalized during the PPG. Regional, national and subnational/local structures will be put in place in a way that will build on the institutional structures defined in the SAP that will be supported/created in Component 1. At the local level where on-the-ground activities will be implemented through ICM, EAFM, MPA planning and implementation, the project will ensure the requisite participatory processes through the SPF involving communities, government, NGOs, private sector, among other stakeholders. Activities in each priority learning site will be led by an overall site coordinator complemented by a team of community organizers and/or local extension workers and technical experts. The project will facilitate the stakeholders in undertaking the planning and implementation.

The project will coordinate its activities with other ongoing GEF funded activities in the Arafura and Timor seas, the Coral Triangle and the wider East Asian Seas area, which include:

#### **CTI projects:**

#### Sulu-Celebes Sustainable Fisheries Management Project

This UNDP/GEF project with participation of Indonesia, Malaysia and the Philippines supports strengthening of institutions and introduction of reforms to catalyse implementation of policies on reducing overfishing and improving fisheries management in the Sulu-Celebes Sea. It was funded under the CTI at the same time as ATSEA and close collaboration has already been established and will continue during the SAP/NAP implementation phase.

#### Coastal and Marine Resources Management in the Coral Triangle: Southeast Asia

Indonesia participates in this ADB/GEF project that has the objective to support the long-term conservation and sustainable management of coral reef ecosystems and other coastal and marine resources to ensure their resiliency

and generate global and local benefits. Collaboration and exchange of experiences will be realized in the areas of ICM and habitat management.

# <u>Strengthening Coastal and Marine Resources Management in the Coral Triangle of the Pacific - under the Pacific Alliance for Sustainability Program</u>

This ADB/GEF project promotes the conservation and sustainable use of globally significant coastal and marine resources in the CTI region through the introduction of integrated and ecosystem-based coastal and marine resources management in 5 Pacific countries, including Timor Leste.

#### Strategies for management of trawl by-catch (REBYC II)

This FAO/GEF project will contribute to the more sustainable use of fisheries resources and healthier marine ecosystems in the Coral Triangle and Southeast Asia waters by reducing by-catch, discards and fishing impact by trawl fisheries. It will be executed by the Southeast Asian Fisheries Development Center (SEAFDEC). Collaboration will be established on trawl management guidance, especially for shrimp trawling.

#### LME-EA Coral Triangle Initiative Project (COREMAPIII-CTI)

This World Bank/GEF project with Indonesia supports management of coral reef resources, associated ecosystems and biodiversity in a sustainable manner for the welfare of coastal communities.

### **Other GEF projects:**

## Scaling Up Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA):

This UNDP/GEF project is executed by PEMSEA and both Indonesia and Timor Leste participate in the project and are PEMSEA country partners. Collaboration and training between ATSEA and PEMSEA has already been established on ICM and will be extended to also include skills training in CCA/DRR, risk/vulnerability assessment, EAFM, MPA/MPA networking, and valuation of ecosystem services.

#### Enabling transboundary cooperation for sustainable management of the Indonesian Seas (ISLME)

This new initiative by FAO/GEF aims to facilitate the implementation of ecosystem approaches to fisheries and coastal management in the ISLME to ensure that sustainable development of ecosystem resources through a TDA/SAP. Close collaboration will be sought with this project to ensure that TDA/SAP process of the ISLME is harmonized and avoids overlap with the ATS TDA/SAP and that experiences and best practices knowledge are shared.

#### Global sustainable supply chains for marine commodities

This UNDP/GEF project will mainstream sustainability into seafood supply chains through market and policy mechanisms and partnerships to rebuild and protect fish stocks and livelihoods. It has a demonstration on sustainable supply chain for snapper fishery in the Arafura and Timor seas and on blue swimming crab in the Sulu-Celebes Sea. The proposed project will this coordinate its work on value-chains and certification/eco-labelling with this initiative.

#### Capturing Coral Reef and Related Ecosystem Services (CCRES)

The objective of the World Bank/GEF project is to introduce innovation in valuing and conserving coral reef ecosystem services through demonstration pilots and market incentives in East Asia/Pacific. The project is co-executed by the University of Queensland, and Australia as a partner also to the proposed project will ensure synergies and coordination with regard to coral reef management.

# Enhancing the Conservation Effectiveness of Seagrass Ecosystems Supporting Globally Significant Populations of Dugongs Across the Indian and Pacific Ocean Basins

Both Indonesia and Timor Leste participate in this global UNEP/GEF project and collaboration and coordination with regard to protection and sustainable management of seagrass beds and dugongs will be established within MMAF in Indonesia, which is the lead agency for both projects, and the Marine Research Foundation in Timor Leste.

# LDCF projects:

Building shoreline resilience of Timor Leste to protect local communities and their livelihoods

This UNDP/LDCF-supported initiative aims to strengthen resilience of coastal communities by the introduction of nature-based approaches to coastal protection. It will develop a comprehensive shoreline management plan for the entire coast of Timor Leste. Close collaboration will therefore be established on formulation of ICM plans along the shoreline of the Timor Sea, as well as on ecosystem-based adaptation and development of management plans for coastal and marine ecosystems at risk.

#### DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Is the project consistent with the National Strategies and Plans or Reports and assessments under relevant conventions? (Yes  $\boxtimes$  /No $\square$ ). If Yes, which ones and how: NAPAs, ASGM NAPS, MIAS, NBSAPS, NCS, TNAS, NCSAS, NIPS, PRSPS, NPFE, BURS, etc.:

Indonesia and Timor Leste adopted National Action Programs (NAPs) for the Arafura and Timor seas region in 2013 and 2012, respectively, as part of the TDA/SAP processes supported by the ATSEA project. The pillars of the NAPs are the same five environmental concerns identified in the TDA and the associated environmental quality objectives identified in the SAP. The detailed national actions proposed in the NAPs are reflected in the design of the SAP implementation project, especially in the harmonization of policy reform and strengthening of intersectoral coordination, capacity development at national level, and formulation of integrated coastal management plans and establishment of marine protected areas.

The project is also fully consistent with the country National Biodiversity Strategies and Action Plans (NBSAPs) that were adopted in 2003 in Indonesia (IBSAP) and 2011 in Timor Leste. The proposed project directly supports the IBSAP's objectives to (i) strengthen resources for supporting the development of science, technology and application of local knowledge in the conservation and sustainable use of biodiversity, (ii) reduce and stop the rate of biodiversity degradation, especially in the marine environment, and (iii) strengthen institutional, policy and law enforcement arrangements for the sustainable management of biodiversity, through strengthening of the governance of the ATS. It is fully in line with the priority actions in the Timor Leste NBSAP that include mainstreaming biodiversity into sectoral plans and programs, and building climate-resilient ecosystems, through its focus on ecosystem-based adaptation and establishment of marine protected areas. This is also closely linked to the priorities of the National Adaptation Program of Action (NAPA) of Timor Leste that identifies physical destruction of reefs, and mangrove areas as likely climate change impacts.

The formulation of the ATSEA SAP has taken into account the CTI Regional Program of Action (RPOA) and the National Program of Action (NPOA) in both Indonesia and Timor Leste. The priority activities in this proposal are guided by the relevant CTI documents, including those on IUU, MPAs and others.

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

**A.** Record of Endorsement<sup>13</sup> 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 SGP OFP endorsement letter).

| NAME                    | POSITION                  | MINISTRY             | DATE (MM/dd/yyyy) |
|-------------------------|---------------------------|----------------------|-------------------|
| Ms. Ir. Tuti Hendrawati | Senior Advisor to the     | Ministry of          | 7 August 2014     |
| MINTARSIH, MPPPM        | Minister on Law and       | Environment          |                   |
|                         | Institutional Relations   |                      |                   |
|                         |                           |                      |                   |
| Mr. Joao Carlos SOARES  | Director, Secretariat for | National Directorate | 7 August 2014     |
|                         | Environment               | for Environmental    |                   |
|                         |                           | Affairs              |                   |
|                         |                           | Timor Leste          |                   |

## B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies<sup>14</sup> and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

| Agency Coordinator,<br>Agency name                             | Signature | Date              | Project<br>Contact<br>Person | Telephone                     | Email                 |
|--|-----------|-------------------|------------------------------|-------------------------------|-----------------------|
| Adriana Dinu, UNDP-GEF Executive Coordinator and Director a.i. | Aim       | 28 August<br>2014 | Jose Erezo<br>Padilla        | 66 2 304<br>9100 ext.<br>2730 | Jose.padilla@undp.org |
|  |           |                   |                              |                               |                       |

C. Additional GEF Project Agency Certification (Applicable Only to newly accredited GEF Project Agencies)
For newly accredited GEF Project Agencies, please download and fill up the required GEF Project Agency
Certification of Ceiling Information Template to be attached as an annex to the PIF.

<sup>&</sup>lt;sup>13</sup> For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

<sup>&</sup>lt;sup>14</sup> GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF