



Global Environment Facility

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September 17, 2009

Dear Council Member,

UNDP as the Implementing Agency for the project entitled: ***Regional (Indonesia, Papua New Guinea and Timor Leste): Arafura and Timor Seas Ecosystem Action Programme (ATSEA)*** under *the Coral Triangle Initiative*, has submitted the attached proposed project document for CEO endorsement prior to final Agency approval of the project document in accordance with UNDP's procedures.

The Secretariat has reviewed the project document. It is consistent with the project concept approved by the Council in April 2008 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by UNDP satisfactorily details how Council's comments and those of the STAP have been addressed.

We have today posted the proposed project document on the GEF website at www.TheGEF.org for your information. We would welcome any comments you may wish to provide by October 15, 2009 before I endorse the project. You may send your comments to gcoordination@TheGEF.org.

If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

A handwritten signature in black ink, appearing to read 'Barbut', enclosed within a simple, hand-drawn rectangular box.

Attachment: Project Document
cc: Alternates, GEF Agencies, STAP, Trustee



REQUEST FOR CEO ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project
THE GEF TRUST FUND

Submission Date: 14 August 2009

PART I: PROJECT INFORMATION

GEFSEC PROJECT ID: 3522

GEF AGENCY PROJECT ID: 3879

COUNTRY(IES): Indonesia and Timor Leste (plus Papua New Guinea to be invited) with support from Australia

PROJECT TITLE: Arafura and Timor Seas Ecosystem Action program (ATSEA)

GEF AGENCY(IES): UNDP

OTHER EXECUTING PARTNER(S): UNOPS; ATSEF Regional Secretariat; Indonesian Ministry of Marine Affairs and Fisheries (MMAF); Timor Leste Department of Agriculture, Fisheries and Forestry (DAFF) with support from Australian Department of the Environment, Heritage, Water and the Arts (DEWHA).

GEF FOCAL AREA(S): International Waters

GEF-4 STRATEGIC PROGRAM(S): IW SO-1, SP1: Restoring and Sustaining Coastal and Marine Fish Stocks and Associated Biological Diversity

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: ASIA CORAL TRIANGLE

Expected Calendar	
Milestones	Dates
Work Program (for FSP)	April 2008
GEF Agency Approval	Sept 2009
Implementation Start	Oct 2009
Mid-term Review (if planned)	Dec 2011
Implementation Completion	Oct 2014

A. PROJECT FRAMEWORK (Expand table as necessary)

Project Objective: To ensure the integrated, cooperative, sustainable, ecosystem-based management and use of the living coastal and marine resources, including fisheries and biodiversity, of the Arafura and Timor Seas region, through the formulation, inter-governmental adoption and initial implementation of a Regional Strategic Action Programme (SAP) and National Action Programs (NAPs).

Project Components	Indicate whether Investment, TA, or STA**	Expected Outcomes	Expected Outputs	GEF Financing*		Co-financing*		Total (\$)
				(\$)	%	(\$)	%	
1. Transboundary Diagnostic Analysis (TDA) for Arafura & Timor Seas	TA	Approved TDA which identifies the ATS transboundary priority environmental problems, environmental & socio-economic impacts, sectoral and root causes and governance analyses	1. Biophysical profile of ATSEA and coastal areas including fisheries and biodiversity assessment 2. Socio-economic and governance profile including resource user groups, market networks, productive value chains, and market access opportunities 3. Causal chain analysis and options to address national and transboundary problems proposed 4. TDA approved by regional committees and ATSEF 5. Stakeholder assessment completed and stakeholder integration and engagement plan developed	0.85M	37%	1.44M	63%	2.29M
2. Strategic Action Program (SAP)	TA	SAP and NAPs agreed and adopted, at the national (inter-	1. High-level (e.g. Ministerial) agreement on SAP and NAPs;	0.45M	29%	1.09M	71%	1.54M

and National Action Programs (NAPs) for Arafura & Timor Seas.		ministerial) and regional (inter-governmental) levels:	2. Regional committees 3. Agreed-reforms and investment actions that are required at both the national and regional levels to effectively address the root causes of the priority transboundary issues identified in the TDA.					
3. Initial implementation of some SAP and NAP components	TA	<i>SAP and NAPs Initial Implementation:</i> Initial implementation of some SAP and NAP components, through targeted demo projects addressing high priority transboundary issues identified by the TDA, to demonstrate the capacity of the littoral nations to cooperate in implementing joint activities, as the foundation for full SAP implementation in a future phase.	1. Local stress reduction through at least three demonstrations / pilot projects on alternative fishing methods and protecting key habitats for shared stocks (e.g. Red Snappers) also leading to improvements in local livelihoods, e.g. 15% increase in income	0.62M	25%	1.88M	75%	2.50M
4. Strengthening of ATSEF as an effective regional mechanism for the cooperative eco-system based management of the ATSEA and Sustainable self-financing.	TA	<i>Regional cooperation mechanism:</i> Develop and strengthen ATSEF as an effective regional mechanism for the cooperative eco-system-based management of the ATS region, and political support for future models for regional institutional arrangements, to be agreed by the participating Governments	1. Regional mechanism established; Strengthening of subcommittees formed by all littoral nations of ATSEA; 2. Review of the institutional and policy options (ranging from an informal experts forum, through to more inter governmental but still non-binding Arafura and Timor Seas Partnership Council, through to the possible formation of legally constituted, intergovernmental organization such as an Arafura and Timor Seas Commission.	0.36M	25%	1.09M	75%	1.45M
		<i>Sustainable self-financing</i> such as a multi-lateral trust fund or partnership council.	1. A regional self-financing mechanism, such as a mutli-lateral trust fund or partnership council, which is contributed to by					

			Governments, private sector and NGOs in the region to ensure funding for the implementation of the SAP 2. Annual reports on joint activities and partnerships with other regional institutions and Initiatives					
5. Project coordination and management		<i>Effective Project Coordination & Management:</i> ATSEA Project is effectively coordinated and managed, according to budget and workplan, and including M&E arrangements and procedures.	1. Project Management Unit (PMU) established 2. M&E arrangements in place 3. Project website (according to IWLearn guidelines) and database in place	0.22M	23%	0.74M	77%	0.96M
Total Project Costs				2.5M		6.24M		8.74M

* List the \$ by project components. The percentage is the share of GEF and Co-financing respectively to the total amount for the component.

** TA = Technical Assistance; STA = Scientific & technical analysis.

B. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT

(expand the table line items as necessary)

Name of co-financier (source)	Classification	Type	Project	%*
Indonesia	Nat'l Gov't	Grant	446,220	7.14%
	Nat'l Gov't	In-kind	1,901,827	30.44%
Timor Leste	Nat'l Gov't	Grant	400,000	6.40%
Australia	Bilateral agency	In-kind	1,000,000	16.01%
UNDP-Indonesia	Impl. Agency	Grant	400,000	6.40%
UNDP-BDP	Impl. Agency	In-kind	50,000	0.80%
WWF	NGO	In-kind	100,000	1.60%
Sustainable Fisheries Partnership	NGO	In-kind	50,000	0.80%
TNC	NGO	In-kind	1,000,000	16.01%
CI	NGO	In-kind	900,000	14.40%
Total Co-financing			6,248,047	100%

* Percentage of each co-financier's contribution at CEO endorsement to total co-financing.

C. FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Project Preparation*	Project	Total	Agency Fee	For comparison: GEF and Co-financing at PIF
GEF financing	150,000	2,500,000	2,650,000	265,000	2,970,000
Co-financing	174,000	6,248,047	6,422,047		5,450,000
Total	324,000	8,748,047	9,072,047	265,000	8,420,000

D. GEF RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY (IES)¹

GEF Agency	Focal Area	Country Name/ Global	(in \$)		
			Project	Agency	Total

				Fee²	
UNDP	International Waters	Indonesia and Timor Leste with PNG later	2,650,000	265,000	2,915,000
Total GEF Resources			2,650,000	265,000	2,915,000

¹ No need to provide information for this table if it is a single focal area, single country and single GEF Agency project

² Relates to the project and any previous project preparation funding that have been provided and for which no agency fee has been requested from trustee

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Estimated person weeks	GEF amounts (\$)	Co-financing (\$)	Project total (\$)
Local consultants*	878	689,900	49,025	738,925
International consultants*	56	140,000	45,000	185,000
Total	496	829,900	94,025	923,925

- Details to be provided in Annex C

F. PROJECT MANAGEMENT BUDGET/COST

Cost Items	Total Estimated person weeks/months	GEF amount (\$)	Co-financing (\$)	Project total (\$)
Local consultants*	648	182,300	-	182,300
International consultants*		-	-	-
Office facilities, equipment, vehicles and communications**		-	622,000	622,000
Travel*		27,000	132,000	159,000
Others** (office supplies)		10,700	8,500	19,200
Total	648	220,000	762,500	982,500

* Details to be provided in Annex C.

** For others, it has to clearly specify what type of expenses here in a footnote. \$10,700 from GEF to office supplies will pay for rental of photocopy machine and other equipment, communications equipment, maintenance, etc.

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

(IF NON-GRANT INSTRUMENTS ARE USED, PROVIDE IN ANNEX E AND INDICATIVE CALENDAR OF EXPECTED REFLOWS TO YOUR AGENCY AND TO THE GEF TRUST FUND)

H. DESCRIBE THE BUDGETED M&E PLAN: Monitoring and evaluation (M&E) of the ATSEA FSP will be undertaken according to the standard M&E principles and requirements of GEF and UNDP. M&E is a core activity of the project, and therefore serves two purposes:

- monitoring of the project on a quarterly and annual basis, including evaluations, to ensure the project impact is realised and is accountable to management, donors and stakeholders; and,
- through participatory monitoring and learning by doing, the objective is for countries and stakeholders to see the benefit of monitoring project delivery in order to deliver results and impact, but also the benefit of monitoring in day to day projects and activities conducted as existing baseline activities nationally.

The indicative M&E activities are presented in the Table below:

M&E Activity	Responsible Parties	Budget US\$ <i>Excluding Staff time</i>	Time frame
Pre-Inception Workshop	<ul style="list-style-type: none"> UNDP-GEF / ATSEF-RS 	<ul style="list-style-type: none"> 50,000 	<ul style="list-style-type: none"> Prior to project official start
Inception Workshop & Report ⁺	<ul style="list-style-type: none"> PMU 	<ul style="list-style-type: none"> 50,000 	<ul style="list-style-type: none"> Within 6 months from official project start
Demonstration Project Review and Indicator Assessment, including Baseline Indicator collection and	<ul style="list-style-type: none"> PMU NLAs/ NCs 	<ul style="list-style-type: none"> 50,000 	<ul style="list-style-type: none"> Within 6 months from official project start

M&E Activity	Responsible Parties	Budget US\$ <i>Excluding Staff time</i>	Time frame
development ⁺			
Annual Project Report (APR)	<ul style="list-style-type: none"> • PMU • Project Steering Committee Review • NLAs / NCs 	• None	• Annually
Project Implementation Review (PIR) GEF IW Results template reporting and IW Tracking Tool reporting	<ul style="list-style-type: none"> • PMU • Project Steering Committee Review • Implementing Agencies 	• None	• Annually
GEF IW Results template reporting and IW Tracking Tool reporting	<ul style="list-style-type: none"> • PMU • Project Steering Committee Review • Implementing Agencies 	• None	• Annually
Quarterly Progress Report	• PMU	• None	• Quarterly
Projects Steering Committee (PSC) Meetings	<ul style="list-style-type: none"> • PMU • PSC members 	• None	• Annually
Technical Reports (each Demo Project)	<ul style="list-style-type: none"> • PMU • Consultants as required 	• 10,000	• As required
Thematic Reports/Lessons Learned	<ul style="list-style-type: none"> • PMU • Consultants as required 	• 10,000	• As required
Mid-Term External Evaluation (MTEE)	<ul style="list-style-type: none"> • PMU • UNDP • External consultants 	• 30,000	• At the end of year two from official project start
Final External Evaluation (FEE)*	<ul style="list-style-type: none"> • PMU • UNDP • External consultants 	• 40,000	• At end of project implementation
Project Terminal Report (PTR)	<ul style="list-style-type: none"> • PMU • NLAA 	• None	• At least one month before official end of project
Project Terminal Report – Synopsis (PTR-S)	<ul style="list-style-type: none"> • PMU • UNDP 	• None	• Within one month of official end of project
Workshop & Training Reports	<ul style="list-style-type: none"> • PMU • External Consultants (where used) 	• None	• As required
Audit	<ul style="list-style-type: none"> • External hired Auditor • UNDP • PMU 	• 9,000 (3,000 p.a.)	• Annually
Visits to Field Sites (IA costs covered by fees)	<ul style="list-style-type: none"> • PMU • UNDP 	• 30,000 (10,000 p.a.)	• Annually
Budget Reviews and Revision	<ul style="list-style-type: none"> • PMU • UNDP • GEF 	• None	• Annually (as part of APR)
Country Mission Reports	• PMU	• None	• Following each country visit
Total Indicative cost (US\$): <i>(excluding PMU staff time and IA/EA staff and travel)</i>		\$279,000[†]	

Notes: ⁺ A comprehensive review of demonstration project draft logframes and indicators will be conducted during the first six months of the project, including an assessment of baseline indicators. Support will be provided by the PMU. The Inception workshop will provide an opportunity to clarify, as far as possible, the project baseline indicators, including assessing the time and resources required to collect baseline information, where this has already not occurred.

* This includes the cost of consultant fees, regional travel and per diems, including travel to a selected number of countries to look at Demonstration activities based on a country/project selection criteria to be developed by the consultants.

[†] Note that the M&E budget will be included in the budget for the project. ^Ø Mid-term External Evaluation and Final External Evaluation will be activities lead by UNDP-GEF

Learning and Knowledge Sharing

Results from the Project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and related forums. For this purpose, the Project will identify, analyze, and share lessons learned that might be beneficial to other projects under implementation or in the design and

implementation of similar future projects. This also includes participation in all GEF's International Waters Conferences and to contribute to **IWLearn**, including production of at least one IWLearn Experience Note (IWEN), establishment of a project website and participation in LME networks, thematic and regional workshops, etc. as appropriate.

PART II: PROJECT JUSTIFICATION

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

The tropical and semi-enclosed Arafura and Timor Seas (ATS) are shared by Australia, Indonesia, Timor-Leste and Papua New Guinea (PNG). The ATS region is extremely rich in living and non-living marine resources, including major fisheries and oil and gas reserves. The ATS region is located at the intersection of the two major Large Marine Ecosystems (LMEs), the Indonesian Seas to the north and northern Australian waters to the south, and is also an integral part of the Coral Triangle zone considered to have the highest marine biodiversity in the world. The ATS region exhibits high productivity that sustains both small- and large-scale fisheries, including several high-value, shared, transboundary fish stocks, that provide livelihoods for millions of people in the region, and make a significant contribution to food security for both regional coastal populations and large populations in the export market countries to the north of region, including China.

In terms of global significance to marine biodiversity, the Coral Triangle region and therefore the ATS region are unsurpassed. In August 2007, President Yudhoyono of Indonesia wrote to other world leaders proposing a new *Coral Triangle Initiative* (CTI), designed to stimulate action to safeguard the region's extraordinary marine and coastal biological resources within six neighboring countries. In early September 2007, the CTI received attention by governments at the APEC Summit in Sydney, Australia. The 21 APEC heads of State formally endorsed the CTI in their APEC Leaders Declaration. The CTI has since become a national priority issue for Indonesia, Timor Leste and PNG. Presidents of these countries and the President of the United States have all explicitly expressed their support for the CTI. The Australian Government has also accorded a high priority to supporting the CTI. Such early, high-level political support provides a stimulus for developing a *Regional Action Plan* that is genuinely ambitious in scope, and leads to accelerated and effective actions across the CTI countries, and a strong regional mechanism from coordinated actions by the littoral nations to address and remove the threats to the Arafura and Timor Seas.

The marine environment in the ATS region is in serious decline, primarily as a result of over-harvesting and other direct and indirect impact of anthropogenic stresses and global climatic changes. The main transboundary concerns, threats and root causes for the ATS region were identified through a series of national and regional consultations during the PPG phase through stakeholder workshops include:

- *Exploitation of fisheries and other living coastal and marine resources/biodiversity*

Fisheries in the ATS region are an extremely complex arena with multiple actors, target species sought and technology used. Fishing is driven by a range of social, cultural, economic factors at different spatial and temporal scales both in respect of legal and illegal fishing in each country and regionally.

Root causes to unsustainable fisheries relate to lack of information on the extent and nature of unsustainable use and overexploitation of resources, absence of a regional management approach, poor enforcement by governments (e.g. IUU fishing), lack of effective management including plans and coordination and lack of overall capacity. Strong demand for high value resources at local, regional and international markets also contributes to the problem. For the artisanal fishers there remains a lack of viable suitable livelihoods (whether through livelihood diversification or new activities).

Root causes of declines in populations of migratory marine species relate to poor enforcement of existing regulation arrangements and management agreements, poor information on the biology and ecology of migratory species, lack of awareness of status and conservation significance, poor information sharing, research and collaboration between littoral nations, absence of a regional approach to migratory species conservation and management and nutritional and cultural reliance on migratory species.

- *Coastal and Marine Habitat destruction/modification*

Three key habitats in the ATS region - coral reefs (coastal and offshore), mangrove forests and sea grass beds - support local, national and globally significant marine biodiversity and provide life support systems for millions of coastal, indigenous and marginalized communities across Indonesia, Timor Leste and PNG (and Australia).

Root causes of habitat destruction include lack of viable suitable livelihood opportunities (whether through livelihood diversification or new activities) for rural coastal peoples in the region that have minimal ecological, social, cultural and economic impacts; lack of community access to appropriate technology, knowledge, finances and skills; and global market demands at regional and international levels for resources (e.g. minerals, oil). There is poor baseline information on socio-economics, the state of the ecosystems and a systems understanding is weak related to such issues as cumulative impacts and effects, feeding and breeding grounds of various species and impacts to recruitment. Lack of integrated coastal zone development planning and catchment management and enforcement (poor compliance) across sectors, and regionally, also contribute to degradation of ecosystems.

- *Changes to Arafura and Timor Sea ecosystem dynamics*

An important feature that links the oceanographic processes in the region is the Indonesian Throughflow and Leewind Current, with the global exchange of water an essential element of the global climate system delivering water from the Western Pacific Ocean to the Indian Ocean. These are fundamental drivers of oceanographic and ecological processes in the region. Considering the nature and condition of the ATS area, research and knowledge on climate change and sea level change are needed in order to anticipate and develop adaptation strategies for the area. Regional cooperation and information sharing and monitoring will contribute to addressing this issue .

The threats facing the ATS region are transboundary in nature and can only be effectively addressed through multi-lateral cooperation between all four littoral nations. The rationale for the GEF Full Scale Project (FSP) is therefore the need for the littoral nations to work cooperatively to sustain the ATS shared living resources, conserve the biota of the seas and coasts, and improve sustainable socio-economic conditions and opportunities for coastal peoples. It is also based on the need for international assistance and catalytic financing, recognizing the significant development challenges and resource limitations facing Timor Leste, which is classified as both a Least Developed Country (LDC) and a Small Island Developing State (SIDS), as well as those facing Indonesia and additionally PNG, which is also designated as a SIDS.

Through the GEF intervention, including the undertaking of a Trans-Boundary Diagnostic Analysis (TDA), development of a Strategic Action Programme (SAP), and implementation of innovative demonstration projects, the littoral nations will be greatly assisted to collaboratively understand and address the shared waters problems that cannot be solved by any one country on its own.

The objective of the project is therefore to ensure the integrated, cooperative, sustainable, ecosystem-based management and use of the living coastal and marine resources, including fisheries and biodiversity, of the Arafura and Timor Seas, through the formulation, inter-governmental adoption and initial implementation of a Regional Strategic Action Programme (SAP). This will be achieved through four interrelated components:

Component 1: Transboundary Diagnostic Analysis

Outcome: *Approved TDA* which identifies the ATS transboundary priority environmental problems, environmental & socio-economic impacts, sectoral and root causes and governance analyses.

This will include the development of a biophysical profile of ATSEA and coastal areas including fisheries and biodiversity assessment; socio-economic and governance profile including resource user groups, market networks, productive value chains, and market access opportunities; a stakeholder assessment; and causal chain analysis and options to address national and transboundary problems.

A joint marine ecosystem assessment cruise will be undertaken between Indonesia, Timor Leste and Australia in the Arafura and Timor Seas. The cruise will cover study areas including physical and biological oceanography, biodiversity and fisheries analysis of the region. The scientists involved in this study will be composed of government and university researchers from Timor Leste, Indonesia and Australia.

During the process of the TDA development, the project will benefit from a series of discussion conducted involving a number of stakeholders at the local and national levels. This process would result in the stronger support and high ownership from all stakeholders to the sustainable development objective for Arafura and Timor Seas.

Component 2: SAP/NAP Development.

Outcome: SAP and NAPs agreed and adopted at the national (inter-ministerial) and regional (inter-governmental) levels.

The reforms and investment actions required at both the national and regional levels, in the form of a regional SAP and National Action Programmes (NAPs), to effectively address the root causes of the priority transboundary issues identified in the TDA are identified, agreed and adopted.

The SAP resulting from discussions with stakeholders, will reflect the identified strategic governance reforms to achieve sustainable development in Arafura and Timor Seas. The discussion process will also identify key players to implement the strategic actions agreed among ATSEF member countries, and the prioritized activities in each country that can be funded by national budgeting system. The NAP developed in relation to SAP contains prioritized national efforts to achieve sustainable development of the ATS in the national jurisdiction area. It is estimated that the SAP and NAPs will be finalized within 24 months of FSP start and endorsed at a high level by the 36th month of the project

Component 3: SAP/NAP Initial Implementation

Outcome: *SAP and NAPs Initial Implementation:* Initial implementation of some SAP and NAP components, through targeted demonstration projects addressing high priority transboundary issues identified by the TDA, to demonstrate the capacity of the littoral nations to cooperate in implementing joint activities, as the foundation for full SAP implementation in a future phase / follow-up project.

Limited funding dictates that only a very small number of demonstration projects (possibly only one in each country) will be possible during the FSP. National level demonstrations of alternative or supplementary sustainable livelihoods activities in coastal communities in Indonesia and Timor Leste, utilising experiences and approaches from the region, existing ATSEF projects in Indonesia and Timor Leste including those from northern Australian coastal indigenous communities could include new projects or replication of existing initiatives. These could be supported by sharing of traditional and co-management coastal and marine management practices between coastal and indigenous people in all littoral nations

Component 4: Regional Cooperation Mechanism

Outcome: *Regional cooperation mechanism:* Develop and strengthen ATSEF as an effective regional mechanism for the cooperative eco-system-based management of the ATS region, through the implementation of the SAP and consideration of future models for regional engagement, to be agreed by the participating Governments, ranging from:

- the original ATSEF concept of an informal experts forum,
- a more inter-governmental but still non-binding Arafura and Timor Seas Partnership Council (ATSPAC), through to
- the possible formation of legally-constituted, inter-governmental organization such as an Arafura and Timor Seas Commission (ATSCOM)

Outcome: *Sustainable self-financing:* Develop a regional self-financing mechanism (eg, a mutli-lateral trust fund or partnership council) to ensure the ongoing implementation of the SAP.

Component 5: Project Coordination and Management (including M&E)

Outcome: *Effective Project Coordination and Management:* ATSEA Project is effectively coordinated and managed, according to budget and workplan, and including M&E arrangements and procedures.

This involves the establishment of functional PMU, PSC, NSCs and monitoring and evaluation system.

Sustainability & replicability

The existence of a committed multilateral forum with a broad stakeholder base, in the form of ATSEF, is a major factor in assuring that the project benefits will continue after implementation. The increase in awareness and the essential knowledge-base for sustaining the seas' living resources that will accrue as a result of both the project, are also factors that will help ensure sustainability of project activities, outputs and outcomes.

The project lessons and experiences in cooperative and collaborative research and management in the ATS region have resonance and replicability for other enclosed and semi-enclosed seas shared by multiple nations. The close alignment of the ATSEA project with the CTI Regional and National Plans of Action presents a powerful mechanism for the replication of ATSEA outcomes, both within the ATS region and in the broader CTI region, and such opportunities will be pursued through close cooperation with the CTI Secretariat and other CTI projects.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL AND/OR REGIONAL PRIORITIES/PLANS:

The Full Scale Project (FSP) underlines the National Plans by the Government and Non-Government agencies of the littoral nations to work cooperatively to sustain the Arafura and Timor Seas shared living resources, conserve the biota of the Seas and coasts, and change the trend from poverty to sustainability among coastal and indigenous communities. In Indonesia, the law #31/2004 and # 17/2007 provide a legal umbrella to support activities as proposed in this project.

The Timor Leste Government has declared that habitat restoration in the coastal area is a national priority. This is due to the fact that approximately 44% of the country has more than 40% slope, which increases the incident of run-off, landslides, water turbidity and sedimentation in the downstream coastal areas. An initiative funded by the Ministry for Agriculture, Forestry and Fisheries of Timor Leste in collaboration with ATSEF, Charles Darwin University, the Northern Territory Government and the Australian Institute of Marine Science was put in place to assist the Timor Leste Government to address national priorities.

The Indonesian government has developed Long-term and Mid-term National Development plans that include marine and coastal development plans. Indonesia has also engaged with Australia, PNG and Timor Leste to plan or conduct joint fish stock assessments in their adjoining sea areas. All ATS littoral nations are actively involved with other countries in the broader region to develop and implement the Regional Plan of Action for IUU fishing.

PNG is only marginally bordering the Arafura-Timor Sea and is not yet a member of ATSEF, and is therefore currently not an active participant in this project. However, PNG will be invited to join during SAP development. PNG's involvement in the CTI also provides a platform for its involvement in the ATSEF process.

Finally, in terms of compliance with national priorities and plans, the ATSEA project links strongly to and will compliment the implementation of the CTI Plan of Action within the ATS sub-region of the broader CTI region. Alignments and synergies between ATSEA FSP proposal and the CTI Plan of Action include compliance with the underpinning principles in both projects, as outlined in section D below.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

The project is consistent with the first objective of the IW focal area to foster international, multi-state cooperation on priority transboundary water concerns through more comprehensive, ecosystem-based approaches to management as well as the Strategic Program 1 on Restoring and Sustaining Coastal and Marine Fish Stocks and Associated Biological Diversity which targets Southeast Asian seas as one of the global hotspots. The Arafura and Timor Seas region is a "new" transboundary system that to date has not benefited from GEF intervention and the implementation of foundational capacity building. The project will therefore build foundational capacity and pilot

test some innovative demonstrations on fisheries conservation and coastal habitat management in the ATS that will generate socio-economic co-benefits for coastal communities. It is anticipated that successful demonstrations will be replicated and scaled up in a subsequent project.

D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES

Grant funding matched by co-financing for TA is appropriate for foundational capacity-building activities of this type of project, including support to regional collaboration, collection and sharing information and development of a SAP and NAPs related to international waters.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The ATSEA project also compliments the CTI Regional and National Plans of Action and is one of several important GEF contributions to the implementation of the CTI.

CTI is a regional program by the governments of six countries (CT6) in the Coral Triangle area which include Indonesia, Philippines, Malaysia, Timor Leste, Papua New Guinea and the Solomon Islands. It is supported and carried forward by the CT6 countries with the support of multilateral agencies (GEF, ADB, UNDP, FAO, etc), bilateral donor agencies (e.g, USAID, AUSAID), civil society (NGO) and private sector partners. Overall, CTI aims to provide a major contribution toward safeguarding the marine and coastal biological resources of the region for the sustainable growth and prosperity of current and future generations.

On May 11-25, 2009, the World Ocean Conference (WOC) was held in Manado, Indonesia. This forum was intended for the countries of the world to discuss current issues in the marine sector which are related to climate change and how the world can wisely utilize the ocean to weather the economic and climate crises. In this conference, a CTI Summit was organized during the last day where the heads of state of the CT6 countries officially signed a CTI Leaders' Declaration. In addition to this Declaration, they agreed to formally launch a program on "Coral Triangle Initiative on Coral Reefs, Fisheries and Food Securities and Adaptation to Climate Change" (CTI-CFFC), and by acclamation stated to adopt a Regional Plan of Action (RPOA) .

The ATSEA project links strongly to and will compliment the implementation of the following CTI Over-arching Commitments to Action:

- Priority seascapes designated and effectively managed
- Ecosystem approach to management of fisheries
- Marine Protected Area (MPAs) established and effectively managed
- Climate change adaptation measures achieved
- Threatened species status improving

The ATSEA project is in line with the overall CTI Regional Plan of Action as ATSEF was directly mentioned in the CTI guiding principle #4 as follows: "CTI should use existing and future forums to promote implementation. Relevant existing forums should be used to implement actions under the CTI. These include, for example, tri-national commissions on the Sulu Sulawesi Seas (SSME) and Bismarck Solomon Seas (BSSE); APEC; ASEAN; Secretariat for the South Pacific Regional Environment Program (SPREP); the Brunei, Indonesia, Malaysia and Philippines East ASEAN Growth Area (BIMP-EAGA); Arafura and Timor Seas Experts Forum (ATSEF); and Program for the Environmental Management of the Seas of East Asia (PEMSEA)".

Other related regional initiatives with which ATSEA will be coordinated include:

- The GEF/UNDP/UNOPs Partnerships for the Environmental Management of the Seas of East Asia (PEMSEA).
- The PEMSEA-supported Sustainable Development Strategy for the Seas of East Asia (SDS-SEA).
- The UNEP Coordinating Body for the Seas of East Asia (COBSEA).
- Asia-Pacific Economic Cooperation (APEC) oceans-related working groups.
- Association of South East Asian Nations (ASEAN).
- the major international environmental NGOs (WWF, IUCN, CI, TNC etc)

- the broader Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices (including Combating IUU Fishing) in the Region
- Environmental Management Committee, Joint Advisory Council, Torres Strait Treaty

F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING

Without GEF:

There is a very strong will to collaborate to sustain the ATS in the governments of the littoral nations and in other stakeholders, as manifest in the very formation of ATSEF in 2002. With existing funding resources, a start has been made, especially at the national level. However, the ATSEF experience to date has highlighted the need for international assistance and catalytic financing, especially to address regional, transboundary issues through multi-lateral cooperation. This need stems from the significant development challenges and resource limitations of Timor-Leste, Indonesia and PNG, their many competing development priorities, including several severe natural disasters in Indonesia and socio-political/security crises in Timor-Leste in recent times, and Australia's ultimately finite capacity to provide ongoing technical and financial support to the region, of the scale necessary to be effective.

Without catalytic support from GEF towards achieving sustainable management and use of the living coastal and marine resources of the Arafura-Timor Seas region, unsustainable fishing practices including IUU fishing, and destruction of key habitats will seriously threaten economies and livelihoods of people at all levels: locally, nationally, and regionally. Unregulated and overfishing in coastal areas will result in depletion of economically important fisheries causing food shortages, and greater dependence on other natural resources. Inter-community conflicts will increase with competition over finite resources. Coastal and fishing communities will become economic migrants, except in areas where alternative livelihood projects are successful, unable to feed themselves or provide sustainable livelihoods leading to increase in poverty in some areas where high poverty levels in the region already exist (e.g. Timor Leste and NTT provinces in Indonesia). This will create instability and poverty within and around the region. IUU fishing will continue to seriously degrade ecosystems, affect local livelihoods and potentially result in the ultimate removal of key species from ecosystems, leading to dramatic changes in the patterns and functioning of the Arafura and Timor Seas ecosystems. A lack of cohesive regional management of priority environmental issues will cause further declines in biodiversity of global significance. While some projects and research activity may continue in the region at national or bilateral levels, regional collaboration to improve understanding of transboundary issues will not be possible without the GEF supported coordination frameworks and resources to support this activity.

With GEF:

Despite its geo-political significance (as highlighted by various frictions and issues between and within Indonesia, Timor-Leste, PNG and Australia), its socio-economic significance (as highlighted by the very high dependency of coastal and indigenous populations on coastal and marine resources and the rapid development of various coastal and marine industries in the region), and its ecological significance, the ATS is transboundary system that has not benefited from GEF intervention and the implementation of foundational capacity building. The project benefits are therefore linked to IW Strategic Objective 2: to expand global coverage of foundational capacity building (enabling activity equivalents) to a limited number of "new", critical transboundary systems, with a focus on key program gaps and integrated, cross focal area approaches. This is also consistent with stated GEF 4 IW provision to invest in limited "new starts" in transboundary water systems experiencing conflict and competing uses (as is the case in the ATS region).

GEF intervention to assist the undertaking of a TDA to confirm, characterize and agree upon priority transboundary and globally significant biodiversity issues and their root causes, and to close identified knowledge gaps, would provide the basis for a SAP of policy, legal and institutional reforms, and investments, for sustaining the living resources of the seas and providing food security for the foreseeable future.

With GEF assistance, the littoral nations will have the opportunity to take advantage of IW-TDA and SAP processes, and to link to IW-Learn networks for learning while doing. This will generate the reform and investment actions required at both the regional and national levels, to effectively address the root causes of the priority transboundary issues. An appropriate GEF intervention will prove catalytic in maintaining a source of food security for the broader Asian region, and making a difference to the livelihoods of the coastal communities, with the collateral benefit of slowing the rate of habitat destruction.

G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MANAGEMENT MEASURES:

The initiative by Australia, Indonesia and Timor-Leste to form ATSEF in 2002, the strong commitment to and investment in ATSEF activities by these countries since then coupled with the strong support for the ATSEA GEF proposal as well as increasing bilateral cooperation on marine resource management issues between these countries (and PNG), bode well for a "low-risk" scenario in relation to the implementation and success of the ATSEA project. There have been significant challenges to setting up an acceptable regime of governance for the transboundary issues of the area, because of longstanding political conflicts, territorial disputes, and competition among and within countries regarding economic development.

The main risks to the project are therefore of a geo-political / diplomatic nature, with periodic disagreements between the littoral nations on various issues, occasionally manifesting in the temporary suspension of bilateral diplomatic ties and similar actions. However, the very formation and operationalisation of ATSEF have already proven to be a mitigating factor against such risk, as the informal and non-governmental elements of the Forum have continued to operate when such events have occurred in recent years - providing a conduit for governments when formal inter-governmental channels have been temporarily closed, and maintaining momentum until resumption of formal ties. ATSEF has already created a sound basis for the development and implementation of effective cooperative, regional, integrated management of these transboundary seas.

The other main potential risk to the project is the significant development challenges and resource limitations of Timor-Leste, Indonesia and PNG, their many competing development priorities, several severe natural disasters in Indonesia and the socio-political/security crises in Timor-Leste (as well as parts of Indonesia and PNG in recent times), and Australia's ultimately finite capacity to provide ongoing, large-scale technical and financial support to the region.

Despite these challenges, the Arafura and Timor Seas littoral nations have continued to strongly support ATSEF and the ATSEA proposal. With GEF intervention to undertake the ATSEA project, to build and strengthen the existing and evolving cooperative arrangements as outlined above (including the development of a regional self-financing mechanism for ATSEA activities), these risks will be further mitigated. Finally, the development of a regional self-financing mechanism, such as a multi-lateral trust fund or partnership council, will mitigate the risk posed by competition for financial resources.

The impacts of climate change on the ATS littoral nations could be significant. Although the exact effects will be difficult to predict, but it certainly would affect the poorest people who live in littoral and coastal communities and in some remoter smaller islands. It is highly likely that climate change will exacerbate existing climatic problems. The Arafura Sea and Timor Sea areas have already been subjected to several climate-related hazards including floods, droughts, storms, landslides, and wildfires. One of the main climatic influences on the Arafura and Timor Seas is the El Nino-Southern Oscillation which provokes the extreme weather events every few years. During El Nino events, droughts become more frequent and severe, during La Nina events, floods become more frequent. Climate change has also implication for millions of coastal fishermen. They rely on highly sensitive marine and coastal ecosystems in which even small changes in water temperature can have large effects.

Changes in sea-surface temperature in combination with ocean acidification that damage coral reefs will exacerbate other stresses such as over-fishing, pollution and alien invasive species which will lead to the reduction of fish stocks. Fishing vessels will also have to cope with more erratic weather and rough seas enroute to and from the fishing grounds and while fishing. The ATSEA project will provide capacity to the communities in the ATS coastal areas to adapt to climate change, through support to sustainable practices in marine and fisheries development. To some extent, this will mean building on traditional knowledge that has been applied for generations.

H. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:

Cost effectiveness is reflected in project design by building on the existing underpinning work that has been achieved by ATSEF since 2006, and linking and coordinating with other major, related regional initiatives, in particular the CTI, thereby achieving synergies and multiplier effects.

The use of a targeted pilot project approach to demonstrate innovative approaches to addressing high priority transboundary threats to fisheries, coastal habitats and livelihoods, has been shown in other GEF-IW projects to be a useful tool in leveraging additional co-financing for the replication of such activities at other sites, thereby multiplying the cost-effectiveness of the GEF investment.

Other more practical examples of cost-effectiveness in project design include provision for holding of ATSEF and ATSEA-PSC and SEG meetings co-jointly, and the piggy-backing of the ATSEA communication plan on other GEF-IW communication and outreach activities, including IW:Learn.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. INSTITUTIONAL ARRANGEMENT:

The project forms part of the ADB-led GEF Program for the Coral Triangle Initiative (CTI) and close coordination will be ensured with ADB and other CTI partners, such as FAO and NGOs in order to facilitate exchange of information and experiences and replication of good practices.

B. PROJECT IMPLEMENTATION ARRANGEMENT:

Implementing and Executing Agencies

The project will be managed according to the standard management arrangements that have been established for GEF-IW projects, which comprise;

- Implementing Agency (IA),
- Executing Agency (EA),
- Project Management Unit (PMU) recruited and employed by the EA,
- Regional Project Steering Committee (PSC) and
- Regional Project Partners.

The IA for the ATSEA FSP will be UNDP. As there is currently no appropriately constituted regional organization in the ATS region, capable of managing the FSP, the EA for the FSP will be the United Nations Office for Project Services (UNOPS).

Consideration has been given to using the ATSEF Regional Secretariat as the EA, however the ATSEF RS is also due to rotate to another ATSEF country – creating issues of institutional continuity and corporate memory if tasked with managing a major GEF project. However, it is proposed that in acting as EA for the ATSEA FSP, UNOPS will work closely with the ATSEF-RS, with the goal of building the capacity of ATSEF as a regional project coordination and management mechanism, during the FSP.

Project Management Unit (PMU) and National Coordinators

UNOPS will recruit and employ a PMU for the duration of the FSP, comprising:

- Project Manager (PM),
- Technical Advisers (TA) , and
- Full-time Financial Administrative Assistant (FAA).

The PMU will be located in Jakarta at the office of Agency for Marine and Fisheries Research building. This office will be fully supported by professional, finance, administrative, travel and other support staff in UNOPS.

As the ATSEA project is also intended to provide capacity-building in project implementation and management to the ATSEF RS, and as it is intended that the ATSEF RS and other ATSEF structures will provide significant support to the project, the costs and benefits of co-locating the PMU and ATSEF RS, and/or seconding staff from one to the other, for the duration of the FSP, will be explored.

The PMU will be responsible for the day-to-day management of all aspects of the FSP, including required reporting to the EA and IA. The PMU will engage international and national consultants to lead the development of the TDA, SAP and NAPs and to undertake various specialist tasks under these activities.

Consultants will be hired, travel arranged and other activities will be organized and carried out according to the established rules, procedures and systems of UNOPs, with the PM delegated with sufficient authority and decision-making powers to allow effective project management.

UNOPS will also recruit and employ a National Coordinator (NC) in Indonesia and Timor-Leste, under local-rate UN Special Service Agreements (SSAs), and housed in and supported by the relevant National Government Lead Agencies in each of these countries, to coordinate all in-country activities in support of the FSP. Australia will designate an NC, employed under its own arrangements.

UNDP GEF will provide the overall project assurance and oversight of the implementation of ATSEA – FSP.

Regional Project Steering Committee

Implementation of the FSP, including review and approval of annual progress, budgets and workplans, will be overseen by the inter-governmental, cross-sectoral, ATSEA regional Project Steering Committee (PSC). As a minimum, the PSC will comprise representatives from:

- UNDP-GEF
- UNDP Country Offices
- PMU
- National Government Lead Agencies from each ATS littoral nation (e.g. GEF OFP and ATSEF Lead Agency)

The PMU will act as the Secretariat for the RPSC and prepare all required documentation for the annual meetings.

Additional groups may be invited to participate in the RPSC, as agreed by the core members, such as:

- National Government supporting agencies from each ATS littoral nation
- Regional representatives from:
 - Coastal and Indigenous communities
 - Environmental NGOs
 - Industry
 - Research community
 - Other regional programmes and projects and multi-lateral organizations

The RPSC will meet at the commencement of the FSP and then annually or as required throughout the duration of the FSP. Meetings of the ATSEA PSC will rotate around each ATS littoral nation. In order to optimize synergies and efficiencies between ATSEA and ATSEF, and build on the strong and functioning framework already established by ATSEF, as well as for cost-effectiveness, meetings of the RPSC should be held in conjunction with meetings of the existing ATSEF Regional Steering Committee (RSC), where possible.

Sponsor acknowledgement

In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF. The UNDP logo should be more prominent -- and separated from the GEF logo if possible, as UN visibility is important for security purposes.

PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:

The project design is aligned with the PIF except some refinement and elucidation of project Components to provide for project coordination and management functions.

PART V: AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement

<u>Agency</u>	<u>Signature</u>	<u>Date</u>	<u>Project</u>	<u>Telephone</u>	<u>Email Address</u>
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<u>Coordinator,</u> <u>Agency</u> <u>Name</u>		<u>(Month,</u> <u>Day,</u> <u>Year)</u>	<u>Contact</u> <u>Person</u>		
John Hough UNDP-GEF Deputy Executive Coordinator	<i>J. Hough</i>	14/08/09	Anna Tengberg Regional Technical Advisor	<u>+66 2288</u> <u>2730</u>	<i>Anna.Tengberg@undp.org</i>

ANNEX A: PROJECT RESULTS FRAMEWORK

Project Strategy		Objectively Verifiable Indicators			
Project Objective:		To ensure the integrated, cooperative, sustainable, ecosystem-based management and use of the living coastal and marine resources, including fisheries and biodiversity, of the Arafura and Timor Seas, through the formulation, inter-governmental adoption and initial implementation of a Regional SAP and NAPs.			
Indicator		Baseline	Target	Sources of verification	Assumptions and risks
Component 1 - TDA C1.1 Outcome: <i>Approved TDA</i> which identifies the ATS transboundary priority environmental problems, environmental & socio-economic impacts, sectoral and root causes and governance analyses	A Trans-boundary Diagnostic Analysis (TDA) completed and approved	Outdated and incomplete bio-physical and socio-economic information on the ATSEA; inadequate understanding of the transboundary problems and their socio-economic root causes and impacts.	TDA finalized within 18 months of FSP start together with technical reports on : 1. Biophysical profile of ATSEA and coastal areas including fisheries and biodiversity assessment 2. Socio-economic and governance profile including resource user groups, market networks, productive value chains, and market access opportunities 3. Causal chain analysis and options to address national and transboundary problems proposed TDA approved by regional committees and ATSEF Stakeholder assessment and stakeholder engagement plan developed for the Arafura and Timor Seas region.	Final TDA document Reports of analyses undertaken as part of the TDA Reports from joint research cruise on physical and biological oceanography, marine biodiversity and fisheries Meeting minutes and record of approval by inter-ministerial committees and Regional Steering Committee and ATSEF. QORs, PIRs, midterm and final evaluations. Information available on official websites at UNDP, project website, and national government websites.	Good access to existing regional and national data to support the TDA. Agreement between countries on identification and prioritization of transboundary concerns, impacts, root causes and action required.
Component 2 - SAP/NAP development C2.1 Outcome: SAP and NAPs agreed and adopted at the national (inter-ministerial) and regional (inter-governmental) levels	SAP developed, agreed, inter-governmentally approved/signed and published. NAPs developed, agreed, approved and published.	No agreed SAP nor harmonized NAPS for the ATSEA have ever been developed. To date, interventions have been fragmented, site specific and largely	SAP and NAPs finalized within 24 months of FSP start and endorsed at a high level by the 36 th month of the project	SAP and NAP documents Reference to the NAPs in related sector plans in the participating countries. PIR, Midterm and final evaluations.	TDA completed as basis for SAP and NAPs. High level political support from countries. Agreement between and within countries reforms and investment actions

		uncoordinated.			required. Inclusive and representative stakeholder involvement in SAP/NAP development process. Effective PSC and NSCs.
<p>*Component 3 - SAP/NAP Initial Implementation</p> <p>C3.1 Outcome:</p> <p>Initial implementation of some SAP and NAP components, through targeted Demonstration Projects addressing high priority transboundary issues identified by the TDA, to demonstrate the capacity of the littoral nations to cooperate in implementing joint activities, as the foundation for full SAP implementation in a future phase / follow-up project.</p>	<p>1 Regional Demonstration Project completed.</p> <p>2 National Demonstration Projects each in Indonesia & Timor Leste completed.</p> <p>(Note: Final selection of Demonstration Projects is undertaken through the development of the TDA/ SAP, during the first 18 months of the FSP.</p> <p>(Note: Once Demonstration Projects are identified and agreed, Indicators, Targets and M&E plans will be developed for each project)</p>	<p>No Demonstration Projects and limited awareness of alternative or supplementary sustainable livelihood activities in coastal communities</p> <p>Limited regional exchange of data, information and experiences</p>	<p>All three Demonstration Projects commenced within 18 months of FSP start.</p> <p>All Demonstration Projects completed by end of FSP and leading to improved livelihoods (15% increase in income) among target communities) and reduced pressure on marine resources</p>	<p>Individual Demonstration Projects project reports.</p> <p>M&E reports, inc. APRs, PIRs, MTEE, FEE etc</p>	<p>Inter-country agreement on regional Demonstration Project.</p> <p>Available local capacity to manage and implement National Demonstration Projects.</p> <p>Stakeholder involvement in Demonstration Projects design, selection and implementation.</p> <p>Mechanisms in place to capture lessons and promote replication.</p>
<p>Component 4 - Regional cooperation mechanism:</p> <p>C4.1 Outcome:</p> <p><i>Regional cooperation mechanism:</i> Develop and strengthen ATSEF as an effective regional mechanism for the cooperative eco-system-based management of the</p>	<p>Agreement on preferred regional cooperation mechanisms.</p>	<p>ATSEF informal experts forum, with limited project implementation capacity.</p>	<p>Preferred model identified and agreed at SAP adoption (24 months after FSP start).</p> <p>Preferred model formally adopted and ready for implementation at end of FSP.</p>	<p>A signed agreement by countries, on the structure and mandate of a regional governance framework.</p> <p>Documents detailing the governance structures, roles and responsibilities.</p> <p>M&E reports, inc. APRs, PIRs, MTEE, FEE etc</p>	<p>Agreement between and within countries on the preferred model.</p> <p>Stakeholder involvement in identification and development of preferred model.</p>

ATS region,					
<p>C4.2 Outcome:</p> <p>A regional self-financing mechanism, such as a mutli-lateral trust fund or partnership council to ensure the implementation of the SAP</p>	Self financing mechanism for ATSEA SAP implementation	Reliance on external donors including GEF.	<p>Self financing mechanism agreed, developed and in-place – including actual commitment of funds to ensure the ongoing implementation of the SAP from Governments, NGOs and the private sector in the region</p> <p>By end of FSP, all participating countries contribute funds to the mechanism</p>	<p>A signed agreement by countries, on the establishment of a self financing mechanism with indicative contribution levels.</p> <p>FEE & PTR</p>	<p>High level of support from contributors, including governments, private sector and NGOs in the region.</p> <p>FSP implementation has been successful and effective, generating support for continuation of SAP implementation post-FSP.</p> <p>Mechanisms in place to capture lessons and promote replication.</p>
<p>Component 5 - Project Coordination & Management</p> <p>C5.1 Outcome:</p> <p>ATSEA Project is effectively coordinated and managed, according to budget and workplan, and including M&E arrangements and procedures.</p>	<ol style="list-style-type: none"> 1. PMU established and fully operational 2. PSC established and fully operational 3. NSCs established and fully operational 4. NCs recruited and fully operational 5. M&E procedures operating 	ATSEF Secretariat playing interim role in coordination of PPG activites	<ol style="list-style-type: none"> 1. By FSP start 2. 1 month before FSP start 3. Within 1 month of FSP start 4. Within 2 months of FSP start 5. Within 1 month of FSP start 	<p>Project Inception Report & 1st Quarterly Progress Report</p> <p>M&E reports, inc. APRs, PIRs, MTEE, FEE etc</p> <p>Project website (following IWLearn guidelines) and database in place</p>	<p>Suitable candidates available for recruitment.</p> <p>Hosting arrangements for PMU and NCs agreed and available.</p> <p>Full support from IA, EA and governments.</p> <p>Stakeholder involvement in the PSC and NSC processes.</p>

RESPOND TO GEF SCIENTIFIC AND TECHNICAL ADVISORY PANEL (STAP) ON ARAFURA AND TIMOR SEAS ECOSYSTEM ACTION PROGRAM (ATSEA) PIF

Date of Screening: 12 March 2008

In respond to further guidance from STAP on ATSEA, the following are responses addressing STAP comments.

1. STAP Comments: *STAP believes this proposal is an important initiative for promoting improved understanding and management of marine ecosystems in the Arafura and Timor Seas. At present the PIF deals only in general terms with the possible pilot projects that would respond to the findings of the TDA, therefore from a scientific perspective it is not possible to assess them at this time. It is important that risk assessment and analysis of mitigation measures be considered in the TDA work, that respond to the threat identified of pollution including from, potentially, the oil and gas industry, plus the issue of illegal fishing by foreign and domestic fleets and controlling the development of foreign joint ventures in the ATS region.*

ATSEA Response:

During the PPG phase, a preliminary TDA process was conducted resulting in TDA framework, presented in the UNDP PRoDOc, that will be used as a basis for a full TDA development in the FSP phase. The TDA Framework identifies preliminary Arafura-Timor Seas transboundary concerns, issues, threats, and root causes, which included issues such as depletion of shared transboundary fisheries stocks, declines in populations of migratory marine species, degradation and biophysical changes of key habitats, and changes to ecosystem dynamics are identified as main results caused by IUU fishing, pollution, lack of viable sustainable livelihoods and climate change.

Detailed pilot projects will be prepared under component three (SAP/NAP Initial implementation) and be informed by the final TDA, which as recommended by STAP, will also include an assessment of risks and mitigation measures. One pilot project will be implemented in each ATSEF country addressing high priority transboundary issues identified by the TDA. The pilot project will demonstrate the capacity of the littoral nations to cooperate in implementing joint activities, as the foundation for full SAP implementation in a future phase/follow-up project. However, due to limited funding there will be only one pilot project per country with Indonesia and Timor Leste as beneficiary of GEF funding and Australia will provide its own support.

2. STAP Comments: *STAP also suggests that the proposal is strengthened by the time of CEO endorsement to reflect more clearly stated global environment benefits (at the moment these are merely implied in the proposal – PIF submission date 15 October 2007), as well as how the project intends to measure and monitor the likely environmental and social benefits resulting from the pilot demonstrations on fisheries conservation, and coastal habitat management.*

ATSEA Response:

The ATSEA project is formulated under the CTI umbrella project that will generate global significant environmental benefits to the region as indicated in the CTI Regional Plan of Action. Some of these actions are closely linked to ATSEA FSP objectives especially in the undertaking of joint research cruise between Indonesia, Timor Leste and Australia as part of TDA development (outcome component 1), SAP/NAPs Development (outcome component 2), enhanced community-based management of existing MPA (pilot project outcome component 3), and Regional Cooperation Mechanism (outcome component 4). Socio-economic benefits of the demonstration activities will be measured in terms of increase of income among target communities. Environmental stress reduction will be measured in terms of coastal/marine area under improved management. More significant environmental and socio-economic benefits will accrue in a subsequent investment phase focusing on implementation of the agreed SAP.

3. STAP Comments: *STAP also suggest that the TDA process include relevant agricultural experts with knowledge of the land-based agricultural systems in Indonesia and East Timor.*

ATSEA Response:

Experts from Indonesia, Timor Leste and Australia from different sectors will be engaged by the project. A multidisciplinary team will be constituted that includes experts in fisheries, marine biodiversity, oceanography, agriculture and land management, community development, socio-economics and governance.

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT

<i>Position Titles</i>	<i>\$/ person week</i>	<i>Estimated person weeks</i>	<i>Tasks to be performed</i>
For Project Management			
Local			
National Project Coordinator (NPC)	581.5	216	Manage and supervise the project activities
Finance Officer	162.5	216	Install the project's financial system, orients project staff, supervises the proper recording financial transactions, reports and management
Administrative Officer (AO)	100	216	Arranges and Manages the administrative activities,
International	-	-	
For Technical Assistance			
Local			
TDA development (4 person)	807	320	Four local consultants (2 from TL & 2 From Ind) will support the TDA Development, at a monthly salary of \$3,228 for the duration of 3 months in year 1; 8 months in year 2; 6 months in year 3; and 3 months in year 4 with 5% increasing salary per year.
Oceanographic assessment	807	48	One oceanography consultant for the oceanographic assessment cruise will be hired at monthly salary of \$ 3,228 for the duration of 4 months in year 2; 4 months in year 3; and 4 months in year 4, working with the LIPI and BRKP scientists to prepare and involve the Baruna jaya research vessel
SAP/NAP development (2 persons)	875	160	Two local consultants (1 from TL & 1 From Indonesia) will support the SAP/NAP Development, at a monthly salary of \$3,500, 3 months in year 1, 8 months in year 2, 6 months in year 3, 3 months in year 4 with 5% increasing salary per year
Assessment of fish population dynamics (1 person)	500	33.5	One local consultant to review and improve the information or data on fish stocks in the ATSEA
Assessment of alternative livelihood (3 persons)	500	100.5	Three local consultants to review information on alternative livelihood options in the ATSEA

			with special focus on selected demonstration sites.
Regional governance structure for ATSEA (2 person)	875	108	Two local consultants to review and development of institutional options for the structure and mandate of a regional governance framework for ATSEA.
Sustainable financing mechanism (2 person)	875	100	Two local consultants to review and develop options for future self-financing of regional mechanism for ATSEA, including funding from the private sector. This will also include meetings with high-level regional government officials.
Editor	500	4	Write, compile and edit ht TDA-SAP/NAP and other projects reports
Lay-out	500	4	Lay-out the TDA-SAP/NAP and others project reports.
International			
TDA	2,500	32	Provide overall responsibility and leadership during the TDA preparation
SAP/NAP	2,500	24	Provide overall responsibility and leadership during the SPA/NAP preparation
Travel by PMU:	1,000	27	Travel cost of National Project Manager, Finance Officer and Administrative Assistant visit and attend workshop/meeting

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.

All PPG objectives have been achieved and met

B. DESCRIBE IF ANY FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION.

NONE

C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:

<i>Project Preparation Activities Approved</i>	<i>Implementation Status</i>	<i>GEF Amount (\$)</i>				<i>Co-financing (\$)</i>
		<i>Amount Approved</i>	<i>Amount Spent To-date</i>	<i>Amount Committed</i>	<i>Uncommitted Amount*</i>	
Component 1: Harmonisation of differing baseline data from Timor Leste	completed	80,000	49,260.60	30,739.4	0	30,000
Component 2: Development of project Implementation and M&E Arrangement	Completed	25,000	99.25	24,900.75	0	25,000
Component 3: Development of financial plan	completed	20,000	1,483.72	18,516.28	0	25,000
Component 4:	completed	25,000	81.67	24,918.33	0	40,000

Project technical and policy reviews						
Component 5: Project preparation coordination	completed	0	0	48,262.98	0	40,000
Total		150,000	50,925.24	99,074.76	0	160,000

- Uncommitted amount should be returned to the GEF Trust Fund. Please indicate expected date of refund transaction to Trustee.

ANNEX E: CALENDAR OF EXPECTED REFLOWS

Provide a calendar of excepted reflows to the GEF Trust Fund or to your Agency (and/or revolving fund that will be set up)



UNDP Project Document

Governments of Indonesia and Timor Leste with support from Australia (Papua New Guinea to be invited to join during FSP)

United Nations Development Programme

Names of additional partners, particularly agencies in the UN Development Group as appropriate

PIMS no. 3879 Arafura and Timor Seas Ecosystem Action Programme

Brief Description

The tropical and semi-enclosed Arafura and Timor Seas (ATS) are shared by Australia, Indonesia, Timor-Leste and Papua New Guinea (PNG). The ATS region is extremely rich in living and non-living marine resources, including major fisheries and oil and gas reserves. The ATS region is located at the intersection of the two major Large Marine Ecosystems (LMEs), the Indonesian Seas to the north and northern Australian waters to the south, and is also an integral part of the Coral Triangle zone considered to have the highest marine biodiversity in the world. The ATS region exhibits high productivity that sustains both small- and large-scale fisheries that provide livelihoods for millions of people in the region.

The gross-annual production from commercial, artisanal and subsistence fisheries in the ATS region is very difficult to estimate, given existing gaps in data collection and analysis and the extremely high level of illegal, unregulated and unreported (IUU) fishing in the region, involving small and large fleets from several countries to the north of Indonesia. While a major threat is foreign fishing there is also a substantial amount of Indonesian unregulated activity in Indonesian and Australian waters. In addition to unsustainable and IUU fishing, Arafura and Timor Seas face significant threats from a number of other pressures including the potential for increased incidence of natural threats associated with climate change as well as rapidly expanding coastal populations, increasing urbanization, high levels of poverty and limited economic opportunities which can increase exploitative pressures on natural resources, degradation of coastal habitats, marine pollution from both land- and sea-based sources, and aquatic invasive species.

The threats facing the ATS region are transboundary in nature and can only be effectively addressed through multi-lateral cooperation between all four littoral nations. The rationale for the GEF Full Scale Project (FSP) is therefore the need for the littoral nations to work cooperatively to sustain the ATS shared living resources, conserve the biota of the seas and coasts, and improve sustainable socio-economic conditions and opportunities for coastal peoples. It is also based on the need for international assistance and catalytic financing, recognizing the significant development challenges and resource limitations facing Timor Leste, which is classified as both a Least Developed Country (LDC) and a Small Island Developing State (SIDS), as well as those facing Indonesia and additionally PNG, which is also designated as a SIDS.

Through the GEF intervention, including the undertaking of a Trans-Boundary Diagnostic Analysis (TDA), development of a Strategic Action Programme (SAP), and implementation of innovative demonstration projects, the littoral nations will be greatly assisted to collaboratively understand and address the shared waters problems that cannot be solved by any one country on its own.

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Acronyms

AA	Administrative Assistant
ACIAR	Australian Centre for International Agricultural Research
AFMA	Australian Fisheries Management Authority
AIMS	Australian Institute of Marine Science
APEC	Asia Pacific Economic Cooperation
APR	Annual Project Review
ATS	Arafura & Timor Seas
ATSCOM	Arafura & Timor Seas Commission (concept only)
ATSPAC	Arafura and Timor Seas Partnership Council (concept only)
ATSEA	Arafura & Timor Seas Ecosystem Action Program
ATSEF	Arafura & Timor Seas Expert Forum
ANU	The Australian National University
BD	Biodiversity (portfolio of GEF)
BRKP	Marine & Fisheries Research Agency (of MMAF – Indonesia)
CDU	Charles Darwin University
CI	Conservation International
CTI	Coral Triangle Initiative
CSIRO	Commonwealth Scientific and Industrial Research Organization
DAFF	Department of Agriculture, Fisheries and Forestry (Australia)
DEC	Department of Environment & Conservation (PNG)
DEWHA	Department of the Environment, Water, Heritage and the Arts (Australia)
DFA	Directorate of Fisheries and Aquaculture (Timor Leste)
EA	Executing Agency
FEE	Final External Evaluation
FMA	(Indonesian) Fisheries Management Area
FSP	Full Scale Project (of GEF)
GEF	Global Environment Facility
GEF-SEC	GEF Secretariat
IA	Implementing Agency
IMO	International Maritime Organization
IUCN	World Conservation Union
IUU	Illegal, Unregulated and Unreported (fishing)
IW	International Waters (portfolio of GEF)
LDC	Least Developed Country
LME	Large Marine Ecosystem
MMAF	Ministry of Maritime Affairs and Fisheries (Indonesia)
MDG	Millennium Development Goal
M&E	Monitoring and evaluation
MED	Ministry of Economy and Development (Timor Leste)
MPA	Marine Protected Area
MSC	Marine Stewardship Council
MTEE	Mid-Term External Evaluation
NAILSMA	North Australian Indigenous Land and Sea Management Alliance
NAP	National Action Programme
NC	National Coordinator
NDE	National Directorate of Environment (Timor Leste)
NFA	National Fisheries Authority (PNG)
NGO	Non Government Organization
NMSA	National Maritime Safety Authority (PNG)
NTRETAS	Northern Territory Department of Natural Resources, Environment, The Arts and Sport

NSC	(ATSEF) National Steering Committee
OFP	(National) Operational Focal Point (for GEF affairs)
PDF-B	Project Development Facility Block-B (of GEF, superceded by PPG)
PEMSEA	Partnerships for the Environmental Management of the Seas of East Asia
PIR	Project Implementation Review
PM	Project Manager
PMU	Project Management Unit
PNG	Papua New Guinea
PPG	Project Preparation Grant
PSC	(ATSEA) Project Steering Committee
PTR	Project Terminal Report
PTR-S	Project Terminal Report Synopsis
RS	(ATSEF) Regional Secretariat
RSC	(ATSEF) Regional Steering Committee
SAP	Strategic Action Programme
SDS-SEA	Sustainable Development Strategy for the Seas of East Asia
SEG	(Regional) Stakeholder Engagement Group
SIDS	Small Island Developing States
SPREP	South Pacific Regional Environment Programme
SRF	Strategic Resource Framework
SSA	(UN) Special Service Agreement
SSAFF	State Secretariat for Agriculture, Forests and Fisheries (Timor Leste)
TA	Technical Adviser
TDA	Transboundary Diagnostic Analysis
TNC	The Nature Conservancy
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNOPS	United Nations Office for Project Services
WSSD	World Summit for Sustainable Development
WWF	World Wide Fund for Nature

SECTION I: Elaboration of the Narrative

PART I: Situation Analysis

1.1 Context and global significance

1. The waters of the tropical and semi-enclosed Arafura and Timor Seas (ATS) are shared by Indonesia, Timor-Leste Papua New Guinea (PNG) and Australia (Figures 1). The Arafura and Timor Seas are considered to be semi enclosed seas under Part IX of the United Nations Convention on the Law of the Sea, which places an obligation on countries bordering enclosed and semi enclosed seas to cooperate in resource management, the protection of the marine environment and marine scientific research. The ATS region is extremely rich in living and non-living marine resources, including major fisheries and oil and gas reserves. The ATS region is located at the intersection of the two major Large Marine Ecosystems (LMEs), the Indonesian Seas to the north and northern Australian waters to the south, and is also an integral part of the Coral Triangle zone considered to have the highest marine biodiversity in the world. The ATS region exhibits high productivity that sustains both small- and large-scale fisheries, including several high-value, shared, transboundary fish stocks, that provide livelihoods for millions of people in the region, and make a significant contribution to food security for both regional coastal populations and large populations in the export market countries to the north of the region, including China.

2. The gross-annual production from commercial, artisanal and subsistence fisheries in the ATS region is very difficult to estimate, given existing gaps in data collection and analysis and the extremely high level of illegal, unregulated and unreported (IUU) fishing in the region, involving small and large fleets from several countries to the north of Indonesia. While a major threat is foreign fishing there is also a substantial amount of Indonesian unregulated activity in Indonesian and Australian waters. In addition to unsustainable and IUU fishing, Arafura and Timor Seas face significant threats from a number of other pressures including the potential for increased incidence of natural threats associated with climate change as well as rapidly expanding coastal populations, increasing urbanization, high levels of poverty and limited economic opportunities which can increase exploitative pressures on natural resources, degradation of coastal habitats, marine pollution from both land- and sea-based sources, and aquatic invasive species.

3. In response to the developing natural resource management challenges in the ATS region, during the Preparatory Committee IV for the World Summit on Sustainable Development (WSSD) held in Bali, Indonesia in June of 2002, concerned stakeholders from Australia, Indonesia and Timor-Leste formed the Arafura and Timor Seas Expert Forum (ATSEF). ATSEF has agreed five priority foci:

1. Deter, prevent, and eliminate illegal and unsustainable fishing;
2. Maintain sustainable fish stocks, biodiversity and marine and coastal habitats;
3. Identify/develop alternative sustainable livelihoods with indigenous and coastal communities;
4. Research & monitor the systems dynamics of marine, coastal and catchment ecosystems, oceanography and climate change;
5. Improve capacity for information management and sharing among ATSEF member nations.

4. In terms of global significance of marine biodiversity, the oceans of south-east Asia are unsurpassed. In August 2007, President Yudhoyono of Indonesia wrote to other world leaders proposing a Coral Triangle Initiative (CTI) designed to stimulate action to safeguard the extraordinary marine and coastal biological resources of the so-called Coral Triangle region (Figure 1). In early September 2007, the CTI received attention by governments at the APEC Summit in Sydney, Australia. The 21 APEC heads of State formally endorsed the CTI in their APEC Leaders Declaration, and it has become an issue of significant interest to Indonesia,

Australia, Timor Leste and PNG. The President of the Philippines, the Prime Minister of PNG, and the President of the United States have explicitly expressed their support for the CTI. The culmination of support to CTI was shown at the CTI Summit held in Manado, Indonesia on May 15, 2009. At this summit, all leaders of the six nations directly involved in the CTI (CT-6) attended the meeting and fully endorsed the CTI Regional Plan of Action which notes the importance of the Arafura and Timor Seas ecosystem. The ATSEA Full Scale Project aligns closely with the principles and goals of the CTI and will develop a strong regional mechanism that will contribute directly to the prevention and management of regional threats.

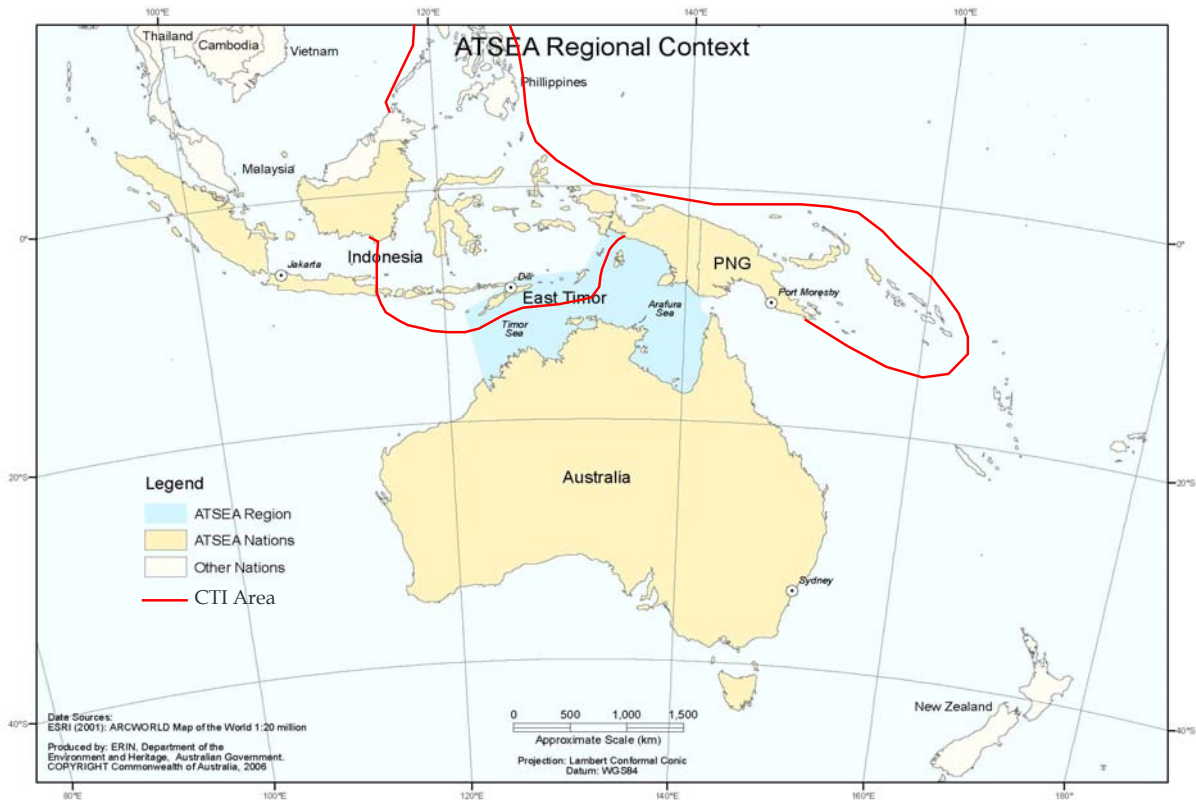


Figure 1: Broader regional context of the ATS Region with Coral Triangle area

Threats, root causes and barriers analysis

Indonesia

Biodiversity and Fisheries

5. Indonesia as the world’s largest archipelagic state is the epi-centre of global marine diversity, as the meeting point for the Pacific and Indian Oceans flora and fauna. The extensive coastal zone of Indonesia is reported to support up to approximately 60% of its 212 million people (Briggs 2003).

6. 67% of Indonesia’s 7,000 coastal villages are located adjacent to coral reefs and are heavily dependant on reef’s and associated products for consumption and livelihoods. According to Soeharsono (1999) there are up to 600 species of coral reef in Indonesia and 1,650 fish species have been recorded in eastern Indonesia (Briggs 2003). The highest biodiversity is found in the Eastern Indonesian waters. Indonesia has up to 86,000km of coral reefs valued at US 1.6

billion/year. Destructive fishing has the potential to result in a net economic loss to Indonesia of US \$170 million/year for the next 2 decades (Briggs 2003). Mangrove ecosystems and sea grass beds in Indonesia support a high degree of biodiversity, particularly in Timor, Rote and Aru islands and along the south coast of Papua where Wasur National Park, one of the largest mangrove ecosystems in the world and a Ramsar Wetland of International Importance, is located.

7. At least 14 species of Cetaceans (whales and dolphins) have been observed in and around the ATS regions. Six species of marine turtles are found in Indonesia with major breeding and feeding grounds in the ATS region. The dugong (*Dugong dugon*), the world's only herbivorous marine mammal, is also found in the region. Dugong are listed by The World Conservation Union (IUCN) as vulnerable to extinction at a global scale. They are also listed on the Red List of Threatened species and Appendix 1 of CITES. Up to 15 families of shark (elasmobranchs) comprising 64 species and 11 families of rays with 41 species are also found in the region.

8. The Arafura Sea is an important area for shrimp and demersal fishes that have been heavily exploited for decades. Shrimp trawling poses a threat to the demersal fish stock due to its inefficient catch methods. In Indonesian parts of Timor and Arafura Sea management areas all fish stocks (demersal, shrimp, small and large pelagic) are fully exploited (Sugiarta 2009) and demersal fish and shrimp in the Arafura Sea are overfished. High value sedentary species such as sea cucumber of which there are 350 species in Indonesia is commercially targeted in the ATS region, but little data exists on the status of resource.

9. Of the three Indonesian provinces within the ATS region: NTT, Maluku and Papua, NTT is considered one of the poorest and least developed provinces, with 2002 estimates that approx 30% of people live below the national poverty line compared to the national average of 18% (AMSAT 2009). Total population in the 3 provinces of ATS is 1,715,277 (2006) which is dominated by population of East Nusa Tenggara Province (approx 1.1 million people), followed by Maluku (380,000) and Papua (250,000). Approximately 50% of the population of NTT lives in coastal villages.

10. Each of the provinces in the ATS region contains a diverse ethno-linguistic groups engaged in various multiple livelihood strategies, with some villages almost entirely dependant on agriculture and others that are entirely reliant on protein and income from marine environment. The region is characterized by migration especially in NTT. Migrating fishers and their families of Bajo, Bugis, Butonese, and Makassarese from other areas of eastern Indonesia travel seasonally to key ports and fishing grounds searching for high commercial value products such as trepang, trochus shell, reef (live) fish, and shark fin, competing for largely open-access and unmanaged resources (small scale fishers are exempt from licensing), contributing to declining habitats and reef resources in some areas. Various groups also engage in transboundary fishing in the Arafura and Timor Seas.

11. Fishers from various settlements in NTT - districts of Rote Ndao, Kupang and Alor, both within and surrounding islands are engage in transboundary fishing in the Timor Sea. For example in 2008 over 550 fishers from Rote and Alor were active at Scott Reef inside the AFZ. These fishers and their families are among the poorest of the poor, with recent World Bank statistics citing 53% of fishing families are below the poverty line (Fox 2009). Many of these fishers in ATS region occupy a weak link in the marketing chain, which is often dominated by a few key buyers or bosses with ties into South East Asia markets, lack of infrastructure, access to capital, limited assets, perishable nature of products sought, limited access and skills to marketing and markets and business planning (AMSAT 2009).

12. In Maluku Province, 92% of the area is sea. The main town of Dobo has long been a trading centre for marine products and a staging post for voyages into shared seas to target a variety of products. Fishers from Aru Islands, Kei Islands (Tual) and Tanimbar Islands (Saumlaki) as well as smaller islands to the west of Tanimbars depend on local resources on fishing and

aquaculture. Main activities including reef fisheries and bottom trawling for fishing and seaweed, pearl as well as grouper aquaculture and some distant shore voyaging. The Province also hosts various communities of maritime ethnic groups such as Bajo, Bugis and Butonese who engaged in migratory livelihood activities particularly to ARu and Tanimbar Islands.

13. In Papua, the port town of Merauke provides a focus point for ATS fisheries, both industrial and artisanal scale and a number of settlements (e.g. Pintu Air on the periphery of Merauke, the fishing village of Lampu Satu (2 km to the east) and the boat building village of Kumbe (60 km to the Northwest) host indigenous people and fishers belonging to migrant Bajo, Bugis and Butonese who access shark and trepang in Arafura and Timor Seas. Local communities engage in small scale coastal fishing, working as laborers and trading along the Eastern Arafura coast. There are also a number of Bugis, Butonese, and Mimika fishermen who are active in the region. Very few indigenous people of Papuan descent live on this coast.

14. In respect of governance of coastal and marine resources sectors in Indonesia not only do central government several ministries (e.g. marine affairs, fisheries, tourism, mining, transportation, environment) have legislative responsibilities and functions for marine and coastal management, fisheries and biodiversity, provincial and local governments now have increased roles and legislative powers for the 3-12nm zones. Several causes exist including a lack of effective integrated coastal and marine management in Indonesia including limited policy and regulation for addressing environmental impacts in biodiversity, fisheries and aquaculture, fragmented environmental institutions in terms of roles, responsibilities and coordination mechanisms at national, provincial and local government levels for effective marine management and weak law enforcement and imbalance between sustainable resource use and economic development. This is further constrained by limited government and NGO human and financial resources, capacity and infrastructure in the largest archipelagic state in the world with a population of over 200 million people and the ATS region considered remote from central government and support. Both Maluku and Papua are characterized by various forms of *sasi*, (customary restrictions governing the taking of marine products and more limited tenure arrangements in NTT). The role of *sasi* in preserving local fishery resources, while highly successful across Asia-Pacific region and Indonesia is a challenging effort amidst the policy to increase production over conservation measures.

Timor Leste

15. Timor Leste, as one of newest democracies in the world and one of the least developed, faces significant threats and challenges. Approximately 42% of the country's estimated 1.1 million population are below the national poverty line, there is a high population growth rate (e.g. approximately 17% increase in population during 2001-2004 with approx 50% under 16yrs old). Seventy-five percent of Timor-Leste's population live in rural areas, where poverty is most prevalent, and depend on natural resources to meet their basic needs. Eighty percent of employment is natural resource-related, and 98 percent of households use wood as their primary fuel (FAA, 2004). Despite large offshore oil and gas reserves worth an estimated £2.8bn, food security, employment and sustainable livelihoods remain important priorities for Timor Leste.

16. The nation has a coast line of 706 km, a total land area of 15,000 sq km, and a marine jurisdiction of approximately 72,000 km². 42% of all the villages in Timor Leste have a coastal border (McWilliam 2003). Timor Leste has rare and possibly unique terrestrial, lake and marine ecosystems, and is extremely important in the conservation of marine biodiversity and endangered marine species of global significance, such as whales, whale sharks, turtles, dugong, and dolphins. However, these ecosystems and resources are as yet poorly understood and there is very limited scientific environmental baseline information available for Timor Leste. In addition, the country is prone to increasing threats from domestic pollution sources, poor catchment management practices resulting in floods, landslides and erosion due to inadequate land management practices and uncontrolled deforestation in the recent past that may be affecting the marine living resources,

inshore and destructive artisanal and subsistence fishing, IUU fishing coupled with rapid population increases potentially putting more pressure on coastal resources. Research suggests that coral reefs are damaged, and with some pelagic and demersal marine species overfished possibly due to destructive fishing.

17. The extent of East Timor's fishery resources and total volume and value of catch from coastal and offshore areas is unknown. In 1997, fisheries contributed approximately US\$481,000 which is less than 1% of all revenues generated. Results from household surveys show that annually coastal communities land around 80% of the total catch (about 5,000 tons) for Timor Leste. An estimated 1,000 tons is landed by illegal, unregulated and unreported fishing vessels with catches valued at US\$ 5.7 million (Anonymous, 2007).

18. The fisheries sector was almost completely destroyed in 1999 and has taken some years to recover. Although major constraints still exist such as loss of income due to lack of storage, infrastructure and cost of fuel, gear limitations restricted fishing to small scale inshore activity. Some fishing occurs for local markets and vessels from other countries have been fishing offshore. Few East Timorese fish as their primary livelihood, such as those from Arturo Island although most located in coastal areas fish for partial subsistence/income. Approximately 6,000 fishers (2001) operate in centers around the coastal areas in particular from Dili, Arturo Island on the north, and Vivueque districts on south coast with variation across communities in relation to fishing dependence and strategies. Many fishers' livelihood strategies are based on agriculture with part time fishing, although Arturo Islanders are mostly fulltime fishers operating larger boats and in offshore areas. Much artisanal activity occurs within 300m of shore as well as inshore gleaning by women. IUU fishing has been identified as a major issue.

19. One of the most significant challenges for Timor Leste as a new nation is improving governance and capacity for marine resources. The situation is complex with existing Timorese (and customary), Indonesian and UN laws in place. The government is working towards addressing these challenges of weak legal-regulatory framework and institutional structures; lack of coordinated policy-making; weak enforcement capacities; basic technical, scientific data and information gaps; and lack of infrastructure and equipment (Anonymous, 2008). Timor Leste although small country by international standards has the potential through ATSEA and related programs to provide valuable high grade protein to feed Timor Leste, provide employment and significant income-earning opportunities and foreign exchange from fisheries and sustainable fisheries management.

PNG

20. A small area of PNGs EEZ includes the Arafura Sea. This includes 3 small islands/cays. This region is typically a shallow marine environment with seagrass meadows and some coral reefs and is an important habitat globally for turtles and dugongs, which are harvested as part of customary fishing activities of Indigenous Torres Strait Islands and Papuans under a Torres Strait Treaty (1985) between Australia and PNG. Administratively, the Western Province of PNG and the coastal South Fly District are the key areas bounded by the Arafura Sea.

21. PNG waters abut Australian waters at the Torres Strait where the Torres Strait Protected Zone (TSPZ) Joint Authority is responsible for management of commercial and traditional fishing in the Australian area of the TSPZ and designated adjacent Torres Strait waters. Commercial fishing is one of the most economically important activities in TSPZ and provides a significant opportunity for financial independence for community fishers. Individual fisheries include prawn, tropical rock lobster, spanish mackerel, barramundi, pearl shell, dugong and turtle, finfish, crab, trochus and sea cucumber (beche-de-mer).

22. Significant IUU fishing is likely to occur in PNG waters. For example in the first half of 2006, 42 Indonesians were apprehended for fishing illegally in PNG. In 2007, 33 Indonesian crew

operating from Meurake but originally from Sulawesi were apprehended for illegal shark fishing in PNG waters. The TDA will be extended to PNG in the next phase of ATSEA.

Australia

23. Northern Australia shares strong environmental, cultural, social and historical connections to Indonesia, Timor Leste and PNG. Shared issues include remoteness, cultural and linguistic diversity, coastal community poverty, bio-security, shared use and management of marine resources, biodiversity, and ecological features.

24. Australian waters demonstrate regionally significant geomorphic features that support ecological systems, feeding grounds and aggregations of regionally and international significant species, and important fisheries. Ecological characteristics of Australian waters include sea floor features and benthic habitats, seagrass meadows, corals, carbonate banks and reefs, and coastal and shelf waters that support an array of marine life including significant populations of internationally threatened species such as marine turtles, dugongs, and whale sharks. Over 250 species – threatened, migratory, cetacean or listed marine species are known to occur in northern Australian waters, including 28 threatened species.

25. The region is an important transport and shipping corridor and supports major marine industries including commercial and recreational fishing, shipping, petroleum exploration and production, defence activities and aquaculture. Around 30 fisheries (e.g. Spanish mackerel, prawns, crab, snapper and shark), are licensed to operate in the region, earning in the tens of millions of dollars annually.

26. Ashmore and Cartier Islands are part of a group of offshore reefs and shoals which are used by traditional Indonesian fishers, and commercial fisheries. Three Australian marine protected areas are currently located in the Timor Sea region including Mermaid Reef National Nature Reserve which is a significant area for a diverse number of shark species which are thought to be in decline elsewhere.

27. The ATS region is generally less populated than Australia's northern neighbours with around 70% of the remote coastline of northern Australia owned by Indigenous peoples from hundreds of distinct language groups. Indigenous populations maintain close links with their sea country through occupation, resource utilisation, subsistence hunting, and cultural and social practices. A network of indigenous sea-ranger groups has been established in recent years with support from both government and non-government groups. Indigenous rangers are playing an increasingly important role in biodiversity monitoring, marine management, and surveillance.

28. Since at least the early 1700s until the introduction of maritime jurisdiction boundaries between Australian and Indonesia, Makassan and other groups of fishers from Indonesia accessed Australia's offshore and coastal regions targeting a variety of marine products, engaging in trade and intermarrying with Indigenous populations. Indeed Makassan trepang fisheries were the first commercial industry operating in Australia.

29. In Australian waters of the Arafura and Timor Sea the Australia Government is implementing a marine bioregional planning process which is designed to better protect marine environments, protect biodiversity, and deliver certainty to resource users as well as provide the framework for the development of a network of new marine protected areas. The marine bioregional planning process is based on science and a comprehensive understanding of stakeholder activities and interests, governance and management arrangements, threats and conservation priorities. The significant technical and scientific information being developed in conjunction with a number of ATSEF member organisations including Indigenous organisations, researchers and sub-national governments will provide extremely valuable inputs to the ATSEA TDA and SAP.

Threats, root causes and barriers analysis

30. The system boundary for the project is the ATSEA Region as depicted in Figure 1, comprising:

- the Timor Sea spanning the Island of Timor (comprising Timor Leste and West Timor – which is part of the Indonesian Province of East Nusa Tenggara) and the north coast of Australia; and
- the Arafura Sea spanning the Indonesian Provinces of Maluku and Papua, the north coast of Australia, bordered by the Torres Strait and the western coast of PNG.

31. The system boundary for the project includes these two Seas, all islands within these Seas as well as the adjacent coastlines and hydrological catchments (it should be noted that within the project area, only Indonesia, Timor Leste and PNG are eligible for GEF funding support).

32. The ATS region is known to contain rich biodiversity that includes fringing coral reefs especially around Maluku and East Nusa Tenggara, and around parts of Timor Leste, and oceanic reefs in Gulf of Carpentaria and Arafura and Timor Seas with very high levels of coral and associated species diversity (part of the Coral Triangle). Extensive stands of coastal mangroves and sea grass beds provide vital nursery areas, and are major source of primary productivity for the adjacent marine systems and fisheries across the region. These habitats support highly diverse populations of plankton invertebrates and pelagic and demersal fish and migratory globally significant protected, rare and endangered species of marine mammals (cetaceans – whales and dolphins), dugongs, all 7 species of marine turtles, and whale sharks.

Major (Perceived) Transboundary Environmental Concerns and Issues in the ATS region

33. The marine environment in the ATS region is in serious decline, primarily as a result of over-harvesting and other direct and indirect impact of anthropogenic stresses and global climatic changes. Three main transboundary concerns, threats and root causes have been identified for the ATS region (see Table 1). These were identified through a series of national and regional consultations during the PPG phase through stakeholder workshops held in Darwin, Kupang, Dili, Bogor, Jakarta and Manado; preparation of national status reports in regards to current state of knowledge, trends and gaps with regard to the Arafura and Timor Seas region (Indonesia and Timor Leste on biodiversity, socio-economic and governance issues in ATS region), and a preliminary framework TDA, presented at a regional consultation meeting in Jakarta in March 2009, to assist the development of full TDA during the Full Scale Project (see Annex 1). It should be noted however that these PEC, threats, and root causes are largely perceived and will be considered during a full comprehensive scientific assessment as part of the full TDA for ATSEA. These are:

- Exploitation of fisheries and other living coastal and marine resources/biodiversity
- Coastal and marine habitat destruction/modification
- Environmental change and impacts on ecosystem dynamics

34. The Preliminary transboundary environmental problems, their threats and (root) causes for the ATS are presented in Table 1. A summary of these are discussed below.

Exploitation of fisheries and other living coastal and marine resources/biodiversity

35. Fisheries in the ATS region are an extremely complex arena with multiple actors, target species sought and technology used. Fishing is driven by a range of social, cultural, economic factors at different spatial and temporal scales both in respect of legal and illegal fishing in each country and regionally.

36. The scale of the problem concerns near shore/coastal and distant shore (including transboundary) fishing and relates to subsistence, artisanal and industrial scale fishing activities in all four countries of the ATS region. Of major concern is the scale and nature of Illegal, Unreported and Unregulated (IUU) fishing. It also concerns both 'legal' traditional Indonesian fishing activity inside Australian waters (regulated by the 1989 amendments to the 1974 MOU between Australian and Indonesian governments) in the Timor Sea (see Fox and Sen 2002, Stacey 2007) undertaken by various ethnic groups – Bajo, Rotenese, Butonese, Madurese, and Timorese. It also concerns artisanal fishing activity by various ethnic populations from Indonesia fishing both within and outside of Indonesian waters and probably Timor Leste. All these ATS fisheries are partly characterized by periodic changes over time with 'waves' of illegal activity for particular species, driven by internal and external economic drivers (e.g. access to capital, demand, global shortages etc).
37. Thus ATS region is the site of fishery conflicts at various levels, between local communities particularly in islands of Maluku in Indonesia and along Timor Leste coastline, inside the AFZ and PNG EEZ and across maritime borders between all 4 countries.

Depletion of shared transboundary fisheries stocks

38. One of the major issues facing the Timor and Arafura Seas is the depletion of shared transboundary fisheries stocks in particular sharks, rays, snappers, prawns/shrimp. This is caused through unsustainable artisanal and industrial fishing practices and management and relates to issues of overexploitation, overcapacity destructive methods, and includes IUU fishing activities.

39. In the Timor - Arafura Seas various fishing operations from Indonesia and countries to the north (e.g. Thailand, Taiwan, South Korea, China, the Philippines) illegally target various species of high commercial value in Australian and Indonesian waters (e.g. snapper, trepang, shark fin) (Adhuri et al, 2009, Stacey 2007, Resosedarmo 2009).

40. In Indonesian waters alone in the Arafura Sea hundreds of vessels may be operating illegally. For example in 2001 it was estimated that 85% or approx 7,000 vessels (over 50 gross tones) were operating without a license (Resosedarmo 2009). Average losses from 1991 to 2005 are estimated at around Rp. 11 -17 trillion. More recently 2006 estimates that such IUU fishing is costing Indonesia more than \$USD 2 billion a year in lost revenues.

41. In Australian waters in 2005-2006 there were a total of 8,378 sightings of IUU vessels and 412 apprehensions and in 2007-2008 there were 798 sightings with 165 apprehensions (AFMA 2009; Fox 2008). The Australian Government committed almost \$AUD400 million to address illegal fishing in Australian waters between 2005-2009 which has lead to a significant reduction in illegal foreign fishing activity in Australian waters.

42. In Indonesia's Arafura Sea Fisheries management area, one of the most heavily exploited regions in Indonesian waters (Wagey et al 2008, Adhuri et al 2009) inappropriate and destructive activity is undertaken by industrial scale fishing fleets by Indonesian and others from countries to the north such as Taiwan and China who operate using fish trawls, shrimp trawls and bottom long lines. Priority concerns regarding fishing in Arafura Sea are unrecorded catch – which covers catch that is thrown away (bycatch, discards), catch which is not reported, catch which is reported but not properly recorded (misreported), and illegal fishing activities. Furthermore, it is estimated that more than 80% of demersal fish, mostly Red Snapper (*Lutjanus* sp) harvested from the Arafura Sea using Bottom Long Line between 1980 and 2005 was defined as unreported (Wagey et al 2009). With regard to illegal fishing activity particularly in the fishnet fishery, fish are transhipped from the fishing vessel to a foreign carrier vessel for transport to country of origin. Thus a major problem is the clear gap in official fisheries statistics for the Arafura Sea and actual real catch and effort.

43. The main characteristics of depletion of shared ATS transboundary fisheries stocks by fishery are outlined below. It is important to note that this characterization is based on species and as such there is some overlap as some fishing operations target more than one species.

- Various *shark fisheries* (elasmobranches): legal and illegal, national and foreign as well as long standing artisanal fisheries in Timor Sea operating under the 1974 MOU between Australia and Indonesia (by ethnic groups originating from various islands in Indonesia – e.g. Rote, Timor, Flores, Alor, Southeast Sulawesi, Wanci, Kaledupa, Tanimbars, Aru. Merauke region, Raas, Tondok). IUU fishing in Australian waters, artisanal boats originating from ports of Pepela, Kupang, Dobo, Samulaki, Merauke but characterized with crews largely originating from other areas such as NTT and South and Southeast Sulawesi. Shark fishing largely for fins is driven by external market demand and fins command highest prices in the SEA region. Due to their biology elasmobranch species are highly vulnerable to fishing pressure. Identified shared stocks between northern Australia and southern Indonesia include *Sphyrna lewini*, *Prionace glauca*, *Carcharhinus falciformis*, *Carcharhinus obscurus* and *Rhynchobatus* spp. (Blaber 2009 et al, Ovenden et al. 2008). There also appears to be overlap in Indonesian and Australian black tip shark fisheries and between the Indonesian trawl fisheries based in Merauke and the Australian trawl fisheries based in the Gulf of Carpentaria (Blaber 2009 et al).
- Various *snapper fisheries*: legal and illegal, Australian (e.g. WA NDSF operating in AFZ and WA waters including inside the MOU box area and targeting some of same gold band snapper species as Indonesians), Indonesian and foreign, sometimes referred to as ‘ice-boats’ targeting Red Snapper: (*Lutjanus malabaricus* and *erthropterus*) and gold band snapper (*Pristipomodies multidens*) and lesser extent Marble hawkfish (*Cirrhitus pinnulats*). Fleets originate from various ports including Kupang, Kei and Aru Island chains, Merauke, and Probolinggo, east Java (Fox 2008).
- Various *Prawn/Shrimp* trawl fisheries, particularly in the Arafura Sea on the Indonesian side of the border and along the coast of Papua with key penaeid shrimp species (e.g banana, tiger, king, endeavour along with dozens of other shrimp species) are overexploited. These trawl fisheries affect smaller demersal fish caught as bycatch and discarded (Wagey *et al* 2009, Wirasantosa 2009)
- *Trepang* fisheries: namely artisanal fisheries operating legally inside the MOU Box area in Timor Sea especially at Scott Reef. Inside the MOU box there is a high probability that the stocks of many species are depleted, due to low densities below what would normally be acceptable under management. However there is no evidence as yet to suggest significant trends of decreasing density and the fishery continues to provide a livelihood for hundreds of Indonesian fisher families (Prescott 2009 pers.comm). In Indonesian waters there exist major gaps on stock status.
- *Trochus* fisheries: trochus (listed in CITES) was a key target species in the past by Indonesians accessing the northwest coast of Australia, but recently appears to have declined possibly due to extremely low population densities and market demand internationally. Trochus it is often gathered while fishers are collecting trepang on offshore reefs.
- *A list of selected species found in Arafura and Timor Seas is provided in Annex 2*

44. Root causes relate to lack of information on the extent and nature of unsustainable use and overexploitation of resources, absence of a regional management approach, poor enforcement by government (e.g. IUU fishing), lack of effective management including plans and coordination, and lack of capacity. Strong demand for high value resources and markets at local, regional and international levels also contributes to the problem. For the artisanal fishers there remains a lack of viable suitable livelihood (whether through livelihood diversification or new activities).

Depletion of economically important coastal and marine fisheries (national level)

45. In each of the countries in the ATS region there are high levels of exploitation of many localized subsistence and commercial coastal and marine species. This occurs due to unsustainable fishing by subsistence artisanal, and industrial including IUU foreign fishing activity inside EEZ's of ATSEA countries. Depletion of localized commercial resources such as trepang is a particular concern, due to the high value of this species and the significant numbers of groups targeting it. Trochus shell is also highly sought after. These issues have direct transboundary ecological and socio-economic impacts. Some of the drivers of IUU fishing in Australian waters are a result of depletion of coastal fisheries in Indonesian waters. The situation in respect of Timor Leste is lesser known.

46. The main social impacts relate to food security – where some local populations in the ATS region are heavily dependant on fish (especially those marginal groups who do not have access to or ownership of land and are migratory in nature) and it is likely this pattern is undergoing change in some areas of the ATS (Darwin ATSEA Workshop proceedings 2008). Overfishing including that by migratory and foreign fishers is placing additional pressure on existing food sources and local livelihood sustainability leading towards a major problem. Economic impacts of IUU fishing include loss of revenue – extremely high for Timor Leste, Indonesia and Australia. High demand for certain species, also poor market access by fishers for many groups for pelagic and demersal species – means that they get low value for certain species, limiting income earning opportunities. Challenges in developing and sustaining alternative or supplementary livelihoods and improving resource management outcomes in ATS region include developing appropriate livelihood diversification and or new activities outside of traditional or established activities for local coastal populations in face of significant socioeconomic and cultural challenges.

47. Root causes of unsustainable fishing relate to lack of food alternatives, increasing coastal populations, viable suitable livelihood opportunities for rural coastal peoples in the region, (whether through livelihood diversification or new activities), poor information on fisheries stocks and impacts of overharvesting, potentially as well as different cultural views on causes of declining harvests of resources, weaknesses in coordination and management across government, poor enforcement by government at all levels and potentially breakdown of traditional management regimes.

Declines in populations of migratory marine species

48. The ATS region is a migratory pathway for a number of protected and endangered migratory and endemic species (e.g. cetaceans such as whales and dolphins), dugongs, turtles, whale sharks – technically belonging to sharks/rays but included in this group due to their long migratory range and protection similar to other migratory species) moving between northern Australia, Indonesia and Timor Leste and further north into Savu and Banda Seas in eastern Indonesia. There is a major lack of information on cetacean depredation (Kahn 2002) and links to cetacean threats from other fisheries such as tuna longline fisheries in Indonesia. These species are protected at various levels to support species conservation such as Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and Convention for Migratory Species (CMS).

49. Seasonal aggregations of whale sharks (*Rhincodon typus*) at Ningaloo Reef, Western Australia, the largest fish in the world, form the basis of a large seasonal multi million ecotourism industry. Despite on-going research during the local annual aggregation, relatively little is known about the migration and aggregation patterns of this whale shark population once it travels north beyond Australian waters. Whale sharks tagged at Western Australia have been tracked over periods of up to four months showing migration paths from northwest Australia into Indonesian and Timor Leste waters and beyond. Whale sharks feed on the fry of various species of pelagic and benthic fish and their migration through the waters of Nusa Tenggara Timor appears to be directly related to the timing and location of fish spawning (Stacey et al 2008). Whale Sharks are provided international protection through inclusion in Appendix II of both CITES, and CMS a status which

strictly regulates the trade of the species based on quotas and permits to prevent their unsustainable use. Appendix II of CMS requires parties to cooperate to develop arrangements aimed at the protection and conservation of species listed on it such as the whale shark. What is unknown is the level of exploitation of whale sharks in eastern Indonesia. Conservation of this highly migratory, long-lived species will require international cooperation to ensure the species is protected.

50. Key threats to declines in populations of these species relate to fisheries, through excessive bycatch such as turtles in trawling activity in Arafura Sea, death from various forms of marine debris (through entanglement or ingestion), a major problem in the ATS region. For example in northern Australian waters some of the largest derelict nets (estimated to weigh around 5 tons and measure 4 kms in length) found believed to be gill nets from Taiwanese fishing boats. Other derelict nets are believed to originate from Indonesia, Korean, and Chinese fisheries. Degradation of feeding and breeding habitats due to various human activities and development and declines in availability of food resources and climate change also threaten populations.

51. Root causes of declines in populations of migratory marine species relate to poor enforcement of existing regulation arrangements and management agreements, poor information on the biology and ecology of migratory species, lack of awareness of status and conservation significance, poor information sharing, research and collaboration between littoral nations, absence of a regional approach to migratory species conservation and management and nutritional and cultural reliance on migratory species.

Coastal and Marine Habitat destruction/modification

- *Degradation and biophysical changes of key habitats (coral reefs, mangroves and sea grass beds)*

52. Three key habitats in the ATS region - coral reefs (coastal and offshore), mangrove forests and sea grass beds - support local, national and globally significant marine biodiversity and provide life support systems for millions of coastal, indigenous and marginalized communities across Indonesia, Timor Leste and PNG (and Australia).

53. Common threats relate to destructive fishing/collecting practices (e.g. cyanide, blast fishing and coral mining, habitat destruction while harvesting marine products such as mud crabs), harvesting of mangrove timber; pollution and erosion from land management and coastal development practices (e.g. logging, land clearing, agricultural practices, aquaculture, industrial, tourist and housing development in coastal zone, sewerage and shipping activity. The petrochemical (oil and gas) and minerals (e.g. gold, copper mines) industries situated in ATS region in four littoral nations and in Timor Sea near offshore coral reef areas also poses a threat to habitats. Climate change and natural disasters can also severely threaten these ecosystems especially coral reefs who have been subject to coral bleaching events in the past in the Timor Sea.

54. Root causes include lack of viable suitable livelihood (whether through livelihood diversification or new activities) opportunities for rural coastal peoples in the region – that have minimal ecological, social, cultural and economic impacts; lack of community access to appropriate technology, knowledge, finances and skills; and global market demands at regional and international levels for resources (e.g. minerals, oil). Poor baseline information on socio-economics, the state of the ecosystems and a systems understanding of issues such as cumulative impacts and effects, feeding and breeding grounds of various species and impacts to recruitment. Lack of integrated coastal zone development planning and catchment management and enforcement (poor compliance) across sectors, and regionally, also contribute to degradation of ecosystems.

Environmental change and impacts on ecosystem dynamics

- *Changes to Arafura and Timor Seas ecosystem dynamics*

55. An important feature that links the oceanographic processes in the region is the Indonesian Throughflow and Leewin Current, with the global exchange of water an essential element of the global climate system delivering water from the Western Pacific Ocean to the Indian Ocean. These are fundamental drivers of oceanographic and ecological processes in the region.

56. Oceanography of the ATS region is affected by the main flow of water mass from Pacific to Indian Ocean which is transported through Makassar Strait into the Flores Sea and Banda Sea where it turns toward Timor Sea and Ombai Strait. A minor component of the main flow goes through Lombok strait to the Indian Ocean. The transport volume indicates that Timor Sea represents the main route of Pacific water that flow to the Indian Ocean. During the west monsoon, water transport into the Banda Sea exceeds those that outflow from the Banda Sea into Maluku, Seram and Arafura seas. Therefore, down welling occurs in Banda Sea during the west monsoon, and upwelling occurs during east monsoon resulting from excessive outflow from Banda Sea into Flores Sea and Timor Sea. The upwelling brings water mass from depths of 125 m -300 m to the surface.

57. Threats to ATS ecosystem relate to climate change including sea level/temperature changes, weather patterns (e.g. cyclones) and ocean acidification. The ecological impacts of depletion/removal of key resources and habitats from marine ecosystems include changes in recruitment patterns/processes of various species and depletion of fish populations and decrease in biodiversity. In the medium to long term this may cause changes to ATS ecosystem balance and dynamics. On the other hand, application of research and knowledge on the physical and biogeochemical systems that affect the marine environment in the ATS area is still very limited. Considering the nature and condition of the ATS area, research and knowledge on climate change and sea level change are needed in order to anticipate and develop an adaptataion strategy for the area. Regional cooperation, information sharing and monitoring of adaptation approaches among littoral nations will be an integral part of the project.

Table 1: Preliminary Arafura-Timor Seas Transboundary Concerns, Issues, Threats, Root Causes

Priority Concern	Issues	Threats	(Root) Causes
Exploitation of fisheries & other living coastal and marine resources/biodiversity	Depletion of shared transboundary fisheries stocks (e.g. Sharks/rays, snappers, prawns/shrimp).	Unsustainable artisanal and industrial fishing practices and management (e.g. overexploitation, overcapacity, destructive methods, Includes Unreported and Unregulated (IUU) fishing activities)	Lack of information on the extent and nature of unsustainable use and overexploitation resources Absence of a regional management approach Poor enforcement by government (e.g. IUU fishing) Lack of effective management (inc plans) and coordination Lack of capacity Increasing demand/markets– local, regional, international Lack of available viable appropriate livelihood alternatives for artisanal

			fishers
	Depletion of economically important coastal and marine fisheries (wide range of species) (national level, e.g. trepang)	Unsustainable fishing (subsistence, artisanal, industrial and IUU fishing) including destructive fishing practices, excessive wastage.	<p>Lack of food alternatives</p> <p>Increasing coastal populations</p> <p>Lack of viable sustainable alternatives/supplementary income opportunities</p> <p>Poor information on fisheries stocks and impacts of overharvesting</p> <p>Weaknesses in coordination and management across government</p> <p>Poor enforcement by government at all levels</p> <p>Breakdown of traditional management regimes (<i>sasi</i>).</p>
	Declines in populations of migratory marine species (e.g. whales, dugongs, turtles, whale sharks)	<p>Excessive bycatch and destructive practices from commercial fisheries including IUU fishing</p> <p>Degradation of feeding habitats and breeding grounds and declines in food resources (due to other threats)</p> <p>Land and marine based sources of pollution (e.g. marine debris, coastal development, sedimentation, aquaculture, oil-gas exploration/exploitation)</p> <p>Possible unsustainable tourism practices</p> <p>Climate change (e.g. increase sea temperature)</p>	<p>Poor enforcement of existing regulatory arrangement and management agreements</p> <p>Poor information on the biology and ecology of migratory species</p> <p>Lack of awareness of status and conservation significance</p> <p>Poor information sharing and research collaboration between littoral nations</p> <p>Absence of regional approach to migratory species conservation and management</p> <p>Nutritional and cultural reliance on migratory species</p>

Priority Concern	Issues/Problems	Threats	(Root) Causes
Coastal and marine habitat destruction/modification	Degradation and biophysical changes of key habitats (coral reefs (coastal and offshore), mangroves, sea grass beds	<p>Destructive fishing practices (e.g. blast fishing and coral mining</p> <p>Pollution & erosion from land/coastal practices (e.g. logging, land clearing, agriculture practices, aquaculture, industry, coastal development for housing settlements, tourism, sewerage,</p>	<p>Lack of viable sustainable livelihoods</p> <p>Lack of community access to appropriate technology, finance and awareness of impacts</p> <p>Lack of baseline information on the state of the environment and systems understanding (e.g. culmative impacts</p>

		ports) Pollution from coastal and offshore mining and oil/gas exploration and production (esp. in Timor Sea) and shipping Global and regional climate change Natural disasters (e.g. cyclones)	and effects (e.g. feeding/breeding grounds of various species and impacts to recruitment) Lack of integrated coastal zone development planning, catchment management and enforcement (poor compliance) Lack of coordination across sectors and programmes Global Demand for resources (e.g. timber, minerals) Climate change (threat and cause)
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Priority Concern	Issues/Problems	Threats	(Root) Causes
Environmental change and impacts on ecosystem dynamics	Changes to ecosystem dynamics (e.g. Arafura –Timor Sea ecosystem dynamics)	Climate change including sea level/temperature changes, weather patterns (e.g. cyclones), and ocean acidification Removal of key species and habitats from marine ecosystems	Poor information on the patterns, functioning and dynamics of ecological/biogeochemical systems Poor information sharing and research collaboration and monitoring and mitigation approaches between littoral nations

58. The barriers to the priority concerns that will be addressed by the project are three-fold:
1. Inadequate scientific knowledge and understanding of main threats to the ATS region at regional scales (TDA Component)
 2. Weak institutional framework for regional governance and management of biodiversity values and threats (SAP component and regional cooperation mechanism)
 3. Opportunities to replicate and scale-up effective activities on a regional scale (local demonstration projects)

1) Inadequate scientific knowledge and understanding of main threats to the ATS region at regional scales (TDA Component)

59. Poor and in some cases, a total lack of baseline information exists in relation to all priority transboundary regional environmental concerns and threats identified in the ATS region. Some baseline studies have been conducted at the national level such as in Indonesia and Australia and some bilateral discussions (e.g. Australia-Indonesia on fisheries management) have taken place, but there has been limited scientific analysis at a regional level by all ATSEF member countries. Furthermore, these studies and discussions have tended to be sectoral focused. A multi-disciplinary and multi-stakeholder approach is required to address ATS threats. The GEF IW Learn TDA science-based approach which analyses biophysical, socio-economic and environmental issues and impacts to identify immediate and underlying root causes in association with governance analysis will enable ATSEF to priorities problems and actions, given it is not possible for ATSEA to address all concerns and root causes at once. A TDA will allow countries to identify and priorities those most pressing transboundary issues with greatest ecological and socio-economic impacts, to be addressed under this initial phase both through regionally and nationally activities in Indonesia, Timor Leste, Australia and PNG.

2) Weak institutional framework for regional governance and management of biodiversity values and threats (SAP component and regional cooperation mechanism)

60. In order to address priority environmental concerns in the ATS given the transboundary nature of these problems and drivers outside of the region a strong multi-lateral regional governance arrangement is required. The ATSEA program will allow for littoral nations to coordinate and address incompatibility issues regarding national legislation and monitoring, surveillance and control activities for management of transboundary species, habitats and combating IUU fishing.

61. Currently ATSEF has provided a mechanism from which to commence regional cooperation on management of ATS region. The ATSEA Project will enable identification of most preferred option to ensure cooperative ecosystem management of ATS. A formal governance arrangement will enable underlying root causes relating to research, information sharing be addressed through regional collaboration on conservation and management of fisheries, habitats, migratory species and poverty alleviation.

3) Opportunities to replicate and scale-up effective activities on a regional scale (local demonstration projects).

62. Given the diverse ethno- linguistic and cultural context of ATS region, the challenges will be to ensure that pilot demonstration projects at local level are designed and implemented in accordance with local and socio-economic needs, demonstrate local benefits (socio-economic) in a participatory framework while being appropriate for replication across the region. The demonstration projects will be identified through the TDA/SAP/NAP phases and will ensure the most appropriate communities and types of projects are implemented i.e. projects appropriate for migrant communities versus more permanent communities, bearing in mind the signification social and economic links across communities especially in eastern Indonesia.. Lessons from the region to alternative livelihoods in marine and coastal contexts and new approach to sustainable livelihoods will be considered to enable ATSEA projects the best likelihood of success. Prioritization and selection of demonstration projects by participating governments will be based on criteria such as projects addressing a regional concern and maximum potential for replication across the ATS region (for example a demonstration project located in an Indonesian island community which has high reliance on subsistence and commercial uses of fish and limited opportunities to pursue non-maritime orientated livelihoods). The sharing of approaches regionally for local adaptation will enable a wider suite of opportunities to be considered such as new approaches which have been piloted in northern Australian indigenous communities (e.g. payment for environmental services). Sharing of results among local, national and regional stakeholders will enable identification of appropriate processes and methods for replication. A replication strategy will enable linkages between and across other NRM initiatives in the region to ensure improved socio-economic conditions for coastal people in the ATS region. This will need to be supported by strong and effective multi-dimensional communication strategy (e.g. media, public relations, and education and awareness aimed at changing behavior).

Summary

63. The threats facing the ATS region are transboundary in nature and can only be effectively addressed through multi-lateral cooperation between all four littoral nations. The rationale for the GEF Full Scale Project (FSP) is therefore the need for the littoral nations to work cooperatively to sustain shared living resources, conserve marine and coastal biodiversity, and improve sustainable socio-economic conditions and opportunities for coastal peoples. It is also based on the need for international assistance and catalytic financing, recognizing the significant development challenges and resource limitations facing Timor Leste, which is classified as both a Least Developed

Country (LDC) and a Small Island Developing State (SIDS), as well as those facing Indonesia and additionally PNG, which is also designated as a SIDS.

Through the GEF intervention, including the undertaking of a Trans-Boundary Diagnostic Analysis (TDA), development of a Strategic Action Programme (SAP), and implementation of innovative demonstration projects, the littoral nations will be greatly assisted to collaboratively understand and address the shared waters problems that cannot be solved by any one country on its own.

Stakeholder analysis

The major stakeholders involved in this project are:

- Governments of Indonesia, Timor-Leste and Australia and potentially PNG
- coastal and indigenous communities
- commercial industry sectors
- scientific research institutions and research agencies
- environmental and other NGOs

64. Of significant benefit to the proposed project is the ATSEF partnership which provides an established and effective mechanism for engaging relevant stakeholders. Since its inception, more than 60 Indonesian groups have been engaged in ATSEF including government, environmental, NGOs, universities, and community organizations. In Australia, Indigenous communities have been integral to the development of ATSEF, Government support and participation is strong, and marine research agencies and universities have been integral to ATSEF arrangements. The Timor-Leste Government has been a strong supporter of ATSEF since it evolved, and local community representation and NGOs engagement are growing as Timor Leste's capacity develops.

65. Several consultation meetings with key stakeholders have been conducted in Jakarta, Kupang, Dili and Bogor. The outcomes of these meetings clearly show strong engagement and eagerness from stakeholders to involve in this project. During the demonstration project they will be involved in the implementation.

66. All of the stakeholders listed above will be direct or indirect beneficiaries of the project, with the *Primary Beneficiaries* being the coastal and indigenous communities of the littoral nations. Detailed stakeholders involvement within this project is provided in Section IV (Part IV: Stakeholder Involvement Plan).

Baseline analysis

67. The baseline scenario is that IUU fishing, habitat destruction and marine pollution will seriously hamper the ability of the littoral nations of the ATS region to export fish to the fish-protein reliant nations in the Asia-Pacific region, and coastal communities will be unable to feed themselves. Regional food security will be jeopardized and absolute and relative poverty levels will continue to be high in many coastal communities, except in pockets where alternative or supplementary livelihood projects and projects to improve existing livelihoods are possible. Inter-coastal community resource competition and conflict, sometimes resulting in violence, will continue to rise. This competition will result in degradation of marine and coastal ecosystems, depletion of commercial stocks, and threats to the viability of migratory species populations. While limited and isolated research activity may be possible, regional collaboration to improve understanding of transboundary issues will not be possible without the coordination frameworks and resources to support this activity.

The net result of the baseline scenario has some serious implications for both the immediate region and Asia in general, through increased competition for resources, loss of food security, and an absence of regional understanding of ecosystem functioning and dynamics.

68. With the goal to sustaining living resources and the livelihoods of the people who depend on them for food security, the littoral nations of the Arafura and Timor Seas have formed ATSEF, and are undertaking a range of national and regional activities to address the five ATSEF priority areas. However, comprehensive regional engagement is not possible without additional technical assistance and investment to pursue long-term regional goals. The GEF IW framework of TDA, SAP and IW Learn Networks can support this.

PART II: Strategy

Institutional, sectoral and policy context

69. The FSP underlines collaboration by the littoral nations of the Arafura and Timor Seas to protect and manage shared living resources, and change the trend from poverty to sustainability among coastal and indigenous communities. In Indonesia, the law #31/2004 and # 17/2007 provide a legal umbrella to support activities as proposed in this project.

70. The need for international assistance and catalytic financing is also based on the many competing development priorities in the littoral nations, including several severe natural disasters in Indonesia, and Australia's ultimately finite capacity to provide ongoing technical and financial support to the region.

71. The Timor Leste Government has declared that habitat restoration in the coastal area is a national priority. Approximately 44% of Timor Leste lies at more than 40% slope, which increases the incidence of run-off, landslides, water turbidity and sedimentation of downstream coastal areas where natural habitats have been degraded. An initiative funded by the Ministry for Agriculture, Forestry and Fisheries of Timor Leste in collaboration with ATSEF – Australia members is being implemented to assist the Timor Leste Government improve information to address national priorities.

72. The Indonesian government has developed Long-term and Mid-term National Development plans that include marine and coastal development initiatives. The MMAF on behalf of Indonesian government has a number of cooperative fisheries initiatives and arrangements with all three of the other ATS littoral countries.

73. PNG is not currently an active participant in ATSEF but is actively engaged in the CTI and has expressed interest in joining ATSEF and the ATSEA project. Every effort will be made to engage PNG more fully in the project through the development of the SAP.

74. All ATS littoral nations are actively involved in the implementation of the Regional Plan of Action for IUU fishing.

75. ATSEF provides an extremely important foundation for regional institutional, sectoral and government engagement in the ATS region. Strengthening of mechanisms for regional marine resource information gathering and management coordination is an important objective of the ATSEA project.

76. The ATSEA project will offer a model for implementing the comprehensive vision of the Manado Oceans Declaration, endorsed by countries on the 14th May 2009, during the Indonesian hosted World Ocean Conference (WOC). The ATSEA project also compliments the "Coral Triangle Initiative on Coral Reefs, Fisheries and Food Securities and Adaptation to Climate

Change” (CTI-CFFC), a new multilateral partnership of the governments of Indonesia, Philippines, Malaysia, Timor Leste, Papua New Guinea and the Solomon Islands (CT6). The CTI is supported and carried forward by the CT6 countries with the support of other multilateral agencies (GEF, ADB, UNDP, FAO, etc), bilateral governments (e.g, United States of America and Australian Government), civil society (NGO) and private sector partners. Overall, CTI aims to provide a major contribution toward safeguarding the marine and coastal biological resources of the region for the sustainable growth and prosperity of current and future generations.

77. Heads of state of the CT6 countries officially signed a CTI Leaders' Declaration 15 May, 2009. In addition to this Declaration, they agreed to formally launch a program on and by acclamation stated to adopt a CTI Regional Plan of Action (RPOA).

78. With the CTI-CFFC, some member countries of CTI have committed to provide contribution for the implementation of RPOA and NPOA. In particular, Indonesia expressed financial support amounting to US\$5 million, PNG US\$2 million, the Philippines US\$5 million, and Malaysia US\$1 million. These commitments from the Coral Triangle member countries were not part of those provided by international donor agencies which have so far expressed their commitment, such as the United States of America with committed funds amounting to US\$40 million, Global Environment Facilities (GEF) amounting US\$63 million, and Australia amounting to Aus\$2 million.

79. The ATSEA project and the CTI share the following principles:

- focus on food security and fisheries
- support for community based biodiversity conservation, sustainable development, and poverty reduction
- importance of improving knowledge and supporting research collaboration
- commitment to using and improving existing arrangements where possible rather than duplicating or adding new mechanisms
- alignment with existing international and regional commitments and agreements
- recognition of the transboundary nature of some threats, resources, species and habitats
- engagement of government and non-government stakeholders

80. The ATSEA project also links strongly to and will compliment the implementation of the following CTI Over-arching Commitments to Action:

- Priority seascapes designated and effectively managed
- Ecosystem approach to management of fisheries
- Marine Protected Area (MPAs) established and effectively managed
- Climate change adaptation measures achieved
- Threatened species status improving

81. The ATSEA project is in line with the overall CTI Regional Plan of Action as ATSEF was directly mentioned in the CTI guiding principle #4 as follows: “CTI should use existing and future forums to promote implementation. Relevant existing forums should be used to implement actions under the CTI. These include, for example, tri-national commissions on the Sulu Sulawesi Seas (SSME) and Bismarck Solomon Seas (BSSE); APEC; ASEAN; Secretariat for the South Pacific Regional Environment Program (SPREP); the Brunei, Indonesia, Malaysia and Philippines ASEAN Growth Area (BIMP-EAGA); Arafura and Timor Seas Experts Forum (ATSEF); and Program for the Environmental Management of the Seas of East Asia (PEMSEA)”.

82. Related to the main goal of CTI, the ATSEA project has high relevancy to four principles goals of CTI. The main interconnection between CTI and ATSEA is reflected in CTI Goal #1 “Priority Seascapes Designated and Effectively Managed”, especially with the target to sustainably manage marine and coastal resources within all priorities seascapes.

83. Related to Goal #2 “Ecosystem Approach to Management of Fisheries (EAFM) and Other Marine Resources Fully Applied”, ATSEA has significant connections, especially in implementation of an ecosystem approach to fisheries management in Arafura and Timor Seas. Also within this goal, strong attention is being put forward to combat IUU fishing.

84. Goal #3 “Marine Protected Areas (MPAs) Established and Effectively Managed” is very relevant with ATSEA because of the high biodiversity of ATS region. The establishment of the Savu Sea MPA will significantly impact on this biodiversity especially in the Timor Sea.

85. Regarding Goal #5 “Threatened Species Status Improved ATSEA is playing an important role in protecting threatened species especially marine mammals including dugong. The role of coastal communities in ATS will be critical to achieve this goal.

Project Rationale and Policy Conformity

86. The project is consistent with the first objective of the GEF International Waters (IW) focal area to foster international, multi-state cooperation on priority transboundary water concerns through more comprehensive, ecosystem-based approaches to management, as well as the Strategic Program 1 on Restoring and Sustaining Coastal and Marine Fish Stocks and Associated Biological Diversity, which targets southeast Asian seas as one of the global hotspots.

87. The ATS region is a “new” transboundary system that to date has not benefited from GEF intervention and the implementation of foundational capacity building. The project will therefore build foundational capacity and pilot test some innovative demonstrations on fisheries conservation and coastal and marine resource management in the ATS region, which will generate socio-economic co-benefits for coastal communities. It is anticipated that successful demonstrations will be replicated and scaled up in a subsequent phase.

88. GEF intervention to assist the undertaking of a TDA to identify, characterize and agree upon priority transboundary and globally significant biodiversity issues and their root causes, and to close identified knowledge gaps, would provide the basis for a SAP which outlines the reforms and investments needed for sustaining the living resources of the seas and providing food security for the foreseeable future.

Project Goal, Objective, Outcomes and Outputs/Activities

Project Goal:

- Ecologically sustainable management and use of the living coastal and marine resources, including fisheries and biodiversity, of the Arafura-Timor Seas region, and improved, sustainable socio-economic conditions and opportunities for coastal peoples in the Arafura and Timor Seas region.

Project Objective:

- To ensure the integrated, cooperative, sustainable, ecosystem-based management and use of the living coastal and marine resources, including fisheries and biodiversity, of the Arafura and Timor Seas, through the formulation, inter-governmental adoption and initial implementation of a Regional Strategic Action Programme (SAP).

Project Components and Outcomes:

Component 1: Transboundary Diagnostic Analysis

Outcome: *Approved TDA* which identifies the ATS transboundary priority environmental problems, environmental & socio-economic impacts, sectoral and root causes and governance analyses.

89. This will include the development of a biophysical profile of ATSEA and coastal areas including fisheries and biodiversity assessment; socio-economic and governance profile including resource user groups, market networks, productive value chains, and market access opportunities; a stakeholder assessment; and causal chain analysis and options to address national and transboundary problems.

90. A joint marine ecosystem assessment cruise will be undertaken between Indonesia, Timor Leste and Australia in the Arafura and Timor Seas. The cruise will cover study areas including physical and biological oceanography, biodiversity and fisheries analysis of the region. The scientists involved in this study will be composed of government and university researchers from Timor Leste, Indonesia and Australia. Expected results of the ATSEA Cruise:

1. The ATSEA Cruise is expected to produce information on oceanographic characteristics of the study area and its related to biological profile and status of living marine resources.
2. Results of research undertaken on the cruise will provide optimum benefit to coastal communities. Analysis of the socio-economic and governance profile of the ATS region involving resource user groups, market networks, productive value chain and market access opportunities will be considered as a parallel study.
3. Information obtained through the ATSEA Cruise will also be important to a wide range of stakeholders including scientists, policy and decision makers, and coastal communities.

91. During the process of the TDA development, the project will benefit from series of discussions involving stakeholders at the local and national levels. This process will result in stronger support and high ownership from all stakeholders to the sustainable development objective for Arafura and Timor Seas.

Component 2: SAP/NAP Development.

Outcome: *SAP and NAPs agreed and adopted* at the national (inter-ministerial) and regional (inter-governmental) levels.

92. The reforms and investment actions required at both the national and regional levels, in the form of a regional SAP and National Action Programmes (NAPs), to effectively address the root causes of the priority transboundary issues identified in the TDA are identified, agreed and adopted.

The SAP resulting from discussions with stakeholders, will reflect the identified strategic governance reforms to achieve sustainable development in Arafura and Timor Seas. The discussion process will also identify key players to implement the strategic actions agreed among ATSEF member countries, and the prioritized activities in each country that can be funded by national budgeting system. The NAP developed in relation to SAP contains prioritized national efforts to achieve sustainable development of the ATS in the national jurisdiction area. It is estimated that the SAP and NAPs will be finalized within 24 months of FSP start and endorsed at a high level by the 36th month of the project

Component 3: SAP/NAP Initial Implementation

Outcome: *SAP and NAPs Initial Implementation:* Initial implementation of some SAP and NAP components, through targeted demonstration projects addressing high priority transboundary issues identified by the TDA, to demonstrate the capacity of the littoral nations to cooperate in implementing joint activities, as the foundation for full SAP implementation in a future phase / follow-up project.

93. Limited funding dictates that only a very small number of demonstration projects (possibly only one in each country) will be possible during the FSP. National level demonstrations of alternative or supplementary sustainable livelihoods activities in coastal communities in Indonesia and Timor Leste, utilising experiences and approaches from the region, existing ATSEF projects in Indonesia and Timor Leste including those from northern Australian coastal indigenous communities could include new projects or replication of existing initiatives. These could be supported by sharing of traditional and co-management coastal and marine management practices between coastal and indigenous people in all littoral nations. Below is a list of examples of possible national and regional demonstration projects, as identified during the PPG phase (national and regional stakeholder consultations and preparation of national reports). Confirmation of demonstration projects will be determined through the TDA and SAP processes.

Indonesia

- Demonstration of alternative or supplementary sustainable livelihoods to improve food security and socioeconomic conditions of local communities. This could include new, strengthening or replication of existing initiatives related to
 - Livelihood development initiatives providing local employment (e.g. business enterprises based on sustainable resource use, fisheries/aquaculture/mariculture, ecotourism supported with business planning assistance, consideration of the use of market mechanisms and economic incentives to promote sustainable fisheries practices)
 - indigenous led initiatives on monitoring and management of threats to biodiversity and pollution to marine environment (e.g. migratory species (e.g. turtles, dugongs, whale sharks), marine debris, quarantine).
 - community-based fisheries management.
- Enhanced community-based management of existing Marine Protected Areas (MPAs) and/or develop new MPAs/Indigenous Protected Areas.

Timor Leste

- Improvement of existing marine and fisheries management, local artisanal fishery markets access to regional markets through capacity building, technical assistance, improved infrastructure, and regulation, and monitoring and consideration of the use of market mechanisms and economic incentives to promote sustainable fisheries practices
- New and diversification of livelihood opportunities for improved food security through community-based fisheries and sustainable aquaculture (ie potential for replication of pilot aquaculture initiatives from West Timor to Timor Leste), or small-scale local cultural/marine ecotourism.

Australia

- An opportunity exists under ATSEA for a pilot demonstration project to be conducted in northern Australia utilising co-financing. This could include strengthening or replication of existing initiatives related to:
 - indigenous monitoring and management of threats to biodiversity and pollution to marine environment (e.g. migratory species such as turtles, dugongs), marine debris, quarantine
 - enterprise development (e.g. a range of business enterprises based on sustainable resource use, aquaculture, ecotourism providing local employment)

- Identification of opportunities for community-based management of Marine Protected Areas (MPAs).
- Sharing of traditional and co-management practices and experiences in areas of coastal and marine use and management, and sustainable enterprises development across all four nations

Component 4: Regional Cooperation Mechanism

Outcome: Regional cooperation mechanism: Develop and strengthen ATSEF as an effective regional mechanism for the cooperative eco-system-based management of the ATS region, through the implementation of the SAP and consideration of future models for regional engagement, to be agreed by the participating Governments, ranging from:

- the original ATSEF concept of an informal experts forum,
- a more inter-governmental but still non-binding Arafura and Timor Seas Partnership Council (ATSPAC), through to
- the possible formation of legally-constituted, inter-governmental organization such as an Arafura and Timor Seas Commission (ATSCOM)

Outcome: Sustainable self-financing: Develop a regional self-financing mechanism (eg, a mutli-lateral trust fund or partnership council) to ensure the ongoing implementation of the SAP.

Component 5: Project Coordination and Management (including M&E)

Outcome: Effective Project Coordination and Management: ATSEA Project is effectively coordinated and managed, according to budget and workplan, and including M&E arrangements and procedures.

This involves the establishment of functional PMU, PSC, NSCs and monitoring and evaluation system.

Project Outputs:

- Transboundary Diagnostic Analysis (TDA) for the ATS region including a regional oceanographic and fisheries research cruise leading to improved biophysical information of the ATS and workshops.
- SAP for the ATS region
- NAPs for each ATS littoral nation
- Initial implementation of some NAP and SAP components, through targeted demonstration projects (see above) addressing high priority transboundary threats to fisheries, coastal habitats and improving livelihoods of local communities identified by the TDA
- Strengthened regional cooperation mechanism
- Sustainable self-financing
- Project management arrangements and structures

Project Indicators, Risks and Assumptions

94. The initiative by Australia, Indonesia and Timor-Leste to form ATSEF in 2002, the strong commitment to and investment in ATSEF activities by these countries since then coupled with the strong support for the ATSEA GEF proposal as well as increasing bilateral cooperation on marine resource management issues between these countries (and PNG), bode well for a "low-risk" scenario in relation to the implementation and success of the ATSEA project. There have been significant challenges to setting up an acceptable regime of governance for the transboundary issues of the area, because of longstanding political conflicts, territorial disputes, and competition among and within countries regarding economic development.

95. The main risks to the project are therefore of a geo-political / diplomatic nature, with periodic disagreements between the littoral nations on various issues, occasionally manifesting in the temporary suspension of bilateral diplomatic ties and similar actions. However, the very formation and operationalisation of ATSEF have already proven to be a mitigating factor against such risk, as the informal and non-governmental elements of the Forum have continued to operate when such events have occurred in recent years - providing a conduit for governments when formal inter-governmental channels have been temporarily closed, and maintaining momentum until resumption of formal ties. ATSEF has already created a sound basis for the development and implementation of effective cooperative, regional, integrated management of these transboundary seas.

96. The other main potential risk to the project is the significant development challenges and resource limitations of Timor-Leste, Indonesia and PNG, their many competing development priorities, several severe natural disasters in Indonesia and the socio-political/security crises (and lack of critical regional infrastructure and capacity) in Timor-Leste (as well as parts of Indonesia and PNG in recent times), and Australia's ultimately finite capacity to provide ongoing, large-scale technical and financial support to the region.

97. Despite these challenges, the Arafura and Timor Seas littoral nations have continued to strongly support ATSEF and the ATSEA proposal. With GEF intervention to undertake the ATSEA project, to build and strengthen the existing and evolving cooperative arrangements as outlined above (including the development of a regional self-financing mechanism for ATSEA activities), these risks will be further mitigated. Finally, the development of a regional self-financing mechanism, such as a multi-lateral trust fund or partnership council, will mitigate the risk posed by competition for financial resources.

98. It is highly likely that climate change will exacerbate existing climatic problems. The Arafura Sea and Timor Sea areas have already been subjected to several climate-related hazards including floods, droughts, storms, landslides, and wildland fires. One of the main climatic influences on the Arafura and Timor Seas is the El Nino-Southern Oscillation which provokes the extreme weather events every few years. During El Nino events, droughts become more frequent and severe, during La Nina events, floods become more frequent. Global warming has also implication for millions of coastal fishermen. They rely on highly sensitive ecosystem in which even small changes in water temperature can have large effects.

99. Changes in sea-surface temperature and ocean acidification that damage coral reefs will exacerbate other stresses such as over-fishing which will lead to the reduction of fish stocks. Fishing vessels will also have to cope with more erratic weather and rough seas enroute to and from the fishing grounds and while fishing. The ATSEA project will provide capacity to the communities in the ATS coastal areas to adapt to climate change, through support to sustainable practices in marine and fisheries development. To some extent, this will mean building on traditional knowledge that has been applied for generations.

Strategic Framework for the ATSEA

No.	Strategic Framework
1.	<p>Component 1. TDA</p> <p>Project Strategy <i>TDA developed:</i> TDA which identifies the ATS transboundary priority environmental problems, environmental & socio-economic impacts, sectoral and root causes and governance analyses</p> <p>Project Indicator and targets:</p> <ul style="list-style-type: none"> • TDA finalized within 18 months of FSP start together with technical reports on : <ul style="list-style-type: none"> ○ Biophysical profile of ATSEA and coastal areas including fisheries and biodiversity assessment ○ Socio-economic and governance profile including resource user groups, market networks, productive value chains, and market access opportunities ○ Causal chain analysis and options to address national and transboundary problems proposed • TDA approved by National Inter-ministerial committees and ATSEF <p>Stakeholder assessment and stakeholder engagement plan developed</p>
2.	<p>Component 2. SAP/NAP Development</p> <p>Project Strategy <i>SAP and NAPs developed:</i> Identify, develop, agree and adopt, at the national and regional levels, the reforms and actions that are required in the form of a regional SAP and NAPs, to effectively address the root causes of the priority transboundary issues identified in the TDA.</p> <p>Project Indicator and targets:</p> <ul style="list-style-type: none"> • SAP and NAPs finalized within 24 months of FSP start and endorsed at Ministerial level by the 36th month of the project
3.	<p>Component 3. SAP/NAP Initial Implementation</p> <p>Project Strategy: <i>SAP and NAPs Initial Implementation:</i> Initial implementation of some SAP and NAP components, through targeted Demonstration Projects addressing high priority transboundary issues identified by the TDA, to demonstrate the capacity of the littoral nations to cooperate in implementing joint activities, as the foundation for full SAP implementation in a future phase / follow-up project.</p> <p>Project Indicator and targets:</p> <ul style="list-style-type: none"> • All three Demonstration Projects commenced within 18 months of FSP start. • All Demonstration Projects completed by end of FSP and leading to improved livelihoods (15% increase in income) among target communities) and reduced pressure on marine resources
4.	<p>Component 4. Regional cooperation mechanism</p> <p>Project Strategy:</p> <ul style="list-style-type: none"> • <i>Regional cooperation mechanism:</i> Develop and strengthen ATSEF as an effective

	<p>regional mechanism for the cooperative eco-system-based management of the ATS region, through the implementation of the SAP, and consider and future models for regional institutional arrangements, to be agreed by the participating Governments.</p> <ul style="list-style-type: none"> • <i>Sustainable self-financing</i>: Develop a regional self-financing mechanism, such as a mutli-lateral trust fund or partnership council to ensure the ongoing implementation of the SAP and subsequent cooperative regional actions after the conclusion of the FSP. <p>Project Indicator and targets:</p> <ul style="list-style-type: none"> • <i>Agreement on preferred regional cooperation mechanisms</i> <ul style="list-style-type: none"> - Preferred model identified and agreed at SAP adoption (24 months after FSP start). And formally adopted and ready for implementation at end of FSP. • Self financing mechanism agreed, developed and in-place – including actual commitment of funds to ensure the ongoing implementation of the SAP post FSP. <ul style="list-style-type: none"> - By end of FSP, all participating countries contribute funds to the mechanism
5.	<p>Component 5 -Project Coordination & Management</p> <p>Project Strategy: <i>Effective Project Coordination & Management: ATSEA Project is effectively coordinated and managed, according to budget and workplan, and including M&E arrangements and procedures</i></p> <p>Project Indicator:</p> <ul style="list-style-type: none"> • PMU established and fully operational • PSC established and fully operational • NSCs established and fully operational • NCs recruited and fully operational • M&E procedures operating

Incremental reasoning and expected global, national and local benefits

Without GEF:

100. There is a very strong will to collaborate to sustain the ATS in the governments of the littoral nations and in other stakeholders, as manifest in the very formation of ATSEF in 2002. With existing funding resources, a start has been made, especially at the national level. However, the ATSEF experience to date has highlighted the need for international assistance and catalytic financing, especially to address regional, transboundary issues through multi-lateral cooperation. This need stems from the significant development challenges and resource limitations of Timor-Leste, Indonesia and PNG, their many competing development priorities, including several severe natural disasters in Indonesia and socio-political/security crises in Timor-Leste in recent times, and Australia's ultimately finite capacity to provide ongoing technical and financial support to the region, of the scale necessary to be effective.

101. Without catalytic support from GEF towards achieving sustainable management and use of the living coastal and marine resources of the Arafura-Timor Seas region, unsustainable fishing practices including IUU fishing, and destruction of key habitats will seriously threaten economies and livelihoods of people at all levels: locally, nationally, and regionally. Unregulated and overfishing in coastal areas will result in depletion of economically important fisheries causing food shortages, and greater dependence on other natural resources. Inter-community conflicts will increase with competition over finite resources. Coastal and fishing communities will become

economic migrants, except in areas where alternative livelihood projects are successful, unable to feed themselves or provide sustainable livelihoods leading to increase in poverty in some areas where high poverty levels in the region already exist (e.g. Timor Leste and NTT provinces in Indonesia). This will create instability and poverty within and around the region. IUU fishing will continue to seriously degrade ecosystems, affect local livelihoods and potentially result in the ultimate removal of key species from ecosystems, leading to dramatic changes in the patterns and functioning of the Arafura and Timor Seas ecosystems. A lack of cohesive regional management of priority environmental issues will cause further declines in biodiversity of global significance. While some projects and research activity may continue in the region at national or bilateral levels, regional collaboration to improve understanding of transboundary issues will not be possible without the GEF supported coordination frameworks and resources to support this activity.

With GEF:

102. GEF intervention to assist the undertaking of a TDA to confirm, characterize and agree upon priority transboundary and globally significant biodiversity issues and their root causes, and to close identified knowledge gaps, would provide the basis for a SAP of policy, legal and institutional reforms, and investments, for sustaining the living resources of the seas and providing food security for the foreseeable future.

103. With GEF assistance, the littoral nations will have the opportunity to take advantage of IW-TDA and SAP processes, and to link to IW-Learn networks for learning while doing. This will generate the reform and investment actions required at both the regional and national levels, to effectively address the root causes of the priority transboundary issues. An appropriate GEF intervention will prove catalytic in maintaining a source of food security for the broader Asian region, and making a difference to the livelihoods of the coastal communities, with the collateral benefit of slowing the rate of habitat destruction.

104. Such an approach is consistent with the GEF movement towards integrated natural resources management and regional collaboration needs, as recognized by the global community through the Millennium Development Goals (MGGs) and WSSD Plan of Implementation (PoI). This approach also relates directly to IW Strategic Objective 1: to catalyze implementation of management action programmes, regional/national reforms, and stress reduction measures agreed through TDA and regional SAP or equivalent processes for transboundary water systems.

105. Despite its geo-political significance (as highlighted by various frictions and issues between and within Indonesia, Timor-Leste, PNG and Australia), its socio-economic significance (as highlighted by the very high dependency of coastal and indigenous populations on coastal and marine resources and the rapid development of various coastal and marine industries in the region), and its ecological significance, the ATS is transboundary system that has not benefited from GEF intervention and the implementation of foundational capacity building. The project benefits are therefore also very much linked IW Strategic Objective 2: to expand global coverage of foundational capacity building (enabling activity equivalents) to a limited number of “new”, critical transboundary systems, with a focus on key program gaps and integrated, cross focal area approaches. This is also consistent with stated GEF 4 IW provision to invest in limited “new starts” in transboundary water systems experiencing conflict and competing uses (as is the case in the ATS region).

106. Through GEF intervention, including the undertaking of a TDA, the development of a SAP and NAPs, and the implementation of innovative demonstration projects (which relates directly to IW Strategic Objective 3), the littoral nations will be greatly assisted to collaboratively understand (through the TDA) and address (through the SAP and NAPs), the shared waters problems that cannot be solved by any one country on its own.

Country Ownership: Country Eligibility and Country Drivenness

107. Australia, Indonesia and Timor-Leste have demonstrated their commitment to the development of cooperative, regional arrangements for the ecologically-sustainable management and use of the ATS region, and for the ATSEA project, through the formation of ATSEF, and the undertaking of a range of regional and national initiatives, both within and outside of the framework of ATSEF. Indonesia and Timor-Leste are eligible to receive GEF grants in accordance with the GEF Instrument (para 9b). The countries host UNDP offices and receive UNDP technical assistance.

108. PNG has also demonstrated strong country drivenness for these matters, through expressing interest to join ATSEF and the ATSEA project, and through a history of strong bilateral engagement with Australia and Indonesia on various transboundary issues.

Indonesia:

109. Sustaining and enhancing the profitability of Indonesia's significant marine and coastal resources has been, and continues to be, a stated Republic of Indonesia National Priority. With forest and other natural resources dwindling, the Indonesian Government looks to the marine and coastal wealth of this maritime nation for future growth potential.

110. Hindering this aspiration is the fact that of an estimated US\$3 billion generated by Indonesia's seas, only US\$700 million returns to Indonesia. Illegal (IUU) fishing is one major reason for the disparity in wealth generated in Indonesia's waters and the benefits that flow to Indonesia.

111. To address its national interests in relation to coastal and marine resource management, Indonesia is a signatory to all relevant major international marine agreements. Through the Ministry for Marine Affairs and Fisheries (MAFF) and its various Directorate Generals and Agencies, and in collaboration and consultation with other government parties and sectors, including Provincial and District (Kabupaten) Governments, Indonesia has developed a National Oceans Policy and coastal and marine resource management plans at the Provincial and District levels. These include the three Indonesian provinces (East Nusa Tenggara, Maluku and Papua) and 11 Districts (Merauake, Mimika, Asmat, Mappi, Aru, Maluku Tenggara, Maluku Tenggara Barat, Kupang City, Kupang District, and Timor Tengah Selatan) in the ATS Region. Fisheries Management Plans have also been developed for each Fisheries Management Area in Indonesia.

112. The Government of Indonesia is a foundation party to ATSEF and has been instrumental in initiating, facilitating and supporting, including financially, both national and regional level ATSEF activities, and is a primary player in initiating the development of the ATSEA GEF project proposal.

113. The Chair of the Indonesian Agency for Marine and Fisheries Research (BRKP) (an agency of MAFF) is responsible for ATSEF activities in Indonesia. BRKP host the ATSEF Regional Secretariat from 2006-2009 and has been extended to 2010. A UNDP supported programme (Capacity 21) commenced in 2004 to prepare BRKP for this important regional coordination function. With this UNDP support, Indonesia has developed and is beginning to implement a comprehensive ATSEF National Action Plan with a range of activities in eastern Indonesia, focussed on the five ATSEF priorities. BRKP will be the responsible institution that will implement the ATSEA FSP program in Indonesia.

114. With the same UNDP support Indonesia has established robust, national institutional arrangements for ATSEF, including designation of a national cross-sectoral Technical Steering Committee and Stakeholders Working Group, a National ATSEF Secretariat, Project Manager and

Project Support Unit. These provide models for possible adoption at the national level in the other ATSEA countries.

115. There has been significant progress with the implementation of the Indonesian ATSEF National Action Plan, including an extremely comprehensive and highly detailed; three volume document series comprising Vol 1: Portrait of Resources in the Arafura and Timor Seas; Vol 2: Status of Development in the Arafura and Timor Seas and Vol 3: ATSEF Indonesia Action Plan and Programme, published in Indonesian with an Executive Summary in English.

116. Volumes 1 and 2 provide an extremely comprehensive and highly detailed analysis of the coastal and marine resource management scenario in the Indonesian sides of the ATS region, and provide an extremely strong foundation for the TDA and possible model for similar overviews in the ATS waters and coasts of Australia, PNG and Timor Leste. The availability of such high calibre baseline-work through the ATSEF framework is a major boost for the FSP and will greatly assist in allowing for the TDA to be undertaken during the FSP timeframe.

117. Indonesia has participated actively in other GEF-IW projects to date; namely the GEF/UNDP/IMO Partnerships for Environmental Management in the Seas of East Asia (PEMSEA), and the follow-up Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) (that is currently being prepared). Indonesia is also actively engaged in bilateral coastal and marine resource management activities with many of its neighbours, including with Australia on seeking to address IUU fishing in a broader regional context. Under the Australia-Indonesia Ministerial Forum, the sustainability of transboundary stocks in the area is a subject of on-going discussion between MMAF and the Australian Government including four sub working groups on IUU fishing, operations of traditional Indonesian fishing in the MOU box (under the *Memorandum of Understanding Between the Governments of Australia and the Government of the Republic of Indonesia Regarding the Operations of Traditional Indonesian Fishermen in Areas of the Australian Exclusive Economic Zone and Continental Shelf*), fisheries management and partnership and cooperation.

Timor-Leste:

118. Written into Timor Leste's Constitution is the provision for sustainable development, a provision that underlines the formulation of policies by the Government of the Democratic Republic of Timor-Leste

119. Ninety percent (90%) of the infrastructure of the Timor-Leste fishing industry, which was based on the Timor Sea, was destroyed in the weeks immediately following the vote for Independence in 1999. As a Small Island Developing (SID) State, Timor-Leste aims to rebuild this fishing industry to serve as a basis for its future achievement of development goals, but also focuses on ecologically sustainable aquaculture as a means of providing both food security and community development. It also aims to eliminate IUU fishing from its waters.

120. Marine Protected Areas (MPAs) feature heavily in Timor-Leste's policies to sustain living resources, with the Nino Konis Santana National Park and Marine Park established at the eastern end of the Island. The park has been identified as possibly being of World Heritage value. Recognizing the importance and potential of its coastal and marine resources, despite its limited financial capacity and competing development priorities, the Timor-Leste Government allocated approximately US\$320k for a joint 'Timor Leste Coastal Marine Habitat Mapping for Tourism and Fisheries Development Project' including a suite of 6 projects in partnership with CDU/AIMS/NRETAs/ANU/UNDP due for completion in mid 2009. This work will greatly assist the TDA and SAP/NAP processes.

121. The Government of Timor Leste is a foundation party to ATSEF and has been extremely active in regional ATSEF meetings, whenever possible. The Minister for Agriculture, Forestry and Fisheries in the Government of Timor-Leste is a Co-Chair of ATSEF.

Australia

122. Along with UNDP and other partners, Australia will serve as a co-financing partner for ATSEA. Australia is as a key member of ATSEF and was crucial in its establishment. To date Australia has contributed more than US\$400k to the establishment of ATSEF, including financial support for the operations of the ATSEF Regional Secretariat.

123. Australia is currently implementing a marine bioregional planning process in the Australian waters of the Arafura and Timor Sea. This process involves a comprehensive analysis of biodiversity values, threats and conservation priorities and the development of conservation strategies including a proposed network of representative marine protected areas. The background studies, data compilation and review, stakeholder analyses, mapping exercises and other activities associated with the marine bioregional planning process will provide extremely valuable inputs to the ATSEA TDA and SAP. Other bilateral fisheries projects such as those funded through Australian research bodies and Ministry of Marine Affairs and Fisheries on shared snapper fisheries and stock assessments provides opportunities for further regional collaboration. The federal Department of Environment, Water, Heritage and Arts (DEWHA) recently pledged AUD\$2 million towards CTI. ATSEA Program could potentially guide expenditure of funds under this initiative to support additional capacity building activities.

124. It is worth noting that with around 70% of the remote coastline of northern Australia owned by indigenous peoples, sustainable livelihoods are an important concern of communities and the Australian Government. Robust Indigenous ecological knowledge and management systems remain in operation for much of the remote north Australian coastline providing a significant cultural and intellectual resource to support ATSEF activities in neighbouring countries.

Papua New Guinea:

125. Similar to Indonesia, coastal and marine resources are extremely important to PNG. The coastal regions of PNG's Western Province are facing increasing risks of over-exploitation of marine resources including particularly fisheries, marine turtles and dugongs. The PNG Government has given high priority to the sustainable development and management of such as part of broader national development agenda. PNG has a stated objective to ensure increasing mining, oil and gas developments in its southern catchments and coastal waters are developed and operated in an ecologically sustainable manner.

126. PNG has a small but well organised and very active National Fisheries Authority (NFA), which focuses on sustainable development of fisheries resources and industries in PNG. The PNG Government is currently expressing significant concerns about IUU fishing, including from neighbouring countries, and has stated that it can only address IUU fishing through regional cooperation.

127. The National Department of Environment and Conservation (DEC) is showing an increasing interest in coastal and marine issues. Most Provincial Governments in PNG also have marine resource management agencies.

128. PNG was a participant in the GEF/UNDP/SPREP International Waters Programme for the Pacific Small Island States (completed in 2006), and has a history of strong bilateral engagement with Australia and Indonesia on various trans-boundary issues. PNG is part of a tri-lateral

wetlands management initiative with both of those countries, covering wetlands in the ATS region catchments, and works closely with Australia on the management of marine resources in the Torres Start Protected Zone, immediately to the west of the ATS region.

129. PNG has expressed interest to participating in ATSEF and the ATSEA project and as the Western Province has generally received little focus in relation to ecologically sustainable development, the ATSEA project presents an important opportunity to review and improve sustainable environmental management. In the meantime, PNG has as one of the 6 CTI nations, adopted the CTI Regional Plan of Action in Manado in May 2009 and pledged support.

Sustainability

130. The existence of a committed multilateral forum with a broad stakeholder base, in the form of ATSEF, is a major factor in assuring that the project benefits will continue after implementation. The increase in awareness and the essential knowledge-base for sustaining the seas' living resources that will accrue as a result of both the project, are also factors that will help ensure sustainability of project activities, outputs and outcomes.

Institutional sustainability:

131. Once initiated, programmatic action tends to become a generator of the means to monitor progress in the implementation of the SAP that it has been instrumental in developing. This is especially the case when it has national support as well as regional support, as in the case of ATSEF. It is anticipated that the consolidation of the ability of Indonesia, PNG, Timor-Leste and Australia to collaborate and cooperate towards elevating community well-being, especially through the development of alternative sustainable livelihoods, will be the guarantee that project benefits continue well after implementation. By definition, alternative livelihoods developed by the FSP will be sustainable, including financially sustainable.

132. It is intended that the SAP will include development of a regional self-financing mechanism such as a mutli-lateral trust fund or partnership council, to ensure the ongoing implementation of the SAP after the conclusion of the FSP.

133. ATSEF provides a strong foundation for developing institutional and financial sustainability. Institutional sustainability at national level will be promoted through the establishment of committees mandated to oversee the development and implementation of the ATSEA SAP.

Replicability

134. The FSP will adopt a demonstration / pilot project approach to initial implementation of SAP and NAP activities, which lends itself to replication, both within the region and more generally, including in other semi-enclosed seas in the broader Asia region and globally. This applies particularly to the methods used to investigate the drivers of IUU fishing, a problem of global proportions, with particularly devastating effects on developing nations in Asia, Africa and South America. The lessons and experiences of the ATSEA project will also be directly transferable to countries in other Asian seas.

135. Through ATSEF, replication of certain successes and lessons is already occurring providing a strong foundation for further replication of other successes during and after the FSP. For example the Australian National University has successfully established alternative sustainable livelihood activities through small-scale commercial mud crab, seaweed and sponge cultivation at communities in West Timor and Rote Island in Indonesia. A partner in ATSEF, AIMS has also

been instrumental in establishing Coastal Community Equitable Benefit Sharing guidelines for the marine bio-tech industry, which are now used as a model under the Convention on Biological Diversity.

136. Through other ATSEF-Australia partners there are also opportunities to extend other successful indigenous livelihoods projects across ATS region. For example, the North Australian Indigenous Land and Sea Management Alliance (NAILSMA) coordinates a network of Indigenous community organisations across north Australia engaged in marine and coastal management. In addition to significant collective experience in implementing on-ground projects, the NAILSMA network, in partnership with the international NGO Ocean Revolution, brings together community groups through a national and international knowledge and skills exchange program. Through ATSEF, NAILSMA and Ocean Revolution are linking with communities in ATSEF neighbours creating significant potential to contribute to ATSEA activities.

137. Of particular note in this region is the potential for “south-south” skills and knowledge transfer and replication of successes between the three less-developed ATS nations. This could include scenarios such as PNG assisting Papua Province in Indonesia with IUU fishing issues, and Indonesia assisting Timor-Leste with fisheries stock assessments, for example.

138. The project lessons and experiences in cooperative and collaborative research and management in the ATS region have resonance and replicability for other enclosed and semi-enclosed seas shared by multiple nations.

139. Finally, the close alignment of the ATSEA project with the CTI Plan of Action presents a powerful mechanism for the replication of ATSEA outcomes, both within the ATS region and in the broader CTI region, and such opportunities will be pursued through close cooperation with CTI.

PART III: Management Arrangements

Implementing and Executing Agencies

140. The project will be managed according to the standard management arrangements that have been established for GEF-IW projects. These typically comprise;

- Implementing Agency (IA),
- Executing Agency (EA),
- Project Management Unit (PMU) recruited and employed by the EA,
- Regional Project Steering Committee (PSC) and
- Regional Project Partners.

141. The IA for the ATSEA FSP will be UNDP. As there is currently no appropriately constituted regional organization in the ATS region, capable of managing the FSP, the EA for the FSP will be the United Nations Office for Project Services (UNOPS).

142. Consideration has been given to using the ATSEF Regional Secretariat as the EA, however the ATSEF RS is also due to rotate to another ATSEF country – creating issues of institutional continuity and corporate memory if tasked with managing a major GEF project. However, it is proposed that in acting as EA for the ATSEA FSP, UNOPS will work closely with the ATSEF-RS, with the goal of building the capacity of ATSEF as a regional project coordination and management mechanism, during the FSP.

Project Management Unit (PMU) and National Coordinators

UNOPS will recruit and employ a PMU for the duration of the FSP, comprising:

- Regional Project Coordinator (RPC),
- Technical Advisers (TA) , and
- Full-time Financial Administrative Assistant (FAA).

143. The PMU will be located in Jakarta at the office of Agency for Marine and Fisheries Research building. All International and Regional staff recruitment and accountability will be fully supported by UNOPS.

144. As the ATSEA project is also intended to provide capacity-building in project implementation and management to the ATSEF RS, and as it is intended that the ATSEF RS and other ATSEF structures will provide significant support to the project, the costs and benefits of co-locating the PMU and ATSEF RS, and/or seconding staff from one to the other, for the duration of the FSP, will be explored.

145. The PMU will be responsible for the day-to-day management of all aspects of the FSP, including required reporting to the EA and IA. The PMU will engage international and national consultants to lead the development of the TDA, SAP and NAPs and to undertake various specialist tasks under these activities.

146. Consultants will be hired, travel arranged and other activities will be organized and carried out according to established rules, procedures and systems of UNOPs together with UNDP COs and consistent with relevant laws, with the PM delegated with sufficient authority and decision-making powers to allow effective project management.

147. UNDP COs will recruit and employ a National Coordinator (NC) in Indonesia and Timor-Leste (and possibly PNG), under local-rate UN Service Contract (SCs), and housed in and supported by the relevant National Government Lead Agencies in each country, to coordinate all in-country activities in support of the FSP. Australia will designate an NC, employed under its own arrangements. UNDP GEF – The UNDP GEF will provide the overall project assurance and oversight of the implementation of ATSEA – FSP.

Regional Project Steering Committee

148. Implementation of the FSP, including review and approval of annual progress, budgets and workplans, will be overseen by the inter-governmental, cross-sectoral, ATSEA regional Project Steering Committee (PSC). As a minimum, the RPSC will comprise representatives from:

- UNDP-GEF
- UNDP Country Offices
- PMU
- National Government Lead Agencies from each ATS littoral nation (e.g. GEF OFP and ATSEF Lead Agency)

149. The PMU will act as the Secretariat for the RPSC and prepare all required documentation for the annual meetings. Additional groups may be invited to participate in the RPSC, as agreed by the core members, such as:

- National Government supporting agencies from each ATS littoral nation

- Regional representatives from:
 - Coastal and Indigenous communities
 - Environmental NGOs
 - Industry
 - Research community
 - Other regional programmes and projects and multi-lateral organizations

150. The RPSC will meet at the commencement of the FSP and then annually or as required throughout the duration of the FSP. Meetings of the ATSEA PSC will rotate around each ATS littoral nation. In order to optimize synergies and efficiencies between ATSEA and ATSEF, and build on the strong and functioning framework already established by ATSEF, as well as for cost-effectiveness, meetings of the RPSC should be held in conjunction with meetings of the existing ATSEF Regional Steering Committee (RSC), where possible.

Sponsor acknowledgement

151. In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF. The UNDP logo should be more prominent and separated from the GEF logo if possible, as UN visibility is important for security purposes.

FSP implementation and execution arrangements are summarized in Figure 2.

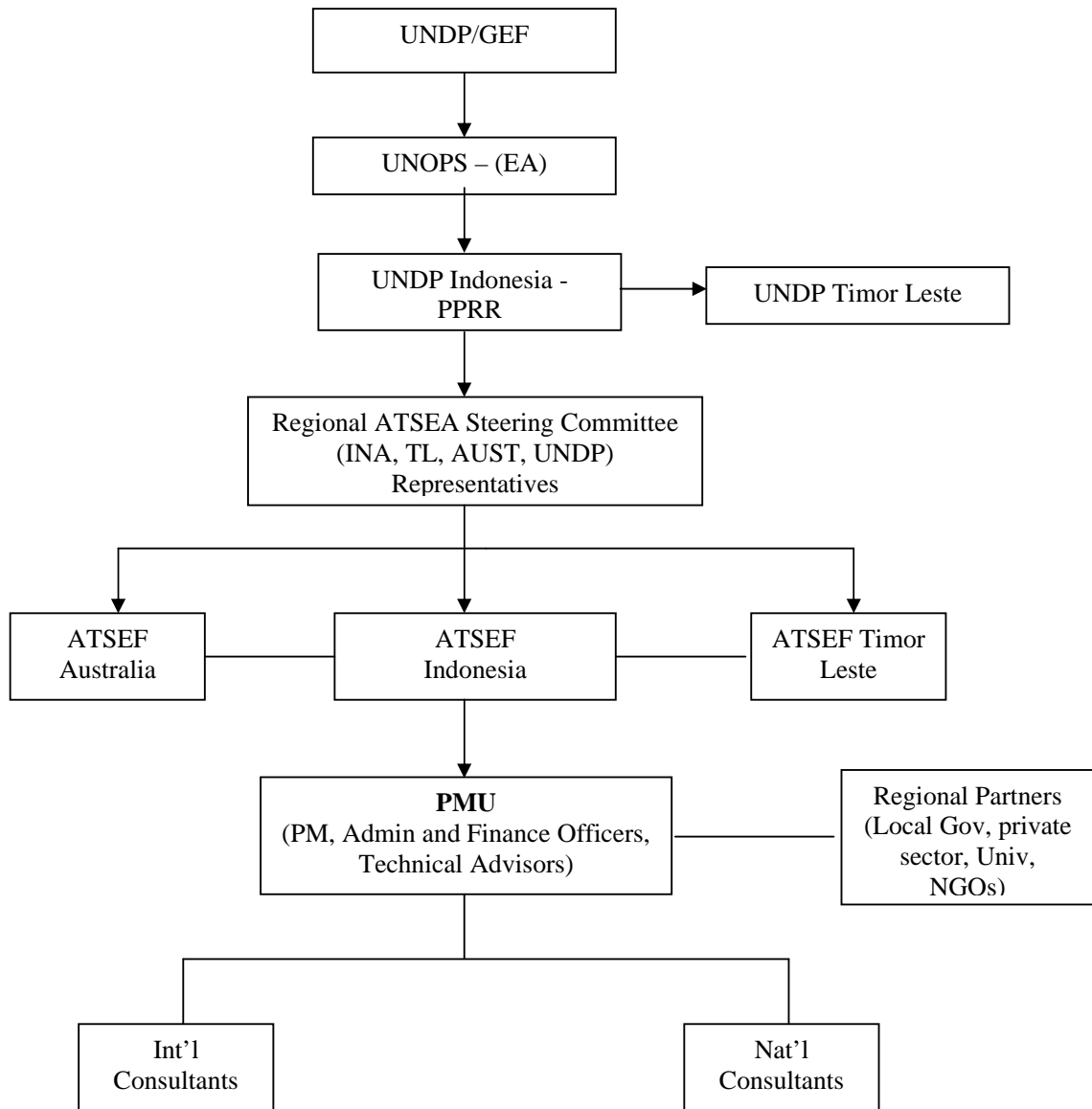


Figure 2: ATSEA Project Management Arrangements

PART IV: Monitoring and Evaluation Plan and Budget

152. Monitoring and evaluation (M&E) of the ATSEA FSP will be undertaken according to the standard M&E principles and requirements of GEF and UNDP. M&E is a core activity of the project, and therefore serves two purposes:

- (i) monitoring of the project on a quarterly and annual basis, including evaluations, to ensure the project impact is realized and is accountable to management, donors and stakeholders; and,

- (ii) through participatory monitoring and learning by doing the objective is for countries and stakeholders to see the benefit of monitoring project delivery in order to deliver results and impact, but also the benefit of monitoring in day to day projects and activities conducted as existing baseline activities nationally.

Project Inception Phase

153. During the first six months of the Project, the full project team together with the representatives of ATSEF, national technical working groups, co-financing partners, UNDP and other relevant regional, national and local stakeholders will conduct the Project Inception Meeting (PIM).

154. Among its important purposes, the PIM will allow the participants to fully understand the goals and objectives of the Project. It will also provide guidance to the project team on the preparation of the first Annual Work Plan (AWP) which is based on the project logframe. During the meeting, the logframe will be reviewed after which the AWP will be prepared. Another important purpose of the PIM is to provide an overview of the UNDP/GEF reporting and monitoring and evaluation (M&E) requirements emphasizing on the annual Project Implementation Reviews (PIRs) and related documentation, Tripartite Review (TPR) Meetings and mid-term and final evaluations. Still another purpose of the PIM is that it will allow all parties to understand and agree on their roles and functions in the Project. In particular, the relationship between the Project and the ATSEF will be clarified.

Monitoring Responsibility and Events

155. The PMU will be responsible for the day-to-day monitoring and implementation progress of the Project based on the AWP. For this purpose, the PMU and the project team will develop specific targets for the implementation performance indicators and their means of verification during the first year of the implementation of the Project. These targets and means of verification will be used to evaluate the pace of implementation and will form part of the AWP. As an annual activity for the succeeding years, targets and indicators for project implementation will likewise be defined as part of the internal evaluation and planning processes conducted by the project team and agreed with the executing and implementing agencies.

156. The UNDP will conduct a project monitoring of the progress of implementation based on quarterly or semi-annual reports from the PMU of the Project. Whenever appropriate, the project team, UNDP and other relevant stakeholders will conduct specific meetings to take stock and address any problems that may arise related to the implementation of the Project. The PMU will prepare reports of such meetings and circulate these no later than two weeks after the meetings were held.

157. The annual monitoring of the Project will be done through the Tripartite Review (TPR) which will be conducted by the project steering committee once a year. The first TPR meeting will be held within the first year after the first project inception meeting. For this meeting, the PMU and project team will prepare an Annual Progress Report (APR) which includes the IW Template and submit it to UNDP at least 14 days before the actual TPR for review and comments. The PMU and project team will present the APR during the TPR highlighting the policy issues and recommendations to be decided by the participants. If necessary, separate reviews of each project component will also be conducted to inform the TPR participants of the progress of project implementation.

Project Monitoring and Reporting

158. The PMU and project team will be responsible for the preparation and submission of the following reports that may form part of the monitoring process. The mandatory reports are (a) to (e) while (f) and (g) are project specific to be defined throughout the implementation of the Project. The Monitoring and Evaluation Plan with corresponding budget is provided in Table 2.

Inception Report (IR)

159. The PMU and project team will prepare the IR immediately following the Inception Meeting. This report covers a detailed First Year Work Plan divided in quarterly timeframes providing the activities and progress indicators that will be followed during the first year of project implementation. A detailed description of the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related matters are also included in the IR. Furthermore, the report will include a section on progress to date on project establishment and start-up activities and an update of any changed external and/or unforeseen conditions that may affect project implementation.

Quarterly Progress Report (QPR)

160. The PMU and project team will prepare a QPR which is a self-assessment report of the quarterly progress of the Project. The QPR is also a key input to the APR and TPR.

Annual Progress Report (APR)/Project Implementation Review (PIR), including GEF Results Template and IW Tracking Tool for SP1

161. The APR and PIR are the annual monitoring processes required by UNDP and GEF respectively. These will be overseen by UNDP and undertaken by the PMU. It has developed into an important monitoring tool for projects and serves as the main vehicle for extracting lessons from existing projects. The GEF Results Template and Tracking Tools for SP1 will also be attached to this report. It is prepared yearly following the first year of project implementation and before the holding of the TPR. Its purpose is to reflect progress achieved in meeting the AWP of the Project and assess the performance of the Project in contributing to project outcomes. The UNDP will evaluate the individual APRs/PIRs of the Project by focal area, theme and region for common issues/results and reasons. The reports will also be useful to the Independent Evaluators who can utilize them to identify any changes in project structure, indicators, work plans, etc. and view a past history of delivery and assessment.

Periodic Thematic Reports

162. As and when required by UNDP or other major stakeholders, the PMU and project team will prepare Periodic Thematic Reports that will focus on specific issues or areas of project activity. These reports may be useful as a form of lessons learned exercise, specific oversight in key areas, or as troubleshooting exercises to assess and overcome constraints and difficulties encountered.

Project Terminal Report

163. The PMU and project team will prepare the Project Terminal Report during the last three months of the Project. This report is comprehensive and summarizes all activities, achievements and outputs, lessons learned, objectives met or unmet, structures and systems implemented and other features of the Project. It will be a definitive statement of the activities of the Project during its lifetime.

Terminal Tripartite Review (TTR)

164. The TTR is conducted during the last month of project implementation. Two months prior to the TTR, the PMU will prepare the draft terminal report (see below), which will serve as the basis of the deliberations and discussions during the TTR. The review will consider the implementation of the Project in totality giving specific consideration to whether or not it has attained its stated objectives and contributed to the broader environmental objective. It will also decide whether any further actions are still needed especially in relation to the sustainability of project results beyond the life of the Project. .

Technical Reports

165. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall Project. These reports may be prepared by members of the project team or external consultants and should be comprehensive, specialized analyses of clearly

defined areas of research within the framework of the Project. The technical reports can be used to disseminate information and knowledge generated during the implementation of the Project.

Project Publications

166. Project publications may be scientific, technical or informational texts on the activities and achievements of the Project in the form of journal articles and other publications. The project team will determine if any of the technical reports generated by the Project merit formal publication. Prior clearance from UNDP will be sought for all publications.

Independent Evaluation

The Project will be subjected to at least two independent external evaluations as follows:

Mid-term Evaluation (MTE)

167. An independent Mid-Term Evaluation will be undertaken at the end of the second year of implementation of the Project. The MTE will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management.

Final Evaluation (FE)

168. An Independent Final Evaluation will be undertaken three months before the terminal report meeting and will focus on the same issues as the MTE. The final evaluation will also look at the impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities.

Audit Clause

169. Certified periodic financial statements of the Project and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to established procedures set out in the programming and finance manuals will be prepared by the executing agency and provided to UNDP.

Learning and Knowledge Sharing

170. Results from the Project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and related forums. For this purpose, the Project will identify, analyze, and share lessons learned that might be beneficial to other projects under implementation or in the design and implementation of similar future projects. This also includes participation in all GEF’s International Waters Conferences to contribute to IW:LEARN, including production of at least one IWLearn Experience Note (IWEN), establishment of a project website and participation in LME networks, thematic and regional workshops, etc. as appropriate. The indicative M&E activities are presented in Table 2.

Table 2: *Indicative M&E Workplan and Budget for ATSEA FSP*

M&E Activity	Responsible Parties	Budget US\$ <i>Excluding Staff time</i>	Time frame
Pre-Inception Workshop	<ul style="list-style-type: none"> • UNDP-GEF / ATSEF-RS 	<ul style="list-style-type: none"> • 50,000 	<ul style="list-style-type: none"> • Prior to project start
Inception Workshop & Report ⁺	<ul style="list-style-type: none"> • PMU 	<ul style="list-style-type: none"> • 50,000 	<ul style="list-style-type: none"> • Within 6 months from official project start
Demonstration Project Review and Indicator Assessment, including Baseline Indicator collection and development ⁺	<ul style="list-style-type: none"> • PMU • NLAs/ NCs 	<ul style="list-style-type: none"> • 50,000 	<ul style="list-style-type: none"> • Within 6 months from official project start

M&E Activity	Responsible Parties	Budget US\$ <i>Excluding Staff time</i>	Time frame
Annual Project Report (APR)	<ul style="list-style-type: none"> • PMU • Project Steering Committee Review • NLAs / NCs 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Annually
Project Implementation Review (PIR)	<ul style="list-style-type: none"> • PMU • Project Steering Committee Review • Implementing Agencies 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Annually
GEF IW Results template reporting and IW Tracking Tool reporting	<ul style="list-style-type: none"> • PMU • Project Steering Committee Review • Implementing Agencies 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Annually
Quarterly Progress Report	<ul style="list-style-type: none"> • PMU 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Quarterly
Projects Steering Committee (PSC) Meetings	<ul style="list-style-type: none"> • PMU • PSC members 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Annually
Technical Reports (each Demo Project)	<ul style="list-style-type: none"> • PMU • Consultants as required 	<ul style="list-style-type: none"> • 10,000 	<ul style="list-style-type: none"> • As required
Thematic Reports/Lessons Learned	<ul style="list-style-type: none"> • PMU • Consultants as required 	<ul style="list-style-type: none"> • 10,000 	<ul style="list-style-type: none"> • As required
Mid-Term External Evaluation (MTEE)	<ul style="list-style-type: none"> • PMU • UNDP • External consultants 	<ul style="list-style-type: none"> • 30,000 	<ul style="list-style-type: none"> • At the end of year two from official project start
Final External Evaluation (FEE)*	<ul style="list-style-type: none"> • PMU • UNDP • External consultants 	<ul style="list-style-type: none"> • 40,000 	<ul style="list-style-type: none"> • At end of project implementation
Project Terminal Report (PTR)	<ul style="list-style-type: none"> • PMU • NLAA 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • At least one month before official end of project
Project Terminal Report – Synopsis (PTR-S)	<ul style="list-style-type: none"> • PMU • UNDP 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Within one month of official end of project
Workshop & Training Reports	<ul style="list-style-type: none"> • PMU • External Consultants (where used) 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • As required
Audit	<ul style="list-style-type: none"> • External hired Auditor • UNDP • PMU 	<ul style="list-style-type: none"> • 9,000 (3,000 p.a.) 	<ul style="list-style-type: none"> • Annually
Visits to Field Sites (IA costs covered by fees)	<ul style="list-style-type: none"> • PMU • UNDP 	<ul style="list-style-type: none"> • 30,000 (10,000 p.a.) 	<ul style="list-style-type: none"> • Annually
Budget Reviews and Revision	<ul style="list-style-type: none"> • PMU • UNDP • GEF 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Annually (as part of APR)
Country Mission Reports	<ul style="list-style-type: none"> • PMU 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Following each country visit
Total Indicative cost (US\$): <i>(excluding PMU staff time and IA/EA staff and travel)</i>		\$279,000[†]	

Notes: [†] a comprehensive review of demonstration project draft logframes and indicators will be conducted during the first six months of the project, including an assessment of baseline indicators. Support will be provided by the PMU. The Inception workshop will provide an opportunity to clarify, as far as possible, the project baseline indicators, including assessing the time and resources required to collect baseline information, where this has already not occurred.

* This includes the cost of consultant fees, regional travel and per diems, including travel to a selected number of countries to look at Demonstration activities based on a country/project selection criterion to be developed by the consultants.

[†] Note that the M&E budget will be included in the budget for the project. ^Ø Mid-term External Evaluation and Final External Evaluation will be activities lead by UNDP-GEF

PART V: Legal Context

171. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Governments of Indonesia and the United Nations Development Programme, signed by the parties on [date]. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

172. The UNDP Resident Representative in Jakarta is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

- a) Revision of, or addition to, any of the annexes to the Project Document;
- b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased experts or other costs due to inflation or take into account agency expenditure flexibility; and
- d) Inclusion of additional annexes and attachments only as set out here in this Project Document.

SECTION II: Strategic Results Framework (SRF)

Table 3: *SRF for the ATSEA FSP*

Project Strategy		Objectively Verifiable Indicators			
Project Objective:		. To ensure the integrated, cooperative, sustainable, ecosystem-based management and use of the living coastal and marine resources, including fisheries and biodiversity, of the Arafura and Timor Seas, through the formulation, inter-governmental adoption and initial implementation of a Regional SAP and NAPs.			
Indicator		Baseline	Target	Sources of verification	Assumptions and risks
Component 1 - TDA CI.1 Outcome: <i>Approved TDA</i> which identifies the ATS transboundary priority environmental problems, environmental & socio-economic impacts, sectoral and root causes and governance analyses	A Trans-boundary Diagnostic Analysis (TDA) completed and approved	Outdated and incomplete bio-physical and socio-economic information on the ATSEA; inadequate understanding of the transboundary problems and their socio-economic root causes and impacts.	TDA finalized within 18 months of FSP start together with technical reports on : 1. Biophysical profile of ATSEA and coastal areas including fisheries and biodiversity assessment 2. Socio-economic and governance profile including resource user groups, market networks, productive value chains, and market access opportunities 3. Causal chain analysis and options to address national and transboundary problems proposed TDA approved by regional committees and ATSEF Stakeholder assessment and stakeholder engagement plan developed for the Arafura and Timor Seas region.	Final TDA document Reports of analyses undertaken as part of the TDA Meeting minutes and record of approval by inter-ministerial committees and Regional Steering Committee and ATSEF. QORs, PIRs, midterm and final evaluations. Information available on official websites at UNDP, project website, and national government websites.	Good access to existing regional and national data to support the TDA. Agreement between countries on identification and prioritization of transboundary concerns, impacts, root causes and action required.
Component 2 - SAP/NAP	SAP developed, agreed, inter-	No agreed SAP nor harmonized	SAP and NAPs finalized within 24 months of FSP start	SAP and NAP documents	TDA completed as basis for SAP and

<p>development</p> <p>C2.1 Outcome:</p> <p>SAP and NAPs agreed and adopted at the national (inter-ministerial) and regional (inter-governmental) levels</p>	<p>governmentally approved/signed and published.</p> <p>NAPs developed, agreed, approved and published.</p>	<p>NAPS for the ATSEA have ever been developed. To date, interventions have been fragmented, site specific and largely uncoordinated.</p>	<p>and endorsed at a high level (e.g. Ministerial) by the 36th month of the project</p>	<p>Reference to the NAPs in related sector plans in the participating countries.</p> <p>PIR, Midterm and final evaluations.</p>	<p>NAPs.</p> <p>High level political support from countries.</p> <p>Agreement between and within countries reforms and investment actions required.</p> <p>Inclusive and representative stakeholder involvement in SAP/NAP development process.</p> <p>Effective PSC and NSCs.</p>
<p>*Component 3 - SAP/NAP Initial Implementation</p> <p>C3.1 Outcome:</p> <p>Initial implementation of some SAP and NAP components, through targeted Demonstration Projects addressing high priority transboundary issues identified by the TDA, to demonstrate the capacity of the littoral nations to cooperate in implementing joint activities, as the foundation for full SAP implementation in a future phase / follow-up project.</p>	<p>1 Regional Demonstration Project completed.</p> <p>2 National Demonstration Projects each in Indonesia & Timor-Leste completed.</p> <p>(Note: Final selection of Demonstration Projects is undertaken through the development of the TDA/ SAP, during the first 18 months of the FSP.</p>	<p>No Demonstration Projects and limited awareness of alternative or supplementary sustainable livelihood activities in coastal communities</p> <p>Limited regional exchange of data, information and experiences</p>	<p>All three Demonstration Projects commenced within 18 months of FSP start.</p> <p>All Demonstration Projects completed by end of FSP and leading to improved livelihoods (15% increase in income) among target communities) and reduced pressure on marine resources</p>	<p>Individual Demonstration Projects project reports.</p> <p>M&E reports, inc. APRs, PIRs, MTEE, FEE etc</p>	<p>Inter-country agreement on regional Demonstration Project.</p> <p>Available local capacity to manage and implement National Demonstration Projects.</p> <p>Stakeholder involvement in Demonstration Projects design, selection and implementation.</p> <p>Mechanisms in place</p>

	(Note: Once Demonstration Projects are identified and agreed, Indicators, Targets and M&E plans will be developed for each project)				to capture lessons and promote replication.
<p>Component 4 - Regional cooperation mechanism:</p> <p>C4.1 Outcome:</p> <p><i>Regional cooperation mechanism:</i> Develop and strengthen ATSEF as an effective regional mechanism for the cooperative eco-system-based management of the ATS region,</p>	Agreement on preferred regional cooperation mechanisms.	ATSEF informal experts forum, with limited project implementation capacity.	<p>Preferred model identified and agreed at SAP adoption (24 months after FSP start).</p> <p>Preferred model formally adopted and ready for implementation at end of FSP.</p>	<p>A signed agreement by countries, on the structure and mandate of a regional governance framework.</p> <p>Documents detailing the governance structures, roles and responsibilities.</p> <p>M&E reports, inc. APRs, PIRs, MTEE, FEE etc</p>	<p>Agreement between and within countries on the preferred model.</p> <p>Stakeholder involvement in identification and development of preferred model.</p>
<p>C4.2 Outcome:</p> <p>A regional self-financing mechanism, such as a multi-lateral trust fund or partnership council to ensure the implementation of the SAP</p>	Self financing mechanism for ATSEA SAP implementation	Reliance on external donors including GEF.	<p>Self financing mechanism agreed, developed and in-place – including actual commitment of funds to ensure the ongoing implementation of the SAP from Governments, NGOs and the private sector in the region</p> <p>By end of FSP, all participating countries contribute funds to the mechanism</p>	<p>A signed agreement by countries, on the establishment of a self financing mechanism with indicative contribution levels.</p> <p>FEE & PTR</p>	<p>High level of support from contributors, including governments, private sector and NGOs in the region.</p> <p>FSP implementation has been successful and effective, generating support for continuation of SAP implementation post-FSP.</p> <p>Mechanisms in place</p>

					to capture lessons and promote replication.
<p>Component 5 -Project Coordination & Management</p> <p>C5.1 Outcome:</p> <p>ATSEA Project is effectively coordinated and managed, according to budget and workplan, and including M&E arrangements and procedures.</p>	<p>1. PMU established and fully operational</p> <p>2. PSC established and fully operational</p> <p>3. NSCs established and fully operational</p> <p>4. NCs recruited and fully operational</p> <p>5. M&E procedures operating</p>	<p>ATSEF Secretariat playing interim role in coordination of PPG activities</p>	<p>1. By FSP start</p> <p>2. 1 month before FSP start</p> <p>3. Within 1 month of FSP start</p> <p>4. Within 2 months of FSP start</p> <p>5. Within 1 month of FSP start</p>	<p>Project Inception Report & 1st Quarterly Progress Report</p> <p>M&E reports, inc. APRs, PIRs, MTEE, FEE etc</p> <p>Project website (following IWLearn guidelines) and database in place</p>	<p>Suitable candidates available for recruitment.</p> <p>Hosting arrangements for PMU and NCs agreed and available.</p> <p>Full support from IA, EA and governments.</p> <p>Stakeholder involvement in the PSC and NSC processes.</p>

SECTION III: Workplan & Total Budget

Table 4: ATSEA FSP Workplan

C = Component	Year / Month from FSP Commencement																																									
	Year 1												Year 2												Year 3																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36						
A = Activity																																										
C1: TDA development																																										
A1.1: SOS Conf & TDA/SAP Workshop:				■																																						
A1.2: Gap filling studies:				■	■	■	■	■	■	■	■																															
A1.3: Joint scientific cruise				■	■	■	■	■	■	■	■																															
A1.4: TDA stakeholder consultations:				■	■	■	■	■	■	■	■																															
A1.5: Develop TDA:							■	■	■	■	■	■	■	■	■	■	■	■																								
A1.5: TDA Adoption (special PSC):																		■																								
C2: SAP/NAP development																																										
A2.1: SAP/NAP stakeholder consults:									■	■	■	■	■	■	■	■	■	■																								
A2.2: Develop SAP:																																										
A2.3: SAP Adoption (minister level):																																										
A2.4: Develop NAPs:																																										
A2.5: Adopt NAPs:																																										

Table 4: ATSEA FSP Workplan continued

C = Component	Year / Month from FSP Commencement																																					
	Year 1												Year 2												Year 3													
A = Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36		
C3: SAP Initial Implementation																																						
A3.1: Agree Nat. Demo Projects:																																						
A3.2: Implement Nat. Demo Projects:																																						
A3.3: Lessons & Replication Workshop:																																						
C4.1: Future Regional Coordination																																						
A 4.1.1: Develop Options:																																						
A4.1.2: Consider Options:																																						
A4.1.3: Agree Preferred Options:																																						
C4.2: Future Self-Sustainability																																						
A4.2.1: Develop Options:																																						
A4.2.2: Consider Options:																																						
A4.2.3: Agree Preferred Options:																																						
C5: PC&M (inc. M&E)																																						
A5.1: Pre-inception workshop:																																						
A5.2: Establish PMU and Project Website:																																						
A5.3: Inception Workshop/1 st PSC meet																																						
A5.4: PSC meetings:																																						
A5.5: Employ NCs/Establish NSCs:																																						
A5.6: NSC meetings:																																						
A5.7: QPR																																						
A5.8: PIR/APR/IW TT																																						
A5.9: MTEE																																						
A5.10: FEE																																						
A.5.11: PTR																																						
A5.12: Audits																																						
A5.13: PMU Country Visits																																						

TOTAL BUDGET AND WORKPLAN

Award ID:	FSP ATSEA
Award Title:	PIMS 3879 IW FSP: Arafura-Timor Seas - ATSEA
Business Unit:	IDN10
Project Title:	PIMS 3879 IW FSP: Arafura and Timor Seas Ecosystem Action program (ATSEA)
Implementing Partner (Executing Agency)	UNOPS

Result	Agency	Fund ID	Source of Funds	Atlas Budgetary Account Code	Atlas description	Yr1	Yr2	Yr3	Yr4	Yr5	Total	See Budget Note
Component 1: Transboundary Diagnostic Analysis (TDA) for Arafura & Timor Seas	UNOPS	62000	GEF	71200	International Consultants	10,000	30,000	30,000	10,000	-	80,000	A
				71300	Local Consultants	34,000	77,500	78,000	67,450	40,000	296,950	B
				74100	Professional Services (Training, survey and meetings)	25,000	175,000	40,000	35,000	15,000	290,000	C
				71600	Travel	15,000	31,500	29,500	25,000	24,600	125,600	D
				74200	Printing and publication	5,000	5,000	15,000	5,000	5,000	35,000	E
				74500	Miscellaneous	5,000	5,000	5,000	5,000	5,000	25,000	
					sub-total GEF	94,000	324,000	197,500	147,450	89,600	852,550	
					Total Component 1	94,000	324,000	197,500	147,450	89,600	852,550	
Component 2 : Strategic Action Program (SAP)/National Action Program (NAP) for Arafura & Timor	UNOPS	62000	GEF	71200	International Consultants	10,000	30,000	20,000	-	-	60,000	F
				71300	Local consultants	30,000	40,000	35,000	20,000	15,000	140,000	G
				74100	Professional Services. (Training)	25,000	25,000	35,000	30,000	20,000	135,000	H

Result	Agency	Fund ID	Source of Funds	Atlas Budgetary Account Code	Atlas description	Yr1	Yr2	Yr3	Yr4	Yr5	Total	See Budget Note
Seas				71600	Travel	5,000	10,000	15,000	5,000	15,000	50,000	I
				74200	Printing and publication	5,000	5,000	10,000	15,000	5,000	40,000	J
				74500	Miscellaneous	5,000	5,000	5,000	5,000	5,000	25,000	
					sub-total GEF	80,000	115,000	120,000	75,000	60,000	450,000	
					Total Component 2	80,000	115,000	120,000	75,000	60,000	450,000	
Component 3: SAP/NAP Initial Implementation	UNOPS	62000	GEF	71300	Local Consultants	-	30,100	29,600	7,250	-	66,950	K
				71600	Travel	-	15,500	15,500	13,000	-	44,000	L
				72600	NGO Grants	60,000	90,000	140,000	140,000	50,000	480,000	M
				74200	Printing and publication	-	-	3,000	3,500	-	6,500	N
				74500	Miscellaneous	4,000	4,000	4,000	4,000	4,000	20,000	
					sub-total GEF	64,000	139,600	192,100	167,750	54,000	617,450	
					Total Component 3	64,000	139,600	192,100	167,750	54,000	617,450	
Component 4: Regional Management & Sustainable Financing Mechanism	UNOPS	62000	GEF	71300	Local consultants	10,000	81,000	80,000	10,000	5,000	186,000	O
				74100	Professional Services.	6,000	26,000	20,000	15,000	6,000	73,000	P
				71600	Travel	10,000	15,000	20,000	15,000	10,000	70,000	Q

Result	Agency	Fund ID	Source of Funds	Atlas Budgetary Account Code	Atlas description	Yr1	Yr2	Yr3	Yr4	Yr5	Total	See Budget Note
Arrangement for ATSEA				74200	Printing and publication	-	2,000	2,000	2,000	-	6,000	R
				74500	Miscellaneous	5,000	5,000	5,000	5,000	5,000	25,000	
					sub-total GEF	31,000	129,000	127,000	47,000	26,000	360,000	
					Total Component 4	31,000	129,000	127,000	47,000	26,000	360,000	
Component 5: Project Coordination and Management	UNOPS	62000	GEF	71400	Contractual services – individuals (NPM & F/AA)	18,900	38,000	39,800	41,800	43,800	182,300	S
				71600	Travel	3,000	6,000	6,000	6,000	6,000	27,000	T
				72500	Office Supplies	1,500	2,400	2,400	2,400	2,000	10,700	U
					sub-total	23,400	46,400	48,200	50,200	51,800	220,000	
					Total Management	23,400	46,400	48,200	50,200	51,800	220,000	
Project Totals						292,400	754,000	684,800	487,400	281,400	2,500,000	

Summary of Funds:¹

	Classification	Amount (USD)
GEF	Grant	\$2,500,000
Indonesia	Grant	\$446,220
	In-kind	\$1,901,827
Timor Leste	Grant	\$400,000
Australia	In-kind	\$1,000,000
UNDP	Grant	\$400,000
UNDP-BDP	In-kind	50,000

¹ Summary table should include all financing of all kinds: GEF financing, co-financing, cash, in-kind, etc. etc

WWF	In-kind	\$100,000
Sustainable fisheries Partnership	In-kind	\$50,000
TNC	In-kind	\$1,000,000
CI	In-kind	\$900,000
TOTAL		\$8,748,047

NOTES:

- A An international specialist in Arafura and Timor Seas Ecosystem Action for TDA will be recruited for 8 months during year 1 until year 4, at a monthly salary @\$10,000
- B Four local consultants (2 from TL & 2 From Ind) will support the TDA Development, at a monthly salary of \$3,228 for the duration of 3 months in year 1; 8 months in year 2; 6 months in year 3; and 3 months in year 4 with 5% increasing salary per year. One oceanography consultant for the oceanographic assessment cruise will be hired at monthly salary of \$ 3,228 for the duration of 4 months in year 2; 4 months in year 3; and 4 months in year 4.
- C Contracting services to provide seminars and workshops for TDA development including preparatory seminars and workshop for oceanographic cruise (year 2, 3, 4) assuming \$10,000/seminar/workshop. Oceanographic survey in year 2 for the duration of 1 month will be conducted with budget estimated at \$ 140,000.
- D Travel cost for international consultant 2 times meeting in Indonesia and Timor Leste, at a unit cost of \$ 2,000/visit, and local consultant meeting in Timor Leste and Australia, cost \$ 2,500/visit. Consultant meeting for oceanographic cruise in year 2 & 3 at a unit cost of \$ 2,500/visit.
- E Printing and publication assuming an average of 500 copies per publication, at unit cost \$ 6 per copy (including design and distribution costs).
- F An international specialist in Arafura and Timor Seas Ecosystem Action for SAP/NAP will be recruited for 6 months during year 1 until year 4, at a monthly salary @\$10,000
- G Two local consultants (1 from TL & 1 From Indonesia) will support the SAP/NAP Development, at a monthly salary of \$3,500, 3 months in year 1, 8 months in year 2, 6 months in year 3, 3 months in year 4 with 5% increasing salary per year
- H Contracting services to provide seminar or workshop TDA development, assuming \$5,000-10,000/seminar/workshop
- I Travel cost for international consultant 2 times meeting in Indonesia and Timor Leste, at a unit cost of \$ 2,000/visit, and local consultants meeting in Timor Leste and Australia, cost \$ 2,500/visit
- J Printing and publication assuming an average of 500 copies per publication, at unit cost \$ 6 per copy (including design and distribution costs), with an estimated 1 publication in year 1
- K Four local consultants will support review of: (1) fish stocks in the ATSEA (one consultant for approx. 8.4 months) and; (2) review of alternative livelihood options (three consultants for approx. 8.4 months), at a monthly salary \$2,000.
- L Travel cost for consultants meeting/workshop and visiting field sites, at cost \$ 2,000-3,000/person/visit

- M Contracting services to provide alternative livelihood activities \$ 50,000 each year, seminar or workshop or meeting for 2 activities, at a unit cost of \$10,000/seminar (each year 3 times of seminar/workshop/meeting)
- N Printing and publication assuming an average of 500 copies per publication, at a unit cost \$ 6 per copy in year 3 and in year 4
- O Two local consultants for review of and development of institutional options for the structure and mandate of a regional governance framework of ATSEA (1 from TL & 1 from Ind), at monthly salary \$3,500 for approx. 13.5 months in total; and two local consultants for review and develop options for future self-financing of regional mechanism for ATSEA, including funding from the private sector also at a monthly salary of \$3,500 for approx. 12.5 months. These consultants will also have to meet with high-level regional government officials.
- P Contracting services to provide seminar/workshop in Indonesia and Timor Leste, at a unit cost of \$ 5,000-\$ 10,000/seminar
- Q High level consultant meeting in Australia, Indonesia and Timor Leste, at a unit cost of \$ 2,000-\$ 5,000/visit, and local consultants meeting in Dili, Jakarta cost \$ 3,000-\$4,000/visit
- R Printing and publication assuming an average of 250 copies per publication, at a unit cost of \$ 6 per copy (including design and distribution costs).
- S Project management will be provided by National Project Manager, Finance Officer/Administrative Assistant, working full time, at an average of \$ 3,150/month, with 5% increasing salary per year
- T Travel cost of the National Project Manager, Finance Officer/Administrative Assistant visit and attend the workshop/meeting
- U Office supplies including renting, communications equipment, maintenance, etc.

SECTION IV: Additional Information

PART I: Other agreements

ATSEF MoU

147. In October 2003, the three ATSEF countries (Australia, Indonesia and Timor Leste) signed a Memorandum of Understanding agreeing to work together towards sustainable use of the Arafura and Timor Seas. Copy of the MoU is provided in Annex 3.

PART II: Project Management Arrangements and Organigram

Please refer to Figure 2 for project organigram.

148. The management arrangements for the FSP comprise the Regional Project Steering Committee (PSC) and the National Steering Committees (NSCs) described in Part III: Management Arrangements, supported by a Regional Stakeholder Engagement Group (SEG), as described below.

Regional Project Steering Committee & Regional Stakeholder Engagement Group

149. In addition to steering the project at the regional, inter-governmental level, including reviewing and approving annual project workplans and budgets, and recommending adaptive management as may be required, the PSC will also provide a stakeholder involvement mechanism at the regional level.

150. Representation of the regional scientific community on the PSC is well catered for through the existing ATSEF structure. The close linkages between ATSEF and the ATSEA project, including holding annual ATSEF Regional Steering Committee meetings and ATSEA-PSC meetings co-jointly, will provide an effective mechanism for the involvement of stakeholders from the regional scientific community in the ongoing development and implementation of the FSP.

National Steering Committees

151. To ensure stakeholder engagement, NSC membership will be cross-sectoral and multi-disciplinary, and may include representation from non-government, community and private sectors. A core function of the NSCs will be to oversee and guide the development, implementation and replication of the local-level demonstration projects, and it is vital that these projects meet the needs and circumstances of the local-level stakeholders.

Engagement with other regional programmes and projects

152. In addition to engaging with other regional programmes and projects through the PSC and SEG, the ATSEA PMU and country representatives will also participate in meetings, workshops and conferences of other regional programmes and projects, especially the CTI, PEMSEA and GEF-IW, and will utilize these as important stakeholder engagement and coordination opportunities.

PART III: Terms of References for key project staff

Table 1. Terms of reference for project staff

Position Titles	Rate (\$)	Duration (person-days/months)	Tasks to be Performed/Relevant Outcomes and Outputs
National Project Coordinator (NPC) (1 person)	2,326/ person-month	1 person - 54 months (part time)	Manage and supervise the project activities, supervise all the project activities and ensure completion of deliverables, hire and supervise regional staff and regional and national consultants, project procurement and disbursement, and attend to all other related duties. Reports to the Project Steering Committee. Other duties will be as Technical Advisor and National Consultants.
Finance Officer (1 person)	650/ person month	1 person - 54 months (full-time)	Install the project's financial systems, orients project staff, supervises the proper recording of financial transactions, reports and management. Consolidates & prepare annual budget, establishes project account, supervises the preparation of payroll, prepares updated reports and attend to all other related duties. Reports to the NPM
Administrative Officer (1 person)	400/ person month	1 person - 54 months (full-time)	Arranges appointments, typing, maintains office records and files, installs the project administration system, maintains database, orients project staff, establish project administration, prepares update reports, manages the day-to-day administrative activities and attend to all other related duties. Reports to the NPM

PART IV: Stakeholder Involvement Plan

153. The stakeholders involved or with an interest in the ATSEA project can be divided into four geographical levels, as follows:

- International
- Regional
- National
- Local

International stakeholders

154. The three main international stakeholders in the ATSEA project are the GEF as the main source of funding, UNDP as the Implementing Agency (IA), and the United Nations Office for Project Services (UNOPS) as the Executing Agency (EA) (please refer part III: Management Arrangements). Other international stakeholders include other UN agencies implementing projects in the region conversant with ATSEA goals such as the:

- Food and Agriculture Organization (FAO) in relation to international and national fisheries management issues (and regional/national offices such as in Timor Leste),
- International Maritime Organization (IMO) in relation to the international regulation of shipping and pollution, and
- United Nations Environment Programme (UNEP).

Building links with these agencies with a view to fostering their support for and engagement in ATSEA will be an important element of the project.

155. Major international environmental NGOs such as WWF, IUCN, CI, and TNC are also active in various activities in the Arafura and Timor Seas and can play an important role in the success of the ATSEA project. As are other international donor organizations operating in the region such as ADB and The World Bank in Indonesia and Timor Leste.

Regional stakeholders

156. There are a range of stakeholders at the broader regional level, including a number of major multi-lateral programmes and projects, including:

- Coral Triangle Initiative (CTI): participating countries, donor agencies and NGOs
- GEF/UNDP/UNOPs Partnerships for the Environmental Management of the Seas of East Asia (PEMSEA)
- PEMSEA-supported Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)
- UNEP Coordinating Body for the Seas of East Asia (COBSEA)
- Asia-Pacific Economic Cooperation (APEC)
- Association of South East Asian Nations (ASEAN)

Other regional stakeholders include the:

- scientific and research community – to provide accurate baseline information and analysis for informed policy and management of ATS
- fisheries and aquaculture industries
- coastal and marine tourism industry
- shipping and ports industries

157. All of these regional stakeholders represent significant opportunities for cooperation, coordination, synergies and multiplier effect with the ATSEA project, and will be important players under the stakeholder involvement plan.

National stakeholders

158. At the national level the primary stakeholders are the national governments and their various ministries, departments and agencies. National-level stakeholders from the private sector, the scientific community, NGOs, and coastal and Indigenous communities will also play a vital role in the project.

Indonesia:

- The lead agency for ATSEF, ATSEA and CTI activities in Indonesia is the Ministry of Maritime Affairs and Fisheries (MMAF), and its Marine and Fisheries Research Agency (BRKP) currently (2008/09) hosts the Regional Secretariat of ATSEF. In addition to BRKP, MMAF also comprises a Directorate General of Capture Fisheries, a Directorate General of Marine and Fisheries Surveillance, Directorate General of Small Islands, DG of Aquaculture. All DG's have internal and external programs and activities
- Amongst other functions, MAFF manages Indonesian national fisheries, and divides the country into 11 Fisheries Management Areas (FMAs), based on bio-ecological and seabed morphological characteristics. One of these FMAs is the *Arafura and Timor Seas*, which covers the Indonesian side of the ATS region, and which means that all related

ATSEA activities can be coordinated through a single Indonesian FMA. Some Ministries such as MAFF maintain technical

- The State Ministry of Environment (KMLH) is the GEF OFP, and whose environment policies and laws contain elements relating to coastal and marine environments, including for environmental impact assessment and climate change (e.g. The Indonesia national council on climate change and its working groups established in 2008). The Ministry also has several regional environmental management centers in Nusa Tenggara, the Molucas and Papua provinces within the ATS region.
- Indonesia also has a National Agency for Planning and Development (BAPPENAS), which amongst other things is charged with coordinating all international development assistance and technical cooperation activities in the country, and which has a National Policy in Marine Affairs and Fisheries. BAPPENAS is therefore a vital national stakeholder in ATSEA. The Agency for Controlling Environmental Impact (BAPEDAL) is also based in the central government.
- Ministry of Forestry (through four DGs and research agency) has functions relating to coastal areas in particular mangroves, conservation of forests and water management (such as coastal catchment areas), as well as national parks (both terrestrial and marine), with new MPAs to be managed through MAFF.
- Tourism, Mining, and Transportation Ministries undertake functions which relate to marine affair management (Ministry of Energy and Mineral Resources responsible for Mining and offshore oil and gas) and the Ministry of Transportation (Shipping and Ports).
- At the local level (Province and District), some central Ministries maintain Technical Implementing Units and therefore act as a representative of the related Ministry in a certain Province and District. For example some of the DGs in MAFF have representatives in Kupang, Tual and Ambon in the ATS region. There are also related Sectoral Services in local government level (Province and District), that administratively come under the Governor (in Province level) or Regent (in District level). Legislations and policies by sector are issued either by central or local government levels in line with their task and where District Governments have responsibility for marine resource management out to 3nm and Provincial Governments have responsibility for marine resource management out to 12nm.
- Several institutions that undertake research on fisheries, natural and social aspects of marine science include the Indonesian Institute of Sciences (Pusat Penelitian Oceanologi/Research Centre for Oceanography) Lembaga Ilmu Pengetahuan Indonesia – P20/LIPI), Agency for Assessment and Implementing Technology (Badan Pengkajian dan Penerapan Teknologi -BPPT). A number of Universities based in Java and other parts of Indonesia with active marine science and technology research programs in ATS including IPB- Bogor Agricultural University. In Indonesia several provinces in the ATS region have major regional universities such as Nusa Cendana University in Kupang (UNDANA) and Pattimura University in Ambon (UNPATTI) already have existing programs and partnerships with ATSEF Australian members.

Timor Leste

- The lead agency for ATSEF, ATSEA and CTI activities in Timor Leste is the National Directorate of Environment (NDE) within the Ministry of Economy and Development (MED), which is also the GEF OFP.
- The National Directorate of Fisheries and Aquaculture (NDFA) within the Ministry of Agriculture, Forestry and Fisheries (MAF) is also a major national government stakeholder in Timor Leste. It currently includes 4 divisions: fisheries resource management, fisheries inspection, fisheries industry and aquaculture with technical operation units in some districts. Building the capacity of NDFA is therefore an important activity for the ATSEA FSP. Also within MAF is the Inspectorate of Fisheries

(surveillance, monitoring, VMS systems etc). The General Directorate of Forestry also has responsibilities for catchment areas and mangroves, protected areas and national parks.

- Ministry of Tourism, Trade and Industry is an important stakeholder in relation to potential marine eco-tourism in areas where some small scale activity exists such as Arturo Island and Jaco Island within the Nino Konis Santana National Park at the far eastern part of Timor.
- The Ministry of Infrastructure is in charge of maritime transports and Port Authority of Timor Leste is independent institute within the Ministry. The Ministry of Economic and Development has responsibility for environmental impact statements.
- The National University of Timor Leste (UNTL) does not offer any marine/coastal programs but has strong links with CDU in Darwin and collaborate on development and student exchange programs, and implementation of ACIAR funded projects.
- Local NGOs include: Perkumpulan Hak which completed a community-based fisheries survey in 6 districts in 2005, the Haburas Foundation based in Dili is active in environmental management in coastal communities especially in Lautem district, Roman Luan on Arturo Island which has established 2 community-based MPAs and an eco-lodge in association with the Australian Conservation Foundation, and Belum organization works with fishers in various districts on fisheries development.
- International NGOs with active coastal programs include: Oxfam, Concern, World Vision, Caritas, and CARE International. Given the large amount of NRM related development activities, food security and local livelihoods other important stakeholders in ATSEA to generate linkages with ATSEA other international donor agencies such as JICA, GTZ and Portuguese Agency (IPAD), FAO, ADB who are all represented in Dili.
- The Timor Sea Designated Authority (TSDA) manages the resources of the Joint Petroleum Development Areas (shared between Australia and Timor Leste which also involves the Ministry of Natural resources and Energy (Oil and Gas Directorate and Ministry of Planning and Finance). Timor Leste has plans to establish a National Petroleum Regulatory Authority.

Australia

- The lead agency for ATSEF, ATSEA and CTI activities in Australia is the Department of the Environment, Water, Heritage, and the Arts (DEWHA).
- Another Australian Government Department that is very active in the ATSEA region is the Department of Agriculture, Fisheries and Forestry (DAFF), including initiatives in bilateral fisheries management and surveillance arrangements with all three of the other ATS littoral nations, and the broader Regional Action Plan on IUU Fishing.
- The Australian Agency for International Development (AusAID) is also a key player in the region, with a large proportion of AusAID's support being directed to the three other ATS littoral nations, including in the areas of sustainable development, enterprise development, environment and fisheries. AusAID is also the GEF Operational Focal Point (OFP) in Australia.
- The Australian Centre for International Agricultural Research works with a number of Indonesia, Timor Leste governments, research organizations and NGOs in areas of fisheries (e.g. snapper, trepang.), aquaculture, capacity building and food security.
- At the sub-national level, the Northern Territory Government has an active research programme with both Indonesia and Timor Leste and the Queensland Government is involved in cooperative management fisheries arrangements with PNG through the Torres Strait Treaty and Protected Zone.
- A number of research and scientific institutions are also active in the ATS region, including those founding members of ATSEF: the Australian National University, with a long established research activity across the entire ATS region and currently in alternative maritime livelihoods and ecotourism in NTT, Indonesia and Timor Leste Charles Darwin University (CDU); the Australian Institute of Marine Science (AIMS), the Commonwealth

Scientific and Industrial Research Organization (CSIRO). Universities from Western Australia and Queensland also have active research programs operating in Timor Leste, Indonesia and PNG.

- NAILSMA represents indigenous communities across northern Australia and implements projects relating to indigenous resource management and enterprise development to improve socioeconomic outcomes.

PNG

- While PNG is not yet a member of ATSEF and ATSEA, the two main national government stakeholders will be the Department of Environment and Conservation (DEC), which is the lead agency for the CTI in PNG, and which is also the GEF OPF, and also the National Fisheries Authority (NFA), which already cooperates closely with Australia, including through the Torres Strait Treaty.
- The PNG National Maritime Safety Authority (NMSA) is also an important potential government stakeholder, being responsible for the regulation of sea-based sources of marine pollution.

Local stakeholders

159. Provincial, Kota (city) and Kabupaten (District) local-level governments exist in the ATS parts of Indonesia, Timor Leste and PNG, as outlined in Table 2 below, and are also important local-level stakeholders for the ATSEA project.

Table 2: *Provincial and local-level governments in ATS region (excluding Australia)*

Country	Provincial Govts in ATS region	City/District Govts in ATS region
Indonesia	East Nusa Tenggara Province	Rote Ndao Kupang City Kupang District Timor Tengah Selatan (inside ATS area but limited local fisheries) Alor (outside of ATS but source of fishers)
	Maluku Province	Aru Islands Maluku Tenggara Maluku Tenggara Barat Ambon City (Provincial capital outside of ATS)
	Papua Province	Merauke Mimika Asmat Mappi. Kota JayaPura (Prov. capital outside of ATS region)
Timor Leste	No provinces	13 administrative districts; 11 of which are coastal (S- south N-north coast: Ainaro (S) Baucau (N) Bobonaro (Maliana) (N) Cova-Lima (Suai) (S) Dili (N) Lautem (Los Palos) (S) Liquica (N)

		Manatuto (N) Manufahi (Same) (N) Oecussi (Ambeno) (N) Viqueque (S) (there are also Aileu and Ermera Districts which are not coastal).
PNG	Western Province	South Fly District (there are also Middle and North Fly Districts which are not coastal).

160. Coastal and Indigenous communities will be the *Primary Beneficiaries* of the ATSEA project and are therefore a significant stakeholder group. Special consideration of gender issues (e.g. women benefiting from supplementary livelihood activities through increased incomes and new technology allowing men to participate in such activities), special attention to vulnerable stakeholder groups with high dependence on ATS resources (e.g. Bajo fisher communities), including those who have been displaced from fishing activities in ATS region and community development participation approaches consistent with local socio-cultural and institutional practices will be required as part of the TDA socioeconomic impact assessment, governance and demonstration pilot project design, implementation and monitoring.

161. In Indonesia these relate primarily to districts containing the largest number of fishers active in the ATS region such as those from NTT province districts of Kupang/ Kupang City, Rote Ndao and Alor. In Maluku this will predominately be fishers from Aru Islands and main town of Dobo, Kei Islands (Tual?) and Tanimbar Islands (Samulaki) as well as smaller islands to the west of Tanimbars and in Papua predominately the town of Merauke and settlements of Pintu Air (on the periphery of Merauke, the fishing village of Lampu Satu (2 km to the east) and the boat building village of Kumbe (60km to the Northwest) which host fishers belonging to Papuan as well as migrant Bajo, Bugis and Butonese. Other fishers active in ATS also originate from islands such as Sulawesi, Madura and Flores.

162. In Timor Leste these include fishers primarily from administrative districts of Dili, Arturo Liquica, and Lautem with smaller numbers in Manatuto, Bononaro and Ambeno districts.

Stakeholder Consultation during FSP Phase

163. During the preparation of the FSP, a wide range of stakeholders have been consulted in relation to national status reports (Indonesia and Timor Leste on biodiversity, socio-economic and governance issues in ATS region), draft preliminary TDA framework, threats, priority environmental concerns and root causes and TDA framework (to identify priority issues of a transboundary nature in the Arafura and Timor Seas as a basis from which to complete the ATSEA Full Scale Program Proposal and from which to develop the full TDA during the Full Scale Project) and the contents of the Project document and potential demonstration projects. This has involved regional and national consultations (stakeholder workshops held in Darwin in August 2008, Dili in September 2008, Bogor in November 2008, Jakarta in April 2009 and Manado in early May 2009). ATSEF Australia, Indonesia and Timor Leste have also established internal consultation mechanisms.

A list of stakeholders consulted is provided at Annex 1.

Summary

164. Of significant benefit to the proposed project is the ATSEF partnership which provides an established and effective mechanism for engaging relevant stakeholders. Since its inception, more than 60 Indonesian groups have been engaged in ATSEF including government, environmental,

NGOs, universities, and community organizations. In Australia, Indigenous organisations have been integral to the development of ATSEF, Government support and participation is strong, and marine research agencies have been integral to ATSEF arrangements and existing activities and projects relevant to ATSEA Program goals. The Timor-Leste Government has been a strong supporter of ATSEF since it evolved, and local community representation and NGOs engagement are growing as Timor Leste's capacity develops.

All of the stakeholders listed above will be direct or indirect beneficiaries of the project, with the *Primary Beneficiaries* being the coastal and indigenous communities of the littoral nations.

ATSEA communication plan & IW:Learn

165. ATSEA will develop a communication plan comprising the standard communication media such as:

- Regular media releases
- Web site
- Brochures and posters
- Technical monographs on project activities (e.g. document outputs from TDA, SAP, NAPs and local-level demonstration project reports)

166. Due to GEF funding limitations, the ATSEA communication plan will ride on the existing communication activities of participating organizations and governments, and rely on co-financing, e.g. by having the ATSEA web site joined with the ATSEF web site and supported by IW:Learn/CTI. IW:Learn will also be used a major conduit for the dissemination and replication of project outputs and outcomes, including lessons learned to local, national and regional and international stakeholders. Specific communication strategies will be developed for individual pilot demonstration projects.

SIGNATURE PAGE

Country: Regional

UNDAF Outcome(s)/Indicator(s):

(Link to UNDAF outcome., If no UNDAF, leave blank)

Expected Outcome(s)/Indicator (s):

(CP outcomes linked t the SRF/MYFF goal and service line)

Expected Output(s)/Indicator(s):

(CP outcomes linked t the SRF/MYFF goal and service line)

Implementing partner:

(designated institution/Executing agency)

UNOPS

Other Partners:

ATSEF Regional Secretariat

Programme Period: 2009-2013
Programme Component: _____
Project Title: Arafura and Timor Seas Ecosystem Action program (ATSEA)
Project ID: 00071576
Project Duration: 5 years
Management Arrangement: UNOPS

Total budget:	8,748,047
Allocated resources:	
• Indonesia government	446,220
• Timor Leste government	400,000
• UNDP	400,000
• GEF	2,500,000
• In kind contributions from multi-donors	5,001,827

Agreed by (Government): _____

Agreed by (Implementing partner/Executing agency): _____

Agreed by (UNDP): _____

ANNEX 1

LIST OF STAKEHOLDERS CONSULTED DURING FSP PHASE

I. Arafura – Timor Seas Ecosystem Action Programme (ATSEA) - ATSEF Inception Meeting, Jakarta, 21 – 22 July, 2008

No	Country	Group	Affiliation
1	Indonesia	Government	Planning Bureau, Ministry of Marine Affairs and Fisheries
			Directorate of Marine and Fisheries, National Development Planning Agency
		Academic/ Research Institution	The Agency for Marine and Fisheries Research (AMFR), Ministry of Marine Affairs and Fisheries (MMAF)
			Center for Oceanography Research, Indonesian Institutes of Sciences
			IPB – Bogor Agriculture Institute
		Donor Agencies	ATSEF Indonesia
			Environment Unit, UNDP Indonesia
		NGO	Sustainable Fisheries Partnership
			WWF – World Wide Fund for Nature
CI – Conservation International			
		TNC – The Nature Conservancy	
2	Timor Leste	Government	Ministry of Agricultural and Fisheries
		Donor Agencies	ATSEF Timor Leste
3	Australia	Government	Australian Government
		Academic	Australian National University, Charles Darwin University, Australian Institute of Marine Science, CSIRO
		Donor Agencies	ATSEF Australia
		NGO	North Australia Indigenous Land and Sea Management Alliance (NAILSMA), WWF Australia,
4	Other Initiatives		Regional Technical Advisor, Land Degradation & International Waters, UNDP Regional Bangkok
			Arafura Timor Sea Expert Forum (ATSEF) Regional

II. Indonesia National Expert Workshop, Bogor 19 – 20 September 2008

No	Country	Group	Affiliation
1	Indonesia	Government	D.G. Capture Fisheries - MMAF
			D.G. Control and Surveillance of Marine Resources (P2SDKP) - MMAF

			D.G. Marine, Coastal and Small Island (KP3K), MMAF
			National Committee on Fisheries Stock Assessment (Komnas KAJISKAN)
		Academic/ Research Institution	The Agency for Marine and Fisheries Research (AMFR), Ministry of Marine Affairs and Fisheries (MMAF)
			Center for Oceanography Research, Indonesian Institutes of Sciences
			IPB – Bogor Agriculture Institute
			Padjajaran University - UNPAD
		Donor Agencies	Arafura Timor Sea Expert Forum (ATSEF) Regional
			ATSEF Indonesia
		NGO	Sustainable Fisheries Partnership
			WWF – World Wide Fund for Nature
			CI – Conservation International
			TNC – The Nature Conservancy
		Association	Indonesian Tuna Association (ASTUIN)

**III. ATSEA Expert Workshop – Indonesia and Consultants Coordination Meeting
Bogor, 16 – 19 November 2008**

No	Country	Group	Affiliation
1	Indonesia	Government	Planning Bureau, Ministry of Marine Affairs and Fisheries
			Directorate of Marine and Fisheries, National Development Planning Agency
			Marine and Fisheries Service, Maluku Tenggara District
			Marine and Fisheries Service, Nusa Tenggara Province
			Marine and Fisheries Service, Belu District, East Nusa Tenggara Province
			Marine and Fisheries Service, Merauke District, Papua
		Academic/ Research Institution	The Agency for Marine and Fisheries Research (AMFR), Ministry of Marine Affairs and Fisheries (MMAF)
			Center for Oceanography Research, Indonesian Institutes of Sciences
			IPB – Bogor Agriculture Institute
		Donor Agencies	ATSEF Indonesia
			Environment Unit, UNDP Indonesia
		NGO	Sustainable Fisheries Partnership
			WWF – World Wide Fund for Nature
			CI – Conservation International
TNC – The Nature Conservancy			
2	Timor Leste	Government	Ministry of Agricultural and Fisheries

		Donor Agencies	ATSEF Timor Leste
3	Australia	Academic	The Australian National University
		Donor Agencies	ATSEF Australia
4	Other Initiatives		Regional Technical Advisor, Land Degradation & International Waters, UNDP Regional Bangkok

IV. ATSEF Regional Meeting Workshop, Jakarta, 2-3 April 2009

No	Country	Group	Affiliation
1	Indonesia	Government	Planning Bureau, Ministry of Marine Affairs and Fisheries
			Directorate of Marine and Fisheries, National Development Planning Agency
		Academic/ Research Institution	The Agency for Marine and Fisheries Research (AMFR), Ministry of Marine Affairs and Fisheries (MMAF)
			Center for Oceanography Research, Indonesian Institutes of Sciences
			IPB – Bogor Agriculture Institute
		Donor Agencies	ATSEF Indonesia
			Environment Unit, UNDP Indonesia
		NGO	Sustainable Fisheries Partnership
			WWF – World Wide Fund for Nature
			CI – Conservation International
TNC – The Nature Conservancy			
2	Timor Leste	Government	Ministry of Agricultural and Fisheries
		Donor Agencies	ATSEF Timor Leste
3	Australia		ATSEF Australia
4	Other Initiatives		Arafura Timor Sea Expert Forum (ATSEF) Regional

V. ATSEA Technical Coordination Meeting, Manado 14 May 2009

No	Country	Group	Affiliation
1	Indonesia	Academic/ Research Institution	The Agency for Marine and Fisheries Research (AMFR), Ministry of Marine Affairs and Fisheries (MMAF)
			IPB – Bogor Agriculture Institute
		Donor Agencies	ATSEF Indonesia Environment Unit, UNDP Indonesia
2	Timor Leste	Government	Ministry of Agricultural and Fisheries/ ATSEF Timor Leste
3	Australia	Academic/ Research Institution	The Australian National University
		Donor Agencies	ATSEF Australia
4	Other Initiatives	Donor Agencies	Arafura Timor Sea Expert Forum (ATSEF) Regional
		Donor Agencies	Regional Technical Advisor, Land

			Degradation& International Waters, UNDP Regional Bangkok
		Government	Principal Technical Advisor international waters and cluster leader, waters, water governance Programme, New York

VI. Kupang, East Nusa Tenggara Stakeholders Meeting 19 – 20 February 2009

No	Country	Group	Affiliation
1	Indonesia	Government	Directorate of ocean and fisheries, National Agency for Development and Planning (BAPPENAS)
			Bureau of Planning, Ministry of marine affairs and fisheries (MMAF),
			Balai Kawasan Konservasi Perairan Nasional (National Institute for Conservation) DG of Coastal and Small Island in Kupang
			Marine and Fisheries Service Province, East Nusa Tenggara
			Marine and Fisheries Service District, Kupang, East Nusa Tenggara
			Marine and Fisheries Service District, Merauke, Papua
			Marine and Fisheries Service District, Tual, Maluku Tenggara
			Marine and Fisheries Service District, Belu, East Nusa Tenggara
			Marine and Fisheries Service District, Rote Ndao, East Nusa Tenggara
		Academic/ Research Institution	The Agency for Marine and Fisheries Research (AMFR), Ministry of Marine Affairs and Fisheries (MMAF)
			IPB – Bogor Agriculture Institute
			Fisheries and Marine department, University of Nusa Cendana, Kupang
		Donor Agencies	ATSEF Indonesia
			Environment Unit, UNDP Indonesia
NGO	OISCA (local NGO) Kupang		
	TNC (international NGO) Kupang		
2	Timor Leste	Government	Ministry of Agricultural and Fisheries/ ATSEF Timor Leste
3	Australia	Academic/ Research Institution	The Australian National University
		Donor Agencies	ATSEF Australia
4	Other Initiatives	Donor Agencies	Arafura Timor Sea Expert Forum (ATSEF) Regional
		Donor Agencies	Regional Technical Advisor, Land Degradation& International Waters, UNDP Regional Bangkok
		Government	Principal Technical Advisor

			international waters and cluster leader, waters, water governance Programme, New York
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**VII. ATSEA – Timor Leste National Expert Consultative Workshop, Dili
25-26 September 2008**

No	Country	Group	Affiliation
1	Timor Leste	Government	TL ATSEF Focal Point/ Directorate of Fisheries Resource Management
			Prosecution of Fisheries Inspection of NDFA
			Division of National Parks
			Directorate of Land Protection and Nat. Park
			Nat. Director of Forest
			Nat. Director of Environment
			Nat. Directorate of Tourism
			Environmental Advisor
			Director of Finance and Administrative of MAF
			Division MCS
			Division Aquaculture
			Division Aquatic Resource Management
			Division Industry-License
			Division Fish Resource Management
		Division Fishing Technology	
Division Marine Resource Management			
	Academic/ Research Institution		
	Donor Agencies	ATSEF Timor Leste	
	NGO		

VIII. Australia (Darwin Workshop 22 August 2008)

No	Country	Group	Affiliation
1	Australia	Research Institution	CSIRO
		Research Institution	CSIRO Land and Water
		Academic	Research School of Pacific and Asian Studies, Australia National University
		Government	Australian Government
		Academic	Charles Darwin University/Australian Institute for Marine Science
		Academic	School of Earth and Environmental Sciences and ARC Centre of Excellence

			for Coral Reef Studies, James Cook University
		Research Institution	CSIRO Marine & Atmospheric Research
		Other Initiative	Coordinator, ATSEF Regional Secretariat
		Non-government	North Australian Indigenous Land and Sea Management Alliance
		Other Initiative	National Coordinator – Australia, Arafura and Timor Seas Expert Forum (ATSEF)
		Research Institution	Marine Nation, CSIRO Marine & Atmospheric Research
		Academic	Graduate Research Studies, Professor of Environmental Science James Cook University
		Academic	Department of Anthropology Research School of Pacific and Asian Studies, Australia National University
		Research Institution	Darwin Office, Australian Institute for Marine Science
		Academic	School for Environmental Research and School for Environmental and Life Sciences, Charles Darwin University
		Government	Australian Fisheries Management Authority
		Government	(Marine Biodiversity), Northern Territory Department of Natural Resources Environment and the Arts
		Government	Marine Division, Department of the Environment, Water, Heritage and Arts
		Academic	Deputy Vice Chancellor, Charles Darwin University
2	Indonesia	Research Institution	Cooperation Division, Agency for Marine, and Fisheries Research, Indonesia
		Research Institution	Research Centre for Capture Fisheries
3	Timor Leste	Government	National Directorate of Fisheries and Aquaculture, Ministry of Agriculture and Fisheries, Timor Leste
		Government	Director Fisheries, Ministry of Agriculture and Fisheries, Timor Leste

ANNEX 2

LIST OF SELECTED SPECIES FOUND IN ARAFURA AND TIMOR SEAS

No		Family	Species	Common Name
I	HARD CORAL	POCILLOPORIDAE	<i>Pocillopora damicornis</i>	
1		ACROPORIDAE	<i>Montipora caliculata</i>	-
2		PORITIDAE	<i>Porites cylindrica</i>	-
3		SIDERASTREIDAE	<i>Psammocora contigua</i>	-
4			<i>Psammocora nierstraszi</i>	-
5		AGARICIIDAE	<i>Pavona cactus</i>	-
6		FUNGIIDAE	<i>Fungia concinna</i>	-
7		OCULINIDAE	<i>Galaxea astreata</i>	-
8			<i>Galaxea fascicularis</i>	-
9		PECTINIIDAE	<i>Echinophyllia aspera</i>	-
10		MUSSIDAE	<i>Acanthastrea echinata</i>	-
11		MERULINIDAE	<i>Hydnophora exesa</i>	-
12		FAVIIDAE	<i>Favia fava</i>	-
13		CARYOPHYLLIIDAE	<i>Euphyllia glabrescens</i>	-
14			<i>Physogyra lichtensteini</i>	-
15		DENDROPHYLLIIDAE	<i>Turbinaria peltata</i>	-
16			<i>Turbinaria reniformis</i>	-
II	SOFT CORAL	ALCYONIIDAE	<i>Dampia pocilloporaeformis</i>	-
1		BRIAREIDAE	<i>Briareum excavatum</i>	-
2		ISIDIDAE	<i>Isis hippuris</i>	-
3		NEPHTHEIDAE	<i>Capnella imbricata</i>	-
4		PLEXAURIDAE	<i>Plexaura" flava</i>	-
5		XENIIDAE	<i>Xenia plicata</i>	-
III	SEAGRASS	POTAMOGETONACEAE	<i>Cymodocea rotundata</i>	-
1		HYDROCHARITACEAE	<i>Enhalus acoroides</i>	-
2		ZOSTERACEAE	<i>Zostera capricorni</i>	-
IV	SHRIMPS	ALPHEIDAE	<i>Alpheus euphrosyne</i>	-
1		ARISTEIDAE	<i>Aristeus mahabissae</i>	-
2			<i>Aristeus semidentatus</i>	-
3		BENTHESICYMIDAE	<i>Benthescymus investigatoris</i>	-
4			<i>Gennadas bouvieri</i>	-
5		GLYPHOCRANGONIDAE	<i>Glyphocrangon pugnax</i>	-
6		NEPHROPIDAE	<i>Metanephrops arafurensis</i>	-
7		PALAEOMONIDAE	<i>Macrobrachium spp.</i>	-
8		PALINURIDAE	<i>Linuparus trigonus</i>	-

9			<i>Palinustus unicornutus</i>	-
10		PANDALIDAE	<i>Plesionika rostricrescentis</i>	-
11		PASIPHAEIDAE	<i>Pasiphaea crosnieri</i>	-
12			<i>Pasiphaea pseudacantha</i>	-
13		PENAEIDAE	<i>Atypopenaeus dearmatus</i>	-
14			<i>Funchalia taaningi</i>	-
15			<i>Metapenaeopsis barbata</i>	-
16		SCYLARIDAE	<i>Ibacus brevipes</i>	-
17			<i>Ibacus novemdentatus</i>	-
18		SICYONIIDAE	<i>Sicyonia benthophila</i>	-
19		SOLENCERIDAE	<i>Hadropenaeus lucasi</i>	-
20			<i>Haliporoides sibogae</i>	-
21			<i>Hymenopenaeus halli</i>	-
22			<i>Solenocera annectes</i>	-
23		STYLODACTYLIDAE	<i>Neostylodactylus affinis</i>	-
24			<i>Parastylodactylus bimaxillaris</i>	-
V	SEA CUCUMBER		<i>Actinopyga lecanora</i>	-
1			<i>Bohadschia argus</i>	-
2			<i>Bohadschia marmorata</i>	-
3			<i>Holothuria (Halodeima) atra</i>	-
4			<i>Pearsonothuria graeffei</i>	-
5			<i>Stichopus chloronotus</i>	-
6			<i>Thelenota ananas</i>	-
VI	FISHES	ACANTHURIDAE	<i>Acanthurus grammoptilus Richardson</i>	-
1		ARIIDAE	<i>Arius bilineatus Valenciennes</i>	Bronze catfish
2		APOGONIDAE	<i>Apogon brevicaudata Weber</i>	Many-banded cardinal-fish
3		APOGONIDAE	<i>A. ellioti</i>	Flag-in cardinal-fish
4		APOGONIDAE	<i>A. fasciatus</i>	Broad-banded cardinalfish
5		APOGONIDAE	<i>A. hartzfeldii</i>	Hartzfeld's cardinalfish
6		APOGONIDAE	<i>A. melanopus</i>	Monster cardinal-fish
7		APOGONIDAE	<i>A. nigripinnus</i>	Bullseye
8		APOGONIDAE	<i>A. poecilopterus</i>	Pearly-finned cardinalfish
9		APOGONIDAE	<i>Rhabdamia gracilis</i>	Luminous cardinalfish
10		ACROPOMATIDAE	<i>Acropoma japonicum</i>	Glowbelly
11		BATRACHOIDIDAE	<i>Batrachomoeus trispinosus</i>	Three-spined frogfish

12		BAGRIDAE	<i>Bagrichthys hypselopterus</i>	Blacklancer catfish
13		COLOCONGRIDAE	<i>Coloconger raniceps</i>	Froghead eel
14		CLUPEIDAE	<i>Amblygaster sirm</i>	Spotted sardinella
15		CLUPEIDAE	<i>Anodontostoma chancunda</i>	Chacunda gizzard shad
16		CLUPEIDAE	<i>Dussumieria elopsoides</i>	Slender rainbow sardine
17		CLUPEIDAE	<i>Etrumeus teres</i>	Round herring
18		CLUPEIDAE	<i>Herklotsichthys koningsbergeri</i>	Koningsberger's herring
19		CLUPEIDAE	<i>H. lippa</i>	Australian spotted herring
20		CLUPEIDAE	<i>Sardinella albella</i>	White sardinella
21		CLUPEIDAE	<i>S. gibbosa</i>	Goldstripe sardinella
22		CHIROCENTRIDAE	<i>Chirocentrus dorah</i>	Dorab wolf-herring
23		CARAPIDAE	<i>Onuxodon margaritiferae</i>	Bivale Pearlfish
24		CAPROIDAE	<i>Antignonia rubescens</i>	Indo-Pacific boarfish
25		CAPROIDAE	<i>Antignonia rhomboidea</i>	Rhomboidal boarfish
26		CENTRINCIDAE	<i>Aeoliscus strigatus</i>	Razorfish
27		CENTRINCIDAE	<i>Centriscus scutatus</i>	Grooved razorfish
28		CENTROPOMIDAE	<i>Psammoperca waigiensis</i>	Waigieu seaperch
29		CARANGIDAE	<i>Absalom radiatus</i>	Fringe-finned trevally
30		CARANGIDAE	<i>Alectis ciliaris</i>	African pompano
31		CARANGIDAE	<i>A. indicus</i>	Indian threadfish
32		CARANGIDAE	<i>Alepes djedaba</i>	Shrimp scad
33		CARANGIDAE	<i>A. mate</i>	Yellowtail scad
34		CARANGIDAE	<i>A. kleinii</i>	Razorbelly scad
35		CARANGIDAE	<i>Carangoides caeruleopinnatus</i>	Coastal trevally
36		CARANGIDAE	<i>C. chrysophrys</i>	Longnose trevally
37		CARANGIDAE	<i>C. equula</i>	Whitefin trevally
38		CARANGIDAE	<i>C. fulvoguttatus</i>	Yellowspotted trevally
39		CARANGIDAE	<i>C. gymnostethus</i>	Bludger
40		CARANGIDAE	<i>C. hedlandensis</i>	Bumpnose trevally
41		CARANGIDAE	<i>C. humerosus</i>	Duskyspotted trevally
42		CARANGIDAE	<i>C. malabaricus</i>	Malabar trevally
43		CARANGIDAE	<i>C. oblongus</i>	Coachwhip trevally
44		CARANGIDAE	<i>C. talamparoides</i>	Imposter trevally

45		CARANGIDAE	<i>Caranx bucculentus</i>	Bluespotted trevally
46		CARANGIDAE	<i>C. ignobilis</i>	Giant trevally
47		CARANGIDAE	<i>C. melampyus</i>	Bluefin trevally
48		CARANGIDAE	<i>C. sexfasciatus</i>	Bigeye trevally
49		CARANGIDAE	<i>C. tille</i>	Tille trevally
50		CARANGIDAE	<i>Decapterus macrosoma</i>	Shortfin scad
51		CARANGIDAE	<i>D. muroadsi</i>	Amberstripe scad
52		CARANGIDAE	<i>D. russelli</i>	Indian scad
53		CARANGIDAE	<i>Gnathanodon speciosus</i>	Golden trevally
54		CARANGIDAE	<i>Megalaspis cordyla</i>	Torpedo scad
55		CARANGIDAE	<i>Scomberoides commersonianus</i>	Talang queenfish
56		CARANGIDAE	<i>S. lysan</i>	Doublespotted queenfish
57		CARANGIDAE	<i>S. tala</i>	Barred queenfish
58		CARANGIDAE	<i>S. tol</i>	Needlescaled queenfish
59		CARANGIDAE	<i>Selar boops</i>	Oxeye scad
60		CARANGIDAE	<i>S. crumenophthalmus</i>	Bigeye scad
61		CARANGIDAE	<i>Selaroides leptolepis</i>	Yellowstripe scad
62		CARANGIDAE	<i>Seriolina nigrofasciata</i>	Blackbanded trevally
63		CARANGIDAE	<i>Ulua aurochs</i>	Silvermouth trevally
64		CARANGIDAE	<i>Uraspis helvola</i>	Whitemouth jack
65		CARANGIDAE	<i>U. uraspis</i>	Whitetongue jack
66		DIRETMIDAE	<i>Diretmichthys parini</i>	Parin's spiny fin
67		DACTYLOPTERIDAE	<i>Dactyloptena macracantha</i>	Spotwing flying gurnard
68		DACTYLOPTERIDAE	<i>D. orientalis</i>	Oriental flying gurnard
69		DACTYLOPTERIDAE	<i>D. papilio</i>	Butterfly flying-gurnard
70		DACTYLOPTERIDAE	<i>D. peterseni</i>	Starry flying gurnard
71		DREPANEIDAE	<i>Drepane punctata</i>	Spotted sicklefish
72		ENGRAULIDIDAE	<i>Papuengraulis micropinna</i>	Littlefin anchovy
73		ENGRAULIDIDAE	<i>Setipinna tenuifilis</i>	Common hairfin anchovy
74		ENGRAULIDIDAE	<i>Stolephorus indicus</i>	Indian anchovy
75		ENGRAULIDIDAE	<i>Thryssa Hamiltonii</i>	Hamilton's thryssa
76		ENGRAULIDIDAE	<i>T. setirostris</i>	Longjaw thryssa
77		EXOCOETIDAE	<i>Cheilopogon cyanopterus</i>	Margined flyingfish
78		EXOCOETIDAE	<i>Cypselurus poecilopterus</i>	Yellow-wing flyingfish

80		EXOCOETIDAE	<i>Hyrundichthys oxycephalus</i>	Bony flyingfish
81		EXOCOETIDAE	<i>Parexocoetus brachypterus</i>	Sailfin flyingfish
82		EXOCOETIDAE	<i>P. mento</i>	African sailfin flyingfish
83		ECHENEINIDAE	<i>Echeneis naucrates</i>	Live sharksucker
84		ECHENEINIDAE	<i>Remora brachyptera</i>	Spearfish remora
85		ECHENEINIDAE	<i>Remora remora</i>	Common remora
86		EPHIPPIDIDAE	<i>Ephippus orbis</i>	Orbfish
87		FISTULARIIDAE	<i>Fistularia petimba</i>	Red cornetfish
88		GLAUCOSOMATIDAE	<i>Glaucosoma magnificum</i>	Threadfin pearl-perch
89		HOLOCENTRIDAE	<i>Myripristis murdjan</i>	Pinecone soldierfish
90		HOLOCENTRIDAE	<i>Sargocentron rubrum</i>	Redcoat
91		LOPHIIDAE	<i>Lophiodes naresi</i>	Goosefish
92		LOPHIIDAE	<i>Lophiomus setigerus</i>	Blackmouth angler
93		LACTARIIDAE	<i>Lactarius lactarius</i>	False trevally
94		MURAENISOCIDAE	<i>Muraenesox bagio</i>	Common pike conger
95		MURAENISOCIDAE	<i>M. cinereus</i>	Daggertooth pike conger
96		MONOCENTRIDAE	<i>Monocentris japonica</i>	Pinecone fish
97		MALACANTHIDAE	<i>Branchiostegus japonicus</i>	Red tilefish
98		MALACANTHIDAE	<i>B. sawakinensis</i>	Freckled tilefish
99		OOCOCEPHALIDAE	<i>Halieutacea indica</i>	Indian handfish
100		PRISTIGASTERIDAE	<i>I. melastoma</i>	Indian ilisha
101		PRISTIGASTERIDAE	<i>Pellona ditchela</i>	Indian pellona
102		PLOTOSIDAE	<i>Euristhmus lepturus</i>	Long-tailed catfish
103		PERISTEDIIDAE	<i>Satyrichthys rieffeli</i>	Spotted armoured-gurnard
104		PLATYCEPHALIDAE	<i>Grammoplites scaber</i>	Rough flathead
105		PLATYCEPHALIDAE	<i>Inegocia harrisii</i>	Harris's flathead
106		PLATYCEPHALIDAE	<i>I. japonica</i>	Japanese flathead
107		PLATYCEPHALIDAE	<i>Platycephalus endrachtensis</i>	Bar-tailed flathead
108		PLATYCEPHALIDAE	<i>P. indicus</i>	Bartail flathead
109		PLATYCEPHALIDAE	<i>P. malabaricus</i>	Crocodile flathead
110		PLATYCEPHALIDAE	<i>Kumococius rodericensis</i>	Spiny flathead
111		PLATYCEPHALIDAE	<i>Rodagius asper</i>	Olive-tailed flathead
112		PLATYCEPHALIDAE	<i>R. prestiger</i>	Thorny flathead
113		PLATYCEPHALIDAE	<i>Cymbacephalus bosschei</i>	Small-eyed flathead
114		PLATYCEPHALIDAE	<i>Suggrundus macracanthus</i>	Large-spined

				flathead
115		PLATYCEPHALIDAE	<i>Kumococius rodericensis</i>	Spiny flathead
116		PSUDOCHROMIDAE	<i>Pseudochromis quinquedentatus</i>	Spiny dottedback
117		PRIACANTHIDAE	<i>Heteropriacanthus cruentatus</i>	Glasseye
118		PRIACANTHIDAE	<i>P. hamrur</i>	Moontail bullseye
119		PRIACANTHIDAE	<i>P. macrocanthus</i>	Red bigeye
120		PRIACANTHIDAE	<i>P. tayenus</i>	Purple-spotted bigeye
121		PRIACANTHIDAE	<i>Pristigenys nipponia</i>	Japanese bigeye
122		RACHYCENTRIDAE	<i>Rachycentron canadum</i>	Cobia
123		SYNODONTHIDAE	<i>Synodus sageneus</i>	Spreatoothed grinner
124		SYNODONTHIDAE	<i>Trachinopcephalus myops</i>	Snake fish
125		SYNODONTHIDAE	<i>Harpadon translucens</i>	Glassy Bombay duck
126		SYNODONTHIDAE	<i>Saurida longimanus</i>	Longfin Lizardfish
127		SYNGNATHIDAE	<i>Hippocampus histrix</i>	Thorny seahorse
128		SYNGNATHIDAE	<i>Solegnathus lettiensis</i>	Günther's pipehorse
129		SCORPAENIDAE	<i>Apistops caloundra</i>	Short-armed waspfish
130		SCORPAENIDAE	<i>Apistus carinatus</i>	Ocellated waspfish
131		SCORPAENIDAE	<i>Cottapistus cottoides</i>	Marbled stingfish
132		SCORPAENIDAE	<i>Dendrochirus brachypterus</i>	Shortfin turkeyfish
133		SCORPAENIDAE	<i>Erosa erosa</i>	Pitted stonefish
134		SCORPAENIDAE	<i>Inimicus sinensis</i>	Spotted ghoul
135		SCORPAENIDAE	<i>Minous pictus</i>	Painted stinger
136		SCORPAENIDAE	<i>Pterois russelii</i>	Plaintail turkeyfish
137		SCORPAENIDAE	<i>Scorpaenodes smithi</i>	Little scorpionfish
138		SCORPAENIDAE	<i>Scorpaenopsis cirrosa</i>	Weedy stingfish
139		SCORPAENIDAE	<i>Scorpaena amplisquamiceps</i>	Orange scorpionfish
140		SERRANIDAE	<i>Centrogenys vaigiensis</i>	False scorpionfish
141		SERRANIDAE	<i>Cephalopholis boenack</i>	Chocolate hind
142		SERRANIDAE	<i>C. sexmaculata</i>	Sixblotch hind
143		SERRANIDAE	<i>Epinephelus amblycephalus</i>	Banded grouper
144		SERRANIDAE	<i>E. areolatus</i>	Areolate grouper
145		SERRANIDAE	<i>E. diacanthus</i>	Spinycheek grouper
146		SERRANIDAE	<i>E. epistictus</i>	Dotted grouper
147		SERRANIDAE	<i>E. fasciatus</i>	Blacktip grouper

148		SERRANIDAE	<i>E. heniochus</i>	Bridled grouper
149		SERRANIDAE	<i>E. morrhua</i>	Comet grouper
150		SERRANIDAE	<i>E. quoyanus</i>	Longfin grouper
151		SERRANIDAE	<i>E. sexfasciatus</i>	Sixbar grouper
152		SERRANIDAE	<i>E. suillus</i>	Orange-spotted grouper
153		SERRANIDAE	<i>Plectranthias japonicus</i>	Japanese perchlet
154		SERRANIDAE	<i>Plectropomus maculatus</i>	Spotted coral grouper
155		SILLAGINIDAE	<i>Sillago maculata</i>	Trumpeter sillago
156		SILLAGINIDAE	<i>S. lutea</i>	Mud sillago
157		SPARIDAE	<i>Argyrops spinifer</i>	King soldierbream
158		SCIAENIDAE	<i>Argyrosomus amoyensis</i>	Amoy croaker
159		SCIAENIDAE	<i>Atrobucca nibe</i>	Longfin kob
160		SCIAENIDAE	<i>Austronibea oedogenys</i>	Yellowtail croaker
161		SCIAENIDAE	<i>Johnius coitor</i>	Coitor croaker
162		SCIAENIDAE	<i>Johnius borneensis</i>	Sharpnose hammer croaker
163		SCIAENIDAE	<i>Protonibea diacanthus</i>	Blackspotted croaker
164		TRACHICHTHYIDAE	<i>Hoplostethus melanopus</i>	Smallscale slimehead
165		TERAPONTIDAE	<i>Pelates quadrilineatus</i>	Fourlined terapon
166		TERAPONTIDAE	<i>Terapon jarbua</i>	Jarbua terapon
167		TERAPONTIDAE	<i>T. theraps</i>	Largescaled terapon
168		TRIGLIDAE	<i>Lepidotrigla grandis</i>	Supreme gurnard
VIII	CETACEAN	BALAENOPTERIDAE	<i>Balaenoptera acutorostrata</i>	Common minke whale
1			<i>Balaenoptera borealis</i>	Sei whale
2			<i>Balaenoptera edeni</i>	Bryde's whale
3			<i>Balaenoptera musculus</i>	Blue whale
4			<i>Balaenoptera physalus</i>	Fin whale
5			<i>Megaptera novaeangliae</i>	Humpback whale
6		DELPHINIDAE	<i>Delphinus capensis</i>	Long-beaked common dolphin
7			<i>Delphinus delphis</i>	Common dolphin
8			<i>Feresa attenuata</i>	Pygmy killer whale
9			<i>Globicephala macrorhynchus</i>	Short-finned pilot whale
10			<i>Grampus griseus</i>	Risso's dolphin
11			<i>Lagenodelphis hosei</i>	Fraser's dolphin
12			<i>Orcaella brevirostris</i>	Irrawaddy dolphin
13			<i>Orcinus orca</i>	Killer whale

14			<i>Peponocephala electra</i>	Melon-headed whale
15			<i>Pseudorca crassidens</i>	False killer whale
16			<i>Sousa Chinensis</i>	Indo-Pacific humpback dolphin
17			<i>Stenella attenuata</i>	Pantropical spotted dolphin
18			<i>Stenella coeruleoalba</i>	Striped dolphin
19			<i>Stenella longirostris</i>	Spinner dolphin
20			<i>Steno bredanensis</i>	Rough-toothed dolphin
21			<i>Tursiops truncatus</i>	Common bottlenose dolphin
22		KOGIIDAE	<i>Kogia breviceps</i>	Pygmy sperm whale
23			<i>Kogia simus</i>	Dwarf sperm whale
24		PHOCOENIDAE	<i>Neophocaena phocaenoides</i>	Finless porpoise
25		PHYSETERIDAE	<i>Physeter macrocephalus</i>	Sperm whale
26		ZIPHIIDAE	<i>Mesoplodon spp</i>	Beaked whale
27			<i>Ziphius cavirostris</i>	Cuvier's beaked whale
28			<i>Hyperoodon sp</i>	Bottlenose whale
VIII	SHARKS	CARCHARHINIDAE	<i>Gliphis sp. A.</i>	Speartooth shark
1		SCYLIORHINIDAE	<i>Apristurus sp. A</i>	Freckled catshark
2			<i>Atelomycterus sp. A</i>	Banded catshark
3			<i>Galeus sp. A</i>	Slender sawtail shark
4			<i>Halaelurus sp.A</i>	Dusky catshark
5		TRIAKIDAE	<i>Mustelus sp.A</i>	White-spotted gummy shark
6		RHINOBATIDAE	<i>Aptychotrema sp. A</i>	Spotted shovelnose ray
7		RAJIDAE	<i>Pavoraja sp. B</i>	Western looseskin skate
8			<i>Raja sp. F</i>	Leyland skate
9			<i>Raja sp. I</i>	Wengs skate
10			<i>Raja sp.O</i>	Sawback skate
11		ANACANTHOBATIDAE	<i>Anacanthobatis sp.A</i>	Western leg skate
12		NARCINIDAE	<i>Narcine sp. A</i>	Ornate numbfish
13			<i>Narcine sp. B</i>	Western numbfish
14		DASYATIDAE	<i>Himantura sp. A</i>	Brown whipray
15		CHIMAERIDAE	<i>Chimaera sp. E</i>	Whitfin chimaera
16		SPYHIRNIDAE	<i>Sphyrna lewinim (Scalloped hammerhead)</i>	Chordata Elasmobranchii

				Sphyrnidae
17		CARCHARHINIDAE	<i>Prionace glauca</i>	Blue Shark
18		RHINOBATIDAE	<i>Rhynchobatus</i> spp	Whitespotted wedgfish
19		RHINCODONTIDAE	<i>Rhincodon typus</i>	Whale Shark

**ANNEX 3:
ATSEF MOU**



Memorandum of Understanding

Preamble:

The Arafura and Timor Seas Experts Forum, (referred to as ATSEF, or as the Forum in this Memorandum) is a non-binding forum to foster collaboration between government and non-government organisations in Australia, Indonesia, Papua New Guinea and Timor-Leste in the pursuit of the sustainable use of the living resources of the Arafura and Timor Seas. It is open to, and encourages participation from, agencies and individuals within the littoral nations and from international organizations, who are willing to advance the purpose of the Forum in accordance with this Memorandum of Understanding.

The Arafura and Timor Seas fit the definition of a semi-enclosed sea under Article 122 of the Law of the Sea Convention. Article 123 of the Convention requires that:

- *states bordering a semi-enclosed sea should cooperate with each other.....through an appropriate regional organisation;*
- *to coordinate the management, conservation, exploration and exploitation of the living resources of the sea;*
- *to coordinate.....with respect to preservation and protection of the marine environment,*
- *to coordinate their scientific policies and undertake joint programs of scientific research in the area;*
- *to invite as appropriate.....international organisations to cooperate with them in the furtherance of the provisions of this article.*

Purpose and Objective:

The purpose of the Forum is to assist in achieving the goals of sustainable development and poverty alleviation, specifically for the littoral nations and for the coastal and indigenous communities, who depend upon the Arafura and Timor Seas for their livelihood.

As a United Nations World Summit on Sustainable Development Partnership (Type 2), 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.

To this end the Signatories to this Memorandum of Understanding agree upon the

following:

1. Foci of the Arafura & Timor Seas Forum

There are five priority foci to which the Forum directs research.

1 Preventing, deterring and eliminating illegal, unreported and unregulated fishing in the Arafura and Timor Seas:

Illegal, unreported and unregulated (IUU) fishing is a major cause of unsustainable stock depletion. IUU fishing is increasing the number of endangered species and is a cause of destruction of marine and coastal habitats. It prevents the sustainable use and development of the seas' living resources.

2 Sustaining fish stocks, marine habitats and coastal and marine biodiversity:

Knowledge of the population of harvested species, of the bio-oceanography of the seas and of marine ecosystems and near shore habitats, is the essential prerequisite for wise management and use of the living resources.

3 Understanding the marine, coastal, and catchment system dynamics of the seas:

A profound understanding of the system dynamics of the seas is the basis for achieving priority 2 and the sustainable use of the seas' living resources.

4 Assisting sustainable and/or alternative livelihoods for coastal, traditional and indigenous communities:

Research and action undertaken to ensure sustainable livelihoods and the well-being of indigenous, traditional and coastal communities is essential to the pursuit of the Forum's objective of poverty alleviation, sustainable development and community empowerment.

5 Improving capacity for data information, management and sharing between the littoral nations of the seas:

Without information sharing, the knowledge base for the sustainable management of the seas and use of its resources will not be accessible to managers, government agencies, coastal and indigenous communities, commercial operations and other stakeholders who require it. Data management is also essential to prevent wasteful duplication of research.



2 Governance of the Arafura & Timor Seas Experts Forum:

To facilitate the achievement of the purpose, objective and the priorities of ATSEF, the signatories of this MoU agree to the following governance structure.

The ATSEF Forum will meet once a year. The Forum is open to any organisation with a direct interest in the Arafura and Timor Seas and willingness to abide by this MoU. Forum meetings will enable the sharing of research findings, data and information, the evaluation of research and its application, evaluation of research directions and proposals, identification of potential collaborations, and appraisal of the outcomes of ATSEF activities.

2.1 ATSEF Steering Committee

An ATSEF Steering Committee, will meet twice yearly and will be comprised of representatives of participating government agencies, research agencies, non-government organisations, and indigenous and coastal organisations. One of the meetings will coincide with the annual Forum.

Up to four representatives will be nominated by each nation, with nominations reflecting a balance between stakeholders, up to two representatives will be drawn from International Organisations, one person from each national secretariat and the regional coordinator will assist the ATSEF Steering Committee at each meeting. The ATSEF Steering Committee will make decisions by consensus.

2.1.1 The Role of the ATSEF Steering Committee is:

- to ensure that, where appropriate, government agencies are involved in the development and execution of research and other ATSEF supported activities;
- to ensure that research and other activities undertaken by the participants advance Forum priorities;
- to ensure that equitable opportunities are available to all relevant organisations to participate in ATSEF supported activities;
- to oversee the process of regional coordination, the activities of the Regional Coordinator and the procedures of ATSEF National Secretariats to ensure that all actions undertaken by them are transparent, accountable and equitable;
- to oversee research proposals to ensure that they meet international research standards;
- to assist facilitate fund raising for ATSEF supported research and other activities;
- to ensure that ATSEF pursues a balanced, efficient and effective portfolio of research and other activities;
- to recommend suitable projects and proponents to appropriate funding bodies.



2.2 Regional Coordination:

The primary responsibility for regional coordination shall be undertaken by a Regional Coordinator, who is a participant in the Forum. The regional coordinator is to work with the National Secretariats and inter-governmental and international organisations to facilitate cooperation and collaboration between ATSEF partner organisations in the pursuit of the Forum's purpose and priorities.

The Regional Coordinator is accountable to the ATSEF Steering Committee. A major responsibility of the Regional Coordinator is to help ensure that the research and other activities endorsed by the ATSEF Steering Committee are adequately funded.

2.2.1 Rotation and Location of the Regional Coordinator

The position of the Regional Coordinator will rotate between the littoral nations after a period of no less than two and no more than three years in each nation.

The Regional Coordinator will be a citizen of the nation undertaking responsibility for regional coordination at the time.

The Regional Coordinator will be based in the national ATSEF Secretariat while undertaking the role.

2.2.2 Role of Regional Coordinator

The Regional Coordinator is required to:

- report to the Steering Committee on progress and issues requiring the consideration of the Committee during and between meetings of the Steering Committee;
- facilitate linkages between ATSEF members and intergovernmental and international organisations;
- foster communication, collaboration and coordination between ATSEF members through the National Secretariats;
- with the assistance of National Secretariats, organize meetings of the Forum and of the ATSEF Steering Committee;
- assist the National Secretariats ensure that the participants and their priorities receive assistance on an equitable and appropriate basis;
- assist the process of data collation, management and sharing as outlined in Section 3 of this Memorandum;
- facilitate appropriate funding of ATSEF supported activities by national, intergovernmental and international organisations; and
- facilitate the development of ATSEF supported proposals that meet both ATSEF priorities and the interests and objectives of potential funding agencies.

2.3 National Secretariats of the Arafura and Timor Seas Experts Forum

It is desirable that each of the littoral states has a National Secretariat, which functions in accordance with the purpose, objectives, priorities and principles of ATSEF. National Secretariats may differ according to the circumstances and institutions of the littoral nation, but shall take particular responsibility for fostering capacity building and

coordination and consultation within the nation.



Forum participants with in each nation will advise and assist the national secretariats in achieving these aims.

2.3.1 Roles and Responsibilities of National Secretariats of ATSEF

Each National Secretariat is accountable to the ATSEF Steering Committee.

National Secretariats are required to:

- facilitate capacity building in marine and coastal science and other relevant research;
- facilitate collaboration, cooperation and coordination in pursuit of ATSEF objectives within and between the littoral nations;
- identify and access sources of funding for research and assist the Regional Coordinator identify and access sources of funding for research and other activities approved by the ATSEF Steering Committee;
- encourage the participation of government agencies, research agencies, private sector, non- governmental organizations and community organizations in ATSEF;
- report to the ATSEF Steering Committee on progress and issues within the littoral nation, compile an annual report and other reports as required; and
- National Secretariats of ATSEF may be responsible for accounting for funds for research programs, if the participants request such assistance.



3 Data Management and Information Sharing

It is agreed that coordinated data management and information sharing between the littoral nations and the participants of ATSEF is essential: for ATSEF to achieve its purpose and objective, to avoid duplication and waste of research resources, and to identify significant gaps in our knowledge of the seas and the marine and coastal biota and ecosystems.

National Secretariats will facilitate data collation and information sharing between members and other relevant organisations into an ATSEF database distributed between appropriate ATSEF member organisations. Existing data nodes in Australia and Indonesia will provide technical advice on the development of the data base.

As part of this priority a focus will be to locate or establish data collation and management capacity where it is most needed, with technical equipment and training in its use as necessary.

3.1 Data Coordinator

It is agreed that to prevent duplication of research, and to ensure complementarity of information in the data base, a Data Coordinator will be employed to facilitate construction and maintenance of an ATSEF data base and associated web site. The data base will contain information and data about where information can be found on activities and research that have occurred in the Arafura and Timor Seas or is relevant to the Seas as well as the owners and/or custodians.

3.2 Access to the ATSEF Data Base

The ATSEF data base may be accessed by all Forum participants, bona fide stakeholders and researchers pursuing research that accords with the purpose and objectives of ATSEF.

3.3 Distribution of Sensitive Information

The Data Coordinator will record the level of sensitivity as instructed by the owners and/or custodians of the information or data, as well as any conditions on its use and further dissemination, in regard to all information and data stored on the ATSEF data base.



4 Financial and Legal Arrangements for the Arafura and Timor Seas Forum

4.1 Legal Arrangements

As ATSEF is a non-binding Forum, and as legal systems vary between the nations, ATSEF will not be incorporated as a legal personality. According to circumstances, National Secretariats may be incorporated as a legal personality or as an unincorporated joint venture.

4.2 Fiscal Arrangements

Where a contract for the transfer of funds intended for research or infrastructure under the aegis of ATSEF the participants in the research program for whom the funds are intended will agree among themselves as to which participant organization, with a legal personality, will be the signatory for the contract and accountable for the use of the funds.

The contracting participant for the research program will also be accountable for the equitable sharing of funds with the other program participants, and for maintaining transparent accounting of the funds.

4.3 Fiscal Arrangements where the National Secretariat has a Legal Personality

Where the National Secretariat is a legal entity, participants in a research program to be funded under the aegis of ATSEF may prefer that the National Secretariat enters into the contract on their behalf.



5 Principles and Procedures for the Conduct of Research and Action under the Aegis of ATSEF

In addition to the principles and procedures outlined in Sections 1, 2, 3 and 4, the following principles will apply, to ensure that research and action programs conducted under the aegis of the Forum conform with its Purpose and Objective, as set out in the preamble:

National sovereignty will be respected and permits sought from appropriate government agencies when necessary. National secretariats will offer advice and support, where possible.

In as far as it is possible, research programs shall include participants from each littoral nation, in keeping with the intention of Article 123 of the Law of the Sea Convention. Where the research or action program is directed to priority 1.4, the coastal and indigenous communities involved shall be participants in, and consulted at all stages of the program, from priority setting and design to the conduct of the research.

- Capacity building shall be an integral aspect of the research and action programs to the maximum extent possible.

Preference should be given to:

projects and activities that clearly meet an agreed ATSEF priority area, with encouragement given to projects addressing more than one priority collaborative activities and projects • outcome focused projects and activities.

Agreed to by the ATSEF Steering Committee Bali October 19, 2003

Signatures: