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The World Bank

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Report No: PAD1169

PROJECT APPRAISAL DOCUMENT

ON

PROPOSED IDA GRANTS AND CREDITS

IN AN AMOUNT OF SDR 3.8 MILLION (US\$5.5 MILLION EQUIVALENT), SDR 4.6 MILLION (US\$6.75 MILLION EQUIVALENT), SDR 6.7 MILLION (US\$9.75 MILLION EQUIVALENT), SDR 4.8 MILLION (US\$7.0 MILLION EQUIVALENT), AND SDR 2.7 MILLION (US\$3.97 MILLION EQUIVALENT), RESPECTIVELY TO THE FEDERATED STATES OF MICRONESIA, THE REPUBLIC OF THE MARSHALL ISLANDS, THE SOLOMON ISLANDS, TUVALU, AND THE PACIFIC ISLANDS FORUM FISHERIES AGENCY;

AND PROPOSED GRANTS FROM THE GLOBAL ENVIRONMENT FACILITY TRUST FUND

IN AN AMOUNT OF US\$1.83 MILLION, US\$1.37 MILLION, US\$0.91 MILLION AND US\$2.19 MILLION, RESPECTIVELY TO THE REPUBLIC OF THE MARSHALL ISLANDS, THE SOLOMON ISLANDS, TUVALU, AND THE PACIFIC ISLANDS FORUM FISHERIES AGENCY;

IN SUPPORT OF FIVE PROJECTS UNDER A SERIES OF PROJECTS

THE PACIFIC ISLANDS REGIONAL OCEANSCAPE PROGRAM

November 26, 2014

Papua New Guinea, Timor-Leste and Pacific Islands  
Environment & Natural Resources Global Practice  
East Asia and the Pacific Region

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## CURRENCY EQUIVALENTS

Currency Unit = SDR  
0.67644 SDR = US\$1

FISCAL YEAR  
January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

ABNJ	Areas Beyond National Jurisdiction
AFD	Agence du Developpement Francaise
AG	Auditor General
BDM	Bêche-de-mer
BP	Bank Procedure
CAS	Country Assistance Strategy
CBM	Community-Based Management
COREMAP	Coral Reef Rehabilitation and Management Program
CROP	Council of Regional Organizations of the Pacific
DGF	Development Grant Facility
DLI	Disbursement Linked Indicators
DOFA	Finance and Administration Division
DRD	Department of Resources and Development
EDF	European Development Fund
EEZ	Exclusive Economic Zone
ESMF	Environmental and Social Management Framework
EU	The European Union
FAD	Fish Aggregator Device
FAO	Food and Agriculture Organization
FD	Fisheries Department
FFA	Forum Fisheries Agency
FFC	Forum Fisheries Committee
FFC	Forum Fisheries Committee
GEF	Global Environmental Facility
IDA	International Development Association
IFR	Interim Financial Reports
IMO	International Maritime Organization
IPP	Indigenous Peoples Plan
IRR	Internal Rate of Return
ISP	Institutional Strengthening Project
IUU	Illegal, Unreported and Unregulated
LMMA	Locally Managed Marine Areas
LMMA	Locally Managed Marine Area
M&E	Monitoring and Evaluation
MCS	Monitoring, Control and Surveillance

MFAT	Ministry of Foreign Affairs and Trade
MFMR	Ministry of Fisheries and Marine Resources
MIMRA	Marshall Islands Marine Resources Authority
MPA	Marine Protected Areas
MSSIF	Mekem Strong Solomon Islands Fisheries Program
NCB	National Competitive Bidding
NGO	Non-Government Organization
NORMA	National Oceanic Resource Management Authority
NZD	New Zealand Dollar
OP	Operations Policy
PAE	Purse Seine Fishing Vessel days
PDO	Program Development Objective
PICs	Pacific Islands Countries
PIROF ISA	Pacific Islands Regional Ocean Framework for Integrated Strategic Action
PIROP	Pacific Islands Regional Ocean Pacific
PNA	Parties to the Nauru Agreement
PROP	Pacific Islands Regional Oceanscape Program
POM	Program Operations Manual
PSC	Program Steering Committee
PSU	Program Support Unit
RFP	Request for Proposal
SOP	Series of Projects
SOPAC	Applied Geoscience and Technology Division
SORT	Systematic Operations Risk-Rating Tool
SPC	Secretariat of the Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Program
TA	Technical Assistance
TAE	Total Regional Allocation
TFD	Tuvalu Fisheries Department
TFSP	Tuvalu Fisheries' Support Programme
UNDP	United Nations Development Bank
UNFSA	United Nations Fish Stocks Agreement
USP	University of the South Pacific
VDS	Vessel Day Scheme
VMS	Vessel Monitoring System
WARFP	West Africa Regional Fisheries Program
WCPFC	Western and Central Pacific Fisheries Commission
WCPFC	Western Central Pacific Fisheries Management Commission

Regional Vice President:	Axel van Trotsenburg, EAPVP
Country Director:	Franz Drees-Gross, EACNF
Sector Director:	John Roome, GPSOS (through June 30, 2014)
Global Practice Senior Director:	Paula Caballero, GENDR (from July 1, 2014)
Global Practice Director:	Bilal Rahill, GENDR (from July 1, 2014)
Practice Manager:	Iain Shuker, GENDR (from July 1, 2014)
Task Team Leader:	John Virdin, GENDR

**PACIFIC ISLANDS**  
**Pacific Islands Regional Oceanscape Program**

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**PAD DATA SHEET**

*Micronesia, Federated States of*

*Pacific Islands regional Oceanscape Program - Federated States of Micronesia (P151754)*

**PROJECT APPRAISAL DOCUMENT**

*EAST ASIA AND PACIFIC*

*0000009061*

Report No.: PAD1169

Basic Information			
Project ID P151754	EA Category B - Partial Assessment	Team Leader John Virdin	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ <input type="checkbox"/> ]		
	Financial Intermediaries [ <input type="checkbox"/> ]		
	Series of Projects [ <input checked="" type="checkbox"/> ]		
Project Implementation Start Date 15-Feb-2015	Project Implementation End Date 30 – Sep - 2020		
Expected Effectiveness Date February 15, 2015	Expected Closing Date September 30, 2020		
Joint IFC No			
Practice Manager Iain G. Shuker	Senior Global Practice Director Paula Caballero	Country Director Franz R. Drees-Gross	Regional Vice President Axel van Trotsenburg
Borrower: Federated States of Micronesia			
Responsible Agency: National Oceanic Resource Management Authority			
Contact: Telephone No.: 6913202700	Patrick Mackenzie	Title: Director	Email:
Project Financing Data(in USD Million)			
[ <input type="checkbox"/> ] Loan	[ <input checked="" type="checkbox"/> ] IDA Grant	[ <input type="checkbox"/> ] Guarantee	
[ <input type="checkbox"/> ] Credit	[ <input type="checkbox"/> ] Grant	[ <input type="checkbox"/> ] Other	
Total Project Cost:	5.50	Total Bank Financing:	5.50
Financing Gap:	0.00		
Financing Source		Amount	

BORROWER/RECIPIENT	0.00
International Development Association (IDA)	5.50
Total	5.50

### Expected Disbursements (in USD Million)

Fiscal Year	15	16	17	18	19	20	21
Annual	0.4	0.8	0.8	1.2	1.2	0.7	0.4
Cumulative	0.4	1.2	2.0	3.2	4.4	5.1	5.5

### Institutional Data

#### Practice Area / Cross Cutting Solution Area

Environment & Natural Resources

#### Cross Cutting Areas

- Climate Change
- Fragile, Conflict & Violence
- Gender
- Jobs
- Public Private Partnership

#### Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	100	7	
Total		100		

#### Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Environment and natural resources management	Environmental policies and institutions	25
Environment and natural resources management	Other environment and natural resources management	20
Public sector governance	Other public sector governance	20
Rural development	Rural policies and institutions	20
Trade and integration	Regional integration	15
Total		100

#### Proposed Development Objective(s)

The **project development objective** is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend.

<b>Components</b>	
<b>Component Name</b>	<b>Cost (USD Millions)</b>
Component 1: Sustainable Management of Oceanic Fisheries	5.00
Component 2: Sustainable Management of Coastal Fisheries	0.30
Component 3: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation	0.20

<b>Systematic Operations Risk- Rating Tool (SORT)</b>	
<b>Risk Category</b>	<b>Rating</b>
1. Political and Governance	M
2. Macroeconomic	M
3. Sector Strategies and Policies	M
4. Technical Design of Project or Program	M
5. Institutional Capacity for Implementation and Sustainability	S
6. Fiduciary	M
7. Environment and Social	S
8. Stakeholders	S
9. Other	M
<b>OVERALL</b>	<b>S</b>

**Compliance**

<b>Policy</b>	
Does the project depart from the CAS in content or in other significant respects?	Yes [ ] No [ X ]
Does the project require any waivers of Bank policies?	Yes [ ] No [ X ]
Have these been approved by Bank management?	Yes [ ] No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ] No [ ]
Does the project meet the Regional criteria for readiness for implementation?	Yes [ X ] No [ ]

<b>Safeguard Policies Triggered by the Project</b>	<b>Yes</b>	<b>No</b>
Environmental Assessment OP/BP 4.01	X	
Natural Habitats OP/BP 4.04	X	
Forests OP/BP 4.36	X	

Pest Management OP 4.09			X
Physical Cultural Resources OP/BP 4.11			X
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
<b>Description of Covenant</b>			
<b>Conditions</b>			
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>	
<b>Description of Condition</b>			
<b>Team Composition</b>			
<b>Bank Staff</b>			
<b>Name</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>
Michael Willis Arbuckle	Sr Fisheries Spec.	Sr Fisheries Spec.	GENDR
Fnu Hanny	Program Assistant	Program Assistant	GENDR
Stephen Paul Hartung	Financial Management Specialist	Financial Management Specialist	GGODR
John Virdin	Sr Natural Resources Mgmt. Spec.	Team Lead	GENDR
Miriam Witana	Procurement Specialist	Procurement Specialist	GGODR
Ross James Butler	Sr. Social Development Specialist	Safeguards	GSURR
Valerie Hickey	Sr. Biodiversity Specialist	Acting Sector Manager / Safeguards	GENDR
Nicole Jenner	Program Assistant	Gender Focal Point	EACNF
Victor Mosoti	Sr. Counsel	Legal Analysis	LEGEN
Marjorie Mpundu	Sr. Counsel	Legal Analysis	LEGES
Jingjie Chu	Natural Resources Economist	Economic Analysis	GENDR

Marea Hatzios	Sr. Coastal Specialist	Task Team Leader (retired)	EASER		
<b>Non Bank Staff</b>					
<b>Name</b>		<b>Title</b>		<b>City</b>	
Garry Preston		Fisheries Advisor/ Consultant		Cairns	
Olha Krushelnytska		Consultant, Operations		Washington, D.C.	
Quentin Hanich		Consultant, Fishery Habitat Conservation		Wollongong, Australia	
Claire Forbes		Consultant, Social Safeguards		Sydney, Australia	
Clare Cory		Consultant, Fisheries Legal Review		Sydney, Australia	
<b>Locations</b>					
<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>
Federated States of Micronesia	National Oceanic Resource Management Authority	Nation-wide	N/A	N/A	

**PAD DATA SHEET**

*Marshall Islands*

*Pacific Islands Regional Oceanscape Program - Republic of the Marshall Islands (P151760)*

**PROJECT APPRAISAL DOCUMENT**

*EAST ASIA AND PACIFIC*

*0000009061*

Report No.: PAD1170

Basic Information			
Project ID P151760	EA Category B - Partial Assessment	Team Leader John Virdin	
Global Supplemental ID (GEF): P152934   Focal Area: Biodiversity			
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ X ]		
Project Implementation Start Date 15-Feb-2015	Project Implementation End Date 30 – Sep - 2020		
Expected Effectiveness Date February 15, 2015	Expected Closing Date September 30, 2020		
Joint IFC No			
Practice Manager Iain G. Shuker	Senior Global Practice Director Paula Caballero	Country Director Franz R. Drees-Gross	Regional Vice President Axel van Trotsenburg
Borrower: Republic of the Marshall Islands			
Responsible Agency: Marshall Islands Marine Resources Authority (MIMRA)			
Contact: Telephone No.: 692 625 8262	Mr. Glen Joseph	Title: Director	Email: gjoseph@mimra.com
Project Financing Data(in USD Million)			
[ ] Loan	[ X ] IDA Grant	[ ] Guarantee	
[ ] Credit	[ X ] Grant	[ ] Other	
Total Project Cost:	8.58	Total Bank Financing:	6.75
Financing Gap:	0		

<b>Financing Source</b>								<b>Amount</b>
BORROWER/RECIPIENT								0.00
International Development Association (IDA)								6.75
Global Environmental Facility (GEF)								1.83
Total								8.58
<b>Expected Disbursements (Bank FY/USD Million)</b>								
Fiscal Year	15	16	17	18	19	20	21	
Annual	0.60	0.80	1.00	1.25	1.50	1.40	0.60	
Cumulative	0.60	1.40	2.40	3.25	4.75	6.15	6.35	
<b>GEF Expected Disbursements (Bank FY/USD Million)</b>								
Fiscal Year	15	16	17	18	19	20	21	
Annual	0.25	0.25	0.25	0.30	0.30	0.30	0.18	
Cumulative	0.25	0.50	0.75	1.05	1.35	1.65	1.83	
<b>Institutional Data</b>								
<b>Practice Area / Cross Cutting Solution Area</b>								
Environment & Natural Resources								
<b>Cross Cutting Areas</b>								
<input checked="" type="checkbox"/>	Climate Change							
<input type="checkbox"/>	Fragile, Conflict & Violence							
<input type="checkbox"/>	Gender							
<input type="checkbox"/>	Jobs							
<input type="checkbox"/>	Public Private Partnership							
<b>Sectors / Climate Change</b>								
Sector (Maximum 5 and total % must equal 100)								
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %				
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	100	33					
Total		100						
<b>Themes</b>								
Theme (Maximum 5 and total % must equal 100)								
Major theme	Theme	%						
Environment and natural resources management	Environmental policies and institutions	25						
Environment and natural resources	Other environment and natural resources	20						

management	management	
Public sector governance	Other public sector governance	20
Rural development	Rural policies and institutions	20
Trade and integration	Regional integration	15
Total		100
<b>Proposed Development Objective(s)</b>		
The <b>project development objective</b> is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend.		
<b>Components</b>		
<b>Component Name</b>	<b>Cost (USD Millions)</b>	
Component 1: Sustainable Management of Oceanic Fisheries	5.45	
Component 2: Sustainable Management of Coastal Fisheries	2.78	
Component 3: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation	0.35	
<b>Systematic Operations Risk- Rating Tool (SORT)</b>		
<b>Risk Category</b>	<b>Rating</b>	
1. Political and Governance	M	
2. Macroeconomic	M	
3. Sector Strategies and Policies	M	
4. Technical Design of Project or Program	M	
5. Institutional Capacity for Implementation and Sustainability	S	
6. Fiduciary	M	
7. Environment and Social	S	
8. Stakeholders	S	
9. Other	M	
<b>OVERALL</b>	S	
<b>Compliance</b>		
<b>Policy</b>		
Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]

Does the project meet the Regional criteria for readiness for implementation?		Yes [ X ]	No [ ]
<b>Safeguard Policies Triggered by the Project</b>		<b>Yes</b>	<b>No</b>
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09			X
Physical Cultural Resources OP/BP 4.11			X
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
<b>Description of Covenant</b>			
<b>Conditions</b>			
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>	
<b>Description of Condition</b>			
<b>Team Composition</b>			
<b>Bank Staff</b>			
<b>Name</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>
Michael Willis Arbuckle	Sr Fisheries Spec.	Sr Fisheries Spec.	GENDR
Fnu Hanny	Program Assistant	Program Assistant	GENDR
Stephen Paul Hartung	Financial Management Specialist	Financial Management Specialist	GGODR
John Viridin	Sr Natural Resources Mgmt. Spec.	Team Lead	GENDR
Miriam Witana	Procurement Specialist	Procurement Specialist	GGODR
Ross James Butler	Sr. Social Development Specialist	Safeguards	GSURR
Valerie Hickey	Sr. Biodiversity	Acting Sector Manager /	GENDR

	Specialist	Safeguards			
Nicole Jenner	Program Assistant	Gender Focal Point	EACNF		
Victor Mosoti	Sr. Counsel	Legal Analysis	LEGEN		
Marjorie Mpundu	Sr. Counsel	Legal Analysis	LEGES		
Jingjie Chu	Natural Resources Economist	Economic Analysis	GENDR		
Marea Hatzios	Sr. Coastal Specialist	Team Leader (retired)	EASER		
<b>Non Bank Staff</b>					
<b>Name</b>	<b>Title</b>	<b>City</b>			
Gary Preston	Fisheries Advisor (Consultant)				
Olha Krushelnytska	Consultant, Operations	Washington, D.C.			
Quentin Hanich	Consultant, Fishery Habitat Conservation	Wollongong, Australia			
Claire Forbes	Consultant, Social Safeguards	Sydney, Australia			
Clare Cory	Consultant, Fisheries Legal Review	Sydney, Australia			
<b>Locations</b>					
<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>
Republic of the Marshall Islands	Marshall Islands Marine Resources Authority	Nation-wide	N/A	N/A	

**PAD DATA SHEET**

*Solomon Islands*

*Pacific Islands Regional Oceanscape Program - Solomon Islands (P151777)*

**PROJECT APPRAISAL DOCUMENT**

*EAST ASIA AND PACIFIC*

*0000009061*

Report No.: PAD1172

<b>Basic Information</b>			
Project ID P151777	EA Category B - Partial Assessment	Team Leader John Virdin	
Global Supplemental ID (GEF): P152938   Focal Area: International Waters			
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ ]		
Project Implementation Start Date 15-Feb-2015	Project Implementation End Date 30 – Sep - 2020		
Expected Effectiveness Date February 15, 2015	Expected Closing Date September 30, 2020		
Joint IFC No			
Practice Manager Iain G. Shuker	Senior Global Practice Director Paula Caballero	Country Director Franz R. Drees-Gross	Regional Vice President Axel van Trotsenburg
Borrower: Solomon Islands			
Responsible Agency: Solomon Islands Ministry of Fisheries and Marine Resources			
Contact: Telephone No.: 67728604	Ms. Ronnelle Panda	Title: Email:	Deputy Director for Policy
<b>Project Financing Data(in USD Million)</b>			
[ ] Loan	[ X ] IDA Grant	[ ] Guarantee	
[ X ] Credit	[ X ] Grant	[ ] Other	
Total Project Cost:	11.12	Total Bank Financing:	9.75
Financing Gap:	0		

<b>Financing Source</b>								<b>Amount</b>
BORROWER/RECIPIENT								0.00
International Development Association (IDA)								9.75
Global Environmental Facility (GEF)								1.37
Total								11.12
<b>Expected Disbursements (Bank FY/USD Million)</b>								
Fiscal Year	15	16	17	18	19	20	21	
Annual	0.55	1.00	1.00	1.00	1.55	2.15	2.50	
Cumulative	0.55	1.55	2.55	3.55	5.10	7.25	9.75	
<b>GEF Expected Disbursements (Bank FY/USD Million)</b>								
Fiscal Year	15	16	17	18	19	20	21	
Annual	0.20	0.20	0.20	0.20	0.20	0.25	0.12	
Cumulative	0.20	0.40	0.60	0.80	1.00	1.25	1.37	
<b>Institutional Data</b>								
<b>Practice Area / Cross Cutting Solution Area</b>								
Environment & Natural Resources								
<b>Cross Cutting Areas</b>								
<input checked="" type="checkbox"/>	Climate Change							
<input type="checkbox"/>	Fragile, Conflict & Violence							
<input type="checkbox"/>	Gender							
<input type="checkbox"/>	Jobs							
<input type="checkbox"/>	Public Private Partnership							
<b>Sectors / Climate Change</b>								
Sector (Maximum 5 and total % must equal 100)								
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %				
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	100	29					
Total		100						
<b>Themes</b>								
Theme (Maximum 5 and total % must equal 100)								
Major theme	Theme	%						
Environment and natural resources management	Environmental policies and institutions	25						
Environment and natural resources	Other environment and natural resources	20						

management	management	
Public sector governance	Other public sector governance	20
Rural development	Rural policies and institutions	20
Trade and integration	Regional integration	15
Total		100
<b>Proposed Development Objective(s)</b>		
The <b>project development objective</b> is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend.		
<b>Components</b>		
<b>Component Name</b>	<b>Cost (USD Millions)</b>	
Component 1: Sustainable Management of Oceanic Fisheries	7.75	
Component 2: Sustainable Management of Coastal Fisheries	3.17	
Component 3: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation	0.20	
<b>Systematic Operations Risk- Rating Tool (SORT)</b>		
<b>Risk Category</b>	<b>Rating</b>	
1. Political and Governance	M	
2. Macroeconomic	M	
3. Sector Strategies and Policies	M	
4. Technical Design of Project or Program	M	
5. Institutional Capacity for Implementation and Sustainability	S	
6. Fiduciary	M	
7. Environment and Social	S	
8. Stakeholders	S	
9. Other	M	
<b>OVERALL</b>	<b>S</b>	
<b>Compliance</b>		
<b>Policy</b>		
Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]

Does the project meet the Regional criteria for readiness for implementation?		Yes [ X ]	No [ ]
<b>Safeguard Policies Triggered by the Project</b>		<b>Yes</b>	<b>No</b>
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09			X
Physical Cultural Resources OP/BP 4.11			X
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
<b>Description of Covenant</b>			
<b>Conditions</b>			
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>	
<b>Description of Condition</b>			
<b>Team Composition</b>			
<b>Bank Staff</b>			
<b>Name</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>
Michael Willis Arbuckle	Sr Fisheries Spec.	Sr Fisheries Spec.	GENDR
Fnu Hanny	Program Assistant	Program Assistant	GENDR
Stephen Paul Hartung	Financial Management Specialist	Financial Management Specialist	GGODR
John Viridin	Sr Natural Resources Mgmt. Spec.	Team Lead	GENDR
Miriam Witana	Procurement Specialist	Procurement Specialist	GGODR
Ross James Butler	Sr. Social Development Specialist	Safeguards	GSURR
Valerie Hickey	Sr. Biodiversity	Acting Sector Manager /	GENDR

	Specialist	Safeguards			
Nicole Jenner	Program Assistant	Gender Focal Point	EACNF		
Victor Mosoti	Sr. Counsel	Legal Analysis	LEGEN		
Marjorie Mpundu	Sr. Counsel	Legal Analysis	LEGES		
Jingjie Chu	Natural Resources Economist	Economic Analysis	GENDR		
Marea Hatziolos	Sr. Coastal Specialist	Team Leader (retired)	EASER		
<b>Non Bank Staff</b>					
<b>Name</b>	<b>Title</b>	<b>City</b>			
Garry Preston	Fisheries Advisor/ Consultant	Cairns			
Olha Krushelnytska	Consultant, Operations	Washington, D.C.			
Quentin Hanich	Consultant, Fishery Habitat Conservation	Wollongong, Australia			
Claire Forbes	Consultant, Social Safeguards	Sydney, Australia			
Clare Cory	Consultant, Fisheries Legal Review	Sydney, Australia			
<b>Locations</b>					
<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>
Solomon Islands	Ministry of Fisheries and Marine Resources	Nation-wide	N/A	N/A	

**PAD DATA SHEET**

*Tuvalu*

*Pacific Islands Regional Oceanscape Program - Tuvalu (P151780)*

**PROJECT APPRAISAL DOCUMENT**

*EAST ASIA AND PACIFIC*

*0000009061*

Report No.: PAD1171

<b>Basic Information</b>			
Project ID P151780	EA Category B - Partial Assessment	Team Leader John Virdin	
Global Supplemental ID (GEF): P152925   Focal Area: Biodiversity			
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ X]		
Project Implementation Start Date 15-Feb-2015	Project Implementation End Date 30 – Sep - 2020		
Expected Effectiveness Date February 15, 2015	Expected Closing Date September 30, 2020		
Joint IFC No			
Practice Manager Iain G. Shuker	Senior Global Practice Director Paula Caballero	Country Director Franz R. Drees-Gross	Regional Vice President Axel van Trotsenburg
Borrower: Tuvalu			
Responsible Agency: Tuvalu Fisheries Department (TFD), Ministry of Natural Resources			
Contact: Telephone No.:	Title: Email:		
<b>Project Financing Data(in USD Million)</b>			
[ ] Loan	[ X ] IDA Grant	[ ] Guarantee	
[ ] Credit	[ X ] Grant	[ ] Other	
Total Project Cost:	7.91	Total Bank Financing:	7.00
Financing Gap:	0		

<b>Financing Source</b>								<b>Amount</b>
BORROWER/RECIPIENT								0.00
International Development Association (IDA)								7.00
Global Environmental Facility (GEF)								0.91
Total								7.91
<b>Expected Disbursements (Bank FY/USD Million)</b>								
Fiscal Year	15	16	17	18	19	20	21	
Annual	0.60	1.00	1.40	1.20	1.20	1.00	0.60	
Cumulative	0.60	1.60	3.00	4.20	5.40	6.40	7.00	
<b>GEF Expected Disbursements (Bank FY/USD Million)</b>								
Fiscal Year	15	16	17	18	19	20	21	
Annual	0.10	0.15	0.15	0.15	0.15	0.15	0.06	
Cumulative	0.10	0.25	0.40	0.55	0.70	0.85	0.91	
<b>Institutional Data</b>								
<b>Practice Area / Cross Cutting Solution Area</b>								
Environment & Natural Resources								
<b>Cross Cutting Areas</b>								
[ X ]	Climate Change							
[ ]	Fragile, Conflict & Violence							
[ ]	Gender							
[ ]	Jobs							
[ ]	Public Private Partnership							
<b>Sectors / Climate Change</b>								
Sector (Maximum 5 and total % must equal 100)								
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %				
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	100	27					
Total		100						
<b>Themes</b>								
Theme (Maximum 5 and total % must equal 100)								
Major theme	Theme	%						
Environment and natural resources management	Environmental policies and institutions	25						
Environment and natural resources	Other environment and natural resources	20						

management	management	
Public sector governance	Other public sector governance	20
Rural development	Rural policies and institutions	20
Trade and integration	Regional integration	15
Total		100
<b>Proposed Development Objective(s)</b>		
The <b>project development objective</b> is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend.		
<b>Components</b>		
<b>Component Name</b>	<b>Cost (USD Millions)</b>	
Component 1: Sustainable Management of Oceanic Fisheries	5.77	
Component 2: Sustainable Management of Coastal Fisheries	2.04	
Component 3: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation	0.10	
<b>Systematic Operations Risk- Rating Tool (SORT)</b>		
<b>Risk Category</b>	<b>Rating</b>	
1. Political and Governance	M	
2. Macroeconomic	M	
3. Sector Strategies and Policies	M	
4. Technical Design of Project or Program	M	
5. Institutional Capacity for Implementation and Sustainability	S	
6. Fiduciary	M	
7. Environment and Social	S	
8. Stakeholders	S	
9. Other	M	
<b>OVERALL</b>	<b>S</b>	
<b>Compliance</b>		
<b>Policy</b>		
Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]

Does the project meet the Regional criteria for readiness for implementation?		Yes [ X ]	No [ ]
<b>Safeguard Policies Triggered by the Project</b>		<b>Yes</b>	<b>No</b>
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09			X
Physical Cultural Resources OP/BP 4.11			X
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
<b>Description of Covenant</b>			
<b>Conditions</b>			
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>	
<b>Description of Condition</b>			
<b>Team Composition</b>			
<b>Bank Staff</b>			
<b>Name</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>
Michael Willis Arbuckle	Sr Fisheries Spec.	Sr Fisheries Spec.	GENDR
Fnu Hanny	Program Assistant	Program Assistant	GENDR
Stephen Paul Hartung	Financial Management Specialist	Financial Management Specialist	GGODR
John Viridin	Sr Natural Resources Mgmt. Spec.	Team Lead	GENDR
Miriam Witana	Procurement Specialist	Procurement Specialist	GGODR
Ross James Butler	Sr. Social Development Specialist	Safeguards	GSURR
Valerie Hickey	Sr. Biodiversity	Acting Sector Manager /	GENDR

	Specialist	Safeguards			
Nicole Jenner	Program Assistant	Gender Focal Point	EACNF		
Victor Mosoti	Sr. Counsel	Legal Analysis	LEGEN		
Marjorie Mpundu	Sr. Counsel	Legal Analysis	LEGES		
Jingjie Chu	Natural Resources Economist	Economic Analysis	GENDR		
Marea Hatziolos	Sr. Coastal Specialist	Team Leader (retired)	EASER		
<b>Non Bank Staff</b>					
<b>Name</b>	<b>Title</b>	<b>City</b>			
Olha Krushelnytska	Consultant, Operations	Washington, D.C.			
Quentin Hanich	Consultant, Fishery Habitat Conservation	Wollongong, Australia			
Claire Forbes	Consultant, Social Safeguards	Sydney, Australia			
Clare Cory	Consultant, Fisheries Legal Review	Sydney, Australia			
<b>Locations</b>					
<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>
Tuvalu	Tuvalu Fisheries Department	Nation-wide	N/A	N/A	

**PAD DATA SHEET**

*Pacific Islands*

*Pacific Islands Regional Oceanscape Program - Pacific Islands Forum Fisheries Agency  
(P151783)*

**PROJECT APPRAISAL DOCUMENT**

*EAST ASIA AND PACIFIC*

*0000009061*

Report No.: PAD1173

<b>Basic Information</b>			
Project ID P151783	EA Category B - Partial Assessment	Team Leader John Virdin	
Global Supplemental ID (GEF): P152930   Focal Area: International Waters			
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ X ]		
Project Implementation Start Date 15-Feb-2015	Project Implementation End Date 30 – Sep - 2020		
Expected Effectiveness Date February 15, 2015	Expected Closing Date September 30, 2020		
Joint IFC No			
Practice Manager Iain G. Shuker	Senior Global Practice Director Paula Caballero	Country Director Franz R. Drees-Gross	Regional Vice President Axel van Trotsenburg
Borrower: Pacific Island Countries			
Responsible Agency: Forum Fisheries Agency			
Contact: Telephone No.:	Dr. Tim Adams 67721124	Title: Email:	Director of Fisheries Management
<b>Project Financing Data(in USD Million)</b>			
[ ] Loan	[ X ] IDA Grant	[ ] Guarantee	
[ ] Credit	[ X ] Grant	[ ] Other	
Total Project Cost:	6.16	Total Bank Financing:	3.97
Financing Gap:	0		

Financing Source	Amount
BORROWER/RECIPIENT	0.00
International Development Association (IDA)	3.97
Global Environment Facility (GEF)	2.19
Total	6.16

#### Expected Disbursements (in USD Million)

Fiscal Year	15	16	17	18	19	20	21
Annual	0.40	0.57	0.60	0.60	0.60	0.60	0.60
Cumulative	0.40	0.97	1.57	2.17	2.77	3.37	3.97

#### GEF Expected Disbursements (Bank FY/USD Million)

Fiscal Year	15	16	17	18	19	20	21
Annual	0.30	0.35	0.35	0.35	0.35	0.35	0.14
Cumulative	0.30	0.65	01.00	1.35	1.70	2.05	2.19

#### Institutional Data

##### Practice Area / Cross Cutting Solution Area

Environment & Natural Resources

##### Cross Cutting Areas

- Climate Change
- Fragile, Conflict & Violence
- Gender
- Jobs
- Public Private Partnership

##### Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	100		30
Total		100		

##### Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Environment and natural resources management	Environmental policies and institutions	25

Environment and natural resources management	Other environment and natural resources management	20
Public sector governance	Other public sector governance	20
Rural development	Rural policies and institutions	20
Trade and integration	Regional integration	15
Total		100
<b>Proposed Development Objective(s)</b>		
The project development objective is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend.		
<b>Components</b>		
<b>Component Name</b>	<b>Cost (USD Millions)</b>	
Component 1: Sustainable Management of Oceanic Fisheries	1.27	
Component 2: Sustainable Management of Coastal Fisheries	0.50	
Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats	2.69	
Component 4: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation	1.70	
<b>Systematic Operations Risk- Rating Tool (SORT)</b>		
<b>Risk Category</b>	<b>Rating</b>	
1. Political and Governance	M	
2. Macroeconomic	M	
3. Sector Strategies and Policies	M	
4. Technical Design of Project or Program	M	
5. Institutional Capacity for Implementation and Sustainability	S	
6. Fiduciary	M	
7. Environment and Social	S	
8. Stakeholders	S	
9. Other	M	
<b>OVERALL</b>	<b>S</b>	
<b>Compliance</b>		
<b>Policy</b>		
Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [ X ]
Does the project require any waivers of Bank policies?	Yes [ ]	No [ X ]

Have these been approved by Bank management?		Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?		Yes [ ]	No [ ]
Does the project meet the Regional criteria for readiness for implementation?		Yes [ X ]	No [ ]
<b>Safeguard Policies Triggered by the Project</b>		<b>Yes</b>	<b>No</b>
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09			X
Physical Cultural Resources OP/BP 4.11			X
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
<b>Legal Covenants</b>			
Name	Recurrent	Due Date	Frequency
<b>Description of Covenant</b>			
<b>Conditions</b>			
Source Of Fund	Name	Type	
<b>Description of Condition</b>			
<b>Team Composition</b>			
<b>Bank Staff</b>			
<b>Name</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>
Michael Willis Arbuckle	Sr Fisheries Spec.	Sr Fisheries Spec.	GENDR
Fnu Hanny	Program Assistant	Program Assistant	GENDR
Stephen Paul Hartung	Financial Management Specialist	Financial Management Specialist	GGODR
John Virdin	Sr Natural Resources Mgmt. Spec.	Team Lead	GENDR
Miriam Witana	Procurement Specialist	Procurement Specialist	GGODR

Ross James Butler	Sr. Social Development Specialist	Safeguards	GSURR		
Valerie Hickey	Sr. Biodiversity Specialist	Acting Sector Manager / Safeguards	GENDR		
Nicole Jenner	Program Assistant	Gender Focal Point	EACNF		
Victor Mosoti	Sr. Counsel	Legal Analysis	LEGEN		
Marjorie Mpundu	Sr. Counsel	Legal Analysis	LEGES		
Jingjie Chu	Natural Resources Economist	Economic Analysis	GENDR		
Marea Hatzios	Sr. Coastal Specialist	Team Leader (retired)	EASER		
<b>Name</b>	<b>Title</b>		<b>City</b>		
Gary Preston	Fisheries Advisor (Consultant)		Cairns		
Olha Krushelnytska	Consultant, Operations		Washington, D.C.		
Quentin Hanich	Consultant, Fishery Habitat Conservation		Wollongong, Australia		
Claire Forbes	Consultant, Social Safeguards		Sydney, Australia		
Clare Cory	Consultant, Fisheries Legal Review		Sydney, Australia		
<b>Locations</b>					
Country	First Administrative Division	Location	Planned	Actual	Comments
Regional	Pacific Islands Forum Fisheries Agency	Honiara, Solomon Islands	N/A	N/A	

## **I. Strategic Context**

### **A. Regional Context**

1. The Pacific Islands Ocean Region covers some 11 percent of the world's ocean area and is home to 22 small island countries and territories. The economies of Pacific Island countries (PICs), 11 of whom are members of the Bank<sup>1</sup>, are fundamentally shaped by this geography as much as any other features. Essentially some 9 million people live on thousands of islands covering roughly 40 million square kilometers of the earth's surface, compared to approximately 40 million people living in the much smaller area (2.75 million sq. km.) of the Caribbean.

2. Because of their small size and remoteness, these countries are at risk of volatility and subject to external economic and natural shocks: the Pacific Islands Ocean Region contains one of the highest concentrations of fragile states anywhere in the world. Throughout the region, 20 percent of most people in PICs live in poverty or hardship, meaning they are unable to meet their needs. Additionally, across PICs the top 20 percent of the population consumes 6 to 12 times as much as the bottom 20 percent. PICs are also marked by their diversity: the development challenges facing larger Melanesian countries such as PNG, with 6 million people and extensive natural resources, are very different from those of the most remote Micronesian and Polynesian countries, which in some cases have total populations of less than 10,000 people and very few natural resources other than fisheries.

3. Despite their diversity, PIC economies throughout the region are in many cases driven by the transboundary ocean and fishery resources that they share. The countries are connected by ocean currents and the living and non-living cargo they carry, which ranges from tiny plankton to charismatic megafauna, not to mention waste and pollutants. The archipelagic nature of most PICs, and their strong reliance on coastal ecosystems for food, weather protection, resilience against shocks, and other services means that they fundamentally depend on healthy ocean environments and resources. In particular, as the threat from climate changes grows throughout the region, including sea level rise and potentially more intense and frequent storm events, maintaining or in some cases restoring healthy ocean environments and resources will be fundamental to building resilience to climatic shocks and longer term changes in the region.

### **B. Sectoral and Institutional Context**

4. *Sector Importance.* The resources, services and biological diversity of the Pacific Ocean are essential to the economies and development of PICs, as well as being of significant value to the international community. For some Bank member PICs, especially the fishery-dependent small-island states (Federated States of Micronesia, Kiribati, Marshall Islands and Tuvalu) ocean resources such as fish stocks comprise the primary natural resource on which future economic growth will be based. These shared fisheries resources include, among others: (i) oceanic fisheries (largely tuna) that provide the majority of public revenues for a number of PICs; (ii)

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<sup>1</sup> Federated States of Micronesia (FSM), Fiji, Kiribati, Palau, Papua New Guinea, Republic of the Marshall Islands (RMI), Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The Cook Islands and Niue are also members through New Zealand.

coastal fisheries that directly sustain rural livelihoods and contribute heavily to food security and national exports in many cases; and (iii) the natural habitats and biodiversity that sustain them.

5. The region's *oceanic fisheries* supply much of the world's tuna, with global demand steadily increasing. The wider Western Central Pacific Ocean area produced 2.6 million tons of tuna in 2013, representing over half of all of the world's tuna catch and yielding revenues at first sale on the order of over US\$6.3 billion. Roughly 60 percent of this tuna catch was taken from PIC waters, or some 35 percent of the world's tuna catch. The total first sale value of the tuna caught in PIC waters was estimated to be some US\$3.4 billion in 2013, of which PICs received roughly 7 percent as a result of access fees paid by largely foreign fleets. Even at this relatively low level of return from what is one of the more profitable fisheries in the world, revenues from sale of access constitute the largest single source of public revenues for a number of PICs. In addition to revenues from access fees, very little value addition takes place within the region. In many countries the diseconomies of isolation reduce the profitability or competitiveness of tuna processing operations, and thus its capacity to pay for access to resources.

6. The *coastal fisheries* throughout the region play a very different but equally crucial role in PIC economies. Although they do not generate significant amounts of national revenue, they are crucial supporters of local livelihoods, food security and dietary health in all PICs. Fish and seafood are a primary source of animal protein in Pacific Island diets, and in some countries per capita consumption exceeds 100 kg per year (compared to a global average of 16 kg per year). PIC coastal fisheries are for the most part relatively small and localized and support only a few viable (though extremely valuable) export fisheries (for example *bêche-de-mer*, trochus, and other specialized products), as well as coral reef fisheries for local consumption that are highly susceptible to over-exploitation. Women are particularly dependent on coastal fisheries for informal economic opportunities including handicrafts.

7. Both the oceanic and coastal fisheries depend on the *natural habitats* of the Pacific Ocean to sustain them, including coral reef ecosystems, mangroves and wetlands among others. These habitats also serve the important function of protecting villages and communities from storms and flooding, whose intensity is only expected to increase with climate change. Additionally, they play a vital role in helping to mitigate climate change, as coastal vegetated habitats such as mangroves and sea grass beds sequester significant amounts of carbon. Finally, they are home to some of the world's most significant marine biodiversity. For example in 2012 the Conference of the Parties of the Convention on Biological Diversity named 26 large areas throughout the Western South Pacific as having met the criteria for ecologically or biologically significant marine areas (EBSAs) worldwide, including the Phoenix Islands in Kiribati, the Kadavu and the Southern Lau Region in Fiji, and the Tonga Archipelago.

8. In the aggregate, the Pacific Ocean's oceanic and coastal fish stocks, and the natural habitats that underpin them, represent a tremendous endowment of shared natural capital throughout the region. Sustaining and enhancing this natural capital provides a wide range of opportunities to advance the World Bank's twin goals of reducing poverty and boosting shared prosperity in the Pacific Islands. For example, better-managed oceanic fisheries will increase the value of access to this resource that many PICs can sell to foreign fleets in order to generate revenues for public services needed for poverty reduction or to translate into foreign direct investment up the value

chain to create job opportunities, while more productive coastal fisheries can support rural livelihoods and food security for many in the bottom 40 percent of income distribution, and both depend on healthy natural habitats.

9. *Key Sector Issues and Institutional Constraints.* The current and potential economic benefits that this natural capital asset provides to PICs depend on its underlying environmental status. In many cases the natural capital has been systematically undervalued over the last two decades, and increasingly overdrawn. More specifically, weaknesses in the institutions responsible for managing the use of this natural capital often led to access arrangements which encouraged overexploitation, failed to provide incentives for conservation or prevent illegal fishing, and understated the true value of the resource. As a result, the region's fishery resources were generally underperforming assets, and many have shown warning signs of overexploitation or are already overexploited – presaging a decline in benefits.

10. For example, *oceanic fisheries* hold great economic value and potential for the Pacific, and particularly the three tuna fisheries: tropical purse seine, tropical long-line and southern long-line fisheries. To date these fisheries are relatively healthy compared to other tuna fisheries throughout the world, due largely to their relative isolation. However, they are now reaching their long-term sustainable limits, and future returns will have to come by earning more from current harvests, rather than increasing them. This is eminently possible but, because the fish are moving across borders, it will require continued collective action from countries to sustainably manage the resource. To date only in the purse seine fishery has this begun to happen (though progress is still fragile), and not yet in the two long-line fisheries.

11. Similarly, *coastal fisheries* throughout the region are threatened (and in some cases severely impacted) by overfishing and coastal degradation, driven by growing demand for coastal fish products, more efficient fishing technologies, improved distribution channels and market access, and the erosion of customary management regimes due to increasing monetisation of local economies. As populations grow, pressure on coastal fishery resources continues to increase and projections indicate that an alternative supply of fish protein (from the more abundant tuna resources, or from aquaculture) will be needed in many PICs in the coming decades.

12. Lastly, as an additional pressure on fisheries, *natural coastal habitats* are increasingly degraded or threatened throughout the region, as a result of coastal development, destructive fishing practices, inadequate watershed management (agriculture and logging), sewage and other forms of pollution from cities, ships and industry, solid waste disposal and mining of coastal aggregates, among others.

13. *Regional and Government Responses to Key Sector Issues and Constraints.* While the threats are significant, the Pacific Ocean and its fisheries resources are still relatively healthy in comparison to other regions of the world, so PICs are well-positioned to be proactive in addressing these challenges. Like the Pacific Ocean, the systems within it are interconnected and interdependent, leading to regional responses to the constraints and opportunities that these natural assets provide. Encouragingly, PIC institutions are already adapting to address these issues in some cases, in particular through collective action for a more effective management system for the purse seine fishery targeting skipjack tuna (representing over half of the tuna

catch in the Pacific). In 2009 the eight countries who are Parties to the Nauru Agreement (PNA)<sup>2</sup> introduced the vessel day scheme (VDS) to manage access to the fishery. It works similar to a ‘cap and trade’ scheme for fishing: each year the PNA countries set the total catch limit needed to maintain a healthy fish stock, and translate that catch limit into individual vessel fishing days, which are allocated to countries by a PNA Office (PNAO) based on an agreed formula, and then the countries sell the days. The vessels days are valuable because they limit catch to sustainable levels of production and this scarcity has value that can be traded. Prior to the introduction of the VDS, PNA countries captured little of the value of the tuna caught in their waters. As a result of introducing the VDS and subsequently a benchmark price, the price of a vessel day increased from US\$1,500 in 2010 to US\$6,000 in 2014, and total revenues to PNA countries increased from US\$70 million in 2009 to an estimated US\$280 million in 2014 (though still less than 10 percent of the value of the catch). This is only the value of access – and not potential additional benefits from local value added to fish products. Nor is this the end of the story – a number of experts believe that the price of vessel days can continue to climb if the system is further strengthened, and this fishery could sustainably return over US\$450 million per year to Pacific Island countries. However for this to happen, compliance with the resource management system will need to be increased to strengthen its integrity (as for example some countries have exceeded the number of days allotted to them at the expense of the health of the resource), its scope expanded to cover as much of this regional fishery as possible, and its flexibility, transparency and efficiency increased (for example by pooling days among multiple countries, or selling them via auction). Additionally, a similar management system could be introduced for the tropical tuna and southern albacore long-line fisheries, significantly enhancing the sustainability and the value of this natural capital asset, and subsequently the benefits that it can provide to Pacific Island countries.

14. Similarly, there are encouraging management models developing for coastal fisheries, whereby Governments have begun to legally empower stakeholders to manage defined areas of the sea, and provide them with the support needed to do so. Such community-based fisheries management systems have in many cases strengthened and codified traditional management measures such as the closure of areas or seasons to fishing, to allow stocks to regenerate and increase the productivity of the fisheries. These models have been successful where applied in the region, but still need to be scaled up significantly in a number of countries to cover the entire coastal fisheries and capture their full potential.

15. Lastly, with the growing recognition of the importance of natural habitats and wider ecosystem functions to the productivity of the region’s fisheries, a number of countries have begun to establish large-scale marine protected areas and spatially-managed marine areas that reflect the archipelagic nature of the region. Such areas can help support and enhance the fisheries when they are well designed, for example providing refuge for reproduction of fish that spill over into fishing grounds. Collaborative multi-country conservation arrangements such as the Micronesia Challenge and the Coral Triangle Initiative, as well as national commitments such as Kiribati’s Phoenix Islands Protected Area, and large-scale shark sanctuaries established by Palau, Tokelau and the Marshall Islands provide good examples of such areas, and are

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<sup>2</sup> FSM, Kiribati, RMI, Nauru, Palau, PNG, Solomon Islands and Tuvalu. More than half of the WCPO purse-seine tuna catch, and about a quarter of the world supply of canning-grade tuna, comes from the exclusive economic zones of these 8 PICs. Tokelau also participates in the VDS, though is not a Party to the Nauru Agreement.

potentially valuable platforms for investment in the protection and restoration of critical habitats that support the fisheries. At the same time, smaller local initiatives such as those mediated by the Locally Managed Marine Areas network (LMMA) and other community-conservation NGOs have also delivered significant results in the region.

### **C. Higher Level Objectives to which the Program Contributes**

16. *Contribution to Governments' Policies and Objectives for the Sector.* The health of the Pacific Ocean and the fisheries resources it supports have been central to the achievement of the Pacific Plan adopted by Pacific Islands Forum<sup>3</sup> leaders in 2005 as the master strategy for regional integration and coordination, and now form a core value of the Framework for Pacific Regionalism adopted by Forum leaders in 2014. Recognizing this, PICs have developed a number of regional policies, policy frameworks and initiatives to support such efforts. First and foremost, the Pacific Islands Regional Ocean Policy (PIROP) and the Pacific Islands Regional Ocean Framework for Integrated Strategic Action (PIROF-ISA) were approved by leaders in 2002 and 2005 respectively, and are referred to in the Pacific Plan. The PIROP's goal is to ensure the sustainable use of the Pacific Ocean and its resources by Pacific peoples and external partners. In the context of the Pacific Plan, PIROP and PIROF-ISA, the Pacific Islands Forum leaders endorsed the Framework for a Pacific Oceanscape in 2010, as a framework for policy implementation to better understand and conserve the Pacific Ocean to guarantee the vision of the Pacific Plan. Leaders tasked the Council of Regional Organizations of the Pacific (CROP) to support implementation of the respective elements of the Framework. These agencies include the Pacific Islands Forum Secretariat, the Secretariat of the Pacific Community (SPC) including the Applied Geoscience and Technology Division (SOPAC), the Secretariat of the Pacific Regional Environment Program (SPREP), the Pacific Islands Forum Fisheries Agency (FFA) and the University of the South Pacific (USP). The Pacific Islands Forum Secretariat will house an Oceanscape Unit responsible for monitoring implementation of the Framework, while FFA provides direct oceanic (tuna) fisheries management, development and compliance services to the Forum's member countries. SPC provides coastal fisheries science, management and development services to its members, together with the oceanic scientific research. Within this framework, the VDS has been developed as a specific system for collective action by the PNA countries to manage the shared purse seine fishery within their waters, administered by the PNAO in Majuro. Similarly, the oceanic fishing activities occurring on the high seas neighboring the waters of some PICs, are managed collectively by the Western and Central Pacific Fisheries Commission (WCPFC) established under the United Nations Fish Stocks Agreement (UNFSA).

17. *Contribution to the World Bank's Corporate Goals and the Country Assistance Strategies.* The health of this natural capital asset is central to the region's ability to reduce poverty and boost shared prosperity. Better managed oceanic and coastal fisheries will be more productive, supplying Governments with greater revenues for investment and rural communities with more secure food, nutrition and livelihoods. Specifically, management systems that enhance sustainability of the resource and increase inclusion of stakeholders in the decision-making process will help ensure that the socio-economic benefits of the region's fisheries are better

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<sup>3</sup> Pacific Island Forum member countries are: Australia, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu. Tokelau, French Polynesia and New Caledonia are associate members of the Pacific Island Forum.

captured by PICs and their distributive feature is increased. For this reason, the proposed program to promote regional integration for better management of fish resources is one of the key instruments in the Bank's regional strategy to support sustained growth and poverty reduction with increased resilience, together with enhanced natural resource sustainability. The proposed program is included in the Country Assistance/Partnership Strategies for the Federated States of Micronesia (FY2014 to 2017), Kiribati (FY2011 to 2014), the Republic of the Marshall Islands (FY2013 – 2016), the Solomon Islands (FY2013 – 2017) and Tuvalu (FY2012 – 2015). The proposed program builds upon analytical work published by the Bank in 2009, *Fisheries in the Economies of Pacific Island Countries and Territories*, and on a *Fisheries Engagement Strategy for the Pacific Islands Region* completed in early 2012. Furthermore, the Bank as a Group will mobilize a number of instruments to help Pacific Island countries sustainably increase the benefits from their fisheries resources: (i) public sector finance in the form of grants and credits from the International Development Association (IDA) via this proposed program, in order to collectively enhance countries' capability to sustainably manage the resources – thereby enhancing the value of access to these resources; and (ii) private sector finance in the form of equity and loans from the International Finance Corporation (IFC) to enhance the value added locally to tuna caught in the countries' waters – thereby increasing local employment from the fisheries. In practice these instruments will be carried out in coordination, with IDA financing provided to Governments to create an enabling environment for greater local investment in fisheries, and IFC providing advisory services and investment as opportunities arise in this new environment.

## II. Program Development Objective

18. The **development objective** of this Program<sup>4</sup> is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries<sup>5</sup>, and the critical habitats upon which they depend. This will provide the basis for sustainable and increased economic benefits to the region from this resource. More specifically, the Program will strengthen: (i) the national and regional institutions<sup>6</sup> responsible for the management of the oceanic fisheries; (ii) the local and national institutions responsible for the management of the coastal fisheries; and (iii) the institutions responsible for the conservation of the natural habitats that support them.

19. *Program Beneficiaries.* Since the Program's activities to strengthen resource management would significantly increase the public revenues received by the Federated States of Micronesia, the Republic of the Marshall Islands, the Solomon Islands and Tuvalu from access to the region's tuna fisheries, the Program is of major importance to these countries. The Program will directly benefit most segments of the population in each country, based on increased resources for public investment. In addition, direct beneficiaries include coastal fishing communities who receive support to better manage targeted fisheries, as well as participate in the returns from management of the tuna fisheries. These communities include subsistence fishers, households where fishing is

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<sup>4</sup> The term 'Program' in this document refers to a Series of Projects (SOP).

<sup>5</sup> Selected fisheries are defined here as the fisheries used or shared by the Pacific Island Countries who are members of the Bank.

<sup>6</sup> Institutions are defined here as the formal and informal rules affecting policy design, implementation and outcomes (North, 1990).

a vital component of rural livelihoods, and small-scale commercial fishers. Women are involved in these coastal fisheries to varying degrees, particularly in the processing and marketing of products.

20. Regional, national and local institutions in the fisheries sector and associated with the project will also benefit from improved capacity to formulate and analyze policy and to promote public-private coordination as a result of program-financed institutional development activities.

21. The private sector stakeholders, including enterprises engaged in the oceanic fisheries, or providing services to the sector, foreign fishing fleets, foreign investors in fisheries and processing enterprises are important regional players who will benefit indirectly from the Program. Consumers will also indirectly benefit from the Program, particularly in coastal communities where fish is a vital component of a food security basket.

22. *PDO Level Results Indicators.* The key results that the project aims to achieve are:

- *Indicator for strengthened management of oceanic fisheries:* the number of days fished for tuna in a country's waters does not exceed its agreed annual allocation of purse seine fishing vessel days (PAE), while the total regional allocation (TAE) remains within sustainable levels<sup>7</sup>;
- *Indicator for strengthened management of coastal fisheries:* the number of additional coastal fisheries legally managed by stakeholders in each country, with support from the Government; and
- *Indicator for sustainable financing of the conservation of critical fishery habitats:* the number of large marine protected or marine managed areas conserving habitat critical to support Pacific fisheries for which sustainable revenue streams are identified.

23. Achieving these results will provide a direct contribution to the Bank's corporate goals to reduce poverty and boost shared prosperity in the region, and improve sustainability, as: (i) strengthened and more sustainable management of the tuna fisheries will increase the size of this resource and the value of access to it for foreign investment, which PICs can capture in the form of public revenues re-invested for poverty reduction and/or foreign direct investment in local value addition to expand job opportunities, depending on the local context; (ii) stakeholder-managed coastal fisheries will be better managed and more productive, enhancing rural livelihoods and food security throughout the region and particularly for the bottom 40 percent of income distribution; and (iii) both of these outcomes will depend on healthy ocean habitats to support fisheries. Achieving these results will also directly contribute to the larger goal of Pacific Island countries to sustainably increase the economic benefits they capture from the region's oceanic and coastal fisheries. Building on ongoing efforts and initiatives, this package of investments will aim to help enhance the contribution of fisheries in particular to economic growth and sustainable development as described in the Pacific Plan, by supporting the implementation of a number of aspects of the PIROP, according to the PIROF-ISA and the Framework for a Pacific Oceanscape.

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<sup>7</sup> The total regional allocation is defined as total purse seine fishing effort, measured in total allowable effort (TAE).

### III. Program Description

#### A. Series of Projects

24. The PROP will be implemented in a Series of Projects (SOP) over a six to ten year period (and each project has a six-year period), based on projected country demand. The expected projects in the series are:

- FY15: Federated States of Micronesia (FSM), Republic of the Marshall Islands (RMI), Solomon Islands, Tuvalu and FFA Investment Projects
- FY16: At least one to two additional country-level investment projects
- FY17: Three to four additional country-level investment projects

25. *Country Demand and Readiness.* FSM, RMI, Solomon Islands and Tuvalu have officially requested IDA support, together with FFA as the regional implementing agency. Each of these countries participates in the management of the shared purse seine tuna fisheries and so is essential to achieving the Program's overall objective, and each country has demonstrated by its interest in the PROP a willingness to continue to improve management of these resources.

#### B. Program components

26. The detailed program description is given in Annex 2. As described in this annex, the program will focus on three main areas, all of which are essential to the achievement of the development of objective: (i) sustainable management of oceanic fisheries, (ii) sustainable management of coastal fisheries, and (iii) conservation of critical fishery habitats; as well the (iv) regional coordination, implementation support, training and monitoring and evaluation, necessary to support these three areas. These will form a menu of activities the Program could support in each project in the series, which would be chosen based on the specific country context. The first five projects in the program series finance activities drawn from this menu, with a total investment cost estimated at US\$39.27 million, of which IDA will finance US\$32.97 million and GEF will finance US\$6.3 million.

27. **Component 1: Sustainable Management of Oceanic Fisheries (US\$25.24 million IDA).** This component aims to help participating Pacific Island countries strengthen the management of the region's purse seine and long-line tuna fisheries. Towards this objective, the component includes activities to: (i) strengthen the capacity of national and regional institutions to sustainably manage Pacific Island tuna fisheries; and (ii) ensure an equitable distribution within Pacific Island countries of the benefits of sustainably managed tuna fisheries.

28. **Component 2: Sustainable Management of Coastal Fisheries (US\$4.18 million IDA, US\$4.5 million GEF).** This component aims to support participating countries to sustainably manage defined coastal fisheries and the habitats that support them, focusing on those with the greatest potential for increased benefits, i.e. coastal fisheries such as bêche-de-mer (BDM) that (i) can generate export earnings for the country, and/or (ii) support livelihoods, food security and dietary health. Towards this objective, this component includes activities to: (i) empower stakeholders to sustainably manage targeted coastal fisheries in participating countries; and (ii) link sustainable coastal fish products to regional markets. This component will provide climate change co-benefits by supporting adaptation in the form of better management of coastal fisheries and natural defenses.

**29. Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats (US\$1.0 million IDA, US\$1.8 million GEF).** This component aims to help identify revenue streams to sustainably finance the conservation of critical habitats that underpin oceanic and coastal fisheries in the region. Towards this objective, the component will include activities to establish: (i) Pacific Marine Conservation Development Financing Mechanisms to support the growing number of large marine protected areas (MPAs) in the region; and (ii) a pilot Pacific Blue Carbon regional program for small to medium scale fishery habitats. The aim of this component is not to provide sustainable financing for all regionally-significant fisheries habitat conservation efforts, but rather to provide the catalytic upstream finance needed to identify, develop and achieve consensus on the mechanisms to deliver such financing, and then to help secure this financing from other sources, for example from the GEF, international foundations, etc. Thus the financing from this component aims to leverage significant additional finance to the region for conservation of critical fishery habitats. This component also provides climate change co-benefits by supporting mitigation, in the form of conservation of vegetated coastal habitats that sequester significant amounts of carbon.

**30. Component 4: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation (US\$2.55 million IDA).** This component aims to provide regional coordination, implementation support and project management, to ensure a coherent approach to program implementation and wide dissemination of results and lessons learned; as well as implementation support and training as needed for the program to achieve its objectives. Towards this objective, this component includes activities to: (i) support a program management unit within FFA for implementation support to participating countries; (ii) share knowledge and outreach globally; (iii) support the Oceanscape Unit within the Pacific Island Forum Secretariat to monitor program progress within the wider context of the Framework for a Pacific Oceanscape; and (iv) support national project management, monitoring and evaluation.

### **C. Program Financing**

31. *Lending Instrument.* The proposed lending instrument is a program of investment project financing – a Series of Projects. The Pacific Islands Regional Oceanscape Program (PROP) is a series of interdependent and overlapping projects to multiple recipients/borrowers, who are facing a common set of development issues and share common development goals. Each of the projects is self-standing and will finance a different eligible recipient/borrower, and each is expected to last approximately six years. The eleven PICs who are member countries of the World Bank are eligible to participate, as all share the transboundary fisheries and fish resources. This Appraisal document describes the first five projects in the series, for the countries of FSM, RMI, the Solomon Islands and Tuvalu, and to FFA. Subsequent operations are envisaged starting in 2015 for additional eligible countries. Taken together, the Series of Projects is expected to span a period of 6 to 10 years, at the end of which it will have covered all eleven eligible PICs.

32. The PROP has a shared development objective and approach, meaning that each project in the series has the same design features, i.e. the same components and sub-components, but is applied to different countries (with some different specifics for each country). This Appraisal document includes the standard design (or template) for the program, to be replicated in other

projects in the series (see Annex 2), as well as the specific activities to be financed in each of the first five projects (see Annexes 3 – 7). Using a standard design addresses three key considerations: (i) encourage regional collaboration in the management and development of the region's oceanic resources; (ii) offer long-term support (6 years for each operation in the series) to implement actions aimed at strengthening collaborative efforts to manage shared oceanic resources; and (iii) give flexibility to groups of countries to participate in the PROP when they are ready (according to agreed eligibility criteria).

33. In order to implement the shared development objective and approach, each project in the series will finance activities that would be implemented nationally in each participating country, as well as some activities better implemented at the regional level. Each project would include investments for both 'physical' goods and services, as well as 'soft' activities such as technical assistance. Most of the physical investments would be made at the national level, while 'soft' activities would be implemented at both the national and regional level.

34. *Rationale for Regional IDA.* The Program meets all regional funding eligibility criteria: (i) it includes more than three countries, three of whom are considered fragile states, and more countries are expected to participate in future projects in the series; (ii) the investments in each project in the series are expected to generate significant regional spill-over benefits; (iii) there is clear evidence of regional commitment via the Pacific Islands Forum and its fisheries agency, with FFA and many of its member countries interested in participating; and (iv) it provides a platform for harmonization of regional fisheries policy and management measures. Regional IDA funds will provide critical resources for the financing of investments in the management of shared fisheries, the costs for which are otherwise beyond (or significantly absorb) the resources available from national IDA allocations. IDA's ability to mobilize these funds simultaneously to participating countries facilitates the synchronization of the investments in improved resource management, which will effectively enhance the value of this regional and transboundary asset. FFA will receive a regional IDA grant as it complies with the following criteria:

- *The recipient is a bona fide regional organization that has the legal status and fiduciary capacity to receive grant funding and the legal authority to carry out the activities financed.* The FFA was established in 1979 under the umbrella of the Pacific Islands Forum, to strengthen national capacity and regional solidarity as means of assisting its 17 members to manage, control and develop their fisheries.
- *The recipient does not meet eligibility requirements to take on an IDA credit.* As a regional organization FFA is not eligible to take on IDA credit. In addition, under its articles of association the FFA is not empowered to borrow from IDA.
- *The costs and benefits of the activity to be financed with an IDA grant are not easily allocated to national programs.* The grant supports activities that capture economies of scale at the regional level across multiple small island states, with spillover effects.
- *The activities to be financed with an IDA grant are related to regional infrastructure development, institutional cooperation for economic integration, and coordinated interventions to provide regional public goods.* The grant is concerned with promoting greater institutional cooperation for improved sustainable economic returns from shared fisheries, which are a regional public good.

- *Grant co-financing for the activity is not readily available from other development partners.* FFA receives funding support from a wide range of bilateral and multilateral development partners to complement the financial contributions of its member countries. However the level of demand for services has outstripped the capacity of the agency to respond, especially in recent years as the management environment in the region has become more complex and FFA member countries struggle to cope with this.
- *The regional entity is associated with an IDA-funded regional operation or otherwise supports the strategic objectives of IDA on regional integration.* FFA is implementing the regional activities of the PROP, an IDA-funded regional operation.

35. *Program Financing.* The appraised activities in the first five projects in the series are estimated to require IDA financing of US\$32.97 million and GEF financing of US\$6.3 million over 6 years (see Tables 1 and 2 below). This would include IDA financing of US\$5.5 million for FSM, IDA financing of US\$6.75 million and GEF financing of US\$1.83 million for RMI, IDA financing of US\$9.75 million and GEF financing of US\$1.37 million for Solomon Islands, IDA financing of US\$7.0 million and GEF financing of US\$0.91 million for Tuvalu and an IDA Regional Grant of US\$3.97 million and a GEF grant of US\$2.19 million to FFA.

**Table 1: Pacific Islands Regional Oceanscape Program (PROP) series estimated cost (US\$ M)**

	IDA	GEF	Total cost
PROP Projects #1 – 5: FSM, RMI, Solomon Islands, Tuvalu, FFA	33	6	39
PROP Projects #6 and 7: Countries to be confirmed*	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
PROP Projects #8 – 11: Countries to be confirmed*	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Total PROP	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>

\* *Composition of countries in PROP Projects# 6 - 11 will be confirmed based on country readiness.*

**Table 2: Financing for the First Five Projects in the Series**

Component and/or Activity	Project Cost (US\$ million)	IDA Financing	% Financing	GEF Financing
1. Sustainable Management of Oceanic Fisheries	25.24	25.24	100	N/A
1.1 Strengthen the capacity of national and regional institutions to sustainably manage Pacific Island tuna fisheries	24.84	24.84	100	N/A
1.2 Ensure an equitable distribution within Pacific Island countries of the benefits of sustainably managed tuna fisheries	0.4	0.4	100	N/A
2. Sustainable Management of Coastal Fisheries	8.79	4.18	48	4.61
2.1 Empower stakeholders to sustainably manage targeted coastal fisheries in participating countries	7.79	3.68	47	4.11
2.2 Link sustainable coastal fish products to regional markets	1.0	0.5	50	0.5
3. Sustainable Financing of the Conservation of Critical Fishery Habitats	2.69	1.0	37	1.69
3.1 Pacific Marine Conservation Development Financing Mechanisms to support the growing	1.69	0	0	1.69

number of large marine protected areas (MPAs) in the region				
3.2 A pilot Pacific Blue Carbon regional program for small to medium scale fishery habitats	1.0	1.0	100	N/A
4. Regional Coordination, Implementation Support, Training and Monitoring and Evaluation	2.55	2.55	100	N/A
4.1 National program management, monitoring and evaluation	0.85	0.85	100	N/A
4.2 Program support unit in FFA	1.4	1.4	100	N/A
4.3 Oceanscape unit located within Pacific Islands Forum Secretariat	0.3	0.3	100	N/A
<b>TOTAL COSTS</b>	<b>39.27</b>	<b>32.97</b>	<b>84</b>	<b>6.3</b>

**Table 3: Sources of IDA Financing for the First Five Projects in the Series, including GEF**

	<b>C1: Oceanic Fisheries</b>		<b>C2: Coastal Fisheries</b>		<b>C3: Fishery Habitats</b>		<b>C4: Regional Coord., M&amp;E, etc.</b>		<b>TOTAL</b>		
	<i>National IDA (\$)</i>	<i>Regional IDA (\$)</i>	<i>National IDA (\$)</i>	<i>GEF (\$)</i>	<i>Regional IDA (\$)</i>	<i>GEF (\$)</i>	<i>National IDA (\$)</i>	<i>Regional IDA (\$)</i>	<i>National IDA (\$)</i>	<i>Regional IDA (\$)</i>	<i>GEF (\$)</i>
FSM	1.0 M	4.0 M	0.3 M	N/A	N/A	N/A	0.2 M	N/A	1.5 M	4.0 M	N/A
RMI	1.0 M	4.45 M	0.95 M	1.83 M	N/A	N/A	0.35 M	N/A	2.3 M	4.45 M	1.83 M
Solomon Islands	1.8 M	5.95 M	1.8 M	1.37 M	N/A	N/A	0.2 M	N/A	3.8 M	5.95 M	1.37 M
Tuvalu	1.0 M	4.77 M	1.13 M	0.91 M	N/A	N/A	0.1 M	N/A	2.23 M	4.77 M	0.91 M
FFA	N/A	1.27 M	N/A	0.5 M	1.0 M	1.8 M	N/A	1.7 M	N/A	3.97 M	2.19 M
<b>TOTAL</b>	<b>4.8 M</b>	<b>20.44 M</b>	<b>4.18 M</b>	<b>4.51 M</b>	<b>1.0 M</b>	<b>1.8 M</b>	<b>0.85 M</b>	<b>1.7 M</b>	<b>9.83 M</b>	<b>23.14 M</b>	<b>6.3 M</b>

## IV. Implementation

### A. Institutional and Implementation Arrangements

36. **Subsidiarity Principle.** While both the approach and coordination of the PROP are regional, some of the implementation will take place on the ground at the national level via relevant implementing agencies, while a portion will be implemented regionally by one single entity (i.e. regional organization). As such, the PROP aims to demonstrate concrete results early in implementation in each country, in order to encourage further local ownership, in addition to capturing economies of scale at the regional level where possible.

37. Annex 8 describes the implementation arrangements for the PROP in detail. In summary, these are as follows:

38. **Regional Level.** FFA will establish a Program Support Unit (PSU) to implement regional project activities (financed by the regional IDA grant, as well as to work with each country on financial management and procurement of project activities. More specifically, the PSU will support and guide all PROP procurement activities, undertake the procurement process on behalf of participating countries for activities involving international procurement, as well as support day-to-day implementation and financial reporting as needed. The PSU will conduct frequent implementation support missions to each of the participating countries, to assist in proactively addressing implementation bottlenecks as they arise. For overall monitoring, FFA will report on

progress to the Forum Fisheries Committee (FFC) of Ministers of Fisheries each year, which may issue non-binding recommendations for implementation.

39. **National Level.** Each of the projects will be implemented at the national level by the ministry, department or agency responsible for fisheries in each country, as designated implementing agencies. Each implementing agency will name or recruit a project focal point, who will be responsible for providing summaries of implementation progress and results from M&E to the PSU, to support program-wide monitoring of results. The implementing agency will implement national-level activities, including national procurement and financial management for these activities, utilizing funds from a national designated account. The implementing agencies in the first four countries to participate in the PROP area as follows: (i) FSM: National Oceanic Resource Management Authority (NORMA); (ii) RMI: Marshall Islands Marine Resources Authority (MIMRA); (iii) Solomon Islands: Ministry of Fisheries and Marine Resources (MFMR); and (iv) Tuvalu: Tuvalu Fisheries Department (TFD).

## **B. Results Monitoring and Evaluation**

40. The monitoring and evaluation (M&E) plan of the program is based on the key indicators detailed in the program's Results Framework in Annex 1. Overall achievement of the PDO will be measured by indicators of: (i) strengthened management of oceanic fisheries, i.e. the number of days fished for tuna in a country's waters does not exceed its agreed annual allocation of purse seine fishing vessel days (PAE), while the total regional allocation (TAE) remains within sustainable levels; (ii) strengthened management of coastal fisheries, i.e. the number of additional coastal fisheries legally managed by stakeholders in each country, with support from the Government, and (iii) sustainable finance of the conservation of critical fishery habitats, i.e. the number of large marine protected or marine managed areas conserving habitat critical to support Pacific fisheries, for which sustainable revenue streams are identified. The key indicators have been chosen taking into account the information they provide, as well as the costs and feasibility for any additional data gathering. The baselines for these indicators have been established on the best available data, but will in some cases be re-measured/refined over the first two years of implementation.

41. Responsibility for overall monitoring and evaluation of progress towards the program objectives and outcomes will lie with the implementing agencies in each country, and the PSU. Currently, the sector monitoring system within these agencies lacks the resources needed to adequately report on progress according to the indicators in the Results Framework (see Annex 1). For this reason, the program will support monitoring and evaluation training and expertise as part of the implementation team in each country, ensuring that a focal point is assigned to oversee and be responsible for M&E of each project. Furthermore, the program will directly support the actual costs of data collection and analysis, as part of each of the three technical components. The PSU will collect the data from each country as the basis of a M&E report submitted annually to the World Bank, together with updated project work programs and budgets.

### C. Sustainability

42. The program will invest significantly in building the capacity of the technical ministries, departments and agencies responsible for fisheries in each country, together with a demand-based model of support from FFA. As a regional organization with the mandate, FFA will continue to promote sustainable management of the region's oceanic resources after the end of the program. In terms of recurrent costs of the investment after the close of each project, the PROP will support the development of sustainable financing models, including for the PNAO to generate revenues to sustainably operate the VDS; for similar systems to the VDS for the tuna long-line fisheries; for community VDS banks (e.g. social accounts linked to revenues from vessel day sales) that can support coastal fishing communities in their continued management of the coastal resources; and for regional financing mechanisms for protection of fishery habitats. Aside from the ongoing operating costs of the VDS and similar systems for the long-line fisheries, coastal fisheries management by the communities, and protection of critical fishery habitats, the key recurrent cost would be for enhanced surveillance and monitoring of the fisheries to enforce compliance with the management systems for the oceanic fisheries. For this reason, the program will support a pragmatic approach to surveillance based on regional collaboration, in order to minimize recurrent costs.

### V. Overall Risk Rating and Explanation of Key Risks

43. The overall risk rating is Substantial. The key risks include stakeholders' compliance with the VDS, institutional capacity for implementation and sustainability, and environment and social risk (particularly climate change).

44. **Stakeholders risk: Purse seine tuna supply is not sustainable, because the VDS system for managing the resource breaks down under collective action failures by the PNA member countries – particularly lack of compliance.** This risk can be disaggregated into risks of: (i) non-compliance with the VDS (i.e. issuing more vessel days for fishing than allocated from the VDS) by PNA member countries participating in the PROP, because the investments of the project do not provide a sufficient incentive to combat high discount rates; and (ii) non-compliance with the VDS by PNA member countries not participating in the PROP, thereby causing some participating countries to follow suit and undermine the entire VDS. To address these risks, the PROP is designed to provide incentives to participating countries to strengthen the VDS through disbursements linked to indicators of sound execution of management measures, and expand to include all PNA member countries in the coming years. The PROP also includes support at both the national and regional level to enhance transparency of information on the activities of PNA member countries, to increase the peer review mechanism of the PNA as an incentive for compliance. Independent and widely communicated third-party verification of the countries' progress towards meeting the indicators will enhance transparency, as the key mitigation measure. The PROP will also support bio-economic analysis of the tuna fisheries as well as market data, to provide clear information to countries on the benefits of compliance with the VDS. Additionally, a number of development partners are supporting the success of the VDS, and the regional structure of the operation ensures that CROP agencies also support and reinforce this effort.

**45. Institutional capacity for implementation and sustainability risk: the program has a large number of stakeholders and relatively weak implementation capacity in some cases, due to limited human resources.** To manage this risk, the Program Support Unit in FFA will work with participating countries, whose efforts will be focused around a core and reduced set of activities. FFA has demonstrated capacity, and will provide real-time support when needed by participating countries. Similarly, there is a governance risk concerning implementing agencies' commitment to the results to be achieved by the project and accountability. To address this risk, the project will support enhanced transparency and public disclosure in the management of the tuna fisheries, and particularly in the scope and sale of access, in order to increase accountability.

**46. Environment and social risk (in particular Climate change risk):** The Climate and Disaster Risk Screening Tool<sup>8</sup> was completed for the PROP, indicating sea level rise, strong winds, ocean temperature and acidification being three main hazards for the region - both historically and with a future potential impact on natural resources, economy and livelihoods of the PICs in general. In relation to the PROP in particular, climate change impacts may ultimately halve coastal fish catches in some PICs, as well as shift oceanic fisheries out of some PIC waters. A recent climate change simulation<sup>9</sup> indicates that skipjack tuna biomass is likely to move East (increasing catches in the EEZs of PICs east of 170 degrees E and decreasing them marginally within the EEZs west of 170 degrees E) by 2035 and 2050 owing to climate change alone. The simulated effect of climate change on coral reefs is likely to reduce production of coastal fisheries, but to enhance habitats for freshwater fisheries and aquaculture. According to the analysis, the potential economic benefits overall to the region from an eastward shift in skipjack tuna could exceed the threats, if careful management of tuna fisheries is ensured to enable the smaller nations in the east to gain more license revenue and allow west nations to continue receive the fish for canning operations. Based on this and other studies, the VDS for management of the purse seine tuna fishery and a similar system for the long-line tuna fisheries is recommended as a win-win adaptation to the climate change. By strengthening VDS, the project will make the fisheries management system more robust and flexible to adjust to relatively small shifts in fisheries supply. Due to the incorporation of the risk into the PROP design, as well as a 'substantial' rating of the climate change risk in the Systemic Operations Risk-Rating Tool (SORT) the climate change risk rating in the screening tool was Moderate<sup>10</sup>. In addition to project design, climate change risk will be addressed during implementation phase - through relevant studies, TORs, consultation and dialogue with stakeholders. Finally, the PROP's support for increased conservation of critical fishery habitats will also provide climate change co-benefits, as these coastal habitats also sequester significant amounts of carbon and can contribute to the global mitigation effort.

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<sup>8</sup> A form of due diligence for IDA-financed operations, introduced in July 2014.

<sup>9</sup> Johann D. Bell, Alexandre Ganachaud, Peter C. Gehrke, Shane P. Griffiths, Alistair J. Hobday, Ove Hoegh-Guldberg, Johanna E. Johnson, Robert Le Borgne, Patrick Lehodey, Janice M. Lough, Richard J. Matear, Timothy D. Pickering<sup>1</sup>, Morgan S. Pratchett<sup>1</sup>, Alex Sen Gupta, Inna Senina and Michelle Waycott. 2013. *Mixed responses of tropical Pacific fisheries and aquaculture to climate change*. Nature Climate Change.

<sup>10</sup> According to the screening tool, the "ratings throughout the tool should reflect the measures you have already designed to reduce risks from climate and disasters. For example, if you are already planning to base the design of your project on future climate projections of precipitation, the rating of potential impact should be lower than if you did not have plans to do so".

## **VI. Appraisal Summary**

### **A. Economic Analysis**

47. An economic analysis of the program was conducted, based on a simple cost-benefit analysis to estimate the quantifiable direct benefits generated by the program. While tangible, the benefits from components 2 and 3 are difficult to quantify given the current data available. For this reason, the analysis focused largely on the benefits from component one in strengthening management of the purse seine fishery, while acknowledging that additional benefits are expected as well from the long-line fishery. The cost-benefit analysis used the most recent sector statistics available to calculate: (i) the projected net economic benefits from the purse seine over the duration of the program (6 years) if the status quo is maintained (i.e. a business-as-usual scenario, without the program, and (ii) the expected net economic benefits from the purse seine tuna fisheries over the next 6 years as a result of the program and a strengthened VDS. On the basis of the results of the analysis, the net present value of the net economic benefits expected to result from the program over a period of 6 years totals more than US\$174 million, at an internal rate of return (IRR) of 121 percent for FSM, 55 percent for Marshall Islands, 45 percent for Solomon Islands, and 16 percent for Tuvalu. In terms of the distribution of the benefits, PIC Governments would capture the majority of the marginal benefits of the program's investment in the oceanic fisheries. The analysis was conservative, and does not include the expected benefits from strengthened management of the coastal fisheries and conservation of the underlying habitats, which are expected to include improved prices per unit of fish catch landed in communities, increased incomes, reduced post-harvest losses, improved marine habitats and biodiversity, and enhanced productivity of coastal and oceanic fisheries.

### **B. Technical**

48. The program has been developed based on the focus and experiences to date of the World Bank's active portfolio of roughly US\$1 billion supporting sustainable fisheries and aquaculture, as well as conservation of the natural coastal and ocean habitats upon which they depend. Beginning in 2005, the Bank re-oriented its efforts and this portfolio away from a focus on financing inputs for sector development, and towards strengthening and building institutions for better resource management. This focus on resource management and sustainability as the overwhelming challenge (and opportunity) in the sector, has been confirmed subsequently by biological and economic research clearly demonstrating that levels of fishing exploitation that are environmentally sustainable (i.e. at levels below the maximum amount that can be harvested and still allow the stocks to regenerate to their previous size) are also much more economically profitable. These findings have been confirmed in 2013 by a blue ribbon panel of 20 global experts and thought leaders convened by the Global Partnership for Oceans, including the Secretary General of the Pacific Islands Forum Secretariat and the Chief Executive Officer of the PNA Office.

49. The recent experiences in the Pacific's purse seine tuna fisheries have shown these results already in the oceanic fisheries, via the introduction of the VDS and a total limit on the amount of purse seine fishing effort authorized to take place in PIC waters each year. Essentially a fixed number of transferable fishing days are agreed at the sub-regional level by the PNA and allocated to each member country based on historical catch levels and resource endowment.

Vessel-days are then made available by those countries to the fishing industry through a variety of different mechanisms, including the sale of nationally allocated vessel-days, the US Treaty, and the FSM Arrangement. This innovation has significantly enhanced efficiency and revenues to PICs, more than tripling the returns to the region in the last five years (from around \$60 million per year to some \$265 million per year). The VDS provides valuable lessons in the development of fisheries management systems that include robust limits on fishing pressure linked to the bio-ecology of the fish stocks, as well as greater empowerment and security of resource users for stewardship. These lessons have been equally applied throughout coastal fisheries such as supply food and livelihoods for so many Pacific Island communities. In many cases throughout the world, for example in Indonesia and West Africa with support of the World Bank-financed Coral Reef Rehabilitation and Management Program (COREMAP) and the West Africa Regional Fisheries Program (WARFP) respectively, Governments have empowered fishing communities with greater management authority and access to targeted coastal fisheries, to both enhance incentives for stewardship and promote local efforts to enhance sustainability and benefits. The program builds on these examples and experiences throughout the world, and notably within the World Bank's own portfolio.

### **C. Financial Management**

50. A financial management assessment was carried out for each of the implementing agencies in accordance with the "*Principles Based Financial Management Practice Manual*" issued by the Board on March 1 2010. The FM main risk, with the exception of FFA, is the lack of the agency's experience in managing donor funds, in particular from the World Bank. To further strengthen financial management and mitigate the risk, a dedicated project accountant will be provided or recruited to support each country's implementing agency, together with additional support as needed from an accountant in the PSU at FFA. A project Operation Manual will also include FM and Disbursement Arrangements and the initial budget will require approval from the Bank. Further details of the financial management arrangements for the program are included in Annex 8.

### **D. Procurement**

51. An assessment of the capacities of FFA and the Phase 1 country implementing agencies to implement procurement actions for the project was conducted during 2014. While all participating countries have national procurement regulations which are generally in line with the Bank's Guidelines, the assessment has concluded that there is limited procurement experience across all agencies, except for FFA. This being a regional investment, it is proposed to entrust responsibility for ensuring progress on procurement activities under all components of PROP to FFA. Small value procurement, under national competitive bidding or shopping, may be carried out by the country implementing agencies under the guidance and support of FFA (specifically in document preparation). Further details on this arrangement are provided in Annex 8.

52. The overall procurement-related risk is rated substantial. The key risks identified are: (i) delays, non-compliance with procedures, and poor quality deliverables; (ii) reduced competition and low market interest; and (iii) inadequate oversight which could result in mis-procurement.

53. To address the above risk areas, the following actions will be implemented: (i) assign project procurement responsibility to FFA in the Financing Agreements, with arrangements detailed in the program operations manual, including the agreed decision-making flow; (ii) establish a Regional Procurement Evaluation Committee comprising representatives from each IA; (iii) appoint dedicated project coordinators and/or local procurement staff to liaise with FFA on procurement activities; (iv) invite bids under regional packages, where appropriate; (v) establish a contract management system at each IA; and (vi) publish contract award decisions, and other relevant information, on external websites.

#### **E. Social (including Safeguards)**

54. The overall social impact of the program is expected to be highly positive and none of the eligible investments on the menu of options include activities that would generate significant risk or irreversible adverse social impacts. To ensure that this is the case and to guide implementing agencies on the environmental and social screening and subsequent assessment of specific project activities during implementation, an Environmental and Social Management Framework (ESMF) has been prepared. To mitigate against any social risks that access to traditional coastal fishing grounds might be restricted as a result of fisheries management measures supported, the ESMF includes a Process Framework to describe project requirements to comply with the Involuntary Resettlement Policy (OP 4.12). Given that many of the program beneficiaries are recognized as indigenous peoples, an Indigenous Peoples Planning Framework (IPPF) has also been included in the ESMF to ensure compliance with the Indigenous Peoples Policy (OP 4.10).

55. Key stakeholders whose representatives have been consulted during preparation and which will be involved in implementation include: participating coastal fishing communities; Government agencies responsible for managing fisheries in participating countries; regional agencies such as the Forum Fisheries Agency, the Parties to the Nauru Agreement Office and the Secretariat of the Pacific Community, the Pacific Islands Forum Secretariat; and the marine sector working group of regional agencies and civil society representatives.

56. Furthermore, it is estimated that between 135,000 and 340,000 women, out of a total of 4.8 million in the Pacific Islands region, are involved in the fisheries sector in varying degrees. However, cultural norms and traditional gender roles impact on women's participation. Women are restrained by multiple obligations, limited time and mobility and therefore, traditional fishing activities in the Pacific Islands are generally segregated, with men focusing on offshore areas, and women's activities usually confined to inshore catchment areas including fishing and collecting or gleaning a number of species from the reef. Women are also increasingly taking up economic opportunities offered by small businesses involved in other areas the fisheries sector, such as eco-tourism, post-harvest and processing, aquaculture, marketing and trading. To ensure gender equitable policies, the Program will support a gender analysis of the fisheries supply chain in Solomon Islands to help inform implementation of both that specific project as well as the wider Program.

#### **F. Environmental (including Safeguards)**

57. Similarly, the overall environmental impact of the program is expected to be highly positive, and none of the eligible investments on the menu of options include activities that would

generate significant risk or irreversible adverse environmental impacts. The main environmental impacts for eligible activities would be minor impacts from construction of small-scale infrastructure, potential increase in use of marine protected areas, and change in natural resource management/use. The scale and likelihood of adverse impacts arising from these activities is limited, and the types of mitigation activities well-known and proven. As such, the program is found to be **Category B** interventions. An Environmental and Social Management Framework (ESMF) has been prepared to ensure that any such potential adverse environmental impacts (examples of which are listed in the ESMF) generated as a result of each project are identified, and appropriate safeguard instruments are prepared to avoid, minimize, mitigate and, in such cases where there are residual impacts, offset these impacts. Environmental policies triggered and addressed in the ESMF include OP 4.01 Environmental Assessment; OP 4.04 Natural Habitats and OP 4.36 Forests. Grievance redress mechanisms for any environmental management plans prepared using the ESMF are included in the Framework, and training on these mechanisms will be provided to project teams and partners during implementation. Further information on the GRM is supplied in the Annex E Process Framework of the Environmental and Social Management Framework.

57. **Consultations** on the Environmental and Social safeguard policies were conducted on August 15, 2014 in Majuro, RMI with representatives from the fisheries agencies of *FSM (NORMA)*, *RMI (MIMRA)*, *Solomon Islands (MFMR)* and *Tuvalu (TFD)*, as well as the representatives from the *FFA*, *PNAO* and *SPC*. At this meeting NORMA, MIMRA, MFMR, TFD and FFA (implementing agencies) agreed on the process of preparing and incorporating safeguard instruments in the implementation arrangements. After the consultations, countries worked with the FFA and agreed on the final version of the ESMF, which was formally submitted to the Bank on September 23, 2014 by the FFA on behalf of all implementing agencies and disclosed on October 23, 2014. In addition to the regional consultation in RMI, national consultations were held in Tuvalu and Solomon Islands – to ensure stakeholder awareness and feedback in regard to the specific country context within the Component 2 (which is not applicable to FSM). Consultation minutes are attached in the ESMF.

58. **ESMF Disclosure:** was disclosed on October 23, 2014 and is available through the World Bank website (<http://documents.worldbank.org/curated/en/docsearch?query=E4664>), as well as through the website of the FFA ([www.ffa.int/wbprop](http://www.ffa.int/wbprop)).

## Annex 1: Results Framework and Monitoring

**Country: Pacific Islands**

**Project Name: Pacific Islands Regional Oceanscape Program (P131655)**

### Results Framework

#### Project Development Objectives

##### PDO Statement

To strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend

**These results are at** | Project Level

#### Project Development Objective Indicators\*

Indicator Name	Baseline <sup>11</sup>	Cumulative Target Values									
		YR1 - 2015	YR2 - 2016	YR3 - 2017	YR4 - 2018	YR5 - 2019	YR6 2020	YR7	YR8	YR9	End Target
Number of days fished in a country's waters does not exceed its agreed annual allocation of fishing vessel days (PAE), while the total regional allocation (TAE) remains within	FSM: 92% <sup>13</sup>	100% or less	100% or less	100% or less	100% or less	100% or less	100% or less				100% or less
	RMI: 100%	100% or less	100% or less	100% or less	100% or less	100% or less	100% or less				100% or less
	Solomon Islands: 88%	100% or less	100% or less	100% or less	100% or less	100% or less	100% or less				100% or less
	Tuvalu: 107%	100% or less	100% or less	100% or less	100% or less	100% or less	100% or less				100% or less

<sup>11</sup> 2011 used as baseline year for this indicator, for all 4 countries, based on most recent publicly available data.

sustainable levels (Percentage)* <sup>12</sup>											
Number of additional coastal fisheries legally managed by stakeholders in each country, with support from the Government (Number) <sup>14</sup>	FSM: N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A
	RMI: 0	0	2	6	12	18	24				24
	Solomon Islands: 0	0	5	10	20	35	50				50
	Tuvalu: 0	0	0	2	4	5	7				7
Number of large marine protected or marine managed areas conserving habitat critical to support Pacific fisheries, for which sustainable revenue streams are identified (Number) <sup>15</sup>	0.00	0.00	1.00	1.00	2.00	2.00	3.00				3.00
Direct project beneficiaries (number), of which are female (%) (Number) <sup>16</sup>	250000.00	250000.00	250000.00	250000.00	250000.00	250000.00	250000.00				250000.00

### Intermediate Results Indicators

<sup>13</sup> 2011 used as baseline year for this indicator, for all 4 countries, based on most recent publicly available data.

<sup>12</sup> Vessel days used, as a % of PAE, while total number of days (TAE) remains constant (linked to agreed target reference point on the order of 0.5Spawning Biomass);

Objective is to maintain at 100% or less each year (actuals may be less) – performance is satisfactory as long as does not exceed 100%;

Measurements that exceed 100% represent that the number of days fished in the country's waters exceeded its agreed allocation

<sup>14</sup> Coastal fisheries with legally recognized by-laws and/or management plans developed by communities;

Numbers given each year are aggregate (including preceding years), rather than additional to the numbers for preceding years.

<sup>15</sup> Sustainable revenue streams, including payments for ecosystem services, identified for at least 3 large marine managed or marine protected areas. Sustainable revenue streams defined as sufficient to cover the investment and recurrent costs of conservation, or just the latter for existing sites.

<sup>16</sup> Only direct beneficiaries from communities impacted by coastal fisheries component listed, although the entire population of each of the four countries will directly benefit from increased sustainable public revenue from the tuna fisheries

Indicator Name	Baseline	Cumulative Target Values									
		YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	End Target
<b>Component 1: Sustainable Management of Oceanic Fisheries</b>											
<i>Intermediate Result indicator One:</i> 100% of purse seine fishing vessel days used are recorded annually according to agreed criteria (Percentage) <sup>17*</sup>	FSM:	100%	100%	100%	100%	100%	100%				100%
	RMI:	100%	100%	100%	100%	100%	100%				100%
	Solomon Islands: 100%	100%	100%	100%	100%	100%	100%				100%
	Tuvalu:	100%	100%	100%	100%	100%	100%				100%
<i>Intermediate Result indicator Two:</i> 100% of purse seine fishing days used and sold are disclosed annually to the PNAO FIMS and other parties as part of a comprehensive verification system for the VDS (Percentage) <sup>18*</sup>	FSM: 0	0	0	0	100%	100%	100%				100%
	RMI: 0	0	0	0	100%	100%	100%				100%
	Solomon Islands: 0	0	0	0	100%	100%	100%				100%
	Tuvalu: 0	0	0	0	100%	100%	100%				100%
<i>Intermediate Result indicator Three:</i> % of tuna catch within a country's waters that is encompassed within the VDS or a	FSM: 89% <sup>20</sup>	89%	100%	100%	100%	100%	100%				100%
	RMI: 90% <sup>21</sup>	90%	100%	100%	100%	100%	100%				100%
	Solomon Islands:	59%	73%	73%	73%	100%	100%				100%

<sup>17</sup> All vessel days used are recorded as such according to PNA criteria, e.g. vs. recording as partially or not used

<sup>18</sup> All vessel days used and sales are recorded in the PNAO FIMS, and also available to other PNAO member countries (i.e. parties) to see. Currently 100% of days used are disclosed to FIMS, but not sales.

compatible system (Percentage) <sup>19*</sup>	59% <sup>22</sup> Tuvalu: 94% <sup>23</sup>	94%	100%	100%	100%	100%	100%				100%
<i>Intermediate Result indicator Four: At least one measure applied and maintained to increase flexibility and the value of a purse seine vessel day above the baseline (Yes/No)</i> <sup>24</sup>	FSM: No	No	No	No	Yes	Yes	Yes				Yes
	RMI: No	No	No	No	Yes	Yes	Yes				Yes
	Solomon Islands: No	No	No	No	Yes	Yes	Yes				Yes
	Tuvalu: Yes	Yes	Yes	Yes	Yes	Yes	Yes				Yes
<i>Intermediate Result indicator Five: A similar system to the VDS is introduced for managing access to the two long-line fisheries (tropical long-line fishery and southern albacore long-line fishery) (Yes/No)</i> <sup>25</sup>	FSM: No	No	No	No	Yes (tropical long-line fishery)	Yes (tropical long-line fishery)	Yes (tropical long-line fishery)				Yes (tropical long-line fishery)
	RMI: No	No	No	No	Yes (tropical long-line fishery)	Yes (tropical long-line fishery)	Yes (tropical long-line fishery)				Yes (tropical long-line fishery)
	Solomon Islands: No	No	No	No	Yes (tropical long-line fishery)	Yes (tropical long-line fishery)	Yes (tropical long-line fishery)				Yes (tropical long-line fishery)
	Tuvalu: No	No	No	No	No	Yes (southern albacore)	Yes (southern albacore)				Yes (southern albacore)
Component 2: Sustainable											

<sup>20</sup> 2014 used as baseline year for this indicator, based on PAE of 6,481 days, and an additional 785 FSMA days. Does not include long-line tuna fishing.

<sup>21</sup> 2014 used as baseline year for this indicator, based on PAE of 2,472 days, and an additional 281 FSMA days. Does not include long-line tuna fishing.

<sup>19</sup> All purse seine fishing vessel days in the EEZ are included in the PAE, including those used in archipelagic waters, this includes all tuna caught in the country's waters, i.e. ensuring there is no illegal and unreported catch.

<sup>22</sup> 2014 used as baseline year for this indicator, based on PAE of 3,127 days, an additional 804 FSMA days, and 1,400 days in archipelagic waters. Does not include long-line tuna fishing.

<sup>23</sup> 2014 used as baseline year for this indicator, based on PAE of 1,772 days, and an additional 107 FSMA days. Does not include long-line tuna fishing.

<sup>24</sup> More flexible measures defined as: creating multi-zone days, creating multi-year days, development of competitive VDS marketing arrangements

<sup>25</sup> Similar system defined as one where total fishing effort is capped at the multi-country level.

Introduction defined as the system entering into force for the long-line tuna fishing in targeted country's waters – target is for this system to be introduced in Y3 and subsequently maintained.

<b>Management of Coastal Fisheries</b>											
<i>Intermediate Result indicator One:</i> Coastal fish resources assessed as the basis for improved management (Number) <sup>26</sup>	FSM: N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A
	RMI: 0	3	8	12	16	20	24				24
	Solomon Islands: 0	3	5	7	7	7	7				7
	Tuvalu: 0	5	5	12	14	17	19				19
<i>Intermediate Result indicator Two:</i> Number of national coastal fisheries management plans implemented for coastal export fisheries (Number) <sup>27</sup>	FSM: N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A
	RMI: 0	0	0	1	1	2	2				2
	Solomon Islands: 0	0	0	1	1	2	2				2
	Tuvalu: N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A
<i>Intermediate Result indicator Three:</i> Regional BDM grouping of Pacific Island Countries formed to better manage this fishery and link to the regional market (Yes/No) <sup>28</sup>	No	No	No	No	Yes	Yes	Yes				Yes
<b>Component 3: Conservation of Fishery Habitats</b>											
<i>Intermediate Result indicator One:</i> Criteria developed	No	No	No	Yes	Yes	Yes	Yes				Yes

<sup>26</sup> Resource assessments conducted. Number of assessments given each year are aggregate (including preceding years), rather than additional to the numbers for preceding years.

<sup>27</sup> Management plans to focus on capping export volumes, and/or size restrictions, depending on species. Numbers given are aggregate

<sup>28</sup> Regional grouping agreed in writing, to develop minimum terms and conditions of resource access, establish a regional register of responsible/ compliant BDM industry participants, and support collective bargaining. This is not yet entered into force.

for endowment funding of large MPAs in the region (Yes/No) <sup>29</sup>											
<i>Intermediate Result indicator two:</i> Identification of 'blue' carbon financing proposals for 3 pilot sites (Number) <sup>30</sup>	0.00	0.00	0.00	0.00	1.00	2.00	3.00				3.00
<b>Component 4: Regional Coordination, Implementation Support and Program Management</b>											
<i>Intermediate Result indicator One:</i> Implementing agencies receive the support needed from FFA to achieve the program's objectives (Yes/No) <sup>31</sup>	FSM: Yes RMI: Yes Solomon Islands: Yes Tuvalu: Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes				Yes Yes Yes Yes

<sup>29</sup> Criteria to be developed by Year 3.

<sup>30</sup> Proposals for carbon financing of mangrove conservation based on REDD+. Numbers given are aggregate

<sup>31</sup> Support needed defined as timely turn-around (within 5 business days) of requests for support on withdrawal applications and procurement packages

### Indicator Description

<b>Project Development Objective Indicators</b>				
Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Number of large marine protected or marine managed areas conserving habitat critical to support Pacific fisheries, for which sustainable revenue streams are identified	Sustainable revenue streams, including payments for ecosystem services, identified for at least 3 large marine managed or marine protected areas. Sustainable revenue streams defined as sufficient to cover the investment and recurrent costs of conservation, or just the latter for existing sites.	Annual	M&E Reports	PIFSec Oceanscape Unit
Direct project beneficiaries (number), of which are female (%)	Only direct beneficiaries from communities impacted by coastal fisheries component listed, although the entire population of each of the four countries will directly benefit from increased sustainable public revenues from the tuna fisheries	annual	Estimates of coastal fishing community populations	No description provided.

### **Intermediate Results Indicators**

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Identification of 'blue' carbon financing proposals for 3 pilot sites.	Proposals for carbon financing of mangrove conservation based on REDD+  Numbers given are aggregate	Annual	Project Reporting	PIFSec Oceanscape Unit
Regional BDM grouping of Pacific Island Countries formed to better manage this fishery and link to the regional market	Regional grouping agreed in writing, to develop minimum terms and conditions of resource access, establish a regional register of responsible/compliant BDM industry participants, and support collective bargaining	ANNUAL	M&E Reports	FFA
A similar system to the VDS is introduced for managing access to the two long-line fisheries (tropical long-line fishery and southern albacore long-line fishery)	Similar system defined as one where total fishing effort is capped at the multi-country level  Introduction defined as the system entering into force for the long-line tuna fishing in targeted country's waters	Annual	M&E Reports from FFA	FFA
Criteria developed for endowment funding of large MPAs in the region	No description provided.	Annual	Project reporting	PIFSec Oceanscape Unit

*\*Disbursement-linked indicator*

## **Annex 2: Detailed Program Description**

1. The **development objective** of this program is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend. This will provide the basis for sustainable and increased economic benefits to the region from this resource. As such, the PROP would directly contribute to the twin goals of reducing poverty and boosting shared prosperity in the region, by sustainably enhancing the benefits from one of the region's greatest natural endowments.
2. In order to achieve the above objective, the program will include the following components, sub-components and activities available for all participating countries. These will form a menu of activities the Program could support in each country, which would be chosen based on the specific local context. Some activities will be implemented at the national level, while others will be implemented at the regional level to capture economies of scale. All activities in this menu would contribute to the shared regional objective of the PROP, even if implemented nationally. As such, the Program follows the subsidiarity principle, whereby a common approach is coordinated at the regional level, but implemented both regionally and nationally in order to show concrete results on the ground. The legal agreements with each country therefore reflect the specific activities of PROP Phase I described in Annexes 3 through 7.

### **Component 1: Sustainable Management of Oceanic Fisheries**

3. The objective of this component is to help participating Pacific Island countries strengthen the management of the region's purse seine and long-line tuna fisheries.
4. Oceanic fisheries hold great economic value and even greater potential for the Pacific, and particularly the three tuna fisheries: tropical purse seine, tropical long-line and southern long-line fisheries. To date these fisheries are relatively healthy compared to other tuna fisheries throughout the world, due largely to their relative isolation. However, they are now reaching their long-term sustainable limits, and future returns will have to come by earning more from current harvests, rather than increasing them. This is eminently possible but, because the fish are moving across borders, it will require continued collective action from countries to sustainably manage the resource. To date only in the purse seine fishery has this begun to happen, and not yet in the two long-line fisheries.
5. The case of the purse seine fishery largely targeting skipjack tuna is encouraging (this represents over half of the tuna catch in the Pacific). The PNA countries introduced in 2009 a vessel day scheme (VDS) to manage access to the fishery. It works as follows: each year the PNA countries set the total catch limit needed to maintain healthy fish stock, and translate that catch limit into individual vessel fishing days, which are allocated to countries based on an agreed formula, and then the countries sell the days. The vessels days are valuable because they limit catch to sustainable levels of production and this scarcity has value that can be traded. Prior to the introduction of the VDS, PNA countries captured little of the value of the tuna caught in their waters. As a result of introducing the VDS and subsequently a benchmark price, the average price of a vessel day increased from US\$1500 in 2010 to US\$6000 in 2014, and total revenues to PNA countries increased from US\$70 M in 2010 to an estimated US\$280 M in 2014 (still less than 10% value of catch). This is only the value of access – and not potential additional

benefits from local value added. Nor is this the end of the story – a number of experts believe that the price of vessel days can continue to climb, and this fishery could sustainably return over US\$450 million per year to Pacific Island countries.

6. In order for the Pacific Island countries to capture this potential, the VDS will need to evolve and strengthen significantly over its second five years. Specifically, compliance with the system will need to be increased to strengthen its integrity (as for example some countries have exceeded the number of days allotted to them at the expense of the health of the resource), its scope expanded to cover as much of this regional fishery as possible, and its flexibility, transparency and efficiency increased (for example by pooling days among multiple countries, or selling them via auction). Compliance in particular will be a growing challenge, as the increase in the price of access will provide greater incentives for free-riding (i.e. illegal and unreported fishing). A recent two-week surveillance survey carried out by FFA and SPC boarded 206 fishing vessels in Pacific Island waters, and found 27 infractions (13 percent). Given the large size of countries' waters in the Pacific, data to date is uneven, and estimates of the value of fish caught illegally in the region range from in the US dollar millions to over a billion.

7. For the tropical tuna and southern albacore long-line fisheries, a similar system to the VDS would be introduced to enhance the management of access, significantly enhancing the sustainability and value of this natural capital asset, and subsequently the benefits that it can provide to Pacific Island countries. The PNA member countries already adopted an agreement for such a system for the long-line fisheries in 2011, though it has not yet entered into force (the two remaining member country signatures necessary are expected shortly).

8. Building on results to date in the PNA, such a process of enhancing the sustainable management of Pacific Island tuna fisheries could be envisaged as follows:

*Strengthen the capacity of national and regional institutions to sustainably manage Pacific Island tuna fisheries:*

- Improve compliance with the VDS for the purse seine fishery: Maintain robust limits on fishing (by ensuring compliance with vessel days and associated links to total catch limits) – so total catch stays within recommended limits, allowing the fish stock to stay healthy. Tuna is the region's natural capital asset, and the bigger the fish stocks the more valuable access to them will be – particularly as much of the rest of the world is overexploiting its tuna. Conversely, selling vessel days outside of agreed levels in the VDS, or excessive capital stuffing within vessel day allocations (e.g. using bigger and more efficient vessels to increase catch per vessel day) not only depresses the price of other vessel days on the market but also threatens the long-term sustainability of the natural resource.
- Expand the coverage of the purse seine fishery VDS and extend a similar system to the long-line fisheries, to include all tuna caught in Pacific Island countries' national waters. As a result, a greater portion of the region's resource would be utilized via this management regime.

- Increase efficiency and flexibility of the purse seine fishery VDS and similar systems for the long-line fisheries. With a healthy fish stock and valuable asset, many additional opportunities will continue to emerge to increase the returns to countries by increasing the efficiency of access to fleets via systems such as the VDS, including: (a) pooling vessel days among countries to allow operators to enter multiple countries' waters at once, (b) selling days through competitive tenders and auctions, and (c) extending the lifespan of access over multiple years, so operators and investors have more visibility and security. To address any concerns about the stability of revenue flows, adjustments to the VDS and similar systems can be made with better data sharing and more transparency, for example setting aside a reserve of vessel days for countries that need them, to be purchased at the benchmark price.

*Ensure an equitable distribution within Pacific Island countries of the benefits of sustainably managed tuna fisheries:*

- A healthy natural asset and an efficient and robust access regime provide a stable environment for capital investments in value chain improvements and market specialization, increasing the opportunities Pacific Island countries will have to leverage access fees and agreements for local investment in value added and processing, e.g. through preferential sale to joint ventures. With a robust management system for fish supply like the VDS for purse seine tuna fishery, more and more local investments become possible, such as IFC's recent investment to help expand processing capacity of SolTuna in the Solomon Islands. Of course not all Pacific Island countries are the same and some will have different comparative advantages, so investment in value addition may take different forms in different contexts, and may very likely contribute towards regional hubs for different services. In some cases trade-offs will need to be made at national level between collection of economic rents from access to the resource and investment in local value added activities.
- Additionally, countries could explore options to create community VDS funds to target the benefits of returns from access directly to coastal communities.

9. To help Pacific Island countries realize these opportunities, the following activities could be supported by the PROP:

***1.1 Strengthen the capacity of national and regional institutions to sustainably manage Pacific Island tuna fisheries***

10. These activities would support strengthening the vessel day scheme (VDS) for the purse seine fishery and extending a similar management system to the long-line fisheries, in order to sustainably increase the benefits to participating countries from access to these fisheries. More specifically, this sub-component would finance the following activities:

- Nationally-Implemented Activities in Participating Countries
  - *Disbursements linked to indicators for implementation of effective management measures.* This activity would disburse funds directly to implementing agencies of national governments to reimburse against pre-identified eligible expenditures for costs linked to regionally-agreed indicators for strengthened and effective

management of the tuna fisheries. Such eligible expenditures will be tracked, and PROP safeguard instruments would also apply to these expenditures. Disbursements would be made annually to national government implementing agencies in each participating country to reimburse these eligible expenditures, based on independent third-party verification that the following indicators have been met (expenditures for each indicator are priced equally)<sup>32</sup>:

- *Improving compliance with the VDS for the purse seine tuna fishery:*
  - The number of days fished in a country's waters does not exceed its agreed annual allocation of fishing vessel days (PAE), while the TAE remains within sustainable levels
  - 100% of fishing vessel days are recorded annually according to agreed criteria
  - 100% of fishing vessel days used and sold are disclosed annually to the PNAO Fisheries Information Management System (FIMS) and other parties as part of a comprehensive verification system for the VDS
- *Expanding the coverage of the purse seine fishery VDS or similar zone-based limit systems for the long line fisheries, to include all tuna caught in the country's national waters:*
  - 100% of tuna catch within a country's national waters is encompassed within the VDS or a compatible system (*specific target set for each country, gradually*)

Additionally, though not linked to disbursements, these expenditures would also support participating countries to increase efficiency and flexibility as appropriate:

- *Increasing efficiency and flexibility of the purse-seine fishery VDS and similar systems for the long-line fisheries:*
  - (Yes/no) more flexible measures are applied, (such as creating multi-zone and multi-year days, development of competitive VDS marketing arrangements, long-term contracts, creation of secondary markets, etc) that increase the value of a vessel day above the baseline (*gradually phased in*)
- *Goods, works and services needed for achievement of the disbursement-linked indicators.* This activity would provide support to participating countries for procurement of specific goods, works and services needed to meet the disbursement-linked indicators (DLIs) for strengthened management of the tuna fisheries, such as establishing fisheries monitoring centers and strengthening observer programs for example.

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<sup>32</sup> Independent verification is expected to be carried out under a regional contract signed with FFA.

- Regionally-Implemented Activities:
  - *Technical assistance to PNAO to support implementation of the recommendations of a regional review of the VDS & PNAO.* This activity would provide targeted technical assistance to support PNAO in the implementation of the recommendations agreed by its members to take actions that will strengthen the VDS in the purse seine fishery and / or across related long-line fisheries during the 2014 regional review of the policy framework of the VDS and the accompanying governance and organizational structure to of the PNAO to administer it.
  - *Technical assistance to SPC to support the information base for the VDS and similar systems for the long-line fisheries.* This activity would provide targeted support to SPC to strengthen the analytical and information base needed for the VDS and similar systems for the long-line fisheries, including setting reference points and control rules for fishing activities that link to resource sustainability.
  - *Coordinated technical assistance to countries to strengthen the VDS for the purse seine fishery and expanding this system to the long-line fisheries.* This activity would support technical assistance provided by FFA in coordination with the PNAO, to participating countries for implementation of the PROP. This activity would support a technical team to lead and coordinate a number of assessments, studies, trainings, mentoring etc. as requested by participating countries, in order to achieve the PROP's objectives. Such assistance is expected to include, among others, conducting economic analyses and preparing briefing materials to increase the understanding among stakeholders of the benefits of a robust VDS, assisting in the development of any modifications to legal frameworks that may be needed (e.g. to enforce the VDS), and a conducting a rolling regional review of the functions and services required to manage tuna fisheries and identify opportunities for regional, sub-regional and national level location and provision of fisheries management services (e.g. management, science, monitoring and surveillance and enforcement hubs, etc.).
  - *Technical assistance and operating costs to identify surveillance and enforcement tasks and needs for countries to collaborate to ensure compliance with the VDS, and a network of compliance experts to support countries' in this effort.* This activity would build upon the current regional fisheries monitoring, control and surveillance (MCS) strategy and effort at FFA in order to support:(i) a regional identification of the key surveillance and enforcement tasks for ensuring compliance with the VDS, and the comparative advantage of various countries to conduct these tasks in collaboration, as part of sub-regional and regional efforts; and (ii) a regional unit and network of compliance experts that could provide on-demand support to participating countries for surveillance and enforcement of the VDS.

## ***1.2 Ensure an equitable distribution within Pacific Island countries of the benefits of sustainably managed tuna fisheries***

11. These activities would support Pacific Island countries to make informed decisions and investments to ensure an inclusive distribution of the benefits from sustainably managed tuna fisheries. This would include collaboration with IFC to leverage access values to a healthy resource, into local investments up the value chain where feasible, that can increase employment. Similarly, this would include piloting local VDS funds to channel access revenues directly to fishing communities, which could have the additional benefit of reducing pressure on and reinforcing better management of, coastal fisheries.

- **Regional Activities**

- *Regional technical advisory services for the establishment of hubs throughout the Western Pacific for services and value addition.* This activity would support technical advisory services to identify the competitive advantage of participating countries to establish regional hubs for various services and value addition along the chain (e.g. fish quality assurance, processing, distribution and providing services), linked to reforms for strengthening the VDS. Additionally, this activity would include ongoing support to participating countries to develop the various opportunities identified, and to secure the necessary finance and private partners in order to implement them. The activity may also include support to provide a forum for representatives of the private sector to offer their perspectives on fisheries policy and management in the region.
- *Pilot Community VDS funds.* This activity would support FFA to provide technical assistance to conduct participatory scenario analyses to design pilot community VDS funds whose objectives would be secure a share of tuna access revenues for fishing communities in participating countries, by purchasing vessel days. This would include formal establishment of pilot community VDS funds based on the results of the scenario analyses, though capitalization with Bank financing is not envisaged.

## **Component 2: Sustainable Management of Coastal Fisheries**

12. The objective of this component is to support participating countries to sustainably manage defined coastal fisheries, focusing on those value chains with the greatest potential for increased benefits, i.e. coastal fisheries such as bêche-de-mer (BDM) that (i) can generate export earnings for the country, and/or (ii) support livelihoods, food security and dietary health. Towards this objective, this component includes activities to: (i) empower stakeholders to sustainably manage targeted coastal fisheries in participating countries, working at the smallest scale feasible in order to generate a response from the fish stocks (e.g. in some cases this might work at the single or multi-community scale around defined reef fisheries); and (ii) link the increase in sustainable coastal fish products from these efforts, to regional and international markets so that the communities can generate increased benefits from better managed fisheries.

13. Coastal and lagoon fisheries throughout the region are critically important to many Pacific island States with few other sources of protein. It is estimated that fish provide 50 – 90 percent of animal protein intake in rural areas and 40 – 80 percent in urban areas. Most of the fish eaten by

rural communities (particularly on the coral atolls and smaller islands) come from subsistence fisheries, with little or no cash cost to the consumer. Subsistence fisheries generally employ 10 to 20 times as many people as commercial fisheries.

14. A diverse range of coastal fishery value chains exist in the region: in some cases exploitation pressure is low and the management goal is to encourage development of the fishery while protecting resource sustainability for the future. In others, especially where there is easy access to markets, over-fishing has already occurred and the fishery is performing sub-optimally. In these cases there is a need and opportunity to support communities and users to rebuild resources and effectively control the fisheries they support, to achieve optimal biological or economic yields that can be better connected to markets and higher incomes for fishing households.

15. Perhaps the most notable example of a coastal fishery value chain in need of better resource management is the high-value BDM fishery. BDM is a product that is harvested in all Pacific Island countries, almost exclusively for export to Asian markets and Asian communities elsewhere. The BDM fishery is analogous in some ways to the purse seine tuna fishery, in that a handful of Pacific Island countries now control a large share of a global commodity for which demand exceeds supply. A 2013 study estimated the value of BDM exports from 5 Pacific Island countries (Papua New Guinea, Solomon Islands, Vanuatu, Fiji and Tonga) to average US\$17.4 million over the past 10 years, and that this value could have been at least doubled through improved management (Hambrey et al, 2013). An earlier study estimated average annual BDM exports from Australia and the Central Western Pacific islands during 2004–2008 at about US\$52 million (Purcell et al., 2009). That study notes that ‘many of these fisheries are suffering unsustainable levels of exploitation, to the point of local extinctions of some species and consequently impacting the livelihoods of hundreds of thousands of fishers’.

16. To strengthen the management of targeted coastal fishery value chains such as BDM, this component would largely be implemented nationally, with regional coordination activities to link more sustainable products to markets.

### ***2.1 Sustainable Management of Targeted Coastal Fisheries***

17. These activities would be implemented nationally in each participating country by the relevant Government agency. The agency would provide dedicated technical assistance and small goods and operating costs to stakeholder groups in communities (e.g. fishers’ associations, community groups, etc.) to strengthen resource management and value addition around targeted coastal fishery value chains, in many cases recruiting a partner such as a local non-government organization (NGO) to carry out the assistance. This technical assistance, small goods and operating costs would be carried out via the following activities:

- *Identify the coastal fishery value chains targeted for support, including collection of baseline information, i.e. initial biological and socio-economic assessments as needed to determine resource potential and likely costs and benefits of different scenarios for rebuilding or improved resource management, as well as market information to assess potential for increased value added to more sustainable products. This program of extension support to improve management and returns from targeted coastal fisheries will identify those value chains and sites for*

support following a period of awareness-raising and wide advertising to give interested communities a chance to come forward. Those sites with valuable coastal fishery value chains and strong local commitment will be selected based on the following criteria:

- The fishery or fisheries to be managed are well-defined (i.e. within a distinct geographic boundary, for a particular species or group of species, or for a stock);
  - The site has the potential to accrue positive economic benefits to stakeholders through improved fisheries resource management;
  - The site does not encompass more than 3 to 4 small to moderate-sized communities, which are neighboring communities;
  - The site has strong local leadership, is socially cohesive, and ideally has a stakeholder group or association already formed that could be recognized with authority to formulate resource management measures on behalf of stakeholders; and
  - The site provides formal confirmation that fishers in the targeted fishery are fully committed to participate in the management and project.
- *Support the development or strengthening of stakeholder groups and associations to participate in the sustainable management, and in some cases rebuilding, of these fisheries, including: ensuring legal recognition and empowerment of the groups and their management options, providing extension and training to support organization and operation of the groups.*
- *Assist these stakeholder groups to develop and implement improved management approaches appropriate to the circumstances and needs of the fishery, relying mainly on the development or strengthening of Community-Based Management (CBM) systems, or on co-management arrangements involving communities, government and other stakeholders. In others, particularly for high-value export products, CBM may not provide all the tools needed for effective management and there may need to be additional fishery monitoring, control and surveillance (MCS) carried out at provincial or national level. The stakeholder groups would be supported assess the current situation and options for strengthening management of the resource and subsequently returns, in some cases developing rebuilding plans for the fish stocks, drawing upon good experiences throughout the region, such as the locally-managed marine area (LMMA) network. Ongoing training and support would be provided to stakeholder groups for development and implementation of management measures (such as identification and development of ecosystem-based management measures, monitoring of fish catch and effort, etc.), supporting restocking or artificial resource enhancement where feasible and justified, and providing any enforcement support needed to ensure compliance (especially at the point of export).*
- *Link products from the fisheries managed by stakeholder groups to regional markets, including providing technical assistance and training for skills development, as well as small goods and works for local value addition. This*

support would likely focus on conducting market research and working with the targeted stakeholder groups to connect to buyers and traders, and identify the specific needs of the latter for sustainable and higher-value products. Such technical assistance and training would likely be provided by local experts and even traders, to provide practical and real-time information on the market needs and the types of products and linkages available to add greater value from the fishery (whose productivity would be increased by the resource management measures). The aim would be to create meetings, including taking representatives from stakeholder groups in targeted fishery value chains to various markets to see first-hand the needs that traders and buyers have, and to better understand the regional market. Additionally, technical assistance would be provided to groups as needed to support development and coordination of new processing and packaging technologies, alternative products, compliance with food safety and other technical requirements of target markets, and any additional capacity-building in small business and enterprise management, including cooperation in marketing arrangements and information-sharing across communities and countries. Lastly, in addition to providing assistance directly to stakeholder groups in targeted fisheries value chains, a rapid survey of local and regional businesses and traders would be conducted, to assess buyers' needs for quality products from the value chain, and provide greater market intelligence to producers. Such surveys would identify key firms or buyers that could inform the market needs for the products resulting from better-managed fisheries, so that the stakeholder groups can respond and link to the demand.

- *Monitoring* to assess changes in the status of the resource and the economic status of activities based on it, evaluate the performance of the management strategies adopted, and allow the adaptation and improvement of these strategies. This would include periodically assessing the different stakeholder groups supported, to see which ones are sustainably managing the fisheries to increase productivity, and connecting higher-value products to markets. Such groups would be reinforced as needed to continue progress and move towards self-supporting stakeholder groups and market linkages.

## **2.2 Linking Sustainable Coastal Fish Products to Regional Markets**

18. These activities would be implemented regionally, in collaboration with SPC:

- *In parallel with national efforts to restore BDM fisheries, mediate the formation of a regional or sub-regional BDM fishery grouping to advance the economic interests of participating PI countries.* Regional technical assistance and convening would be provided to harmonize economic and other management arrangements, developing minimum terms and conditions of resource access, establishing a regional register of responsible/ compliant BDM industry participants, maximizing the leverage available through collective bargaining and action, and promoting exchange of technical information in support of national-level management initiatives. The proposed arrangement would mainly be of interest to the main BDM-producing Pacific Island countries (those of Melanesia)

but, as with PNA, countries with lower levels of production would also benefit from the bargaining power generated by the larger producers. The proposed BDM arrangement will almost certainly be built on an existing regional or sub-regional grouping of countries, and may ultimately be extended to cover other coastal fishery resources, particularly trochus, another high-value export product.

- *Ongoing technical support to countries with BDM and coastal fisheries management (e.g. a 'BDM task force')*, including support to assess potential biological, economic and fiscal management tools for BDM and other export-oriented coastal fishery products, which could be applied at the national level as part of an integrated suite of management arrangements that involve both CBM and MCS. This would also include periodically updated assessments of BDM production, price and market trends and other industry monitoring and intelligence; and development of fishery monitoring tools that can be deployed at national level to enable performance assessment of fishery management and development activities, and training of national staff from participating countries in their use. These tools may possibly be based in part on the fishery monitoring 'dashboards' already developed by the Bank for other countries/ regions.

### **Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats**

19. The objective of this component is to help identify revenue streams to sustainably finance the conservation of critical habitats that underpin oceanic and coastal fisheries in the region. While a number of initiatives have been launched by communities and countries throughout the region to protect and conserve critical fishery habitats, the key obstacle has consistently been a lack of mechanisms to capture the benefits these habitats provide, and sustainably finance the costs of this effort. This obstacle is also a key area identified in the Framework for a Pacific Oceanscape. For this reason, the PROP will provide targeted technical assistance and support at the regional level to help identify the benefits of conservation and establish mechanisms that can capture these benefits. The aim would not be to provide sustainable financing for all regionally-significant fisheries habitat conservation efforts, but rather to provide the catalytic upstream finance needed to identify, develop and achieve consensus on mechanisms to capture the benefits of conservation and help unlock significant financing, for example from the GEF, international foundations, etc. For this reason, the component would include activities that establish: (i) Pacific Marine Conservation Development Financing Mechanisms to support the growing number of large marine protected areas (MPAs) in the region; and (ii) a pilot Pacific Blue Carbon regional program for small to medium scale fishery habitats. This component would be coordinated by the Office of the Pacific Oceanscape Commissioner within the Pacific Islands Forum Secretariat (both staff and consultants as needed), with technical guidance from the Marine Sector Working Group and CROP agencies.

#### ***3.1 Establish financing mechanisms to support large marine protected areas***

20. This sub-component will help enhance the productivity of Pacific oceanic and coastal fisheries by providing the upstream technical assistance needed to establish sustainable financing mechanisms for conservation of the natural habitats upon which they depend. Increasingly one of the most common and significant fishery habitat conservation measures in the region is the introduction of large-scale MPAs. In many cases, the key obstacle to the success of these

measures is the identification of the costs and benefits of their introduction and operation, and establishment of mechanisms to capture these benefits (which are global in nature in many cases) and sustainably finance operating costs. As such, the PROP will include assistance to help targeted countries determine the costs and benefits of existing and proposed MPAs, and to identify options to capture the benefits, for example through the development of ecosystem service markets and trading of costs and benefits with adjacent coastal States and distant water fishing States. Where large-scale MPAs are designed to deliver both ecological and sustainable net benefits to the countries, the PROP would support the development of mechanisms to capture the benefits and provide a sustainable stream of finance for operating costs, for example through conservation trust funds, and/or markets for the ecosystem services (e.g. through the VDS, or tourism green fees). This would build upon precedents outside the region, such as the conservation trust fund established in Brazil, the Brazilian Biodiversity Fund (Funbio). Financial mechanism structure, format and host organization will be decided based on consultation with the relevant partners including potential donors and existing fund mechanisms established in the region. Activities to develop and establish such mechanisms would include:

- *Assessment of existing and potential new regional sites for large scale marine protected areas, to be supported by the PROP.* An analysis of both the scope and distribution of the ecological and economic costs and benefits to the Pacific islands region from its large oceanic ecosystems, and identification of existing and potential new marine protected areas that could further build the Framework for a Pacific Oceanscape. The analysis would consider short and long term impacts and focus on the shared interests of the Pacific Islands region (i.e. development, food security, sustainability). The assessment would establish clear standards for measuring costs and benefits of large scale marine protected areas (MPAs) and clear criteria for financing assistance with their establishment and/or operation, and engage with regional leaders, regional fisheries management organizations, and global institutions to support and recognize these criteria. These criteria will then provide important reference points for the financing activities of Pacific marine conservation development financing mechanisms. PIFSec's Oceanscape Unit would carry out this review with the Marine Sector Working Group, including database analysis with SPC and the Government of Australia.
- *Technical assistance for the establishment of Pacific Marine Conservation Development Financing Mechanisms for those sites to be supported by the PROP.* This will include the technical assistance necessary to establish Pacific marine conservation development financing mechanisms, including design, establishment and administration, governance, etc. This would include development of the principles, rationale and criteria, and the identification of funding opportunities. Technical assistance will identify opportunities to engage commercial and non-profit NGO partners in the development of the financing mechanisms. A consultation workshop with MSWG participants and potential commercial and non-profit partners would be held to review and develop an agreed draft for review and subsequent endorsement by Forum leaders.

- *Technical assistance, training and exchange of lessons learned to individual Pacific Island countries hosting large MPAs.* This activity will provide technical assistance, legal and regulatory support, and fund institutional strengthening activities that enable host States to establish and manage large scale marine protected areas and participate in the Pacific marine conservation development financing mechanisms. This activity would also provide national governments with communication materials, technical assistance and iconic speakers to broaden government and stakeholder understanding of sustainability limitations, ecosystem services, and conservation benefits.

### ***3.2 Establish a pilot Pacific Blue Carbon Regional Program for the conservation of small to medium scale fishery habitats***

21. In complement to support for rebuilding or strengthening coastal fisheries (see component two), this sub-component will provide technical assistance to help design a Pacific Blue Carbon Regional Program to secure climate finance to create conservation incentives for coastal communities to conserve mangrove habitats, seagrass beds and coastal wetlands that support fisheries. This sub-component will work at the regional level to assess opportunities to pair up with established, standards-based climate finance mechanisms like the terrestrial framework to pay for carbon stored in natural coastal habitats that would otherwise be lost to habitat degradation or deforestation (e.g. REDD+), identify opportunities in the voluntary carbon market, and build a long term Pacific Blue Carbon Regional Program to support the technical surveys and background work needed to capture these opportunities. Following the design of the Pacific Blue Carbon Regional Program, the activity will help identify at least 3 pilot communities in participating countries where climate finance might realistically be secured for conservation of natural coastal habitats (i.e. ‘blue carbon’), where clear tenure and stakeholder benefits are ensured in order to avoid implementation and enforcement issues that are associated with top-down regulation, uncertainty over tenure, and lack of engagement by stakeholders. Technical assistance will then be available to these communities to support these blue carbon projects to become viable. Analysis would build on lessons learnt from existing blue carbon projects. More specifically, these activities would include:

- *Assessment of opportunities to pair up with established, standards-based climate finance mechanisms to pay for carbon stored (REDD+), identification of opportunities in the voluntary carbon market and development of a Pacific Blue Carbon Regional Program (\$.05m).* The assessment and strategy will support Pacific engagement in blue carbon trading and biodiversity offsets and ultimately develop local-regional markets for Blue Carbon. PIFSec’s Oceanscape Unit would coordinate this review with the Marine Sector Working Group, engaging CROP agencies and retaining consultants as necessary.
- *Development of criteria and identification of 3 to 5 potential pilot trial communities and projects for Blue Carbon funding.* This activity will develop and confirm criteria for Pacific communities and marine conservation projects and identify potential pilot trial communities in participating countries for blue carbon, where clear tenure and stakeholder benefits are ensured in order to avoid implementation and enforcement issues that are associated with top-down

regulation, uncertainty over tenure, and lack of engagement by stakeholders. PIFSec's Oceanscape Unit will coordinate this activity, consulting with the Marine Sector Working Group to confirm criteria and initially identify potential pilot communities and projects, engaging CROP agencies and retaining consultants as necessary.

- *Baseline research and development of marine conservation strategies and funding proposals for pilot trial sites.* With pilots identified, significant amounts of baseline scientific research on carbon sequestration capacities and habitat mapping will be conducted as a pre-requisite for any blue carbon projects to become viable. This sub-component will include the technical assistance, scientific and survey expertise, and legal and regulatory support in order to enable participating communities, partners and governments for pilot trials to assess their blue carbon potential, limitations and opportunities and participate in blue carbon markets. Analysis would assess costs and benefits and potential blue carbon values, and work with communities to identify key stakeholders, decision making frameworks and management requirements. In some cases, additional technical assistance may be needed for participating countries to strengthen and expand their policy, legislative and regulatory frameworks for habitat conservation, tenure, and participation in blue carbon markets.

#### **Component 4: Regional Coordination, Implementation Support and Program Management**

22. The objective of this component is to provide regional coordination, implementation support and program management, to ensure a coherent approach to program implementation and wide dissemination of results and lessons learned; as well as regional and national implementation support and training as needed for the program to achieve its objectives. Towards this objective, this component would include the following activities:

- Regionally-Implemented Activities
  - *Program support unit located within FFA.* This unit would work with participating countries as needed on project financial management and procurement. This unit will also support monitoring and evaluation, working closely with the participating countries to collect, compile, analyze and disseminate the results of the PROP as measured by the key results indicators. The PSU will conduct frequent implementation support missions to each of the participating countries.
  - *Global outreach and knowledge sharing by FFA.* This would provide funding for FFA to exchange lessons learned and share results on behalf of the countries with other highly migratory fisheries around the world.
  - *Oceanscape unit located within the Pacific Island Forum Secretariat.* This unit would be responsible for drawing upon program monitoring and evaluation, and coordination with other country, regional and development partner initiatives, to support the Framework for a Pacific Oceanscape. Program support would be provided in collaboration with the Government of Australia, and would include

financing for a full-time staff person in the Secretariat's Oceanscape Unit, as well as support for convening meetings and learning exchanges around implementation. The PROP and other initiatives in support of the Framework would form a regional learning portfolio which could have a demonstration effect throughout the islands in regard to shared challenges and opportunities. This could also include support for a sub-committee of Finance Ministers from the region to monitor implementation progress of the PROP, and report annually to Forum leaders.

- Nationally-Implemented Activities (Implemented by relevant Government agency in each participating country)
  - *Program management, monitoring and evaluation in each participating country, including technical advisory support and support for fiduciary management and controls, and data collection, analysis and evaluation for progress according to the key results indicators. Opportunities to collaborate and coordinate with existing World Bank program management and technical support or that provided by bilateral donor agencies will be pursued to help ensure coherency and effectiveness of project implementation.*

## **Annex 3: FSM Investment Project under the Pacific Islands Regional Oceanscape Program**

**(\$5.5 m IDA)**

### **I. Strategic Context**

1. The Federated States of Micronesia (FSM) comprises four semi-autonomous states (Chuuk, Kosrae, Pohnpei and Yap) which together have a total land area of around 700 square km, and a population of just over 100,000 persons.

2. FSM has a very large exclusive economic zone (EEZ) of over 2.8 million square kilometers, and tuna fisheries provide both a key source of revenue for the Government, and one of the main national development opportunities. Tuna catches in FSM waters average around 150,000 tons/year, with highs of almost 250,000 tons in some years. Smaller but still significant amounts (over 25,000 tons) are taken by domestic vessels fishing within and outside the FSM EEZ. Some FSM ports, especially Pohnpei, also experience significant levels of transshipment (where fish captured by one vessel is transferred to another carrier vessel for transport), which provides opportunities to leverage additional economic benefits, especially in regard to onshore catch processing and service industry development.

3. Skipjack tuna is the country's main fisheries resource, with yellowfin and bigeye tuna and other oceanic species also having important economic roles. The key challenges for FSM are to capture a greater proportion of the value the tuna caught in its waters, both through increased revenues for access, and by leveraging resource access into fishery development activities that provide jobs, exports and other contributions to the domestic economy. This will require continued strengthened of FSM's oceanic fishery management and governance arrangements, and greater in-house capacity to implement coherent national development strategies based on sustainable management of this key resource.

4. Oceanic fishery resources in FSM's EEZ are under the management jurisdiction of a single entity, the National Oceanic Resource Management Authority (NORMA). NORMA was established in 2002 and comprises a Board that includes representatives of all states, and a secretariat charged with technical and administrative oceanic fishery management functions. Although administratively separate from Government, NORMA is not financially independent and functions in much the same way as a National Government Department, with annual budget allocations and financial management being handled centrally by the Department of Finance and Administration.

5. Currently the Government spends less than US\$500,000 per year on fisheries management, or less than 2 percent of the direct benefits that oceanic fishery resources generate for FSM. During the course of PROP implementation, the cost of fishery management will be progressively integrated into the national budget process through a process of organizational and revenue-collection reform.

6. Development and management arrangements for coastal fisheries in FSM are far more complex and involve a combination of traditional, state and national jurisdiction and responsibilities which differ from state to state. In order to achieve early impact and momentum, the PROP will initially focus on supporting oceanic fisheries management in FSM. However the Government is keen to ensure that the PROP also addresses questions of coastal fishery management, and budgetary provision has been made for the development of a program of activities during the first year of the PROP, and for subsequent implementation. This is likely to focus on the application of ecosystem approaches to coastal fishery management, but with a somewhat different approach among the four states because of the specific characteristics of each. This project component would be coordinated by the FSM Department of Resources and Development.

## **II. Project Development Objective**

7. The **project development objective** is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend. This will provide the basis for sustainable and increased economic benefits to the country from this resource.

8. *PDO Level Results Indicators* (see Annex 1 for more details). The key results that the project aims to achieve are:

- *Strengthened Management of Oceanic Fisheries*: the number of days fished for tuna in FSM's waters does not exceed its agreed annual allocation of purse seine fishing vessel days (PAE), while the total regional allocation (TAE) remains within sustainable levels.

## **III. Project Description**

9. The following components and activities of the PROP will be financed in FSM:

### ***Component 1: Sustainable Management of Oceanic Fisheries (US\$5.0 million IDA)***

10. The objective of this component is to help participating Pacific Island countries strengthen the management of the region's purse seine and long-line tuna fisheries. Towards this objective, the following activities will be supported by the PROP in FSM:

#### **1.1 Strengthen the capacity of NORMA to sustainably manage the shared tuna fisheries**

*1.1.1: Disbursements to NORMA for costs linked to indicators for strengthened tuna fisheries management (US\$2.575 m)*

11. This activity would disburse funds directly to NORMA to reimburse against eligible expenditures for costs linked to indicators for strengthened management of the tuna fisheries. Such eligible expenditures would be tracked and subject to World Bank safeguards. Disbursements will be made annually to NORMA (with an advance for the first year upon effectiveness of the project) upon independent third-party verification that the following management measures have been achieved (expenditures for each indicator are priced equally):

- Improving compliance with the VDS for the purse seine tuna fishery:
  - The number of days fished in FSM waters does not exceed its annual allocation of fishing vessel days (PAE)
  - 100% of fishing vessel days are recorded annually according to agreed criteria
  - 100% of fishing vessel days used and sold are disclosed annually to the PNAO Fisheries Information Management System (FIMS) and other parties
- Expanding the coverage of the VDS or compatible systems for all tuna caught in FSM's national waters:
  - 100% of tuna catch within FSM's national waters that is encompassed within the VDS or a compatible system

Additionally, though not linked to disbursements, these expenditures would also support NORMA to increase efficiency and flexibility as appropriate:

- Increasing efficiency and flexibility of the VDS:
  - (Yes/no) more flexible measures are applied, such as creating multi-zone and multi-year days, development of competitive VDS marketing arrangements, long-term contracts, creation of secondary markets, etc., that increase the value of a vessel day above the baseline (*gradually phased in*)

12. The expenditures reimbursed would support improved fishery sector governance and management arrangements, increased surveillance to enforce fisheries management measures, real-time monitoring of tuna fishing activities through the Vessel Monitoring System (VMS), the National Observer Program, and increased capacity for NORMA to participate in regional and sub-regional fisheries management arrangements. Eligible expenditures would include:

- *Fuel and additional costs to support increased fisheries surveillance patrols (both sea and aerial patrols) including training in fisheries surveillance and legislation, and regional coordination/harmonization on surveillance with other PICs*, in complement to the funding currently provided by the Governments of FSM and Australia, and from penalties (some of which go into a MCS Revolving Fund) as well as the operational support (aerial patrols, ship-rider agreements, joint exercises) from the governments of Australia, USA, New Zealand and France;
- *Training and expanded participation of NORMA staff* in fishery industry economic, biological and operational analysis to allow development of negotiating positions with industry and in PNA meetings;
- *Continued expansion and enhancement of the National Observer Program* by at least 100 percent: recruitment of 10 additional observers and 2 de-briefers per year, observer and de-briefer training and work attachments; and
- *Policy, legislative and human resource development leading to the establishment of a sanitary competent authority* for fish caught in the country's waters.

13. In terms of fisheries surveillance, the country's Maritime Police Unit (within the Department of Justice) currently carries out surveillance and enforcement of the country's fisheries legislation on behalf of NORMA, as well as other surveillance activities (including drug- and people-trafficking) via one coastal search-and-rescue and three ocean-going patrol vessels, two of which have been provided and partially supported by the Government of Australia. The Maritime Police utilize the Vessel Monitoring System (VMS) through connection to the satellite-

based vessel monitoring system run by FFA as a means of detecting potential infringements, as well as conducting periodic comprehensive patrols and inspections of fishing vessels. Parts of the southern and northern borders of FSM's exclusive economic zone adjoin high seas areas (some of which are the subject of international agreements which prohibit or control fishing) and these are high-risk areas for infraction.

14. The Maritime Police increasingly conduct joint patrols with neighboring countries under provisions of the Niue Treaty. Additional cooperation arrangements are expected to be developed under Niue Treaty subsidiary arrangements. In addition the Department of Justice is actively promoting sub-regional cooperation among legislators in neighboring countries in order to harmonize legislative approaches, improve information-sharing, develop enforcement capacity and streamline prosecution and judicial processes. Coupled with this is a need for training and capacity-building in fishery legal issues for attorneys, enforcement officers and fishery agency staff.

15. Obstacles to the effectiveness of surveillance activities in FSM include inadequate information and communications technology to enable patrol vessels to communicate with each other and with shore bases in FSM's four states; inability to track vessels via the International Maritime Organization (IMO) Automated Identification System (AIS); insufficient safety and technical equipment for use in boarding; and inadequate integration of national and international databases on aspects of surveillance and enforcement. Financing of additional sea-days by patrol vessels is also a constraint, although less so than in some other countries.

16. In addition, NORMA is interested in exploring opportunities to purchase aircraft airtime to increase aerial surveillance, potentially using small locally-based aircraft normally engaged on inter-island flights. Under such arrangements the importance of surface patrols increases, since this is the primary way in which infringements detected by aerial surveillance are followed up and punitive actions implemented.

*1.1.2. Goods and services needed for achievement of the disbursement-linked indicators (US\$2.425 m)*

17. Financing will be provided for procurement of specific goods and services needed to meet the disbursement-linked indicators (DLIs) for strengthened management of the tuna fisheries. Services will include technical assistance to support a comprehensive review of NORMA's roles, functions, human and financial resources and organizational structure, and then implementation of any reforms and technical assistance required to improve the Agency's effectiveness and capacity for governance of the oceanic fisheries sector more broadly. This will be a multi-year institutional strengthening process involving at least the following elements: (i) functional/organizational review and (if needed) restructuring of NORMA; (ii) economic analysis to assist in adding value to the VDS and in optimizing allocation issues among domestic and bilateral fleets and regional/ sub-regional access arrangements; (iii) operational review to identify improvements and efficiency gains; (iv) formulation and implementation of a human resources development plan - including technical assistance to expand NORMA capacity on targeted issues such as implementation of the recommendations of the PNA VDS Review, implementation of WCPFC obligations, economic analysis, observer management and legal reviews; and Development of an Industry Communications Strategy; and (v) development of an industry Communications Strategy for the sector. In addition, hardware, software and bandwidth expansion to enhance internet access for NORMA will be supported, enabling better utilization

of vessel monitoring and fisheries information management systems, and real-time e-reporting from vessels. Furthermore, hardware and software acquisition will be supported to enable for real-time monitoring of vessels by observers. Lastly, equipment will include information and communication technology for enhanced maritime surveillance and safety.

***Component 2: Sustainable Management of Coastal Fisheries (US\$0.3 million IDA)***

18. The objective of this component is to support participating countries to sustainably manage defined coastal fisheries, focusing on those with the greatest potential for increased benefits, i.e. coastal fisheries such as bêche-de-mer (BDM) that (i) can generate export earnings for the country, and/or (ii) support livelihoods, food security and dietary health.

19. Coastal fishery resources are of key importance in supporting livelihoods, food security and dietary health in FSM. However the nature and economic contribution of coastal fisheries varies significantly among the four States, as also do governance and management arrangements. These involve various forms of traditional, local and state control and jurisdiction, with the national government playing a coordinating and facilitating role through the Department of Resources and Development (DRD). Because of the diversity of management arrangements there will be high transaction costs involved in operating independently in four separate states. To ensure that the specific contexts are taken into account with wide stakeholder consultation, this component will be phased in over time, beginning with an initial activity financed from this Grant to support a feasibility and project design. This feasibility and design work will identify areas where subsequent PROP funding can best add value to help coastal communities to sustainably manage defined fisheries and subsequently enhance production. This will be undertaken during the first year of implementation, with identified activities to be undertaken in subsequent years with additional financing. DRD has indicated that the focus should be on the adoption of ecosystem approaches to the management of coastal fisheries in the four states, while acknowledging that the activities in each state are likely to be different because of varying resource endowments, exploitation practices and economic potential.

***Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats***

*This component of the program will be implemented at the regional level.*

***Component 4: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation (US\$0.2 m IDA)***

20. The objective of this component is to provide regional coordination, implementation support and program management, to ensure a coherent approach to program implementation and wide dissemination of results and lessons learned; as well as regional and national implementation support and training as needed for the program to achieve its objectives. Towards this objective, this component would include support for national program management, monitoring and evaluation, as well as collaboration with the regional program support unit located within FFA (see Annex 7).

***4.1 National program management, monitoring and evaluation (US\$0.2 m)***

21. This includes the costs of additional staff needed for NORMA to manage the national designated account for the PROP, with support from FFA.

#### IV. Implementation

22. See Program Implementation Arrangements in Annex 8 for more details. Table 1 below provides an overview of specific activities and budget for implementation in FSM:

*Table 1. Overview of Activities, budget and procurement categories for FSM*

		<b>Procurement</b>	<b>Budget (US\$)</b>	<b>Source of Financing</b>
<b>Component 1: Sustainable Management of Oceanic Fisheries</b>				
1.1 Strengthen the capacity of NORMA to sustainably manage the shared tuna fisheries	<p>Disbursements to NORMA for costs linked to indicators of strengthened tuna fisheries management:</p> <p>(i) Costs for increased surveillance and enforcement of fisheries management, including sea and aerial patrols (fuel, operating costs, charters), and training in fisheries surveillance and legislation, and regional coordination/ harmonization on surveillance with other PICs;</p> <p>(ii) Training of NORMA staff in economic analysis, investment appraisal and negotiation strategies; Increased participation of FSM professionals in regional and national negotiations (e.g. PNA);</p> <p>(iii) Establishment of food hygiene competent authority to ensure compliance of FSM fishery products with market state requirements; and</p> <p>(iv) Expansion and enhancement of the FSM National Observer Program, including:</p> <ul style="list-style-type: none"> <li>• Expand the number of observers trained and certified to PIRFO standards</li> <li>• Expand the number of de-briefers trained and certified to PIRFO standards, to recommended 1:5 ratio</li> </ul>	N/A	<p>2,575,000</p> <p>includes:</p> <p>(i) 1,500,000</p> <p>(ii) 120,000</p> <p>(iii) 655,000</p> <p>(iv) 300,000</p>	IDA

	<b>Procurement</b>	<b>Budget (US\$)</b>	<b>Source of Financing</b>
<p>Goods and services needed for achievement of disbursement-linked indicators:</p> <p>(i) Institutional strengthening, including a functional, operational and structural review of NORMA; development and implementation of NORMA human resource development plan, including technical assistance to expand NORMA capacity on targeted issues; and development of an Industry Communications Strategy;</p> <p>(ii) Expansion and enhancement of the NORMA fisheries information management system (IMS) and improvement of IT facilities (hardware, software, bandwidth) that support it;</p> <p>(iii) Integration of new data sources (e.g. radar satellite data) into vessel monitoring system (VMS);</p> <p>(iv) Acquisition of hardware and software to support real-time data provision from observers (satellite phones, electronic tablets); and</p> <p>(v) Enhanced maritime ICT and safety equipment.</p>	<p>Technical Assistance</p> <p>Equipment</p>	<p>2,425,000</p> <p>includes:</p> <p>(i) 350,000</p> <p>(ii) 575,000</p> <p>(iii) 300,000</p> <p>(iv) 600,000</p> <p>(v) 600,000</p>	IDA
<b>Component 2: Sustainable Management of Coastal Fisheries</b>			
Development and subsequent implementation of coastal fishery management planning process in 4 FSM states, focusing on the ecosystem approach, to prepare potential activities for financing under this component	Technical assistance	300,000	IDA
<b>Component 3: Sustainable Financing for conservation of Critical Habitats (No activities envisaged)</b>			
<b>Component 4: Regional Coordination, Implementation Support, Training, Monitoring and Evaluation</b>			
National program management, monitoring and evaluation	Consultant, operating costs	200,000	IDA
<b>TOTAL</b>		<b>5,500,000</b>	<b>IDA</b>

## V. Key Risks and Mitigation Measures

24. See Overall Risk Rating and Explanation of Key Risks on page 13 for more details.

## VI. Appraisal Summary

25. See Program Appraisal Summary on page 15 for more details.

## **Annex 4: RMI Investment Project under the Pacific Islands Regional Oceanscape Program**

**(\$6.75 m IDA, \$1.83 m GEF)**

### **I. Strategic Context**

1. The Republic of Marshall Islands (RMI) comprises 29 atolls and 5 isolated islands, 24 of which are inhabited by a population of around 53,000 people. Two-thirds of the population lives on Majuro, the capital, and Ebeye, a densely populated islet of Kwajalein. Outer islands are sparsely populated due to lack of employment opportunities and economic development.

2. The country has a very large Exclusive Economic Zone (EEZ) (about 2.1 million sq. km) relative to its small land mass (181 square km) and tuna fisheries provide a key source of revenue for the Government. Much of this is through the sale of access to the resources in the form of licenses and fishing vessel days to foreign fishing vessels, although the RMI Government has been active in promoting domestic tuna fishery development and associated service industries. Majuro is also a major transshipment port, which provides opportunities to leverage additional economic benefits, especially in regard to further service industry development.

3. Skipjack tuna is the country's main fisheries resource, accounting for some 75 percent of total catches, with yellowfin and bigeye tuna and other oceanic species also having important economic roles. Additionally, coastal resources are the primary supporters of food security, livelihoods and dietary health for the population, especially in the outer islands. Governance and management arrangements for coastal resources involve various forms of traditional, community and local government control and jurisdiction, with significant variation between islands, some of which are home to multiple communities.

4. The Government has been assisting the commercialisation of coastal fisheries through a program of fish collection, and marketing of the product in Majuro and Ebeye, as a way of providing income-earning opportunities for outer island residents. Coupled with this is the *Reimaanlok* (Looking Forward) program which promotes community-based management of natural resources, both marine and terrestrial, in the outer islands, especially those where market access for fishery products is being developed. Both the fish collection system and the *Reimaanlok* process are currently limited in their coverage due to funding and logistical constraints, but it is envisaged to extend them to all atolls through the PROP. RMI has also recently put in place regulations controlling the harvesting and export of commercially sensitive species (sea cucumbers and marine ornamental species) to ensure their exploitation is sustainable.

5. The Marshall Islands Marine Resources Authority (MIMRA) has overall responsibility for the development and management of RMI's fishery resources, both oceanic and coastal. MIMRA's activities include fishing vessel licensing, sale of vessel-days under the PNA VDS, an observer programme which also collects transshipment/ port sampling data, operating the outer island fish collection and marketing system and associated data collection, the *Reimaanlok* (in conjunction with other national partners, including NGOs and communities), and other activities including

aquaculture and vessel/ plant maintenance/ repair. MIMRA's annual operational budget in recent years has been around \$2 million. An Institutional Strengthening Plan, prepared by FFA and approved by the MIMRA Board in 2013, proposes a strategic and functional review of MIMRA and a program of human resource development.

## II. Project Development Objective

6. The **project development objective** is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend. This will provide the basis for sustainable and increased economic benefits to the country from this resource.

7. *PDO Level Results Indicators* (see Annex 1 for more details). The key results that the project aims to achieve are:

- *Indicator for strengthened management of oceanic fisheries*: the number of days fished for tuna in RMI's waters does not exceed its agreed annual allocation of purse seine fishing vessel days (PAE), while the total regional allocation (TAE) remains within sustainable levels; and
- *Indicator for strengthened management of coastal fisheries*: the number of additional coastal fisheries legally managed by stakeholders in RMI, with support from the Government.

## III. Project Description

8. The following components and activities of the PROP will be financed in RMI:

### ***Component 1: Sustainable Management of Oceanic Fisheries (US\$5.45 million IDA)***

9. The objective of this component is to help participating Pacific Island countries strengthen the management of the region's purse seine and long-line tuna fisheries. A focus will be on the strengthening of RMI's implementation of the vessel day scheme (VDS) for the purse seine fishery, and extending compatible management systems to long-line and other fisheries. Towards this objective, the following activities will be supported by the PROP:

#### **1.1 Strengthen the capacity of MIMRA to sustainably manage the shared tuna fisheries**

##### *1.1.1 Disbursements to MIMRA for operating costs linked to indicators for strengthened tuna fisheries management (US\$3.66 m)*

10. This activity would disburse funds directly to MIMRA to reimburse against eligible expenditures for operating costs linked to indicators for strengthened management of the tuna fisheries. Such eligible expenditures would be tracked and subject to World Bank safeguards. Disbursements will be made annually to MIMRA (with an advance for the first year upon effectiveness of the project) upon independent third-party verification that the following management measures have been achieved (expenditures for each indicator are priced equally):

11. Improving compliance with the VDS for the purse seine tuna fishery:
- The number of days fished in RMI waters does not exceed its annual allocation of fishing vessel days (PAE)
  - 100% of fishing vessel days are recorded annually according to agreed criteria
  - 100% of fishing vessel days used and sold are disclosed annually to the PNAO Fisheries Information Management System (FIMS) and other parties
12. Expanding the coverage of the purse seine fishery VDS or similar system for the long line fisheries, to include all tuna caught in the RMI's national waters:
- 100% of tuna catch within RMI's national waters that is encompassed within the VDS or a compatible system
13. Additionally, though not linked to disbursements, these expenditures would also support MIMRA to increase efficiency and flexibility as appropriate: Increasing efficiency and flexibility of the purse-seine fishery VDS and similar systems for the long-line fisheries:
- (Yes/no) more flexible measures are applied, such as creating multi-zone and multi-year days, development of competitive VDS marketing arrangements, long-term contracts, creation of secondary markets, etc., that increase the value of a vessel day above the baseline
14. The expenditures reimbursed will support improved fishery sector governance and management arrangements, surveillance to enforce fisheries management measures, real-time monitoring of tuna fishing activities through the Vessel Monitoring System (VMS), the National Observer Program, and increased capacity for MIMRA to effectively participate in regional and sub-regional fisheries management arrangements. Eligible expenditures would include:
- *Fuel and additional costs to support increased fisheries surveillance patrols (both sea and aerial patrols)*, in complement to the Government's funding from the Government of Australia, as well as the operational support (aerial patrols, ship-rider agreements, joint exercises) from the governments of Australia, USA, New Zealand and France);
  - *Training and expanded participation of MIMRA staff* in fishery industry economic, biological and operational analysis to allow development of negotiating positions with industry and in PNA meetings;
  - *Expansion of the National Observer Program* by at least 500 percent, including an average annual increase of 30 observers and 6 de-briefers, observer and de-briefer training and work attachments, acquisition of hardware and software for real-time submission and utilisation of observer data;
  - *Policy, legislative and human resource development leading to the establishment of a sanitary competent authority* for fish caught in the country's waters.
15. In terms of fisheries surveillance, the RMI Police Department Sea Patrol currently carries out surveillance and enforcement of the country's fisheries legislation on behalf of MIMRA, via a patrol vessel provided and partially supported by the Government of Australia. The Sea Patrol generally responds to specific infractions noted by MIMRA through connection to the satellite-based vessel monitoring system run by FFA, as well as conducting periodic patrols and inspections of fishing vessels. Extensive sections of the borders of RMI's exclusive economic

zone adjoin high seas areas (some of which are the subject of international agreements which prohibit or control fishing), and these are high-risk areas for infractions.

16. Sea Patrol increasingly conducts joint patrols with neighbouring countries under provisions of the Niue Treaty. Additional cooperation arrangements will be developed under Niue Treaty subsidiary arrangements in the foreseeable future. However, the key obstacle to increased or even continued patrolling, and to implementing improved patrol strategies (aimed at detecting unlicensed vessels, rather than ensuring compliance by authorized vessels), is lack of resources to support the operating costs of the vessel, particularly fuel. Inadequate communications equipment and systems to enable the patrol vessels to communicate with the Majuro shore base is also an obstacle to the effectiveness of surveillance operations.

17. In addition to increased sea patrols, the RMI Police Department is currently in negotiations to obtain aircraft airtime to increase aerial surveillance. Initial financing for a trial period may be available from the Government of Australia, but is likely to be short-term. Aerial surveillance needs to be supplemented by additional surface patrols, since this is the primary way in which infringements detected by aerial surveillance are followed up and punitive actions implemented.

*1.1.2. Goods and services needed for achievement of the disbursement-linked indicators (US\$1.79 m)*

18. Financing will be provided for procurement of specific goods and services needed to meet the disbursement-linked indicators (DLIs) for strengthened management of the tuna fisheries. Services will include technical assistance to support a comprehensive review of MIMRA's roles, functions, human and financial resources and organizational structure, and then implementation of any reforms required to improve the Agency's effectiveness and the governance of the oceanic fisheries sector more broadly. Furthermore, hardware and software acquisition will be supported to enable for real-time monitoring of vessels by observers. In addition, hardware, software and bandwidth expansion to enhance internet access for MIMRA will be supported, enabling better utilization of vessel monitoring and fisheries information management systems, and real-time e-reporting from vessels. Lastly, equipment will include information and communication technology for enhanced maritime surveillance and safety.

***Component 2: Sustainable Management of Coastal Fisheries (US\$0.95 million IDA, US\$1.83 million GEF)***

19. The objective of this component is to support RMI to sustainably manage defined coastal fisheries, focusing on those with the greatest potential for increased benefits, i.e. coastal fisheries such as bêche-de-mer (BDM) that (i) can generate export earnings for the country, and/or (ii) support livelihoods, food security and dietary health. Towards this objective, the following activities will be supported by the PROP in RMI:

**2.1 Sustainable Management of Targeted Coastal Fisheries**

*2.1.1 National management measures for targeted coastal fisheries (US\$0.95 m IDA)*

20. MIMRA has recently passed regulations to control the harvesting and export of sea cucumbers, and will soon do the same for marine ornamental species intended for the aquarium trade. This component will support the development of appropriate monitoring and control systems required for the implementation of these regulations, as well as the development and

implementation of management plans and regulations for other resources and sub-sectors (beginning with aquaculture, turtles and trochus).

### *2.1.2 Stakeholder management of targeted coastal fisheries (US\$1.83 m GEF)*

21. The status of coastal lagoon and reef fisheries in RMI is poorly known, and in some atolls isolation and lack of access to markets no longer offer protection from overexploitation. For this reason MIMRA has commenced a process of working more closely with communities to take stock of the local resource base and to develop or improve management arrangements that will counteract increasing pressure on the resources. Access to RMI's outer islands is difficult and costly and this has in the past impeded progress in these areas. This component will support procurement of goods and the operating costs and services for MIMRA to conduct resource and socio-economic assessments in all of the inhabited islands, and to provide ongoing support to each of the islands to develop and implement management plans agreed by local governments and the communities they represent. Through the *Reimaanlok* process template regulations have already been developed and implemented in one atoll (Ailuk) and the goal is to adapt this to the specific needs of other atolls and promote its adoption. Specific items to be supported include:

- Procurement of a medium-sized (approx. 12-13m) vessel capable of supporting resource assessment and management teams working in the outer islands;
- Renovation/upgrading of extension facilities on selected outer islands (installation of radio/communications equipment, photovoltaic power systems, etc.);
- Resource and socio-economic surveys, community consultations, public information campaigns, training workshops and facilitation of fisheries management planning in an increasing number of outer islands;
- Ongoing fishery catch and effort data monitoring in association with the fish collection system, through continuation and expansion of the current data collection process;
- Periodic follow-up monitoring, community consultation and information dissemination;
- Extending this process to cover all 24 local government jurisdictions.

22. The process requires extensive community consultation through multiple visits to each atoll or local government area (some local governments encompass more than one atoll). MIMRA also plans to extend the *Reimaanlok* process to the lagoon of Majuro, the capital atoll, which is quite different from the outer islands. Urban drift has led to a high population density and the presence of communities from many of RMI's outer islands leads to a more complex fishery management environment. In addition coastal sand and gravel mining, pollution from transshipment operations and other activities have impacted on lagoon water quality and fish resources. Improving management of Majuro lagoon and its fishery resources will require a multi-sectoral approach involving several national and local government agencies and NGOs.

### ***Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats***

*This component will be implemented at the regional level.*

### ***Component 4: Regional Coordination, Implementation Support and Program Management (US\$0.35 million IDA)***

23. The objective of this component is to provide regional coordination, implementation support and program management, to ensure a coherent approach to program implementation and wide dissemination of results and lessons learned; as well as regional and national implementation



Component/ Activity		Procurement	Budget (US\$)	Source of Financing
	Goods and services needed for achievement of disbursement-linked indicators: (i) MIMRA strategic/ functional review; (ii) Acquisition of hardware and software to support real-time e-reporting/ data provision from observers (satellite phones, electronic tablets); (iii) Expansion of the MIMRA fisheries information management system (IMS) and improvement of IT facilities (hardware, software, bandwidth) that support it; (iv) Integration of new data sources (e.g. radar satellite data) into vessel monitoring system (VMS); and (v) Equipment/systems for enhanced maritime communication.	Technical assistance  Equipment	1,790,000  includes: (i) 100,000 (ii) 400,000 (iii) 515,000  (iv) 475,000 (v) 300,000	IDA
<b>Component 2: Sustainable Management of Coastal Fisheries</b>				
2.1 National management measures for targeted coastal fisheries	(i) Formulation of additional fishery management plans and regulations (ii) Operating costs to implement national regulations on sea cucumbers, marine ornamentals and additional targeted fisheries. (iii) Industry and community awareness	Technical assistance  Travel  Operating costs	950,000  includes: (i) 500,000 (ii) 250,000 (iii) 200,000	IDA
2.2 Stakeholder management of targeted coastal fisheries	(i) Support to resource assessment, community consultations, training workshops, and development/ implementation of local coastal fishery management arrangements in outer islands and Majuro.  (ii) Medium-sized vessel (12 – 13 m) to support resource assessments and mgt.	Training Travel Operating costs Equipment (incl. research vessel)	1,830,000  includes: (i) 1,330,000 (ii) 500,000	GEF
<b>Component 3: Sustainable Financing for conservation of Critical Habitats.</b> <i>(Implemented at regional level, no national activities envisaged)</i>				
<b>Component 4: Regional Coordination, Implementation Support, Training, Monitoring and Evaluation</b>				
National program management, monitoring and evaluation		Consultants, operating costs	350,000	IDA
<b>TOTAL</b>			<b>6,750,000</b>	<b>IDA</b>
			<b>1,830,000</b>	<b>GEF</b>

## V. Key Risks and Mitigation Measures

26. See Overall Risk Rating and Explanation of Key Risks on page 13 for more details.

## VI. Appraisal Summary

27. See Program Appraisal Summary on page 15.

## **Annex 5: Solomon Islands Investment Project under the Pacific Islands Regional Oceanscape Program**

**(US\$9.75 m IDA, US\$1.37 GEF)**

### **I. Strategic Context**

1. The Solomon Islands has a population of some 540,000 people spread across 10 provinces with over 70 distinct languages. Over 90 percent of the country's territory is ocean, with an Exclusive Economic Zone of more than 1.3 million square kilometers. This area includes tremendous natural resources, such as tuna fisheries that provided an estimated \$19 million in revenues to the Government in 2014, as well as supported local processing and livelihoods. The coastal fisheries throughout the archipelago support food and livelihoods, with a per capita fish consumption roughly twice the global average.

2. The objectives for the benefits to be gained from the country's fisheries resources are stated in the NCRA Government's Policy Statement (2010), and relevant sections of the Solomon Islands National Development Strategy 2011-2020 and its Medium Term Development Plan 2014-2018. The use of these fisheries is guided by these documents, which identifies the specific need for control mechanisms supported by legislation for resource management.

3. The implementation of national policy for the country's fisheries resources is led by the new Ministry of Fisheries and Marine Resources (MFMR) Corporate Plan (2014-2018). This Plan is driven by six policy statements/areas derived from the new Fisheries Management Bill (awaiting enactment). These include (1) Improve market access for our rural fishers, (2) Grow livelihoods through sustainable aquaculture development, (3) Improve health of our fisheries and marine resources, (4) Grow our economy through sustainable fisheries investments, (5) Effective enforcement of our fisheries laws, and (6) Increase skills and knowledge of partners in fisheries development. A new Fisheries Bill expected to be enacted in early 2015 will provide legal efficacy to these policy objectives.

4. In addition to supporting implementation of these national policies, PROP investments in the Solomon Islands will build upon and expand the support provided by the Government of New Zealand, in particular cementing institutional strengthening activities over the past seven years including the ongoing and renewed for five years (2015 – 2019) 'Mekem Strong Solomon Islands Fisheries Programme' (MSSIF), in order to help strengthen the fisheries management system and the benefits it can generate for the country. Tables 1 and 2 in this annex summarizes information on the two sources financing, both of which are aiming towards the common objective of strengthening management of Solomon Islands' fish resources.

### **II. Project Development Objective**

5. The **project development objective** is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend. This will provide the basis for sustainable and increased economic benefits to the country from this resource.

6. *PDO Level Results Indicators* (see Annex 1 for more details). The key results that the project aims to achieve are:

- *Indicator for strengthened management of oceanic fisheries*: the number of days fished for tuna in the Solomon Islands' waters does not exceed its agreed annual allocation of purse seine fishing vessel days (PAE), while the total regional allocation (TAE) remains within sustainable levels; and
- *Indicator for strengthened management of coastal fisheries*: the number of additional coastal fisheries legally managed by stakeholders in the Solomon Islands, with support from the Government.

### **III. Project Description**

7. The following components and activities of the PROP will be financed in the Solomon Islands:

#### ***Component 1: Sustainable Management of Oceanic Fisheries (US\$7.75 m IDA)***

8. The objective of this component is to help participating Pacific Island countries strengthen the management of the region's purse seine and long-line tuna fisheries. Towards this objective, the following activities will be supported by the PROP:

#### **1.1 Strengthen the capacity of MFMR to sustainably manage the shared tuna fisheries**

##### ***1.1.1 Disbursements to the Ministry of Fisheries and Marine Resources (MFMR) for costs linked to indicators for strengthened tuna fisheries management (US\$3.25 million IDA)***

9. This activity will disburse funds directly to MFMR to reimburse against eligible expenditures for costs linked to indicators for strengthened management of the tuna fisheries. Such eligible expenditures would be tracked and subject to World Bank safeguards. Disbursements will be made annually to MFMR (with an advance for the first year upon effectiveness of the project) upon independent third-party verification that the following management measures have been achieved (expenditures for each indicator are priced equally):

10. Improving compliance with the VDS for the purse seine tuna fishery, and a similar system for the long-line fishery:

- Solomon Islands does not exceed its annual allocation of purse seine fishing vessel days (PS PAE)
- Solomon Islands does not exceed its annual allocation of long-line fishing vessel days (LL PAE), once the VDS is established for that fishery
- 100% of fishing vessel days are recorded annually according to agreed criteria
- 100% of fishing vessel days used and sold are disclosed annually to the PNAO Fisheries Information Management System (FIMS) and to other parties

11. Expanding the coverage of the VDS or similar system, for the tuna caught in Solomon Islands' national waters to include the archipelagic fishery (referred to as the Main Group Archipelago, MGA):

- 100% of tuna catch within Solomon Islands' archipelagic waters and within national PAE allocations is encompassed within the purse seine VDS or a similar system, and planned long-line VDS (once established)

12. Additionally, though not linked to disbursements, these expenditures would also support MFMR to increase efficiency and flexibility as appropriate: Increasing efficiency and flexibility of the VDS:

- More flexible measures are applied, such as creating multi-year days when linked to processing in country and/or pooling, auctioning and/or tendering days, that increase the value of a vessel day above the baseline

13. The expenditures reimbursed will support improved surveillance to enforce fisheries management measures, and increased capacity for MFMR to effectively manage the tuna fisheries. Eligible expenditures would include:

- Fuel and additional costs to support increased fisheries surveillance patrols;
- Operating costs of an operational center for surveillance in Honiara;
- Costs for use and development of an integrated electronic reporting system; and
- Training and development of MFMR staff based on institutional review.

*1.1.2 Goods and services needed for achievement of the disbursement-linked indicators (US\$4.5 m)*

14. Financing will be provided for procurement of specific goods and services needed to meet the disbursement-linked indicators (DLIs) for strengthened management of the tuna fisheries, including:

- Technical assistance to support institutional strengthening, including an institutional review (management and functional review, organizational structure, legal);
- Technical assistance for organizational development in MFMR, including strategic planning, operational planning, process mapping and specification, human resource systems, human resource performance management systems;
- Technical assistance and goods to develop financial management systems and processes, including a compliance risk assessment, planning, research planning delivery, competent authority, licensing processes; and
- Technical assistance, together with procurement of any goods and equipment needed, in order to develop fish catch documentation systems.

In addition, capital expenditure financing will be provided for works to establish an operational center for fisheries surveillance in Honiara and two outlying enforcement centers, as well as for goods to establish an integrated electronic reporting system (adoption of FIMS, e-logbooks and camera technology) to enhance compliance.

***Component 2: Sustainable Management of Coastal Fisheries (US\$1.8 m IDA, US\$1.37 m GEF)***

15. The objective of this component is to support the Solomon Islands to sustainably manage defined coastal fisheries and the ecosystems that support them, focusing on those with the greatest potential for increased benefits, i.e. coastal fisheries that (i) can generate export earnings for the country, such as bêche-de-mer (BDM) and/or (ii) support livelihoods, food security and dietary health. This component will support dedicated technical assistance, goods and operating

costs to MFMR empower stakeholders to sustainably manage targeted coastal fisheries and the supporting ecosystems. Technical assistance through partners and in-house advisers (funded by the Government of New Zealand MSSIF Program) may be available if required to support MFMR staff to ensure the successful delivery of PROP activities. Community awareness through information exchange promoting a nationwide understanding of sustainable resource development and management incorporating community ownership of these measures will be a priority under this component.

## **2.1 Sustainable management of targeted coastal fisheries (\$1.3 m IDA, \$1.37 m GEF)**

16. The Solomon Islands has a system of customary ownership of marine and coastal resources that require national, provincial and community-based regulative frameworks and cooperation to effectively develop and sustainably manage coastal fisheries and the supporting ecosystems. The ongoing nationwide development of Community Based Resource Management (CBRM) systems, that incorporates fisheries management plans and monitoring programs, has made significant positive impacts in certain areas within the country. The PROP will support MFMR to scale up these co-management practices throughout the country.

17. The status of coastal fisheries in the Solomon Islands in general terms remains unknown, however the nation's high population growth, urbanization, coastal degradation and limited livelihood opportunities has increased the reliance on coastal fisheries to meet daily needs. Moreover, as a result of internal emigration to population centers, especially Honiara and Auki, small-scale domestic commercial fishing of coastal resources to supply demands in these centers has greatly increased. Scientific data on the impact of these commercial fishing practices on local resource stock populations is currently unknown.

18. The MFMR has initiated a number of proactive national and provincial projects and measures to understand the current use and pressure on the country's coastal fisheries. These initiatives will be supported by the new Fisheries Management Bill (awaiting enactment in early 2015) and ongoing updating and/or preparation of new provincial fisheries ordinances. Key initiatives to date have included: (i) a nationwide sea cucumber assessment survey in 2012 and subsequent draft management plan, (ii) an innovative mobile platform for the collection of coastal fisheries data (a project called Hapi Fis) that is identifying both market and scientific morphological and abundance data on artisanal/semi commercial fish trading through local marketing outlets to develop a data base to allow evaluation of stocks and to develop sustainable management systems, (iii) a provincial based fish aggregator device (FAD) program designed to supplement coastal fisheries access to oceanic resources in order to increase food security and income opportunities whilst reducing fishing pressure on coastal reef associated species.

19. Further development and expansion of MFMR support to coastal fisheries management has been limited due to availability of resources. For this reason, the PROP will support the Government to expand current data collection programs for coastal fisheries, working in conjunction with Provincial governments and communities to improve resource baseline information and to use this information to support community-based resource management. Educational awareness and information exchange through the MFMR Provincial extension

programs will play a significant role in ensuring management measure introduced are understood.

20. In complement to support from the MSSIF program, this component will support operational costs, goods and services (including training) for:

- (i) *Coastal fisheries resource assessments*, including
  - a. a nationwide frame survey to provide a baseline study of the coastal fisheries, that will also provide a baseline for future damage and loss disaster assessment and management; and
  - b. Fisheries Resource Assessments and Fisheries Environmental Risk Assessments (ERA) for: (a) marine gastropods - Trochus/green snail (initial assessment in Project Year 1 and a follow up assessment in Project Year 4); (b) sea cucumbers (follow up assessment to a 2012 survey in Project Year 3); (c) bait fish (two/three year project linked to pole-and-line fishery); (d) Deep-water snapper (initial assessment in Project Year 1 and a follow up assessment in Project Year 4); and (e) shark, dugong, crocodile, dolphin and turtle (including a review of traditional/customary fishing practises for some of these species) and other internationally threatened marine and coastal species;
- (ii) *Coastal fisheries monitoring*, including establishment of a GIS unit and inshore FIMS to support the collection, analysis and use (for management decision making) of coastal fisheries data from all resource and data collection programmes including data from the existing MSSIF Program market survey data collection (Hapi Fis) project;
- (iii) *Stakeholder management of targeted coastal fisheries*, focused on empowering communities to legally manage defined coastal fisheries, including strengthening of coastal fisheries extension and inspection services through the upgrading of extension office and CBRM unit in Honiara, to work with a specific number of communities to develop management measures for the coastal fisheries in defined areas of the sea, that would be recognized as by-laws by the Province and endorsed by the Ministry; and
- (iv) *National management measures for coastal fisheries*, including development and implementation of management plans for key fisheries species in partnership with key stakeholders, including: (a) technical assistance to review coastal fisheries regulations and assist the Provincial Governments develop and implement their fisheries Ordinances in line with the new Fisheries Management Act; and (b) technical assistance to national and provincial government and communities to monitoring and ensure integration of management plans, including annual ministerial workshop/meeting in Honiara.
- (v) *Small goods and works to increase local value added*, on the basis of community management measures and an assessment MFMR is conducting, small goods and works to support increased local value added will be supported in participating communities.

## **2.2. Linking sustainable coastal fish products to regional markets (US\$ 0.5 million)**

21. The project will support identification of areas where funding can best add value in linking coastal fish products to regional markets. This will be undertaken during the first year of implementation via technical assistance to identify key domestic fisheries development projects linked to the sustainable development of local Solomon commodities with regional markets.

22. There are a number of coastal fishery resource commodities in various stages of development that link to the regional market through ad-hoc distribution channels. These channels for the most part do not follow industry standard best practices and thus returns for commodities are less than optimal. These include trade issues associated with harvested Beche-de-mer in the western Solomon Islands with Papua New Guinea (Shortlands and Ontong Java); a proposed trade of commercially valuable deep water snapper finfish between the remote eastern Solomon Island communities in the Temotu Province to markets in Vanuatu; and the continued development of new farming areas for seaweed (the Solomon Islands now being the largest exporter of non-edible seaweed in the Pacific region).

**Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats**

*This component will be implemented at the regional level.*

**Component 4: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation (US\$0.2 m IDA)**

23. The objective of this component is to provide regional coordination, implementation support and program management, to ensure a coherent approach to program implementation and wide dissemination of results and lessons learned; as well as regional and national implementation support and training as needed for the program to achieve its objectives. Towards this objective, this component would include collaboration with the regional program support unit located within FFA (see Annex 7).

**4.1 National program management, monitoring and evaluation (US\$0.2 m)**

24. This includes the costs of additional staff needed for MFMR to manage a national designated account for the PROP, with support from FFA. This would include a full-time project coordinator, an accountant, and a procurement officer (for the first three years).

**IV. Project Description: Mekem Strong Solomon Islands Fisheries Programme (MSSIF)**

25. The Mekem Strong Solomon Islands Fisheries programme, which began in 2010, is a joint Solomon Islands-New Zealand Fisheries and Marine Sector Program. Phase II of the Program will run from 2015 to 2019 and will contribute to achieving the following outcomes:

- Strengthened Solomon Islands capacity to sustainably develop and manage fisheries;
- Increased economic contribution from sustainable inshore fisheries and aquaculture;
- Increased government revenue from sustainable offshore fisheries; and
- Increased income and employment from fishing, onshore processing and related activities.

26. To contribute to these outcomes, MSSIF will invest NZD 8.9 million over five years in activities under the following outputs:

Capacity Development	Inshore Fisheries	Offshore Fisheries
<ul style="list-style-type: none"> <li>• Mentoring and coaching of Ministry of Fisheries and Marine Resources (MFMR) leaders.</li> </ul>	<ul style="list-style-type: none"> <li>• Providing expert technical advice and support on inshore fisheries management and development.</li> </ul>	<ul style="list-style-type: none"> <li>• Providing expert technical advice and support on offshore management and development policy development and implementation, and in bilateral and</li> </ul>

<ul style="list-style-type: none"> <li>• Developing and implementing MFMR organisation and individual capacity development plans</li> <li>• Conducting stakeholder analysis and implementing stakeholder engagement plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Collecting, managing, analysing and using inshore fisheries data, and annual stock assessments of key species.</li> <li>• Improving knowledge and skills of Provincial Fisheries Officers in supporting community fisheries resource management.</li> <li>• Mentoring and training to build business skills in seaweed farmers.</li> </ul>	<p>international fisheries management negotiations.</p> <ul style="list-style-type: none"> <li>• Establishing robust systems for licensing, monitoring, and enforcing compliance in offshore fisheries.</li> <li>• Providing expert technical advice and support to processes for onshore investment decisions.</li> </ul>
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## V. Implementation

27. The technical assistance funded by the MSSIF will be complemented by investments from the PROP in goods, works and services to significantly enhance fisheries monitoring, reporting, surveillance and enforcement, linked to indicators of strengthened fisheries management, together with institutional strengthening and support for communities to better manage coastal fisheries. To ensure all activities are complementary and synergistic, annual planning for the PROP financing will be carried out by MFMR together with annual planning for the MSSIF. The annual work program and budget for the PROP will be coordinated with the Steering Committee for the MSSIF, and submitted to the World Bank before the end of the calendar year. See Program Implementation Arrangements in Annex 8 for further details.

28. Tables 1 and 2 below provide an overview of specific activities and budget for implementation in the Solomon Islands:

*Table 1. Overview of PROP Activities, budget and procurement categories for the Solomon Islands*

		Procurement	Budget (US\$)	Source of Financing
<b>Component 1: Sustainable Management of Oceanic Fisheries</b>				
1.1 Strengthen the capacity of MFMR to sustainably manage the shared tuna fisheries	Disbursements to MFMR for costs linked to indicators of strengthened tuna fisheries management: (i) Costs of increased sea and aerial surveillance patrols (ii) Operating costs of a fisheries surveillance Operational center in Honiara (iii) Costs of use of integrated electronic reporting systems; and (iv) Training for MFMR staff based on results of institutional review.	N/A	3,250,000  includes: (i) 1,800,000 (ii) 310,000 (iii) 810,000 (iv) 330,000	IDA
	Goods, works and services needed for achievement of disbursement-linked indicators:		4,500,000  includes:	IDA

	<ul style="list-style-type: none"> <li>(i) Technical assistance for institutional strengthening, including an institutional review (management and functional review, organizational structure, legal);</li> <li>(ii) Technical assistance for organizational development in MFMR, including strategic planning, operational planning, process mapping and specification, human resource systems, human resource performance management systems;</li> <li>(iii) Technical assistance for strengthening financial management systems and processes, including a compliance risk assessment, planning, research planning delivery, competent authority, licensing processes;</li> <li>(iv) Technical assistance to develop fish catch documentation systems;</li> <li>(v) Construction and equipping of a fisheries surveillance operational center in Honiara;</li> <li>(vi) Construction and equipping of 2 outlying enforcement centers;</li> <li>(vii) Goods and services to establish integrated electronic reporting systems.</li> </ul>	<ul style="list-style-type: none"> <li>Works</li> <li>Goods</li> <li>Technical assistance</li> </ul>	<ul style="list-style-type: none"> <li>(i) 150,000</li> <li>(ii) 150,000</li> <li>(iii) 600,000</li> <li>(iv) 600,000</li> <li>(v) 1,250,000</li> <li>(vi) 250,000</li> <li>(vii) 1,500,000</li> </ul>	
<b>Component 2: Sustainable Management of Coastal Fisheries</b>				
2.1 Sustainable management of targeted coastal fisheries	<p>Operational costs, goods and services (including training) for:</p> <ul style="list-style-type: none"> <li>(i) A nationwide frame survey to provide a baseline study of the coastal fisheries</li> <li>(ii) Fisheries Resource Assessments and Fisheries Environmental Risk Assessments (ERA)</li> <li>(iii) Development and implementation of management plans for key fisheries species, including technical assistance to review regulations and ordinances, and for monitoring/integration of management plans</li> </ul>	<ul style="list-style-type: none"> <li>Operational costs</li> <li>Works</li> <li>Goods</li> <li>Technical assistance</li> </ul>	<p>1,370,000</p> <p>includes:</p> <ul style="list-style-type: none"> <li>(i) 420,000</li> <li>(ii) 750,000</li> <li>(iii) 200,000</li> </ul>	GEF
	<ul style="list-style-type: none"> <li>(i) Establishment of a GIS unit and inshore FIMS to support the collection, analysis and use of coastal fisheries data</li> <li>(ii) Strengthening of coastal fisheries extension and inspection services – including physical works, training, travel budget, and funding of a communication and awareness program.</li> </ul>		<p>1,300,000</p> <p>includes:</p> <ul style="list-style-type: none"> <li>(i) 250,000</li> <li>(ii) 500,000</li> </ul>	IDA

	(iii) Small goods and works to add more value to fish products in participating communities, on the basis of an assessment by MFMR of the value chains		(iii) 550,000	
2.2 Linking sustainable coastal fish products to regional markets	Funding of technical assistance to develop the business value chain related to national and regional trade in a number of commercially traded (and/or potential traded) high value species	Technical assistance	500,000	IDA
<b>Component 4: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation</b>				
National program management, monitoring and evaluation	Consultant, operating costs		200,000	IDA
<b>TOTAL</b>			<b>9,750,000</b>	<b>IDA</b>
			<b>1,370,000</b>	<b>GEF</b>

Table 2. Overview of MSSIF outputs and budget (2015-2019) (Government of New Zealand)

Output	Budget (NZD)
<b>Capacity Development:</b> <ul style="list-style-type: none"> <li>MFMR capacity development assessment completed</li> <li>MFMR organisational capacity development plan and individual staff development plans operationalised</li> <li>Tailored capacity development activities to support organisational and individual development plans</li> <li>Stakeholder analysis completed and engagement plan operationalised</li> </ul>	2,876,000
<b>Inshore Fisheries:</b> <ul style="list-style-type: none"> <li>Inshore fisheries data collection, storage, management and analysis by MFMR</li> <li>Provincial Fisheries Officers trained in skills required to implement new Inshore Fisheries Management Strategy</li> <li>Business skills development for seaweed farmers</li> </ul>	2,880,000
<b>Offshore Fisheries:</b> <ul style="list-style-type: none"> <li>Advice and support for bilateral, regional, sub-regional and international fisheries management negotiations</li> <li>Technical advice on offshore fisheries management and development issues</li> <li>Cost and benefit analysis of onshore investment proposals, and support for SI government negotiations and processes</li> </ul>	2,293,000
<b>Non-output specific costs/Management costs (supporting all outputs):</b> <ul style="list-style-type: none"> <li>Program management and reporting</li> <li>Contracting of technical specialists to support specified MFMR projects</li> </ul>	900,000
<b>TOTAL</b>	<b>8,949,000</b>

## V. Key Risks and Mitigation Measures

29. See Overall Risk Rating and Explanation of Key Risks on page 13 for more details.

## VI. Appraisal Summary

30. See Program Appraisal Summary on page 15.

## **Annex 6: Tuvalu Investment Project under the Pacific Islands Regional Oceanscape Program**

**(US\$7.0 m IDA; US\$0.91 m GEF)**

### **I. Strategic Context**

1. Tuvalu is the third-smallest independent country in the world, comprising nine, widely separated inhabited islands and a population of around 12,000, half of which lives on the main island of Funafuti. The country has a very large Exclusive Economic Zone (slightly under 1 million sq. km) relative to the size of its landmass (26 square kilometers) and tuna fisheries provide the single most important source of revenue for the Government, most of it through the sale of resource access rights in the form of fishing vessel days to foreign fishing vessels. On a per capita basis, Tuvalu is the most fishery-dependent nation on earth, and has the highest rate of fish consumption of any country.

2. Skipjack tuna is the country's main fisheries resource, and the key opportunity for Tuvalu is to capture a greater portion of the value the tuna caught in its waters, via increased revenues for access. This will require continued strengthened management of the resource and access to it, and greater capacity. Currently the Government spends less than US\$500,000 per year on fisheries management, or less than 5 percent of the benefits the resources generate for the country. During the course of PROP implementation, the cost of fishery management will be progressively integrated into the national budget process through a process of organizational and revenue-collection reform.

3. Additionally, Tuvalu's outer island populations are highly dependent on coastal fisheries for both food security and livelihoods. The country's legislation gives management authority over these resources to island Councils (*Kaupules*), but there is currently little information as to the status of many of these fisheries and management efforts. The Tuvalu Fisheries Department aims to support these Councils to manage the coastal fisheries, and ultimately may establish service agreements between the two in order to do so.

4. Strengthening management of the fisheries resources is a priority for the Government, as reflected in both the National Strategy for Sustainable Development 2005 – 2015, and the Priority Roadmap for the First 100 Days issued in 2013 by the new Government.

5. PROP investments in Tuvalu will build upon and expand the support provided to date by the Government of New Zealand, cementing institutional strengthening activities over the past two years and providing parallel financing to its upcoming 5-year 'Tuvalu Fisheries Support Program' (TFSP), in order to help strengthen the fisheries management system and the benefits it can generate for the country. Tables 1 and 2 in this annex summarize information on the two sources financing, towards the common objective of strengthening management of Tuvalu's fish resources.

## II. Project Development Objective

6. The **project development objective** is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend. This will provide the basis for sustainable and increased economic benefits to the country from this resource.

7. *PDO Level Results Indicators* (see Annex 1 for more details). The key results that the project aims to achieve are:

- *Indicator for strengthened management of oceanic fisheries*: the number of days fished for tuna in the Tuvalu's waters does not exceed its agreed annual allocation of purse seine fishing vessel days (PAE), while the total regional allocation (TAE) remains within sustainable levels; and
- *Indicator for strengthened management of coastal fisheries*: the number of additional coastal fisheries legally managed by stakeholders in Tuvalu, with support from the Government.

## III. Project Description

8. The following components and activities of the PROP would be financed in Tuvalu:

### ***Component 1: Sustainable Management of Oceanic Fisheries (US\$5.77 m IDA)***

9. The objective of this component is to help participating Pacific Island countries strengthen the management of the region's purse seine and long-line tuna fisheries.

#### **1.1 Strengthen the capacity of TFD to sustainably manage the shared tuna fisheries**

10. These activities would support strengthening the vessel day scheme (VDS) for the purse seine fishery and extending a compatible management system to the long-line fisheries, in order to sustainably increase the benefits to participating countries from access to these fisheries.

##### ***1.1.1 Disbursements to the Tuvalu Fisheries Department for costs linked to indicators for strengthened tuna fisheries management (US\$3.7 million IDA)***

11. This activity would disburse funds directly to the Tuvalu Fisheries Department (TFD) to reimburse against eligible expenditures for costs linked to indicators for strengthened management of the tuna fisheries. Such eligible expenditures would be tracked and subject to World Bank safeguards. Disbursements will be made annually to TFD (with an advance for the first year upon effectiveness of the project) upon independent third-party verification that the following management measures have been achieved (expenditures for each indicator are priced equally):

12. Improving compliance with the VDS for the purse seine tuna fishery:

- The number of days fished in Tuvalu waters does not exceed its agreed annual allocation of fishing vessel days (PAE)
- 100% of fishing vessel days are recorded annually according to agreed criteria

- 100% of fishing vessel days used and sold are disclosed annually to the PNAO Fisheries Information Management System (FIMS) and the other parties

13. Expanding the coverage of the VDS or compatible system, for the tuna caught in Tuvalu's national waters:

- 100% of tuna catch within Tuvalu's national waters that is encompassed within the VDS or a compatible system

14. Additionally, though not linked to disbursements, these expenditures would also support TFD to increase efficiency and flexibility as appropriate: Increasing efficiency and flexibility of the VDS:

- (Yes/no) more flexible measures are applied, such as creating multi-zone and multi-year days, development of competitive VDS marketing arrangements, long-term contracts, creation of secondary markets, etc., that increase the value of a vessel day above the baseline

15. The expenditures reimbursed will support improved fishery sector governance and management arrangements, surveillance to enforce fisheries management measures, improved real-time monitoring of tuna fishing activities through the national observer program, as well as building capacity for the TFD to participate in the regional fisheries management system. Eligible expenditures would include:

- *Fuel and additional costs to support increased fisheries surveillance patrols* (both sea and aerial patrols), in complement to the Government's funding from the Government of Australia, as well as and the operational support (aerial patrols, ship-rider agreements, joint exercises) from the governments of Australia, USA, New Zealand and France;
- *Training and expanded participation of TFD staff* in fishery industry economic, biological and operational analysis to allow development of negotiating positions with industry and in PNA meetings;
- *Expansion of the National Observer Program* by at least 100 percent: recruitment of 10 additional observers and 2 debriefers per year, observer and debriefer training and work attachments, participation in sub-regional observer hubs in Pago Pago, Nadi and elsewhere; and
- *Policy, legislative and human resource development leading to the establishment of a sanitary competent authority* for fish caught in the country's waters.

16. In terms of fisheries surveillance, the country's maritime police currently carry out surveillance and enforcement of the country's fisheries legislation on behalf of TFD, via a patrol vessel provided and partially supported by the Government of Australia. The maritime police generally respond to specific infractions noted by the TFD through connection to the satellite-based vessel monitoring system run by FFA, as well as conducting periodic patrols and inspections of fishing vessels. The eastern and western borders of the country's exclusive economic zone are generally the areas of highest incidences of infractions, and the priority for patrols. The maritime police are increasingly conducting joint patrols with the Government of Kiribati in neighboring waters under provisions of the Niue Treaty, as well as providing surveillance services in the waters of Nauru and Tokelau. Additional cooperation arrangements

will be developed under Niue Treaty subsidiary arrangements during 2014. However, the key obstacle to continued and even increased patrolling, and to implementing improved patrol strategies (aimed at detecting unlicensed vessels, rather than ensuring compliance by authorized vessels), is lack of resources to support the operating costs of the vessel, particularly fuel.

17. In addition to increased sea patrols, TFD is currently in negotiations to purchase aircraft airtime to increase aerial surveillance, particularly of its eastern border with the high seas. Current discussions center on the use of a Cessna aircraft based in Apia, Samoa, which would be chartered under cooperative arrangements to carry out aerial surveillance of the EEZ of Samoa, Cook Islands, Tokelau, Kiribati, Tuvalu and (possibly) Niue. This arrangement should enable aerial surveillance of the Tuvalu EEZ on a monthly basis. Under this scenario the importance of surface patrols increases, since this is the primary way in which infringements detected by aerial surveillance are followed up and punitive actions implemented.

*1.1.2 Goods and services needed for achievement of the disbursement-linked indicators (US\$1.77 m)*

18. Financing will be provided for procurement of specific goods and services needed to meet the disbursement-linked indicators (DLIs) for strengthened management of the tuna fisheries. Services will include technical assistance to TFD staff in fishery industry economic, biological and operational analysis. Goods and equipment will include the acquisition of hardware and software for real-time monitoring by observers; and the hardware, software and bandwidth expansion to enhance internet access for TFD, enabling utilization of vessel monitoring and fisheries information management systems, and real-time e-reporting from vessels.

**1.2 Ensure an equitable distribution within Tuvalu of the benefits of sustainably managed tuna fisheries**

20. These activities would support Tuvalu to make informed decisions and investments to ensure an inclusive distribution of the benefits from sustainably managed tuna fisheries, via potential establishment of community VDS funds.

*1.2.1 Pilot Community VDS Funds (US\$0.3 million IDA)*

21. Tuvalu will be one of the first countries in the region to pilot the development of Community VDS Funds, potentially with one fund per island. These funds would provide a vehicle to secure a share of tuna access revenues for communities. Technical assistance and advice procured through FFA and/ or other sources will support the development of a range of options and scenarios for discussion among national Government, Island Councils, community organizations and other concerned stakeholders. The consultative process would lead to selection and implementation of the most favorable options, and ultimately the establishment of more equitable fishery resource rent-sharing mechanisms in Tuvalu.

***Component 2: Sustainable Management of Coastal Fisheries (US\$1.13 m IDA; US\$0.91 m GEF)***

22. The objective of this component is to support participating countries to sustainably manage defined coastal fisheries, focusing on those with the greatest potential for increased benefits, i.e. coastal fisheries such as bêche-de-mer (BDM) that (i) can generate export earnings for the country, and/or (ii) support livelihoods, food security and dietary health.

## 2.1 Sustainable Management of Targeted Coastal Fisheries

23. These activities would be implemented by TFD, to provide dedicated technical assistance and small goods and operating costs to communities to strengthen management and value addition around targeted coastal fisheries. Tuvalu's coastal fisheries are under the jurisdiction of the local council (*Kaupule*) on each of the nine islands, with support from TFD. The community on each island has formed a fishers' association, which operates under the umbrella of the national Tuvalu Fishermen's Association, and has in most instances led the development of some form of management measures for approval by the *Kaupule*. Many of these measures need further development or assistance to achieve full implementation.

24. The status of coastal fisheries in Tuvalu is poorly known, though to date they have been relatively protected as a result of isolation and lack of access to markets. For this reason, the TFD now aims to work more closely with communities to take stock of the resource base, and start to develop or improve management measures and institutions in advance of increasing pressure on the resources. Access to Tuvalu's outer islands is difficult and costly and this has in the past impeded progress in these areas.

25. This component will support procurement of goods and the operating costs and services for TFD to conduct resource and socio-economic assessments in selected islands, and then to provide ongoing support to each of the islands to develop and implement management plans that would be approved by the island councils. Specific items to be supported include:

- *Coastal fisheries resource assessments*, including:
  - Initial resource and socio-economic surveys, community consultations and fisheries management planning in (approximately) 5 of the outer islands, complementing funding provided by the Government of New Zealand to commence work in two islands during 2014; and
  - Re-survey of all islands after 3 years and 6 years;
- *Coastal fisheries monitoring*, including ongoing fishery catch and effort data monitoring using the smartphone based 'HapiFis' system currently under development by USAID in the Solomon Islands;
- *Stakeholder management of targeted fisheries*, including annual follow-up monitoring and community consultations in all outer islands in between the initial assessments and re-surveys, to develop and implement management plans that would be approved by the island councils; and
- *Restoration and management of Funafuti lagoon and the fisheries it supports*. Funafuti, the capital island in Tuvalu, presents a special case which is quite different from the country's other islands. Urban drift has led to significant overcrowding (more than 50 percent of the national population now lives on Funafuti) and the presence of sub-communities from all of Tuvalu's islands leads to reduced compliance of decisions made by traditional leaders. High population densities (6,500 people in an area of only 2 sq. km) have led to problems of sewage and solid waste disposal, and these have in turn impacted on lagoon water quality and fish resources. Management of the lagoon ecosystem has not kept pace with population growth in Funafuti. For this reason, the PROP will finance a number of goods and technical assistance needed to support TFD to improve management of the Funafuti lagoon and its fishery resources, via procurement of a small research/enforcement vessel for the lagoon (including dive and underwater

survey equipment, water quality sampling and assessment equipment, laboratory equipment for ciguatera toxin sampling and assessment, and IT hardware and software), enhanced resource monitoring and surveys, development with stakeholders of a management plan for the lagoon fishery and the wider ecosystem, and enhanced awareness-raising and surveillance for enforcement. These efforts will build upon the GEF-financed ‘Ridge-to-Reef’ project and the data collection, information, planning and training it supports in Funafuti, in order to finance the direct management and implementation costs, notably surveillance and enforcement activities.

***Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats***

*This component will be implemented at the regional level.*

***Component 4: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation (US\$0.1 m IDA)***

27. The objective of this component is to provide regional coordination, implementation support and program management, to ensure a coherent approach to program implementation and wide dissemination of results and lessons learned; as well as regional and national implementation support and training as needed for the program to achieve its objectives. Towards this objective, this component would include support for national program management, monitoring and evaluation, as well as collaboration with the regional program support unit located within FFA (see Annex 7).

***4.1 National program management, monitoring and evaluation (US\$0.1 m)***

28. This would include the costs of additional staff needed for the Project Supporting Team Office of the Tuvalu Aviation Investment Project to provide financial management for a national designated account for the PROP, to support the Fisheries Department.

**IV. Project Description: Tuvalu Fisheries Support Programme 2014-2019**

29. The five year Tuvalu Fisheries’ Support Programme (TFSP) builds on the New Zealand-funded Institutional Strengthening Project (ISP) from 2012 and 2013. The ISP produced recommendations for the restructuring of the TFD to achieve greater effectiveness, and for several initiatives to be undertaken towards generating greater revenues for the GoT and employment for Tuvaluans at sea, and to improve the management of inshore fisheries resources.

30. The TFSP’s goal is: “healthier fisheries resources and increased returns to Tuvalu”. The outcomes supporting this goal fall into three categories:

- (i) Increasing revenue from Tuvalu’s tuna resources through access arrangements, greater participation through joint-venture investments, and increased employment opportunities for Tuvaluans aboard tuna vessels;
- (ii) Improving the management of inshore resources through delivery of Fisheries Department support to island Councils and communities in the areas of resource and social assessments, formulation of management and development plans, and delivery of technical and financial support under agreed memoranda of understanding; and
- (iii) Progressive development and implementation of improved corporate policies, strategies and plans for the Fisheries Department, including implementing the human resources

development plan; and the construction of new corporate accommodation to house the Fisheries Department.

31. The budget for the TFSP is \$5.6 million over five years, to be managed as follows:
- (i) Appointment of two Advisors by MFAT into TFD, amounting to approximately \$1.4 m.
  - (ii) A Grant Fund to the GoT Fisheries Department of approximately \$900,000 to support activities related to achieving the outputs and outcomes of the offshore and inshore projects. This budget, and related expenditure, will be overseen by a Programme Steering Committee (PSC), which will evaluate project progress quarterly on the basis of progress reporting by TFD, and approve draw-down on the funding in support of on-going work.
  - (iii) Funding the design and construction of a new building for the TFD in Funafuti, estimated at \$3,145,000.
  - (iv) Monitoring, assessment and evaluation by MFAT in 2017 and 2019, amounting to approximately \$120,000.

## V. Implementation

32. The technical assistance, grant fund and new TFD headquarters funded by the TFSP will be complemented by investments from the PROP in goods, works and services to significantly enhance fisheries monitoring, reporting, surveillance and enforcement, linked to indicators of strengthened fisheries management, together with support for communities to better manage coastal fisheries. To ensure all activities are complementary and synergistic, annual planning for the PROP financing will be carried out by TFD together with annual planning for the TFSP. The annual work program and budget for the PROP will be coordinated with the Steering Committee for the TFSP, and submitted to the World Bank before the end of the calendar year. See Program Implementation Arrangements in Annex 8 for more details.

33. Tables 1 and 2 below provide an overview of specific activities and budget for implementation in Tuvalu:

*Table 1. Overview of PROP Activities, budget and procurement categories for Tuvalu*

		Procurement	Budget (US\$)	Source of Financing
<b>Component 1: Sustainable Management of Oceanic Fisheries</b>				
1.1 Strengthen the capacity of TFD to sustainably manage the shared tuna fisheries	Disbursements to TFD for costs linked to indicators of strengthened tuna fisheries management: (i) Expanded participation of TFD staff in PNA meetings (ii) Expansion of the National Observer Program, incl: <ul style="list-style-type: none"> <li>• Expand the number of contractors who are PIRFO-certified to de-brief observers, to ratio of 1 de-briefer to 5 observers</li> <li>• Expand the number of trained observers, complementing support from the Gov. of New Zealand</li> <li>• Costs of joint observer management offices with other</li> </ul>	N/A	3,700,000  includes:  (i) 150,000 (ii) 1,500,000	IDA

	<p>countries, beginning in Fiji or American Samoa</p> <p>(iii) Costs of additional fisheries surveillance patrols (8 sea patrols per year, 10 days each, for a total of \$300,000 per year)</p> <p>(iv) Development of provisions for sanitary competent authority</p>		<p>(iii) 1,800,000</p> <p>(iv) 250,000</p>	
	<p>Goods and services needed for achievement of disbursement-linked indicators:</p> <p>(i) Technical assistance to TFD staff in fishery industry economic, biological and operational analysis</p> <p>(ii) Acquisition of hardware and software necessary to support real-time data provision from observers (satellite phones, electronic tablets)</p> <p>(iii) Hardware, software and services for expanded internet access for TFD</p>	<p>Goods</p> <p>Technical assistance</p>	<p>1,770,000</p> <p>includes:</p> <p>(i) 300,000</p> <p>(ii) 1,380,000</p> <p>(iii) 90,000</p>	IDA
1.2 Ensure an equitable distribution within Tuvalu of the benefits of sustainably managed tuna fisheries	<p>Technical assistance, community consultations, development of financial management and accounting systems) to establish community VDS funds, beginning in Tuvalu</p>	<p>Initial scoping/ feasibility Consultant (individual)</p> <p>Specialized legal/ financial/ technical TA on demand</p>	<p>Funded at regional level (see Annex 7)</p> <p>\$300,000</p>	<p>GEF</p> <p>IDA</p>
<b>Component 2: Sustainable Management of Coastal Fisheries</b>				
2.1 Sustainable management of targeted coastal fisheries	<p>Resource assessments: Operating costs for TFD to conduct resource surveys for the coastal fisheries on 5 outer islands over a two-year period, then monitoring re-surveys on 7 islands at 3-year intervals</p>	Operating costs	780,000	IDA
	<p>Fisheries monitoring: Outer island data monitoring and transmission (smartphone-based)</p>	Equipment; Operating costs	70,000	IDA
	<p>Stakeholder management of coastal fisheries: Ongoing tech. support by TFD to communities on each outer island to develop &amp; implement resource management plans over 4 years (interim years between major surveys/ re-surveys)</p>	Operating costs	280,000	IDA
	<p>Restoration and management of Funafuti lagoon and the fisheries it supports:</p> <p>(i) Resource survey, ongoing water quality and ciguatera monitoring of Funafuti lagoon</p> <p>(ii) Purchase and operation of Funafuti lagoon patrol vessel</p>	<p>Goods/ equipment</p> <p>Technical assistance</p>	<p>910,000</p> <p>includes:</p> <p>(i) 350,000</p> <p>(ii) 410,000</p>	GEF

	(iii) Funafuti conservation area strengthening (signage, public information) (iv) Management planning for designated fisheries	Operating costs	(iii) 50,000 (iv) 100,000	
<b>Component 4: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation</b>				
National program management, monitoring and evaluation		Consultant, operating costs	100,000	IDA
<b>TOTAL</b>			<b>7,000,000</b>	<b>IDA</b>
			<b>910,000</b>	<b>GEF</b>

*Table 2. Overview of TFSP outputs and budget (2014-2019) (Government of New Zealand)*

<b>Output</b>	<b>Activities</b>	<b>Budget (NZ\$)</b>
<b>Offshore Fisheries:</b> Policy framework developed development assessment completed	<ul style="list-style-type: none"> <li>Develop a policy framework with timelines and milestones to deliver key activities for offshore fisheries as contained in the Corporate Plan and this design document, for use as a basis for progress reporting to Program Steering Committee and the Government of New Zealand.</li> <li>Undertake an assessment and establish a plan of action to ensure fish products landed by Tuvalu-flagged vessels are certified as meeting market hygiene standards and originate from legal fisheries.</li> </ul>	1,225,850
<b>Seafarer Training:</b> Seafarers trained in purse-seine fishing skills by an equipped TMTI	<ul style="list-style-type: none"> <li>TFD to source second-hand equipment at market rate. TMTI staff to undertake purse-seine fishing trip aboard JV vessel to gain experience. SPC trainer to train the TMTI trainers. Training module to be provided by SPC (as developed for Kiribati's Fisheries Training Centre).</li> <li>TMTI to deliver a three week purse-seine training course to up to 150 unemployed seafarers. Courses will run each quarter for 15 trainees.</li> </ul>	210,000
<b>Inshore Fisheries:</b> Policy framework developed and implemented for key inshore activities	<ul style="list-style-type: none"> <li>Develop a policy framework with timelines and milestones to deliver key TFD inshore fisheries activities (resource assessments, household surveys, Kaupule and community workshops and consultations)</li> </ul>	687,440
<b>Human Resource and Organisational Development:</b> <ul style="list-style-type: none"> <li>HRD plan implemented</li> <li>New TFD building</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of the HRD plan approved in the first phase of the ISP.</li> <li>Design, construction, fit-out and project management for new TFD building</li> </ul>	3,295,000
<b>Non-output specific costs/Management costs</b>	<ul style="list-style-type: none"> <li>Assessment, Re-design, Evaluation</li> </ul>	120,000
<b>TOTAL</b>		<b>5,538,290</b>

## V. Key Risks and Mitigation Measures

34. See Overall Risk Rating and Explanation of Key Risks on page 13 for more details.

## VI. Appraisal Summary

35. See Program Appraisal Summary on page 15.

## **Annex 7: FFA Investment Project under the Pacific Islands Regional Oceanscape Program**

**(US\$3.97 M IDA; US\$2.19 M GEF)**

### **I. Strategic Context**

1. The Pacific Islands Forum Fisheries Agency (FFA) was established in 1979 by ten Pacific Island countries to pool their resources to promote regional coordination and cooperation on fisheries management and development. Since that time, its membership has grown to 17 countries and territories:

2. FFA is governed by the Forum Fisheries Committee (FFC), which includes representatives from each of the member countries and territories, with a Secretariat based in the Solomon Islands. The FFC Council of Ministers meets on a biennial basis to provide oversight.

3. The agency provides a range of fisheries management services to member countries and territories, including providing technical assistance, supporting regional fisheries access treaty negotiations, establishing and operating a regional register of foreign fishing vessels, and creating a secure communications network and satellite-based fishing vessel monitoring system, among others. FFA works closely with the Parties to the Nauru Agreement Office to support the VDS for the purse seine tuna fisheries, as well as with other member countries and territories to support management of the long-line tuna fisheries.

4. Given its mandate and capacity to support PICs in the management of the tuna fisheries, working together with the PNAO in the purse seine tuna fisheries, FFA is well-placed to help implement this Program. PROP investments in FFA will incorporate a \$1.5 million GEF grant from the global Areas Beyond National Jurisdiction (ABNJ) Program, aimed towards a common set of objectives. The activities financed by this grant are included in the description below, to highlight their complementarity.

### **II. Project Development Objective**

5. The **project development objective** is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend. This will provide the basis for sustainable and increased economic benefits to the region from this resource.

6. *PDO Level Results Indicators* (see Annex 1 for more details). The key results that the project aims to achieve are:

- *Indicator for strengthened management of oceanic fisheries*: the number of days fished for tuna in the waters of FSM, RMI, Solomon Islands and Tuvalu does not exceed their agreed annual allocation of purse seine fishing vessel days (PAE), while the total regional allocation (TAE) remains within sustainable levels; and

- *Indicator for strengthened management of critical natural habitats to the fisheries: the number of large marine protected or marine managed areas conserving habitat critical to support Pacific fisheries, for which sustainable revenue streams are identified.*

### **III. Project Description**

4. The Forum Fisheries Agency (FFA), representing its member countries participating in the PROP, including the countries participating in Phase I, will implement the following activities of the PROP, via a regional IDA grant and a GEF grant in parallel.

#### ***Component 1: Sustainable Management of Oceanic Fisheries (\$1.27 m IDA)***

5. The objective of this component would be to help participating Pacific Island countries strengthen the management of the region's purse seine and long-line tuna fisheries. Towards this objective, this component includes regional activities to: (i) strengthen the capacity of national and regional institutions to sustainably manage Pacific Island tuna fisheries; and (ii) ensure an equitable distribution within Pacific Island countries of the benefits of sustainably managed tuna fisheries.

#### **1.1 Strengthen the capacity of national and regional institutions to sustainably manage Pacific Island tuna fisheries (\$1.17 m IDA)**

6. These activities would support strengthening the vessel day scheme (VDS) for the purse seine fishery and extending a similar management system to the long-line fisheries, in order to sustainably increase the benefits to participating countries from access to these fisheries. More specifically, this sub-component would finance the following activities at the regional level:

- *Technical assistance to PNAO to support implementation of the recommendations of a regional review of the VDS & PNAO (funded by the GEF ABNJ Program).* This activity provides technical assistance to PNAO (as a beneficiary) to support the implementation of the recommendations agreed by its members to take actions that will strengthen the VDS in the purse seine fishery and / or across related long-line fisheries during the 2014 regional review of the policy framework of the VDS and the accompanying governance and organizational structure to of the PNAO to administer it. More specifically, as needed by the PNAO this activity would provide technical assistance for: (i) PNAO governance reforms, (ii) legal reforms and instruments (including templates); (iii) economic analyses; and (iv) a secondee or dedicated advisor.
- *Coordinated technical assistance to countries to strengthen the VDS for the purse seine fishery and expanding similarly zone-based management systems to the long-line fisheries (US\$0.4 m IDA, as well as funding from GEF ABNJ Program).* This activity would support technical assistance provided by FFA, in coordination with the PNAO, to participating countries for implementation of the PROP. Such assistance is expected to include: (i) conducting a rolling regional review of the functions and services required to manage tuna fisheries and identify opportunities for regional, sub-regional and national level location and provision

of fisheries management services (e.g. management, science, monitoring and surveillance and enforcement hubs, etc); (ii) support to countries for policy reforms and stakeholder consultations; (iii) legal advice to countries (e.g. regulatory frameworks to enforce the VDS); (iv) general implementation support for the results of the functional reviews; (v) development of a model to incorporate financial flows (revenues and expenditures) into national information management system portals; and (vi) development and implementation of a training course on commercial and economic management of fisheries, for officials from both Finance Ministries and fisheries agencies. In addition, this activity will include financing an independent third-party verification of participating countries' progress towards the annual disbursement-linked indicators for strengthening the VDS.

- *Technical assistance to identify surveillance and enforcement tasks and needs for countries to collaborate to ensure compliance with the VDS, and a network of compliance experts to support countries' in this effort (US\$0.77 m IDA).* This activity would build upon the current regional fisheries monitoring, control and surveillance (MCS) strategy and effort at FFA in order to support:(i) updating regional and national fisheries compliance risk assessments; (ii) development of a regional standard operating procedures (SOPs) manual for fisheries compliance officers, and training in its use; (iii) conducting a training course for fisheries monitoring, control and surveillance (MCS) officers of all member countries; and (iv) training for VDS officers.

## **1.2 Ensure an equitable distribution within Pacific Island countries of the benefits of sustainably managed tuna fisheries (\$0.1 m IDA)**

7. These activities would support Pacific Island countries to make informed decisions and investments to ensure an inclusive distribution of the benefits from sustainably managed tuna fisheries. This would include collaboration with IFC to leverage access values to a healthy resource, into local investments up the value chain where feasible, that can increase employment. Similarly, this would include piloting local VDS funds to channel access revenues directly to fishing communities.

- *Regional technical advisory services for the establishment of hubs throughout the Western Pacific for services and value addition (US\$0.1 m IDA).* This activity would support technical advisory services to identify the competitive advantage of participating countries to establish regional hubs for various services and value addition along the chain (e.g. fish quality assurance, processing, distribution and providing services), linked to reforms for strengthening the VDS. Additionally, this activity would include ongoing support to participating countries to develop the various opportunities identified, and to secure the necessary finance and private partners in order to implement them.
- *Pilot Community VDS funds (funded by the GEF ABNJ Program).* This activity would support FFA to provide technical assistance to conduct participatory scenario analyses to design pilot community VDS funds whose objectives would

be secure a share of tuna access revenues for fishing communities in participating countries, by purchasing vessel days. This would include establishment and capitalization of pilot community VDS funds based on the results of the scenario analyses. This effort would begin in Tuvalu as a first case study, with the possibility to establish a community VDS fund for each of the 8 islands, based on a dedicated commitment of vessel days each year from the country's allocation.

***Component 2: Sustainable Management of Coastal Fisheries (US\$0.5 million GEF)***

8. The objective of this component is to support participating countries to sustainably manage defined coastal fisheries, focusing on those with the greatest potential for increased benefits, i.e. coastal fisheries such as *bêche-de-mer* (BDM) that (i) can generate export earnings for the country, and/or (ii) support livelihoods, food security and dietary health. Towards this objective, this component includes activities to: (i) empower stakeholders to sustainably manage targeted coastal fisheries in participating countries, working at the smallest scale feasible in order to generate a response from the fish stocks (e.g. in some cases this might work at the single or multi-community scale around defined reef fisheries); and (ii) link sustainable coastal fish products to regional markets.

**2.1 Linking Sustainable Coastal Fish Products to Regional Markets**

9. This component will provide support to the Secretariat of the Pacific Community (SPC) (as a beneficiary), and will provide ongoing technical support to countries with BDM and coastal fisheries management (e.g. a 'BDM task force'), including support to assess potential biological, economic and fiscal management tools for BDM and other export-oriented coastal fishery products, which could be applied at the national level as part of an integrated suite of management arrangements that involve both CBM and MCS. This would also include periodically updated assessments of BDM production, price and market trends and other industry monitoring and intelligence; and development of fishery monitoring tools that can be deployed at national level to enable performance assessment of fishery management and development activities, and training of national staff from participating countries in their use. These tools may possibly be based in part on the fishery monitoring 'dashboards' already developed by the Bank for other countries/ regions.

10. These activities will include:

- *In parallel with national efforts to restore BDM fisheries, mediate the formation of a regional or sub-regional BDM fishery grouping to advance the economic interests of participating PI countries.* Regional technical assistance and convening will be provided to harmonize economic and other management arrangements, developing minimum terms and conditions of resource access, establishing a regional register of responsible/ compliant BDM industry participants, maximizing the leverage available through collective bargaining and action, and promoting exchange of technical information in support of national-level management initiatives. The proposed arrangement would mainly be of interest to the main BDM-producing Pacific Island countries (those of Melanesia) but, as with PNA, countries with lower levels of production would also benefit from the bargaining power generated by the larger producers. The proposed BDM

arrangement will almost certainly be built on an existing regional or sub-regional grouping of countries, and may ultimately be extended to cover other coastal fishery resources, particularly trochus, another high-value export product.

- *Ongoing technical support to countries with BDM and coastal fisheries management (e.g. a 'BDM task force')*, including support to assess potential biological, economic and fiscal management tools for BDM and other export-oriented coastal fishery products, which could be applied at the national level as part of an integrated suite of management arrangements that involve both CBM and MCS. This would also include periodically updated assessments of BDM production, price and market trends and other industry monitoring and intelligence; and development of fishery monitoring tools that can be deployed at national level to enable performance assessment of fishery management and development activities, and training of national staff from participating countries in their use. These tools may possibly be based in part on the fishery monitoring 'dashboards' already developed by the Bank for other countries/ regions.

***Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats (\$1.0 m IDA, \$1.69 m GEF)***

11. The objective of this component would be to help identify revenue streams to sustainably finance the conservation of critical habitats that underpin oceanic and coastal fisheries in the region. Towards this objective, the component would include both regional and national activities that establish: (i) Pacific Marine Conservation Development Financing Mechanisms to support fishery habitat conservation, including (among other things) the establishment of large scale oceanic marine protected areas (MPAs), remediation/mitigation projects, integrated ocean management and mechanisms for cost and benefit sharing; and (ii) a pilot Pacific Blue Carbon regional program for small to medium scale fishery habitats. This component will provide support to the Office of the Pacific Oceanscape Commissioner within the Pacific Islands Forum Secretariat (as a beneficiary), with technical guidance from the Marine Sector Working Group and CROP agencies.

**3.1 Establish financing mechanisms to support large marine protected areas (\$1.69 m GEF)**

12. This sub-component will help enhance the productivity of Pacific oceanic and coastal fisheries by providing the upstream technical assistance needed to establish sustainable financing mechanisms for conservation of the natural habitats upon which they depend. Increasingly one of the most common and significant fishery habitat conservation measures in the region is the introduction of large-scale MPAs. Support will include assistance to determine the costs and benefits of existing and proposed MPAs, and the identification of options for host States and their coastal communities to mitigate any conservation costs through the development of ecosystem service markets and trading of costs and benefits with adjacent coastal States and distant water fishing States. More specifically, the PROP would support the development of Pacific fishery habitat conservation financing mechanisms that would provide PICs, coastal communities, and conservation projects with market-based options to avoid, minimize or mitigate any loss in revenue caused by the implementation of fishery habitat conservation projects (such as the establishment of MPAs), provided that such projects are designed and managed to deliver both ecological and sustainable net economic benefits to the countries.

Financing mechanisms would build on global precedents such as the Brazilian Biodiversity Fund (Funbio), and fill a gap in Pacific fisheries habitat conservation that would enable countries and communities to seek funding from existing financing mechanisms such as tourism green fees, and alternative embryonic financing mechanisms such as blue carbon, biodiversity offsets, and conservation trading opportunities. Activities to develop and establish such mechanisms would include:

- *Assessment of existing and potential new regional sites for large scale marine protected areas (\$0.3 m GEF)*. An analysis of both the scope and distribution of the ecological and economic costs and benefits to the Pacific islands region from its large oceanic ecosystems, and identification of existing and potential new marine protected areas that could further build the Framework for a Pacific Oceanscape. The analysis would consider short and long term impacts and focus on the shared interests of the Pacific Islands region (i.e development, food security, sustainability). Assessment of MPA sites will take into account the GEF criteria for defining globally significant sites for biodiversity conservation, specifies in the GEF6 Programming Directions. The assessment would establish clear standards for measuring costs and benefits of large scale marine protected areas (MPAs) and clear criteria for financing assistance with their establishment and/or operation, and engage with regional leaders, regional fisheries management organizations, and global institutions to support and recognize these criteria. These criteria will then provide important reference points for the financing activities of Pacific marine conservation development financing mechanisms. PIFSec's Oceanscape Unit would carry out this review with the Marine Sector Working Group, including database analysis with SPC and the Government of Australia.
- *Technical assistance for the establishment of Pacific Marine Conservation Development Financing Mechanisms (\$1.0 m GEF)*. This will include the technical assistance necessary to establish Pacific marine conservation development financing mechanisms, including design, establishment and administration, governance, etc. This would include development of the principles, rationale and criteria, and the identification of funding opportunities. Technical assistance will identify opportunities to engage commercial and non-profit NGO partners in the development of the financing mechanisms. A consultation workshop with MSWG participants and potential commercial and non-profit partners would be held to review and develop an agreed draft for review and subsequent endorsement by Forum leaders.
- *Technical assistance, training and exchange of lessons learned to individual Pacific Island countries hosting large MPAs (\$0.39 m GEF)*. This activity will provide technical assistance, legal and regulatory support, and fund institutional strengthening activities that enable host States to establish and manage large scale marine protected areas and participate in the Pacific marine conservation development financing mechanisms. This activity would also provide national governments with communication materials, technical assistance and iconic

speakers to broaden government and stakeholder understanding of sustainability limitations, ecosystem services, and conservation benefits.

### **3.2 Design a pilot Pacific Blue Carbon Regional Program for the conservation of small to medium scale marine habitats (\$1.0 m IDA)**

13. In complement to support for rebuilding or strengthening coastal fisheries (see component two), this sub-component would will provide technical assistance to help design a Pacific Blue Carbon Regional Program that would create conservation incentives for coastal communities to conserve mangrove habitats, seagrasses and coastal wetlands that support fisheries. This sub-component will assess opportunities to pair up with established, standards-based mechanisms like the terrestrial framework to pay for carbon stored as a result of avoided deforestation (REDD+), identify opportunities in the voluntary carbon market, and build a long term Pacific Blue Carbon Regional Program to ultimately develop regulatory compliance markets. Following the design of the Pacific Blue Carbon Regional Program, the activity will help identify at least 3 pilot trial communities in participating countries for blue carbon, where clear tenure and stakeholder benefits are ensured in order to avoid implementation and enforcement issues that are associated with top-down regulation, uncertainty over tenure, and lack of engagement by stakeholders. Technical assistance will then be available to these communities to support these blue carbon projects to become viable. Analysis would build on lessons learnt from existing blue carbon projects. More specifically, these activities would include:

- *Assessment of opportunities to pair up with established, standards-based mechanisms to pay for carbon stored (REDD+), identification of opportunities in the voluntary carbon market and development of a Pacific Blue Carbon Regional Program (\$.15 m IDA).* The assessment and strategy will support Pacific engagement in blue carbon trading and biodiversity offsets and ultimately develop local-regional markets for Blue Carbon. PIFSec's Oceanscape Unit would coordinate this review with the Marine Sector Working Group, engaging CROP agencies and retaining consultants as necessary.
- *Development of criteria and identification of at least 3 potential pilot trial communities and projects for Blue Carbon funding (\$.15 m IDA).* This activity will develop and confirm criteria for Pacific communities and marine conservation projects and identify potential pilot trial communities in participating countries for blue carbon, where clear tenure and stakeholder benefits are ensured in order to avoid implementation and enforcement issues that are associated with top-down regulation, uncertainty over tenure, and lack of engagement by stakeholders. PIFSec's Oceanscape Unit will coordinate this activity, consulting with the Marine Sector Working Group to confirm criteria and initially identify potential pilot communities and projects, engaging CROP agencies and retaining consultants as necessary.
- *Baseline research and development of marine conservation strategies and funding proposals for pilot trial sites (\$.7 m IDA).* With pilots identified, significant amounts of baseline scientific research on carbon sequestration capacities and habitat mapping will be conducted as a pre-requisite for any blue carbon projects

to become viable. This sub-component will include the technical assistance, scientific and survey expertise, and legal and regulatory support in order to enable participating communities, partners and governments for pilot trials to assess their blue carbon potential, limitations and opportunities and participate in blue carbon markets. Analysis would assess costs and benefits and potential blue carbon values, and work with communities to identify key stakeholders, decision making frameworks and management requirements. In some cases, additional technical assistance may be needed for participating countries to strengthen and expand their policy, legislative and regulatory frameworks for habitat conservation, tenure, and participation in blue carbon markets.

***Component 4: Regional Coordination, Implementation Support and Program Management (\$1.7 m IDA)***

14. The objective of this component is to provide regional coordination, implementation support and program management, to ensure a coherent approach to program implementation and wide dissemination of results and lessons learned; as well as regional and national implementation support and training as needed for the program to achieve its objectives. As part of this component, FFA will implement the following activities:

- *Program Support Unit located within FFA (US\$1.4 m IDA).* This unit will work with participating countries for financial management and procurement. This unit will also support monitoring and evaluation by working closely with the participating countries to collect, compile, analyze and disseminate the results of the PROP as measured by the key results indicators. The PSU will conduct frequent implementation support missions to each of the countries.
- *Global outreach and knowledge sharing by FFA (funded by the GEF ABNJ Program).* This would provide funding for FFA to exchange lessons learned and share results on behalf of the countries with other highly migratory fisheries around the world.
- *Oceanscape unit located within the Pacific Island Forum Secretariat (US\$0.3 m IDA).* This unit would be responsible for program monitoring and evaluation, and coordination with other country, regional and development partner initiatives in support of the Framework for a Pacific Oceanscape. This support would be provided in collaboration with the Government of Australia, and would include financing for a full-time staff person in the Secretariat's Oceanscape Unit, as well as support for convening meetings and learning exchanges around implementation. The PROP and other initiatives in support of the Framework would form a regional learning portfolio which could have a demonstration effect throughout the islands in regard to shared challenges and opportunities. This could also include support for a sub-committee of Finance Ministers from the region to monitor implementation progress of the PROP, and report annually to Forum leaders.

#### IV. Implementation

15. See Program Implementation Arrangements in Annex 8.

16. FFA eligibility for regional IDA grant is based on the following:

- *The recipient is a bona fide regional organization that has the legal status and fiduciary capacity to receive grant funding and the legal authority to carry out the activities financed.* The FFA was established in 1979 under the umbrella of the Pacific Islands Forum, to strengthen national capacity and regional solidarity as means of assisting its 17 members to manage, control and develop their fisheries.
- *The recipient does not meet eligibility requirements to take on an IDA credit.* As a regional organization FFA is not eligible to take on IDA credit. In addition, under its articles of association the FFA is not empowered to borrow from IDA.
- *The costs and benefits of the activity to be financed with an IDA grant are not easily allocated to national programs.* The grant supports activities that capture economies of scale at the regional level across multiple small island states, with spillover effects.
- *The activities to be financed with an IDA grant are related to regional infrastructure development, institutional cooperation for economic integration, and coordinated interventions to provide regional public goods.* The grant is concerned with promoting greater institutional cooperation for improved sustainable economic returns from shared fisheries, which are a regional public good.
- *Grant co-financing for the activity is not readily available from other development partners.* FFA receives funding support from a wide range of bilateral and multilateral development partners to complement the financial contributions of its member countries. However the level of demand for services has outstripped the capacity of the agency to respond, especially in recent years as the management environment in the region has become more complex and FFA member countries struggle to cope with this.
- *The regional entity is associated with an IDA-funded regional operation or otherwise supports the strategic objectives of IDA on regional integration.* FFA is implementing the regional activities of the PROP, an IDA-funded regional operation.

17. Table 1 below provides an overview of specific activities and budget for implementation by FFA:

*Table 1. Overview of Activities, budget and procurement categories for FFA*

		Procurement	Budget (US\$)	Source of Financing
<b>Component 1: Sustainable Management of Oceanic Fisheries</b>				
1.1 Strengthen the capacity of national and regional institutions to sustainably	Technical assistance to PNAO to support implementation of the recommendations of a regional review of the VDS & PNAO for: (i) PNAO governance reforms, (ii) legal reforms and instruments (including templates);	Consultants on demand (individual, firms)	250,000	GEF ABNJ Program

manage Pacific Island tuna fisheries	(iii) economic analyses; and (iv) a secondee or dedicated advisor.			
	Coordinated technical assistance to countries to strengthen the VDS for the purse seine fishery and expanding this system to the long-line fisheries (i) conducting a rolling regional review of the functions and services required to manage tuna fisheries and identify opportunities for regional, sub-regional and national level location and provision of fisheries management services (e.g. management, science, monitoring and surveillance and enforcement hubs, etc); (ii) support to countries for policy reforms and stakeholder consultations; (iii) legal advice to countries; (iv) general implementation support for the results of the functional reviews; (v) development of a model to incorporate financial flows (revenues and expenditures) into national information management system portals; and (vi) development and implementation of a training course on commercial and economic management of fisheries, for officials from both Finance Ministries and fisheries agencies	(i) Consultant (firm)  (ii) Operating costs for FFA staff  (iii) Operating costs for FFA staff  (iv) Consultants on demand (individual)  (v) Consultant (individual)  (vi) Consultant (individual); Operating costs	1,350,000  includes:  (i) 100,000  (ii) 150,000 (50,000 per year, first 3 years)  (iii) 250,000 (50,000 per year for 1 <sup>st</sup> 5 years)  (iv) 670,000  (v) 30,000  (vi) 150,000	GEF ABNJ Program  GEF ABNJ Program  GEF ABNJ Program 150,000 1 <sup>st</sup> 3 years; IDA 100,000 after year 3  GEF ABNJ Program 370,000 for 1 <sup>st</sup> 3 years; IDA 300,000 for next 3 years  GEF ABNJ Program  GEF ABNJ Program
	Technical assistance to identify surveillance and enforcement tasks and needs for countries to collaborate to ensure compliance with the VDS, and a network of compliance experts to support countries' in this effort: <ul style="list-style-type: none"> <li>• updating regional and national fisheries compliance risk assessments;</li> <li>• development of a regional standard operating procedures (SOPs) manual for fisheries compliance officers, and training in its use;</li> <li>• conducting a training course for fisheries monitoring, control and surveillance (MCS) officers of all member countries; and</li> <li>• training for VDS officers.</li> </ul>	(i) Consultant (firm)  (ii) Consultant (individual)  (iii) Operating costs for FFA staff  (iv) Operating costs for FFA staff	770,000  includes:  (i) 150,000  (ii) 20,000  (iii) 500,000 (100,000 per year for 5 years)  (iv) 100,000	IDA
1.2 Ensure an equitable distribution within Pacific Island countries of the	Technical assistance to develop a policy, regulatory framework and cost-recovery model for establishment of a regional competent authority for Pacific fish products	Consultant (individual)	100,000	IDA

benefits of sustainably managed tuna fisheries	Technical assistance to develop options for establishment of community VDS funds, beginning in Tuvalu	Consultant (individual)	100,000	GEF ABNJ Program
<b>Component 2: Sustainable Management of Coastal Fisheries</b>				
2.1 Linking Sustainable Coastal Fish Products to Regional Markets	Technical assistance to support the formation of a regional or sub-regional BDM fishery grouping, and provide ongoing technical support to countries with BDM and coastal fisheries management (e.g. a 'BDM task force')	Consultant (firm)	500,000	GEF co-financing
<b>Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats</b>				
3.1 Establish financing mechanisms to support large marine protected areas	Assessment of existing and potential new regional sites for large scale marine protected areas	Technical Assistance	300,000	GEF co-financing
	Technical assistance for the establishment of Pacific Marine Conservation Development Financing Mechanisms	Operating costs	1,000,000	
	Technical assistance, training and exchange of lessons learned to individual Pacific Island countries hosting large MPAs		390,000	
3.2 Design a pilot Pacific Blue Carbon Regional Program for the conservation of small to medium scale marine habitats	Technical assistance to design a Pacific Blue Carbon Regional Program.		150,000	IDA
	Criteria and identification of blue carbon pilot projects.		150,000	IDA
	Baseline research and development of marine conservation strategies and technical support.		700,000	IDA
<b>Component 4: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation</b>				
PROP Program Support Unit in FFA		Consultants (Individual); operating costs	1,400,000 (230,000 per year)	IDA
Global outreach and knowledge sharing by FFA		Operating costs for FFA staff	200,000	GEF ABNJ Program
Oceanscape unit located within the Pacific Island Forum Secretariat		Sub-grant to PIFSec	300,000	IDA
<b>TOTAL IDA (US\$)</b>			3,970,000	
<b>TOTAL GEF (US\$)</b>			2,190,000	

## V. Key Risks and Mitigation Measures

18. See Overall Risk Rating and Explanation of Key Risks on page 13 for more details.

## VI. Appraisal Summary

19. See Program Appraisal Summary on page 15.

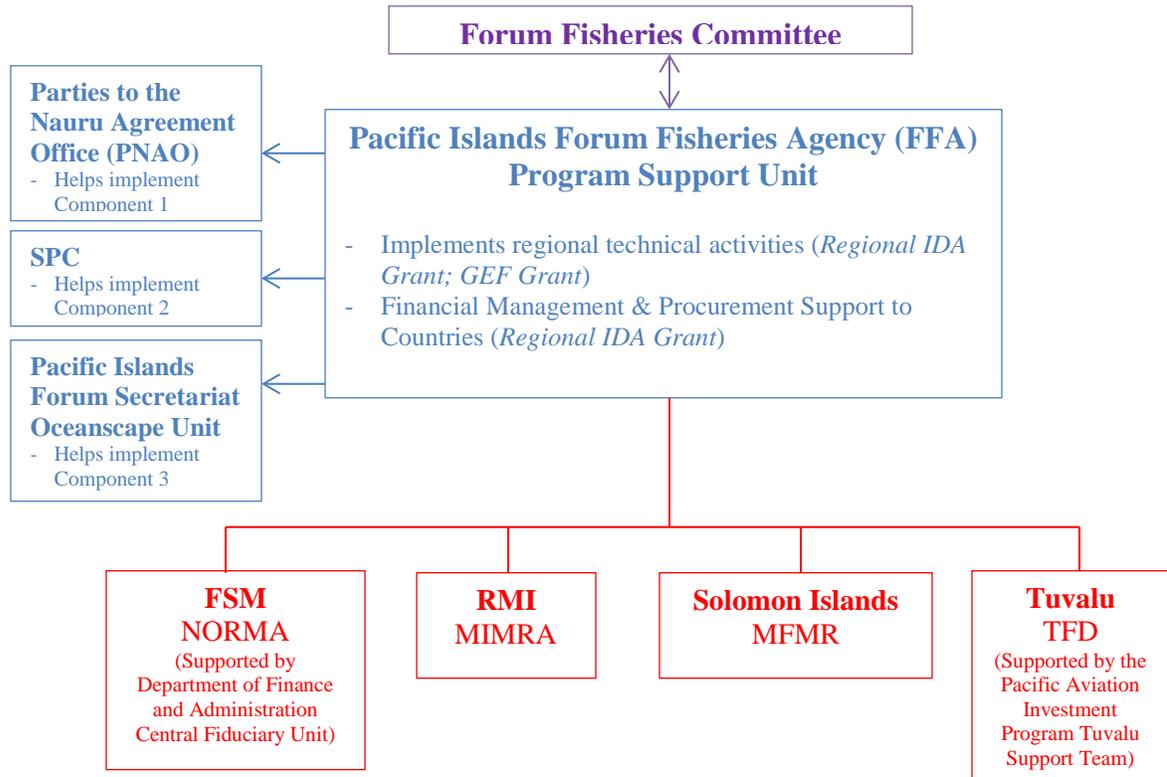
## Annex 8: Implementation Arrangements

1. **Program institutional and implementation arrangements.** Table 1 shows the Program Implementation Organizations and their roles. All projects in the series are expected to be implemented using the same arrangements. Figure 1 shows the implementation arrangements for the first four countries participating in the PROP.

**Table 1: Program Implementation Organizations and their Roles**

Organization	Management Roles and Responsibilities
<b>REGIONAL COORDINATION AND IMPLEMENTATION</b>	
Forum Fisheries Committee (FFC)	<ol style="list-style-type: none"> <li>1. Oversees and monitors overall Program implementation</li> <li>2. Advises the PSU of any issues or concerns affecting project implementation and proposes remedial actions</li> <li>3. Helps to resolve any disputes that may arise in the Program</li> </ol>
Program Support Unit (PSU)	<ol style="list-style-type: none"> <li>1. Carries out regional technical activities financed from regional IDA grant</li> <li>2. Works with IAs in day-to-day implementation as needed, carrying out frequent trips to each participating country, e.g. quarterly</li> <li>3. Responsible for all international procurement advertising, bid document preparation and procurement processing, on behalf of participating countries, and assist in the preparation of documentation for national procurement, to be included in the Financing Agreements and detailed in the Program Operations Manual</li> <li>4. Assists in the implementation of accounting procedures in the payment process as needed in each participating country</li> <li>5. Consolidates reports from individual countries for Program reporting</li> </ol>
<b>COUNTRY-LEVEL IMPLEMENTATION</b>	
Ministries/Secretaries of Finance	<ol style="list-style-type: none"> <li>1. Sign Grant/Credit Agreements</li> </ol>
Implementing Agencies (IAs)	<ol style="list-style-type: none"> <li>1. Responsible for the implementation of the project in respective countries, and monitors progress</li> <li>2. Participate in regional procurement committees</li> <li>3. Process procurement under national competitive bidding or shopping, with documentation and guidance provided by FFA</li> <li>4. Obtain necessary Government clearances for contract awards</li> <li>5. Sign and manage contracts for all activities in respective country, including payments, working with PSU as needed</li> <li>6. Responsible for environmental and social safeguards compliance</li> <li>7. Monitors progress of project activities</li> <li>8. Provide periodic reports as well as project Monitoring and Evaluation data</li> <li>9. Manage the DA for the country</li> </ol>
IDA	<ol style="list-style-type: none"> <li>1. Responsible for supporting the participating countries and FFA to achieve the program development objective</li> <li>2. Responsible for administering IDA funds and ensuring compliance with World Bank procurement and financial management safeguards</li> <li>3. Responsible for supervision of environmental and social safeguards</li> </ol>

**Figure 1: Implementation Arrangements**



■ Regional Monitoring ■ Regional Implementation/Support ■ National Implementation

## Regional Implementation

**2. Regional Coordination and Implementation Arrangements:** The Program will be monitored by the FFC, comprised of one representative of each of the Forum members. It meets on an annual basis, and will review and Program implementation progress as summarized and presented by FFA. A Program Support Unit will be established by month four after effectiveness at FFA, to implement a number of project activities towards the program development objective (financed by the regional IDA grant and a parallel GEF grant), as well as work with each participating country as needed on financial management and procurement. FFA will be assigned the responsibility for PROP procurement activities, as defined in the Financing Agreements with each country IA, and will provide such services through its PSU. FFA will not be eligible to claim any fee relating to these services. More specifically, the PSU will undertake any international procurement activities needed by participating countries on their behalf, prepare all documentation required for procurement processing at national level, as well as collaborate on day-to-day implementation and financial reporting as needed. Fiduciary staff contracted to the PSU for providing these services will be paid from the grant allocated to FFA, under component 4. The Grant/Credit Agreement will outline the roles and responsibilities of the PSU for each participating country. PROP regional activities implemented by FFA will be incorporated into

the organization's processes for annual planning, budgeting and reporting, including the Annual Work Plans, Budgets and Annual Reports provided to and approved by the FFC each year.

**3. Program Support Unit (PSU) at FFA.** The PSU will consist of the following full-time staff/consultants: (i) PROP Regional Coordinator who will coordinate the Program between the participating countries, helping manage resources and timing of the Program, and also implement the regional technical activities financed by the regional IDA grant and parallel GEF grant; (ii) Financial Manager who will be responsible for working with national implementing agencies on financial management as needed, as well as the financial transactions of regional technical activities implemented by the PSU; (iii) Procurement specialist who will be responsible for managing regional procurement and working with national implementing agencies on procurement at the national level, as needed, including preparation and updating of procurement plans; and (iv) Administrative Assistant to support the administration/coordination of the Program. These four positions are new positions that will be competitively hired as consultants financed by the Program, and/or are full-time FFA staff who will be designated to the PSU. The costs of the PSU will be financed by the regional IDA grant to FFA (see Annex 7).

### **National Implementation**

**4. National Implementation Arrangements.** Each of the projects will be implemented at the national level by the ministry, department or agency responsible for fisheries in each country, as designated implementing agencies (IAs). Each IA will recruit a project coordinator, who will be responsible for providing summaries of implementation progress and results from M&E to the PSU, to support program-wide monitoring of results. The IA will implement national-level activities, including financial management for these activities, utilizing funds from a national designated account. All documentation required for national level procurement will be prepared by the FFA PSU. The IAs in the first four countries to participate in the PROP area as follows: (i) FSM: National Oceanic Resource Management Authority (NORMA); (ii) RMI: Marshall Islands Marine Resources Authority (MIMRA); (iii) Solomon Islands: Ministry of Fisheries and Marine Resources (MFMR); and (iv) Tuvalu: Tuvalu Fisheries Department (TFD). Each IA will recruit a national PROP Coordinator responsible for overseeing implementation, monitoring progress towards intended results according to the indicators (see Annex 1), providing technical inputs for procurement processing/documentation as required to the FFA PSU, and ensuring environmental and social safeguards compliance. In addition, a financial management specialist and a national procurement officer, if required, will be designated/recruited for each IA within the first quarter after effectiveness.

**5. FSM.** In FSM, PROP activities focus on the oceanic fisheries, and so will be implemented by NORMA as the responsible public agency. Future activities on the coastal fisheries would be implemented with the Secretary for Resources and Development, as well as the respective State Governments. For financial management, NORMA will rely upon the newly-established central fiduciary unit for Bank projects in the Department of Finance and Administration. A project coordinator will be recruited by NORMA with project financing, to serve as the full-time focal point for implementation, as well as a project accountant overseen by the Finance and Administration Division (DOFA).

6. **RMI.** In RMI, PROP activities will be implemented by MIMRA as the agency responsible for managing the country's fisheries resources. A project coordinator will be recruited by MIMRA with project financing, to serve as the full-time focal point for implementation.

7. **Solomon Islands.** In the Solomon Islands, PROP activities will be implemented by MFMR. A project coordinator will be recruited by MFMR with project financing, to serve as the full-time focal point for implementation, reporting directly to the Permanent Secretary. Annual planning for the PROP will be carried out by the coordinator as part of MFMR's annual planning process and together with the annual planning for the MSSIF, to ensure complementarity and synergy. The annual work program, budget and updated procurement plan will be coordinated with the MSSIF steering committee, to enhance collaboration. A national steering committee, comprised of representatives at the Director level or above from the Ministry of Environment, Ministry of Finance, Ministry of Justice and MFMR, chaired by the Permanent Secretary or designate from MFMR, will oversee timely implementation of the project.

8. **Tuvalu.** In Tuvalu, PROP activities will be implemented by TFD, with the Tuvalu Project Support Team of the Pacific Aviation Investment Program providing financial management and procurement. TFD will recruit a full-time project coordinator, financed by the project. Annual planning for the PROP will be carried out by the coordinator together with the annual planning for the TFSP, to ensure complementarity and synergy. The annual work program, budget and updated procurement plan will be coordinated with the TFSP steering committee, to enhance collaboration.

### **Financial Management.**

9. Overall, the proposed financial management (FM) arrangements for this operation satisfy the Bank's fiduciary (financial management) requirement as stipulated in OP/BP 10. The primary mitigating measure will be the provision of a dedicated project accountant to support for each implementing agency. The project accountants will be responsible for the day to day accounting for the respective project which would include recording of the transactions, maintaining adequate documentation, preparing interim financial reports and ensuring the audit arrangements for the project are fulfilled. A Project Operations Manual will be prepared which will include the details of the FM and Disbursement arrangements.

### **General FM Requirements**

10. This section covers the non-country/agency specific FM requirements for each implementing agency to avoid duplication. In each of the regional/country implementation arrangements section further below, the assessment covers specific aspects of financial management that are particular to that authority and which may not be managed in common with other implementing agencies.

### **Budgeting Arrangements**

11. It is recommended that the initial budget prepared by each of the 5 implementing agency project budgets is submitted to the World Bank for clearance prior to its adoption. This budget should broadly cover the life of the project but only provide detail up to the end of their second financial year and will be consistent with the Procurement Plan and the Annual Work Plan. It

would be expected all agencies would review their budget at least every 6 months. Where the implementing agency does not have experience in the preparation of budgets, the FFA and or the project accountant would assist in the preparation of the budget.

### **Accounting/Staff Arrangements**

12. All agencies responsible for the preparation of reports will require an accounting package that is able to segregate the project transactions from the entities own expenditures, either through the use of “a separate company” through the chart of accounts, or through using an additional or available fields within the accounting software. In addition pre-identified eligible operational expenditure for costs linked to agreed disbursement linked indicators will be need to be tagged to enable verification of the expenditures both by the World Bank task team and by the external auditors. Given the current diversity of accounting packages already in use, no specific accounting package will be mandated. Accounts will be maintained in the currency of the country.

### **Project Reporting**

13. Each of the five agencies will be required to submit quarterly Interim Financial Reports, (IFR) for quarters ending March, June, September and December. IFRs will be due to be received by the Bank within 45 days of the end of the reporting period. The IFRs will be in a format agreed to by the agency and the Bank and while there may be small variations in the format, to enable where practicable for reports to be generated directly from the accounting system, the information required will be substantially the same and will include reporting by component, sub component/activity and category. Reports will show income (based on disbursement) expenditure for the reporting quarter, year to date and cumulative expenditure. If there is more than one source of project financing, each source of financing should be showed separately. In addition commitments (unpaid amounts of contracts) as at the date of the report should also be included.

### **Disbursement arrangements**

14. Each of the 5 implementing agencies will broadly operate in a similar fashion, and the specific requirements are included in their respective Flow of Funds Section. For each program a separate Disbursement Letter will be required and three disbursement methods will be included. Hence the disbursement arrangements will allow the programs to use all of the following methods: (a) advances into and replenishment of Designated Account, (b) direct payment, and (c) reimbursement. Ceilings for each program will be based on expected demand on the use of the designated account and the threshold for Direct Payments and Reimbursements will be 20% of the balance of the Designated Account (DA). The DA managed by each implementing agency will have two components: (i) ceiling for non DLI funds and (ii) an advance of DLI funds.

15. Component 1.1 is designed to rely on disbursement linked indicators as the basis to disburse proceeds from the Bank. Under this component, funds will be advanced, separately and to each implementing agency, on a semi-annual basis and based on an expenditure forecast for operating expenses to be incurred by each respective agency. At the end of each six month period, DLIs will be measured and reported by each agency to the Bank, following the established protocols, for validation. IDA funds may be advanced into the DA, which should be documented subsequently by the amount not exceed the lesser of: (a) the DLI Value allocated to each DLI

achieved during the respective DLI Period; and (b) the amount of DLI Expenditures incurred but not paid by the proceeds of the Financing as of the DLI Period for which payment is requested. The undocumented advance in the DA shall be refunded to the Bank by the closing of the project.

16. For each advance requested by an implementing agency, the DLI requirement will need to have been achieved or the agency must demonstrate it has expended the equivalent of advance in operational costs. Upon verification of this the advanced funds will be considered as documented.

17. To avoid undue complications it is recommended that for any GEF funds an additional Designated Account be opened, however this can be determined at negotiations dependent on each implementing agency's capacity.

18. An initial training session for staff involved in the preparation of the Withdrawal Applications will be conducted by the World Bank's Financial Management Specialist to reduce the risk of the submission of incorrect WA applications.

**External Audit Requirements**

19. Each agency will be required to provide an annual audit of project activities although for those agencies producing separate project accounts, namely Solomon Islands and Tuvalu, the first audit will cover the period from the start of the project to the end of the first full financial year; thus the first audit could cover a period for between 12 and 24 months. Generally, Audited Financial Statements are required six months after the reporting date but as the legislative requirements in some recipient countries for the completion of the audit of the National Accounts, is nine months for consistency all audits will be required nine months after the reporting date.

20. The audit would be required (subject to appropriate sampling) to review both the direct project expenditure (input expenditure) and the pre-identified eligible expenditures incurred to meet the Disbursement Linked Indicators.

21. For those agencies where the project accounts will be fully integrated into the agency's financial statements, then a note to the accounts disclosing the minimum following information will be required in lieu of separately audited project accounts:

(a) *(name of agency)* received financial support from the Grant No. *(show the IDA number of the grant)* to support implementation of the Pacific Islands Regional Oceanscape Program.

Summary information on transactions taking place during the year is as follows:

	<b>Current year</b>	<b>Preceding year</b>	<b>Cumulative</b>
	\$	\$	\$
<b>Balance at the beginning of the year</b>	X	X	
Amounts received during the year	X	X	X
Expenditures during the year	(X)	(X)	(X)

<b>Balance at the end of the year</b>	<b>X</b>	<b>X</b>	
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*Note X. World Bank Financing*

(b) The opening and closing balances shown above are included in Cash and Cash Equivalents and represent balances outstanding on the IDA Grant Funded Designated Account No (*show the Bank Account number*) held at the (*name of Bank*) Amounts received and expenditures during the year also include any direct payment made during the period.

(c) The proceeds of the IDA Grant have been expended in accordance with the intended purposes as specified in the Grant Agreement.

The following table gives a summary of the likely audit arrangements for each of the agencies,

<b>Agency</b>	<b>Project accounts integrated</b>	<b>Financial Year</b>	<b>Auditor</b>
FFA	Yes	July to June	Private
NORMA/Dept. Finance - FSM	Yes	October - September	Private/Government
MIMRA - RMI	Yes	October - September	Private
Tuvalu Fisheries Dept.	No	January - December	Government
MFMR -	No	January - December	Private/Government

### **Supervision Arrangements**

22. As the implementing agencies have no experience with World Bank Funded projects, a brief training session will be conducted for each implementing agency to outline the World Bank's specific reporting and disbursement requirements. Ideally this will be part of each project launch. There will be a more intensive FM supervision, both through desk review and field visits during the first 12 months after effectiveness, including a field mission to each country within 3 months of the commencement of project expenditure. The initial review will also ensure there is adequate tagging of the eligible expenditures incurred to meet the Disbursement Linked Indicators. Assuming no major issues after the first year of implementation 6 monthly FM implementation reviews will be done in conjunction with ongoing reviews of other projects in the countries.

### **REGIONAL PACIFIC FISHERIES AUTHORITY**

#### **Implementing Agency - Pacific Island Forum Fisheries Agency (FFA)**

23. The FFA is an international organization established to help countries in the Pacific Islands Region to sustainably manage their fishery resources. The FFA activities are overseen by the Forum Fisheries Committee comprised of the 17 member countries. It has extensive experience working with donors.

24. The FFA will implement US\$3.97 million of funds in its own right but will if requested provide FM support on behalf of the national implementing agencies. To assist the FFA a dedicated FM person will be employed for the life of the project and located in FFA. If additional FM staff are required to be employed by FFA to assist in the fiduciary requirements of

the individual countries this would be financed on an agreed basis by the national implementing agencies.

### **Budgeting Arrangements**

25. As the FFA has extensive experience in the preparation of multiyear budgets and will also oversee procurement of activities covering all the participating countries it will also provide guidance to the other implementing agencies on the estimated costs of the larger multi country procurements.

### **Accounting/Staff Arrangements**

26. FFA finance staff are highly skilled finance staff and use Finance One version 11.7 accounting software to maintain their accounts. The system can easily segregate World Bank funds, can create a commitment system and can handle multi currencies. It would meet all reporting requirements for the project. Accounts will be maintained on an accrual basis and hence IFRs and Annual Financial Statements will be on an accrual basis. Although the Solomon Islands Government has the calendar year as their financial year the FFA reporting year is from July 1 to June 30. Project funds for FFA funded activities will be able to be separately identified in the FFA accounts but will form part of the consolidated reports for FFA.

### **Internal Controls**

27. Program procedures will be consistent with the FFA Financial Procedures Manual which covers expenditure approvals, cash management, property plant & equipment, management reporting, revenue, administered funds, retention of accounting records, financial statements and reports (including donor reporting) and authority and delegations. Based on this manual there would be adequate segregation of incompatible duties, controls over cash and assets.

28. The FM risk arising from the absence of an effective Internal Audit Division can be mitigated against by the strong controls already in place and regular FM implementation reviews to ensure compliance with the FFA controls.

### **Flow of Funds and Disbursement**

29. A segregated DA in US dollars will be opened at a commercial bank acceptable to the World Bank and will be managed by FFA. The ceiling of the DA will be established in the Disbursement Letter.

### **External Audit**

30. The audit of the FFA component of the project will be audited as part of the overall entity audit and hence will be audited by the FFA's auditor. This audit firm will need to be acceptable to the Bank and if has not conducted previous audits will be subject to the Banks due diligence process for auditors new to auditing Bank Financed Programs.

## **FEDERATED STATES OF MICRONESIA**

### **Implementing Agencies/Arrangements**

31. The National Oceanic Resource Management Authority (NORMA) is the regulating body for the fishing industry and the exclusive economic zone in the FSM. While the Authority has

limited administrative independence, its finances are managed by the Department of Finance and Administration Division of National Treasury consistent with other line government departments. Hence it is fully funded by the National Government. While NORMA will be the implementation agency, the higher level accounting work would be done by the Finance and Administration Division subject to approval from Congress. The Federated States of Micronesia will receive equivalent of US\$5.5 million.

### **Budgeting Arrangements**

32. A stand-alone budget will be required for this part of the project. While there will be input from NORMA, the main responsibility for the preparation of the budget will be with the Finance and Administration Division. The specific work may be completed by the project Accountant who will be employed to carry out the FM requirements of the project. It is required that all foreign-assisted projects of US\$50,000 or more must go through Congress, however foreign funds can be reviewed by congress for approval by resolution if not included in the appropriation bill.

### **Accounting/Staff Arrangements**

33. NORMA's role will be limited to preparation of the documentation however the final checking of available funds, approval and recording of transactions will be done by the Finance and Administration Division (DOFA). It is recommended a copy of the documentation is kept with NORMA and that they receive a monthly printout of project transactions to reconcile against their own records. This will provide an additional layer of control. To help facilitate this and develop the accounting skills in NORMA it is suggested project funds are used to purchase a simple accounting package to enable NORMA to more accurately maintain their own set of project records.

34. The project accounts will be maintained on the government of FSM accounting system, Fund Ware. Fund Ware has an extensive chart of accounts enabling classification by funding source, and by program number. It also has the capacity to record commitments. The financial year is from October to September. It will also be necessary to tag expenditure incurred in meeting the Disbursed Linked Indicators (DLIs) to ensure the total expenditure is equal or greater than the amount of the DLI.

35. To ensure there is not undue demands placed on current staff in NORMA and DOFA it is recommended that a project funds are used to employ a Project Accountant who will be responsible for the day to day project FM requirements. This position would be overseen by DOFA.

### **Internal Controls**

36. The Financial Management Regulations dictate the internal controls framework of the FSM government which is sufficiently comprehensive to provide adequate segregation of duties, controls over assets and approval and authorization controls. NORMA will be required to comply with the government internal control framework.

### **Funds Flow and Disbursement**

37. A Designated Account in US dollars will be opened at a commercial bank acceptable to the World Bank and will be managed by DOFA. The ceiling of the DA will be established in the Disbursement Letter.

### **External Audit**

38. The project accounts will be incorporated into the government accounts and will be audited as part of the government accounts and will disclose project revenue and expenses. The Public Auditor has stated the external auditor could not provide assurance the funds were expended for the intended purpose as required under the legal agreement.

39. The government accounts are audited by a private contract audit firm, however donor funds other than for US funds are not tested on compliance to respective legal agreements between the donors and the Government of FSM. In order to ensure that the proceeds of the IDA Grant have been expended in accordance with the intended purposes as specified in the Grant Agreement, additional compliance audits every two years will be required conducted through the Office of the National Public Auditor.

40. The first compliance audit will be required to cover the period from the start of project to September 30 2016 then subsequent audits shall cover the period of two fiscal years.

## **REPUBLIC OF THE MARSHALL ISLANDS**

### **Implementing Agencies/Arrangements**

41. Marshall Islands Marine Resources Authority (MIMRA) is the regulating body for the fishing industry in the Marshall Islands. MIMRA is Non-Commercial Statutory Authority and maintains its own financial records separate from the government. The Marshall Islands will receive equivalent of US\$6.75 million.

### **Budgeting Arrangements**

42. MIMRA has budget experience through the preparation of their annual budget which is approved by MIMRA Board then required to be presented to Cabinet during budget hearings in Aug-Sep. The funds contributed by MIMRA to the Government's budget are incorporated into the Government of Marshall Island funds, though MIMRA's actual operating budget is not. MIMRA will be responsible for preparation and monitoring of the budget.

### **Accounting/Staff Arrangements**

43. MIMRA has 3 accounting staff, a chief accountant, an accounts payable person and accounts receivable person. MIMRA uses Quick books and its accounts are maintained on an accrual basis. While some minor modifications may need to be made to the chart of accounts, QuickBooks is able to segregate transactions by class and the current arrangements meet all the accounting and reporting requirements for the project. Given the small number of finance staff at MIMRA it is recommended that a project funds are used to employ a project accountant responsible for the day to day project FM requirements. This position would be overseen by the chief accountant.

### **Internal Controls**

44. MIMRA has an Employee Policy Handbook which outlines the broad expectations of staff and includes a section on conflict of interest. Controls within the payment cycle are adequate and there is segregation of duties of incompatible activities. Expenditure is managed through different levels of authorization depending on the amount.

#### **Funds Flow**

45. Project funds will be held in a designated account with a commercial Bank, (Bank of Guam) although larger expenditures may be through direct payment. It is recommended that funds are held with MIMRA, which would require a subsidiary agreement to be signed between the government of the Republic of the Marshall Islands and MIMRA.

#### **External Audit**

46. MIMRA is audited by a private auditing firm, Deloitte Touche, and as this firm has not previously conducted audits of Bank financed projects, it will be subject to the Banks due diligence process for auditors new to auditing Bank Financed Programs, which may include the one off satisfactory completion of a questionnaire.

### **SOLOMON ISLANDS**

#### **Implementing Agencies/Arrangements**

47. Ministry of Fisheries and Marine Resources (MFMR) is responsible for management and development of fisheries in the Solomon Islands and they are also responsible for the issuing of fishing licenses. MFMR is a government ministry and hence subject to the Public Finance and Management Act and the accompanying Financial Instructions. Due to staff limitations within MFMR the financial management aspects of this project would be completed by a Finance Accountant employed by the project. The Solomon Islands will receive equivalent of US\$7.75 million.

#### **Budgeting Arrangements**

48. A standalone budget will be required for this part of the project. The budget will be prepared by MFMR staff with assistance from FFA and the Project Accountant.

#### **Accounting/Staff Arrangements**

49. MFMR staff have limited experience in project accounting as Ministry requirements are limited to the preparation of documentation and monitoring the budget. Given the small number of finance staff the work load required to maintain the project FM requirements could not be satisfactorily distributed between the current staff, so it is recommended that a Project Accountant is employed for the life of the project. To ensure that there is accurate indemnification of each of the sources of finance, which will be held in the same operation account, it is recommended the project purchase an off the shelf accounting package to maintain the accounts as no system currently exists. This system will also need the capacity to tag expenses paid in meeting the Disbursed Linked Indicators (DLIs) to ensure the total expenditure is equal or greater than the amount of the DLI and clearly identify which finance source is used for each expenditure.

50. The accounts will be maintained on a cash basis.

### **Internal Controls**

51. As the project will be overseen by MFMR the Public Finance and Management Act and the accompanying Financial Instructions will dictate the project internal controls framework. Authorizations of project payments will be consistent with the MFMR arrangements which provide adequate segregation of duties. To ensure accurate monitoring of each source of finance the monthly bank reconciliation of the operational account will include a breakdown of the bank balance by each source of finance.

### **Funds Flow**

52.

Project funds will flow from the World Bank into a designated account held at the Central Bank. Using a standing order funds will then flow to a commercial bank acceptable to the World Bank. Both sources of finance will be held in the one Designated Account.

### **External Audit**

53. Project financial statements will preferably be audited under the supervision of the Solomon Islands Office of the Auditor General (AG), which is an independent auditor acceptable to the Bank. Currently the AG has indicated they will be unable to conduct the audit, so a private auditing firm acceptable to the Bank may need to be engaged initially. Project funds should be allocated to cover the cost of these audits.

## **TUVALU**

### **Implementing Agencies/Arrangements**

54. The Fisheries Department is one of three departments which make up the Ministry of Natural Resources. The Fisheries Department has no dedicated accountant so while the Fisheries Department (FD) will implement the project their FM capacity is limited and additional resources will be required through the project funding to enable the FM requirements of the project to be met. Tuvalu will receive the equivalent of \$7 million US of project funds.

### **Budgeting Arrangements**

55. Due to the limited number of skilled staff in the FD, the budget will be prepared by the Project Accountant and assisted by FD staff.

### **Accounting/Staff Arrangements**

56. Given FDs limited FM staff and their lack of experience in donor funded projects it is recommended that a Project Accountant is employed for the life of the project. As there is a PMU in place for the World Bank financed Aviation project it is recommended the Project Accountant sit in the same location to enable peer support

57. It is also recommended the project purchase an off the shelf accounting package to maintain the accounts as no system currently exists. It makes sense that in Tuvalu section of the project the same accounting package is used in the aviation project. The financial year is from January to December and the accounts will be maintained on a cash basis. It will also be necessary to tag

expenses paid through the Fisheries Department in meeting the Disbursed Linked Indicators (DLIs) to ensure the total expenditure is equal or greater than the amount of the DLI.

### Internal Controls

58. The Tuvalu Public Finance Act and the accompanying Financial Instructions 2008 will dictate the project internal controls framework where applicable. Nominated Ministry of Natural Resources accounting officers will approve project expenditure.

### Funds Flow

59. An Australian dollar designated account will be opened at the National Bank of Tuvalu and will be managed by the Ministry of Finance, i.e. they will be the main signatories to the account. Any two signatories of Secretary of Finance, Senior Assistant Secretary, Assistant Secretary, Government Accountant and Project Manager, will be used for the Withdrawal Applications. There will be monthly reconciliations of the DA prepared by the Project Accountant.

### Procurement

60. **Capacity Assessment.** An assessment of the capacities of FFA and the Phase 1 participating country implementing agencies (IAs) to implement procurement actions for the project was conducted during 2014. The results of the assessments are available in the Bank’s project portal website, identifying the risks, risk ratings and mitigation measures for each IA. All participating countries in Phase 1 have national procurement regulations which are generally in line with the Bank’s Procurement Guidelines. Overall, the assessments indicate limited procurement experience across all agencies, except for FFA. The overall procurement-related risk to the program is rated ‘substantial’. Risk mitigation action plans have been agreed with each IA. FFA will be responsible for PROP procurement activities processed under international competitive procedures. Small value goods, works and services procured at the national level will be processed by the IAs, with FFA assisting in preparation of the documents.

### 61. Key Risks and Mitigation Measures.

The table below summarizes the key risk areas and proposed mitigation measures.

**Table 3: Procurement Risks and Mitigation Measures**

Key risks	Mitigation Actions	By Whom	By When
1. Delays, non-compliance with procedures, and poor quality deliverables due to weak and lean capacities, and high level decision-making.	i. Assign procurement responsibility to FFA for procurement internationally, to be defined in the Financing Agreements, and detailed in the Program Operations Manual (POM);	IAs/FFA	Negotiations
	ii. Establish the process flow in each IA for procurement decision-making;	IAs	Negotiations
	iii. Appoint a Regional Procurement Evaluation Committee comprising representatives from FFA and each country IA (composition to be detailed in the POM);	FFA/IAs	Negotiations
	iv. Assign national PROP Coordinators and/or national procurement officers to liaise with FFA on procurement	IAs	Negotiations

Key risks	Mitigation Actions	By Whom	By When
	activities, and provide technical inputs as required; v. Establish contract management systems within each IA, with technical advisory support as required.	IAs	Award of first contract in each IA
2. Reduced competition and low market interest due to small-size packages and remoteness of participating countries	i. Invite bids under regional packages, where appropriate.	FFA	As indicated in procurement plans
3. Potential for mis-procurement due to inadequate oversight.	i. Publish contract award decisions, and other relevant information, on external websites.	FFA/IAs	As each contract is awarded.

**62. Implementation Support for Procurement.** The Bank’s task team will provide procurement support through prior and post reviews, and guidance during implementation support missions. The designated procurement specialist will visit FFA at least bi-annually, and other IAs, as necessary during implementation.

**63. Applicable procurement policies and procedures.** Procurement for the project will be carried out in accordance with the World Bank’s Guidelines: “*Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*” January 2011 and revised July 2014, and “*Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*” January 2011 and revised July 2014, the Guidance Manual “*Making Procurement and Financial Management Work for Fragile & Small States in the Pacific*” April 2013, and the provisions stipulated in the Financing Agreements.

**64. Exceptions to National Competitive Bidding (NCB) Procedures.** Except for the Solomon Islands, all goods and works procured nationally will follow shopping procedures. The procurement procedures to be followed for National Competitive Bidding (NCB) in the Solomon Islands shall be in accordance with the Interim Financial Instructions, 2014 issued by the SI Ministry of Finance and Treasury, subject to additional provisions stipulated in the Financing Agreement to ensure compliance with the Bank’s *Procurement Guidelines*.

**65. Procurement Arrangements.** The Financing Agreements with each country IA will assign responsibility for procurement activities to be processed internationally to the FFA, and the specific arrangements will be detailed in the Program Operations Manual (POM). More specifically, the POM will detail the roles and responsibilities of each entity including the decision-making structure in each IA, and the flow process to be followed under each procurement category and method. Where appropriate, FFA will consolidate national level requirements into regional packages, to promote economies of scale, market interest and competition. The ensuing contract from each procurement activity processed by FFA, on behalf of an IA, will be signed with and managed by the respective IA. Where procurement activities are advertised at the national level only, FFA will prepare the documentation necessary for such

activities, and will assist the IAs in evaluations and contract preparation. FFA will not be entitled to any service fee for procurement services provided to the country IAs. FFA will hire qualified staff to the PSU to oversee all PROP procurement activities. The cost for such staff will be met from component 4 of the grant allocation to FFA.

**66. Procurement of Works.** Procurement of works includes construction of surveillance and enforcement centers, and renovation/upgrading of maritime extension facilities. Shopping or NCB procedures (in accordance with paragraph 69 above) will be followed for procurement of works.

**67. Procurement of Goods.** Goods to be procured include a marine vessels and communication equipment, ICT equipment, hardware and software, and office equipment and facilities. Goods will be procured based on the method thresholds agreed for the Pacific. All goods procured at the national level will be carried out under shopping procedures.

**68. Direct contracting for Goods and Works.** While it has yet to be identified, some maritime surveillance and safety equipment may be of a proprietary nature, which will be procured under direct contracting.

**69. Selection of Consultants.** Consultants will be hired for specialized technical services, project management, fiduciary, safeguards, and monitoring and evaluation services. FFA will be responsible for processing the selection of consultants to be hired internationally. The respective IAs will be represented in the selection evaluation committees and in negotiations.

**70. Procurement Documents.** The Bank’s standard bidding documents will be used for procurement of goods under international competitive bidding (ICB) procedures. The Bank’s standard request for proposal (RFP) documents will be used for hiring of consultant firms, and the sample templates in the Guidance Manual for the Pacific (refer paragraph 68 above) will be used for hiring of individual consultants. Sample templates for procurement under NCB and shopping will be prepared by FFA, and agreed with the Bank prior to issue.

**71. Prior-Review Thresholds.** The procurement method and prior review thresholds for different types of procurement applicable to Bank operations in fragile and small states in the Pacific shall be applicable for PROP, as per Table 4 below.

**Table 4: Thresholds for Procurement Methods and Prior Review**

Procurement Method	Procurement Threshold	Prior Review Threshold
<b>Goods 1/:</b>		
International Competitive Bidding	≥US\$1,000,000.	All contracts subject to prior review
National Competitive Bidding	<US\$1,000,000.	First two contracts subject to prior review
Shopping	<US\$500,000.	All contracts subject to post review
<b>Works 2/:</b>		
International Competitive Bidding	≥US\$5,000,000.	All contracts subject to prior review
National Competitive Bidding	<US\$5,000,000.	First two contracts subject to prior review

Shopping	<US\$1,000,000.	All contracts subject to post review
<b>Selection of Consultants:</b>		
All methods, except SSS		≥US\$200,000.
Selection Based on Consultants' Qualifications (CQS)	<US300,000.	
Single Source Selection for Firms (SSS)	Comply with para. 3.8 to para.3.11 of the Consultants Guidelines	All contracts subject to prior review
Individual Consultants	Comply with para. 5.1 to para. 5.6 of the Consultants Guidelines	All contracts subject to post review except for (i) selection of all consultants hired for legal work or for procurement activities; and (ii) all SSS contracts

1/ includes IT systems and non-consulting services

2/ includes design, supply and installation of plant and equipment.

72. **Procurement Plans.** Initial procurement plans have been prepared for each IA, identifying the procurement and consultant selection methods, prior review requirements, and processing time frames. Goods, works and services needed to support achievement of the disbursement-linked indicators are included in the procurement plans. Additionally, a regional procurement plan has been prepared identifying items from each IA plan to be included in regional procurement packages, to be processed by FFA. The procurement specialist hired to the PSU in FFA will monitor all PROP procurement activities and be responsible for ensuring that all procurement plans are updated annually, in consultation with each IA. Hiring of the PROP coordinators and PSU staff will be processed under advance procurement, to be financed retroactively where appropriate.

**Table 5: Procurement Arrangements and Schedule for Works**

1	2	3	4	5	6	7	8
#	Contract (Description)	Estimated Cost (US\$)	Procurement Method	P-Q	Domestic Preference (Yes/No)	Review by Bank (Prior/Post)	Expected Bid Opening Date
SI-MFMR							
1.1	New construction/upgrading works (multiple contracts)	950,000	NCB/S	no	no	Prior, Post	May, 2016

**Table 6: Procurement Arrangements and Schedule for Goods**

1	2	3	4	5	6	7	8
#	Contract (Description)	Estimated Cost (US\$)	Procurement Method	P-Q	Domestic Preference (Yes/No)	Review by Bank (Prior/Post)	Expected Bid Opening Date
1. Regional Procurement by FFA for IAs							
1.1	Supply of hardware and software for FIMS (multiple contracts)	375,000	ICB	no	no	Prior	Nov, 2016

1.2	Supply of hardware and software for real-time e-reporting/ data provision (multiple contracts)	2,310,000	ICB	no	no	Prior	Apr, 2016
1.3	Supply of equipment/systems for enhanced maritime communication	750,000	ICB	no	no	Prior	Jun, 2017
2. SI-MFMR							
2.1	Supply of Equipment for fisheries surveillance operational center in Honiara; and for 2 outlying enforcement centers	75,000	ICB	no	no	Prior	Jul, 2017
3. RMI-MIMRA							
3.1	Supply of Equipment for Majuro & outer islands fisheries management	500,000	ICB	no	no	Prior	Apr, 2016
3.2	Supply of vessel for resource assessments and mgt	375,000	ICB	no	no	Prior	Nov, 2015
4. TUV-TFD							
4.1	Supply of hardware, software and services for expanded internet access for TFD	90,000	S	no	no	Post	Sep, 2015
4.2	Supply of Funafuti lagoon patrol vessel	450,000	ICB	no	no	Prior	Mar, 2017

**Table 7: Procurement Arrangements and Schedule for Consultancy Services**

	2	3	4	5	6
#	Description of Services	Estimated Cost (US\$)	Selection Method	Review by Bank (Prior/ Post)	Expected Proposals Submission Date
1. Regional Procurement by FFA to support IAs					
1.1	TA for institutional/organizational strengthening, documentation and reporting (multiple contracts)	1,300,000	QCBS	Prior	Jul, 2015
1.3	TA to develop & establish integration of new data sources into VMS (multiple contracts)	1,075,000	QCBS	Prior	Jul, 2015
1.4	TA for GIS, FIMS (multiple contracts)	885,000	QCBS	Prior	Jan, 2016
1.5	TA to develop & implement systems for enhanced maritime communication(multiple contracts)	300,000	QCBS	Prior	Sep, 2016

2. FFA					
2.1	TA for PNAO (multiple contracts)	250,000	QCBS, IC	Prior	Feb, 2015
2.2	TA for PIFSec	300,000	QCBS	Prior	Apr, 2015
2.3	PROP Fiduciary Hub Services (multiple contracts)	1,800,000	IC	Prior	Dec, 2014
2.4	TA for Independent Verification for Component 1		QCBS		
2.5	TA to support countries in Component 1 (multiple contracts)	2,320,000	QCBS, CQS, IC	Prior, Post	Mar, 2015
2.6	TA to support Component 2	500,000	QCBS	Prior	Oct, 2015
2.7	TA to support Component 3 (multiple contracts)	2,200,000	QCBS, CQS	Prior, Post	Oct, 2015
3. SI-MFMR					
3.1	Design & supervision of FSOC; and 2 outlying enforcement centers	200,000	CQS	Post	Jul, 2015
3.2	TA to support Component 1 (multiple contracts)	1,300,000	QCBS	Prior	Jul, 2015
3.3	TA to support Component 2 (multiple contracts)	2,000,000	QCBS, CQS	Prior, Post	Jun, 2015
3.4	National Program Coordination, M&E (multiple contracts)	250,000	IC	Prior	Dec, 2014
4. RMI-MIMRA					
4.2	TA for Industry & community awareness programs	200,000	CQS	Post	Nov, 2016
4.3	National Program Coordination, M&E (multiple contracts)	270,000	IC	Prior	Dec, 2014
5. FSM-NORMA					
5.1	IMS Manager	120,000	IC	Prior	Jul, 2015
5.2	National Program Coordination, M&E (multiple contracts)	200,000	IC	Prior	Dec, 2014
6. TUV-TFD					
6.1	TA to support Component 1	600,000	QBS, IC	Prior	Aug, 2015
6.2	National Program Coordination, M&E (multiple contracts)	90,000	IC	Prior	Dec, 2014

73. **Publications of Awards.** All contract awards will be published on an external website and, for those subject to prior review, additionally in UNDB.

74. **Fraud and Corruption.** The “*Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants*”, dated October 15, 2006, and revised in January 2011 are applicable.

#### **Environmental and Social (including safeguards)**

75. The overall impact of the program is expected to be highly positive and none of the eligible investments on the menu of options include activities that would generate significant risk or irreversible adverse environmental or social impacts.

76. The environmental and social impacts of each project will generally depend on the type of activities under each phase of the PROP. Each project would include investments for both

‘physical’ goods and services, as well as ‘soft’ activities such as technical assistance. Most of the physical investments would be made at the national level, while ‘soft’ activities would be implemented at both the national and regional level.

77. Examples of the type of the proposed activities (salient physical characteristics relevant to the safeguard analysis), which have the potential to incur adverse environmental or social impacts are as follows:

- Component 1, Subcomponent 1 specifically for Solomon Islands might include the construction of an operational center for surveillance of the fisheries, and two outlying enforcement centers for fisheries surveillance. The construction work may generate minor site-specific and time-bound adverse environmental impacts that can be readily mitigated through standard mitigation measures, if screened properly.
- Component 2, Sub-component 2 may include support to restock beche-de-mer if it is deemed a viable method to sustainably restore stocks. If so, hatchery facilities based on native brood stock would be used. Support would include supplying fishers with juveniles to restock near shore habitats. This activity will not involve introduction of non-native species nor involve the purchase, distribution, use or disposal of bactericides during implementation. However, investments in the area of small enterprise development associated with bêche-de-mer valued added processing may include installation of small scale civil works (e.g., solar dryers) for drying.
- Component 3 investments related to the TA for sustainable financing of MPAs, and potentially blue carbon. Activities under Component 3 Subcomponent 1 will support research to assess the unique physical and ecological aspects of the MPAs that would generate ecosystem services (like spawning or feeding grounds for tuna which migrate beyond EEZs of host nations) and that could be incorporated into a system of payment for environmental services. Subcomponent 2 will include TA in order to assess blue carbon potential and participate in blue carbon markets, and will help identify potential blue carbon sites. Small scale infrastructure works are not expected to be financed by the project.

78. The scale and likelihood of adverse impacts arising from these activities is limited, and the types of mitigation activities well-known and proven. As such, the program is found to be Category B interventions

79. The project triggers safeguard policies OP 4.01 Environmental Assessment; OP 4.04 Natural Habitats; OP 4.36 Forests; OP 4.10 Indigenous Peoples; and OP 4.12, Involuntary Resettlement. A brief explanation for triggering Bank safeguards and proposed measures/instruments are presented in Table 8.

**Table 8. World Bank Safeguards Policy triggered and proposed instruments**

<b>Safeguard Policies</b>	<b>Triggered</b>	<b>Why</b>	<b>Related Instrument</b>
Environmental Assessment OP/BP 4.01	<b>Yes</b>	The aim of the program is to help improve environmental and resource quality in the Pacific Islands Region in order to increase the economic benefits generated by the goods and services from healthy ocean ecosystems. As such, the overall impact	Current Environmental and Social Management Framework (ESMF) has been prepared to guide investments that may

		<p>of the program is expected to be highly positive and none of the eligible investments on the menu of options include activities that would generate significant risk or irreversible adverse impacts in the coastal or oceans fisheries targeted by the program. However, some investments under Components 1 and 2 may generate minor to moderate site specific and time bound adverse environmental impacts that can be readily mitigated through standard mitigation measures, when screened properly.</p> <p>Additionally, Component 3 (Sustainable Financing of the Conservation of Critical Fishery Habitats) might result in creation of the Marine Protected Areas (MPAs), in which case any potential access restrictions will be addressed through a detailed Process Framework (Annex E).</p> <p>The project also envisages TA for sustainable financing and potential of protected areas, which may lead to potential minor environmental impact downstream. The Interim Guidelines on the Application of Safeguard Policies to TA Activities in Bank-Financed Projects and TFs Administered by the Bank is applied. As such, the safeguard documentation prepared for the project applies equally to the TA component(s) and Terms of References for the TA activities will be approved by the Bank to ensure the consultancy outputs comply with the Bank safeguard policies.</p> <p>At this stage in program design, the specific investments that may generate minor to moderate adverse impacts include: small scale infrastructure works to allow for inspection of fish catch at landing sites and restocking of beche-de-mer and establishment of the associated small scale drying facilities. Potential adverse impacts will be limited to waste management, construction noise, and health and safety of workers.</p>	<p>generate any adverse environmental impact. Screening form (Annex A) will be used to screen for environmental and social impacts.</p>
<p>Natural Habitats OP/BP 4.04</p>	<p><b>Yes</b></p>	<p>Program activities will not involve significant loss or degradation of natural habitats. Most of the program activities will be in the marine areas (coastal and ocean) of the Pacific Island which are known sites rich in biodiversity. All program activities are designed to enhance positive and sustainable returns to these important habitats.</p>	<p>Current ESMF contains measures to properly manage the risk of any unforeseen adverse environmental impact on natural habitats, including critical natural habitats, as well as measures to enhance the program's positive environmental</p>

			outcomes.
Forests OP/BP 4.36	<b>Yes</b>	As the project (sub-component 3.2) will include the technical assistance, scientific and survey expertise, and legal and regulatory support in order to enable participating countries to pilot trials to assess their blue carbon potential, limitations and opportunities and participate in blue carbon markets, and would create conservation incentives for coastal communities to conserve the mangrove habitats, the policy is triggered.	Current ESMF includes a Screening form (Annex A) ensure that the negative impacts on mangrove forests of any downstream activities under Component 3.2 are addressed, and any positive impacts are enhanced. TOR for the studies proposed under sub-component 3.2 will integrate policy requirements of OP 4.36.
Pest Management OP 4.09	<b>No</b>	The project will not purchase, distribute, apply or dispose of pesticides, including bactericides.	Not applicable
Physical Cultural Resources OP/BP 4.11	<b>No</b>	The project will not involve any major civil works. It will support the construction of an operational center for surveillance of fisheries, and two outlying enforcement centers for fisheries surveillance (under Component 1) in Honiara, Solomon Islands. Additionally, small scale infrastructure works are foreseen to allow for inspection of fish catch at landing sites and restocking of beche-de-mer and establishment of the associated small scale drying facilities. Given the small scale works involved, the policy is not expected to be triggered. A chance finds procedure is included in the ESMF and EMP.	Not applicable Chance Finds Procedure are included in the ESMF.
Indigenous Peoples OP/BP 4.10	<b>Yes</b>	Although OP4.10 does not apply in all participating countries, this policy has been triggered as the project has a regional scope, and because specific sites and activities were not identified at the project preparation stage. It is possible that the project will affect Indigenous Peoples to some extent. Because the project beneficiaries are expected to be overwhelmingly indigenous peoples, the approach adopted will be to incorporate the elements of an IPP into overall project design.	Guidance provided in Annex B of ESMF for the incorporation of elements of an IPP into overall project design.
Involuntary Resettlement OP/BP 4.12	<b>Yes</b>	Project activities may require small-scale coastal land acquisition. It is expected that market-based or voluntary donation will be the common approach. Any voluntary land donations will meet the World Bank requirements through the application of the Voluntary Land Donation Protocol appended to the ESMF in Annex D.  Although it is considered unlikely, certain program	To address potential restriction of access to resources, a Process Framework (PF) has been prepared in compliance with requirements stated in OP 4.12 (See Annex E of the ESMF).

		activities may involve the involuntary acquisition of land and/or removal of assets. Accordingly, the policy will be triggered and a Resettlement Policy Framework (RPF, presented in Annex C) has been prepared. Subsequently, Abbreviated Resettlement Action Plans will ensure that all affected persons are compensated for involuntary acquisition of land and/or removal of assets at full replacement cost.	Voluntary Land Donation Protocol (Annex D)  Resettlement Policy Framework (RPF, presented in Annex C)
Safety of Dams OP/BP 4.37	No	Neither this project nor the possible downstream investments from project's TA will involve building dams nor depend on an existing dam.	Not applicable
Projects on International Waterways OP/BP 7.50	No	Following discussion with LEGEN and the RSA, it was agreed that there will be no impacts from this project or its possible downstream investments on international waterways as described under OP 7.50.	Not applicable
Projects in Disputed Areas OP/BP7.60	No	Any project activities in areas which may be disputed will be declared ineligible and not included in the project.	Not applicable

80. Consultations on the Environmental and Social safeguard policies were conducted on August 15, 2014 in Majuro, RMI with representatives from the fisheries agencies of FSM (NORMA), RMI (MIMRA), Solomon Islands (MFMR) and Tuvalu (TFD), as well as the representatives from the FFA, PNAO and SPC. At this meeting, NORMA, MIMRA, MFMR, TFD and FFA (implementing agencies) agreed on the process of preparing and incorporating safeguard instruments in the implementation arrangements. After the consultations, countries worked with the FFA and agreed on the final version of the ESMF, which was formally submitted to the Bank on September 23, 2014 by the FFA on behalf of all IAs. In addition to the regional consultation in RMI, national consultations were held in Tuvalu and Solomon Islands – to ensure stakeholder awareness and feedback in regard to the specific country context within the Component 2 (which is not applicable to FSM). Consultation minutes are attached in the ESMF.

81. The ESMF is made available through the World Bank website ([www.worldbank.org](http://www.worldbank.org)), as well as through the websites of the FFA ([www.ffa.int](http://www.ffa.int)).

82. **Capacity building for safeguards implementation.** There are 11 Pacific Island Countries eligible to join PROP. Each possesses differing levels of familiarity with Bank Safeguards Policies and Procedures; however the level of institutional capacity across the region as a whole is quite weak. FFA, representing its member countries participating in the PROP, including the countries participating in Phase I, has experience with World Bank safeguards because of the link to IDA-financed operations. Additionally, all four national implementing agencies have a general knowledge on bank safeguard policies as they were briefed on the PROP safeguard requirements during the preparation mission.

83. Nevertheless, the World Bank will provide necessary training and development of staff to each Project implementing agency in the first year of the implementation to build their capacity

and provide implementation support during the actual determination of the range of activities to be included in the “menu” of each country’s support.

84. Bank’s Interim Guidelines on the Application of Safeguard Policies to Technical Assistance (TA) Activities in Bank- Financed Projects and Trust Funds Administered by the Bank will apply for the TA provided by the project. Accordingly, Terms of References for the TA activities will be approved by the Bank to ensure the consultancy outputs comply with the Bank safeguard policies.

85. **Monitoring & Evaluation.** Monitoring and evaluation of outcomes and results are a core part of the project design. The IAs and PSU will collect and present data and reports for annual reviews by the FFC, in addition to World Bank implementation support missions. Discussions during these missions related to institutional capacity building, financial viability, technical reviews and site visits will also provide effective means of monitoring progress.

86. The existing statistical systems are fragmented and of varying quality. The project includes support to strengthen institutional capacity in the IAs to collect and analyze key data, and ensure timely monitoring and evaluation of project progress. Baselines are established using existing information. These include information generated by the IA systems, the PNAO FIMS, and FFA’s information systems.

87. **Role of Partners.** The PROP will complement and in some cases leverage a number of ongoing initiatives supported by development partners, including:

- *The Government of Australia* is currently one of the main sources of funding support to the regional fisheries and oceans programs of both SPC and FFA. This support ranges from tuna fisheries science and management to food security and community-based management. The Government of Australia is also providing support for the implementation of the Framework for a Pacific Oceanscape approved by members of the Pacific Islands Forum, focusing on the regional level actions such as delineation of maritime boundaries, ongoing support to FFA, community-based fisheries management, and bi-lateral assistance to the Government of Kiribati for the development of a national fisheries policy. Additionally, the Government will provide support to the Pacific Islands Forum Secretariat for the establishment of an Oceanscape Unit to help monitor progress in implementation of the Framework. Further assistance to monitoring, control and surveillance (MCS) of the region’s tuna fishery is provided through the Australian Patrol Boat Program, managed by the Australian Defense Force.
- *The European Union (EU)* has supported a number of regional fisheries programs targeted primarily at ACP countries and, sometimes, French territories in the region. Currently the EU supports a multi-year oceanic and coastal fishery science program, implemented primarily through SPC, and a program aimed at development of domestic tuna fishing industries and action against IUU fishing, implemented jointly through SPC and FFA. The EU has also supported several national fisheries and marine development or research projects in Solomon Islands. The 11<sup>th</sup> European Development Fund (EDF) is currently being negotiated, which would provide support for key areas of regional cooperation such as sustainable fisheries, as well as potentially an investment facility to help leverage grants or loans from other institutions for infrastructure.

- The *Government of France, through the Agence du Developpement Francaise (AFD)*, is supporting the regional RESCCUE project to be implemented by SPC. This five-year project will be carried out at sites in Fiji, New Caledonia, French Polynesia and Vanuatu that are representative of the region's environmental and socio-economic diversity. It will focus on improving and sustainably funding integrated coastal zone management, most notably by setting up payment mechanisms to help maintain ecosystem services at the selected pilot sites. The Oceanscape Unit at the Forum Secretariat will ensure that the lessons and experiences from these activities are incorporated into Components 2 and 3 of the PROP.
- *The Global Environment Facility (GEF)* is supporting a number of related activities, including a global program on improved management of fisheries in areas beyond national jurisdiction (ABNJ program), jointly implemented by FAO, IUCN, Conservation International and the World Bank. One of the 4 projects within the ABNJ program will undertake activities in the Pacific Islands region, in partnership with PNAO and FFA. Through UNDP and FAO as GEF implementing agencies, FFA is also supporting member countries under Phase 2 of the Western Pacific Oceanic Fisheries Management Project, to help them participate more effectively in the work of the Western Central Pacific Fisheries Management Commission (WCPFC). A complementary GEF project to improve fishery data coverage and availability, is being implemented in Indonesia, Philippines and Vietnam, in collaboration with the WCPFC. Additionally, the GEF is supporting a number of 'ridge-to-reef' programs for integrated management of coastal ecosystems through UNDP as the implementing agency, whose data collection, information systems, planning and training efforts will inform implementation of the PROP.
- Through the Ministry of Foreign Affairs and Trade (MFAT) *the New Zealand Government* funds FFA and SPC to provide science, compliance, policy, management and development advice and services to Pacific Island Countries (PICs). It funds the New Zealand Ministry for Primary Industries to provide mentoring and technical advice to PIC fisheries agencies and vocational training in the region and in New Zealand. The New Zealand Defence Force supports tuna fishery MCS by participation in joint aerial and maritime patrols. New Zealand has bi-lateral institutional strengthening programs in Solomon Islands and Tuvalu involving funding selected aspects of national agency work plans (in Solomon Islands) and embedded in-country advisers. New Zealand also has a sustainable coastal fisheries support programme in Kiribati. Taken together with a range of other fisheries activities, New Zealand spent NZ\$ 19.5 million in 2013-2014 on Pacific fisheries development. Between 2013-2014 and 2007-2018 this figure is expected to total NZ\$70 million.
- *World Bank Development Grant Facility (DGF)*. The World Bank has been providing support to the PNAO and SPC to undertake bio-economic analysis and implement improved operational management arrangements for the purse-seine and (ultimately) long-line vessel-day schemes. A grant of US\$375,000 was provided in 2012/2013, with similar levels being provided in 2014 and 2015. The Bank has previously provided business planning and other technical advisory support to the PNAO.
- Micronesian Trust Fund, Waitt Foundation and Packard Foundation were consulted on the development of financial mechanism under Component 3. The Bank will consult with

these organizations and other relevant partners (e.g. Asia Pacific Network of Conservation Trust Fund) during the project implementation.

88. To ensure sound coordination among development partners, the World Bank will join annual meetings with the Government of Australia, the Government of New Zealand and FFA concerning the region's fisheries. Additional development partners may also join this group to ensure a coherent program of support in the region.

89. **Disbursement-linked indicators.** Details on the measurement of disbursement-linked indicators in each country are as follows:

### Federated States of Micronesia

#### DLI 1: Improving compliance with the VDS for the purse seine tuna fishery

Year	1	2	3	4	5	6
<b>Target</b>	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation
<b>DLI Value:</b>	USD107,389	USD107,389	USD107,389	USD107,389	USD107,389	USD107,389
<b>DLI Achievement Measure</b>	Number of days fished in a country's waters, compared to its annual allocation under the vessel day scheme. This DLI is scalable, calculated as follows: annual disbursement = DLI value – (measurement – 100). In other words, the DLI will be reduced by the same percentage that the measurement exceeds 100 percent. The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Number of days actually fished in a country's waters is verified by independent agent contracted by FFA, and compared to the annual allocation agreed by the PNA.  Review of independent agent's report on number of days fished vs. annual PNA allocation.					

#### DLI 2: Increased transparency in the vessel day scheme for the purse seine tuna fishery

Year	1	2	3	4	5	6
<b>Target</b>	100% of purse seine fishing vessel days used in a country's	100% of purse seine fishing vessel days used in a country's	100% of purse seine fishing vessel days used in a country's waters are	100% of purse seine fishing vessel days used in a country's	100% of purse seine fishing vessel days used in a country's	100% of purse seine fishing vessel days used in a country's

	waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS
<b>DLI Value:</b>	USD214,778	USD214,778	USD214,778	USD214,778	USD214,778	USD214,778
<b>DLI Achievement Measure</b>	Number of days fished in a country's waters that are recorded according to agreed criteria, and which are disclosed to the PNAO FIMS and other Parties to the Nauru Agreement. This DLI is scalable, meaning that for the two targets, a total percentage will be calculated (each target weighted equally), and the annual disbursement will be equal to the percentage (i.e. the average of the measurement for each of the two targets will be equal to a percentage, and the annual disbursement will equal that percentage). The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Verified by independent agent contracted by FFA. Review of independent agent's report on confirmation that days recorded according to agreed criteria, and disclosed to FIMS and other Parties to the Nauru Agreement.					

### DLI 3: Expanding the coverage of the VDS or similar system

Year	1	2	3	4	5	6
<b>Target</b>	89% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system
<b>DLI Value:</b>	USD107,000	USD107,000	USD107,000	USD107,000	USD107,000	USD107,000
<b>DLI Achievement Measure</b>	% of purse seine tuna licenses issued by the country, which are included in its annual allocation of fishing days under the vessel day scheme. This DLI is scalable, meaning that the annual disbursement will equal the percentage achieved of the target. The amount disbursed would be made annually each year, only for that target period.					
<b>Verification</b>	Number of purse seine tuna fishing licenses issued in a country's waters, compared to allocation of fishing vessel days under the vessel day scheme, are verified by independent agent contracted by FFA.					

<b>Protocol</b>	Review of independent agent's report, disbursement is scalable, equivalent to percentage difference between measurement and target.
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### Republic of Marshall Islands

#### DLI 1: Improving compliance with the VDS for the purse seine tuna fishery

Year	1	2	3	4	5	6
<b>Target</b>	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation
<b>DLI Value:</b>	USD153,000	USD153,000	USD153,000	USD153,000	USD153,000	USD153,000
<b>DLI Achievement Measure</b>	Number of days fished in a country's waters, compared to its annual allocation under the vessel day scheme. This DLI is scalable, calculated as follows: annual disbursement = DLI value – (measurement – 100). In other words, the DLI will be reduced by the same percentage that the measurement exceeds 100 percent. The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Number of days actually fished in a country's waters is verified by independent agent contracted by FFA, and compared to the annual allocation agreed by the PNA.  Review of independent agent's report on number of days fished vs. annual PNA allocation.					

#### DLI 2: Increased transparency in the vessel day scheme for the purse seine tuna fishery

Year	1	2	3	4	5	6
<b>Target</b>	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the

	Nauru Agreement as part of a comprehensive verification system for the VDS	Nauru Agreement as part of a comprehensive verification system for the VDS	Agreement as part of a comprehensive verification system for the VDS	Nauru Agreement as part of a comprehensive verification system for the VDS	Nauru Agreement as part of a comprehensive verification system for the VDS	Nauru Agreement as part of a comprehensive verification system for the VDS
<b>DLI Value:</b>	USD306,000	USD306,000	USD306,000	USD306,000	USD306,000	USD306,000
<b>DLI Achievement Measure</b>	Number of days fished in a country's waters that are recorded according to agreed criteria, and which are disclosed to the PNAO FIMS and other Parties to the Nauru Agreement. This DLI is scalable, meaning that for the two targets, a total percentage will be calculated (each target weighted equally), and the annual disbursement will be equal to the percentage (i.e. the average of the measurement for each of the two targets will be equal to a percentage, and the annual disbursement will equal that percentage). The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Verified by independent agent contracted by FFA. Review of independent agent's report on confirmation that days recorded according to agreed criteria, and disclosed to FIMS and other Parties to the Nauru Agreement.					

### DLI 3: Expanding the coverage of the VDS or similar system

Year	1	2	3	4	5	6
<b>Target</b>	90% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system
<b>DLI Value (in SDR)</b>	USD151,000	USD151,000	USD151,000	USD151,000	USD151,000	USD151,000
<b>DLI Achievement Measure</b>	% of purse seine tuna licenses issued by the country, which are included in its annual allocation of fishing days under the vessel day scheme. This DLI is scalable, meaning that the annual disbursement will equal the percentage achieved of the target. The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Number of purse seine tuna fishing licenses issued in a country's waters, compared to allocation of fishing vessel days under the vessel day scheme, are verified by independent agent contracted by FFA.  Review of independent agent's report, disbursement is scalable, equivalent to percentage difference between measurement and target.					

## Solomon Islands

### DLI 1: Improving compliance with the VDS for the purse seine tuna fishery

Year	1	2	3	4	5	6
<b>Target</b>	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation
<b>DLI Value:</b>	USD135,417	USD135,417	USD135,417	USD135,417	USD135,417	USD135,417
<b>DLI Achievement Measure</b>	Number of days fished in a country's waters, compared to its annual allocation under the vessel day scheme. This DLI is scalable, calculated as follows: annual disbursement = DLI value – (measurement – 100). In other words, the DLI will be reduced by the same percentage that the measurement exceeds 100 percent. The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Number of days actually fished in a country's waters is verified by independent agent contracted by FFA, and compared to the annual allocation agreed by the PNA.  Review of independent agent's report on number of days fished vs. annual PNA allocation.					

## DLI 2: Increased transparency in the vessel day scheme for the purse seine tuna fishery

Year	1	2	3	4	5	6
<b>Target</b>	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS

<b>DLI Value:</b>	USD270,833	USD270,833	USD270,833	USD270,833	USD270,833	USD270,833
<b>DLI Achievement Measure</b>	Number of days fished in a country's waters that are recorded according to agreed criteria, and which are disclosed to the PNAO FIMS and other Parties to the Nauru Agreement. This DLI is scalable, meaning that for the two targets, a total percentage will be calculated (each target weighted equally), and the annual disbursement will be equal to the percentage (i.e. the average of the measurement for each of the two targets will be equal to a percentage, and the annual disbursement will equal that percentage). The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Verified by independent agent contracted by FFA. Review of independent agent's report on confirmation that days recorded according to agreed criteria, and disclosed to FIMS and other Parties to the Nauru Agreement.					

### DLI 3: Expanding the coverage of the VDS or similar system

Year	1	2	3	4	5	6
<b>Target</b>	59% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	73% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	73% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	73% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system
<b>DLI Value (in SDR)</b>	USD135,416	USD135,416	USD135,416	USD135,416	USD135,416	USD135,416
<b>DLI Achievement Measure</b>	% of purse seine tuna licenses issued by the country, which are included in its annual allocation of fishing days under the vessel day scheme. This DLI is scalable, meaning that the annual disbursement will equal the percentage achieved of the target. The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Number of purse seine tuna fishing licenses issued in a country's waters, compared to allocation of fishing vessel days under the vessel day scheme, are verified by independent agent contracted by FFA.  Review of independent agent's report, disbursement is scalable, equivalent to percentage difference between measurement and target.					

## Tuvalu

### DLI 1: Improving compliance with the VDS for the purse seine tuna fishery

Year	1	2	3	4	5	6
<b>Target</b>	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation	Number of purse seine tuna fishing days fished in a country's waters is 100% or less of its agreed annual allocation

<b>DLI Value:</b>	USD154,556	USD154,556	USD154,556	USD154,556	USD154,556	USD154,556
<b>DLI Achievement Measure</b>	Number of days fished in a country's waters, compared to its annual allocation under the vessel day scheme. This DLI is scalable, calculated as follows: annual disbursement = DLI value – (measurement – 100). In other words, the DLI will be reduced by the same percentage that the measurement exceeds 100 percent. The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Number of days actually fished in a country's waters is verified by independent agent contracted by FFA, and compared to the annual allocation agreed by the PNA.  Review of independent agent's report on number of days fished vs. annual PNA allocation.					

## DLI 2: Increased transparency in the vessel day scheme for the purse seine tuna fishery

Year	1	2	3	4	5	6
<b>Target</b>	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS	100% of purse seine fishing vessel days used in a country's waters are recorded annually according to agreed criteria  100% of purse seine fishing days used and sold in the country's waters are disclosed annually to the PNAO FIMS and other Parties to the Nauru Agreement as part of a comprehensive verification system for the VDS
<b>DLI Value:</b>	USD309,111	USD309,111	USD309,111	USD309,111	USD309,111	USD309,111
<b>DLI Achievement Measure</b>	Number of days fished in a country's waters that are recorded according to agreed criteria, and which are disclosed to the PNAO FIMS and other Parties to the Nauru Agreement. This DLI is scalable, meaning that for the two targets, a total percentage will be calculated (each target weighted equally), and the annual disbursement will be equal to the percentage (i.e. the average of the measurement for each of the two targets will be equal to a percentage, and the annual disbursement will equal that percentage). The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Verified by independent agent contracted by FFA. Review of independent agent's report on confirmation that days recorded according to agreed criteria, and disclosed to FIMS and other Parties to the Nauru Agreement.					

## DLI 3: Expanding the coverage of the VDS or similar system

Year	1	2	3	4	5	6
<b>Target</b>	94% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system	100% of purse seine tuna catch within a country's waters that is encompassed within the VDS or a compatible system
<b>DLI Value (in SDR)</b>	USD153,000	USD153,000	USD153,000	USD153,000	USD153,000	USD153,000
<b>DLI Achievement Measure</b>	% of purse seine tuna licenses issued by the country, which are included in its annual allocation of fishing days under the vessel day scheme. This DLI is scalable, meaning that the annual disbursement will equal the percentage achieved of the target. The amount disbursed would be made annually each year, only for that target period.					
<b>Verification Protocol</b>	Number of purse seine tuna fishing licenses issued in a country's waters, compared to allocation of fishing vessel days under the vessel day scheme, are verified by independent agent contracted by FFA.  Review of independent agent's report, disbursement is scalable, equivalent to percentage difference between measurement and target.					

### Annex 9: Implementation Support Plan

1. The results achieved by the PROP will be exponentially enhanced by robust implementation support. The World Bank will function as a partner working with the participating countries and regional organizations, towards the shared objective of better managed Pacific fisheries that can make a greater contribution to poverty reduction. This is crucial in the Pacific, where regionalism is the modus operandi, particularly for a transboundary and jointly-managed resource like fisheries. The World Bank as an honest and neutral broker can contribute timely and independent analysis and expertise to the ongoing regional dialogue on the management of the resources, drawing from experiences throughout its global portfolio of fisheries support.

2. In order to provide robust implementation support, the following team and skills would be envisaged:

- **Regional technical focal point, with strong fisheries policy and economic expertise**, who would act as a liaison to participating countries, regional organizations and development partners to support implementation of the PROP, work with additional countries to join the PROP in future operations, and engage in the regional dialogue and fora on behalf of the World Bank to share experiences and empirical evidence on the sector. This person would ideally be based in the World Bank's Honiara office.
- **Financial management specialist**, based in the World Bank's Sydney office, providing real-time guidance as needed to the PSU, as well as frequent monitoring and supervision throughout participating countries.
- **Procurement specialist**, based in the World Bank's Sydney office, providing real-time guidance as needed to the PSU, as well as frequent monitoring and supervision.
- **Social safeguards specialist**, based in the World Bank's Sydney office, providing annual reviews of compliance with the ESMF and its Process Framework.
- **Additional technical specialists as needed**, in order to enhance quality of implementation and draw upon global experiences, for example in sustainable financing of fishery habitat conservation, regional coastal fisheries markets, etc.

- **Task team leader**, responsible for overall support and supervision to ensure that the operations are on track to achieve the objective, and compliance with the financing agreements.

### I. Summary of implementation support

<b>Title</b>	<b>Focus</b>	<b>Skills Needed</b>	<b>Number of Staff Weeks</b>
Regional technical focal point, based in Honiara	act as a liaison to participating countries, regional organizations and development partners to support implementation of the PROP	Strong fisheries policy and economic expertise	44
	work with additional countries to join the PROP in future operations		
	engage in the regional dialogue and fora on behalf of the World Bank to share experiences and empirical evidence on the sector		
Financial management specialist, based in Sydney	providing real-time guidance as needed to the PSU, as well as frequent monitoring and supervision throughout participating countries	World Bank financial management specialist	N/A
Procurement specialist, based in Sydney	providing real-time guidance as needed to the PSU, as well as frequent monitoring and supervision	World Bank procurement specialist	N/A
Social safeguards specialist, based in Sydney	providing annual reviews of compliance with the ESMF and its Process Framework	Strong knowledge in World Bank's social safeguards, notably OP4.12	3
Additional technical specialists as needed	to enhance quality of implementation and draw upon global experiences, for example in sustainable financing of fishery habitat conservation, regional coastal fisheries markets, etc.	To be determined	15
Task Team Leader	overall support and supervision to ensure that the operations are on track to achieve the objective, and compliance with the financing agreements	Strong technical sector expertise, and program management	20

### Annex 10: Team Composition

**World Bank staff and consultants who worked on the project:**

Name	Title	Unit
Michael Arbuckle	Sr. Fisheries Specialist	GENDR
Garry Preston	Consultant, Coastal Fisheries	GENDR
Quentin Hanich	Consultant, Fishery Habitat Conservation	GENDR
Cynthia Dharmajaya	Program Assistant	GFADR
Fnu Hanny	Program Assistant	GENDR
Stephen Hartung	Sr. Financial Management Specialist	GGODR
Miriam Witana	Procurement Specialist	GGODR
Ross Butler	Sr. Social Development Specialist	GSURR
Valerie Hickey	Acting Sector Manager/Environmental Safeguards	GENDR
Olha Krushelnytska	Consultant, Safeguards/Operations	GENDR
Claire Forbes	Consultant, Social Safeguards	GENDR
Nicole Jenner	Gender Focal Point for the Pacific Islands	EACNF
Victor Mosoti	Sr. Counsel	LEGEN
Marjorie Mpundu	Sr. Counsel	LEGES
Clare Cory	Consultant, fisheries legal review	GENDR
Jingjie Chu	Economic Analysis	GENDR
Marea Hatziolos	Task Team Leader (retired)	GENDR
John Virdin	Task Team Leader	GENDR



## Annex 11: Economic Analysis

### A. Program Objective

1. The development objective of this program is to strengthen the shared management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend. This will provide the basis for sustainable and increased economic benefits to the region from this resource.

### B. Overview of Program Cost and Benefits

2. The proposed investment is divided into four components, totaling \$US39.87 million, of which US\$32.97 will be financed by IDA (see Annex 3-7 for details), including:

- Component 1: Sustainable Management of Oceanic Fisheries (US\$25.24 million IDA).
- Component 2: Sustainable Management of Coastal Fisheries (US\$4.18 million IDA).
- Component 3: Sustainable Financing of the Conservation of Critical Fishery Habitats (US\$1.0 million IDA).
- Component 4: Regional Coordination, Implementation Support, Training and Monitoring and Evaluation (US\$2.55 million IDA).

3. For each country, the majority of the financing will support component 1 (see Table 1) targeted towards the tuna fisheries, where the largest economic benefits will be generated.

*Table 1. IDA Financing for Each Country by Component (\$ million)*

Components	FSM (\$m)	RMI (\$m)	Solomon Islands (\$m)	Tuvalu (\$m)	FFA (\$m)	TOTAL (\$m)
<b>C1: Oceanic Fisheries</b>	5	5.45	7.75	5.77	1.27	25.24
<b>C2: Coastal Fisheries</b>	0.3	0.95	1.8	1.13		4.18
<b>C3: Fishery Habitats</b>					1	1
<b>C4: Regional Coord., M&amp;E</b>	0.2	0.35	0.2	0.1	1.7	2.55
<b>TOTAL</b>	<b>5.5</b>	<b>6.75</b>	<b>9.75</b>	<b>7</b>	<b>3.97</b>	<b>32.97</b>

4. As mentioned previously, the tuna fisheries include both the purse seine and long-line fisheries in the region. For management of the purse seine fishery, the vessel day scheme (VDS) has brought the Pacific Island countries tremendous economic gains. Prior to the introduction of the VDS, PNA countries captured little of the value of the tuna caught in their waters. After the VDS, the total revenue for these island countries has increased from US\$70 M in 2009 to an estimated US\$280 M in 2014, with a price increase from US\$1,500 in 2010 to US\$6,000 in 2014. Encouraged by this performance, the PNA members agreed to lift the benchmark Day price to \$8000/day in 2015, a 33 percent increase compared to 2014.

5. This increasing trend of the price and revenue is unlikely to be sustained if the current system is not strengthened and countries' capacity for collective action strengthened. The VDS is at a critical stage in its development because the 2015 Day revenue target will potentially place more than half of the existing purse seine fleet under substantial economic pressure. Potentially, this pressure will incentivize the pursuit of efficiency gains and the creation of added value within

the region's purse seine tuna value chain. However, the risks are that it will also place pressure on compliance with the VDS, stimulate demand for Day substitutes, and even encourage negotiation of bi-lateral agreements outside of the system.

6. The VDS is essentially a cap and trade scheme, where the value of a day of fishing access is determined by its scarcity and attributes. This program will help maintain and increase the value of the VDS through protecting and enhancing the integrity of a Vessel Day and improving the attributes of a Vessel Day, including the exclusivity, transferability, duration, divisibility, and flexibility. Since project preparation, some of the key indicators of strengthened management have already improved in the participating countries. This is an encouraging sign that the participating countries realize the importance of maintaining the quality of the products (Vessel Day). As the system has already been established and an inception period of progress completed, there are challenges in describing with complete certainty the future scenarios, e.g. 'with' and 'without' project'. However, based on the trends to date and information available, as well as inputs from experts in the region, the following scenarios have been defined and expected benefits calculated.

7. There are a range of benefits expected to be generated from the program's four components. Because some of the activities are being simultaneously implemented and have overlapping relationships, expected benefits cannot be isolated as a function of each investment but can be analysed with respect to their total expected effects on the major fishery sectors. The benefit will be mainly from the strengthened collective management of the fishery resource through (i) expanding the coverage of the VDS, (ii) improving compliance with the VDS and linkage to total catch limits; and (iii) increasing its efficiency and flexibility. Table 2 illustrates the potential economic benefits generated from the project by component.

*Table 2: Benefits of Different Components*

<b>Component</b>	<b>Examples of Expected Benefit</b>
<i>Component 1:</i> Sustainable Management of Oceanic Fisheries	<ul style="list-style-type: none"> <li>• Improved management capacity and efficiency</li> <li>• Improved economic gain from oceanic fisheries, both purse seine fishery and long-ling fishery</li> <li>• Increased amount and quality of fisheries data for better management and policy-making</li> <li>• Improved data recording</li> <li>• Improved fisheries knowledge exchange</li> <li>• Better vision and direction for the sector to be successful in a sustainable manner</li> </ul>
<i>Component 2:</i> Sustainable Management of Coastal Fisheries	<ul style="list-style-type: none"> <li>• Improved collaborative management between stakeholders and Governments</li> <li>• Improved prices per unit weight of landed catch due to improved quality</li> <li>• Increased profits and rents</li> <li>• Improved marine habitats and biodiversity</li> <li>• Reduce post-harvest loss</li> <li>• Reduced losses from spoilage of fish that do not reach any</li> </ul>

	<p>markets in sellable condition</p> <ul style="list-style-type: none"> <li>• Better business environment</li> <li>• Improved food safety</li> <li>• More foreign exchange earnings</li> </ul>
<p><i>Component 3:</i> Sustainable Financing of the Conservation of Critical Fishery Habitats</p>	<ul style="list-style-type: none"> <li>• Improved marine habitats and biodiversity</li> <li>• Enhanced productivity of Pacific oceanic and coastal fisheries</li> <li>• Improved capacity to manage marine protected areas</li> <li>• Sustainable financial mechanisms established to sustain economic benefits</li> <li>• Potential climate finance to provide long-term incentives for habitat protection.</li> </ul>
<p><i>Component 4:</i> Regional Coordination, Implementation Support, Training and Monitoring and Evaluation</p>	<ul style="list-style-type: none"> <li>• Increased coordination of fisheries management, surveillance, monitoring, and sector development activities</li> <li>• Improved management capacity and efficiency</li> <li>• Ensure the capture of above benefits</li> </ul>

### C. Valuation of Project Benefits

8. A simple cost-benefit analysis was conducted to estimate the quantifiable direct benefits generated by the program. While tangible, the benefits from components 2 and 3 are difficult to quantify given the current data available. For this reason, the analysis focused largely on the benefits from component one in strengthening management of the purse seine fishery, while acknowledging that additional benefits are expected as well from the long-line fishery.

9. Two scenarios were modelled to estimate future benefits over the project period (6 years): (i) a “without project” or “business as usual” scenario, and a (ii) “with project” scenario incorporating assumptions based on the investments and associated reforms implemented through various project components. Where available, data on VDS supply, demand, price, and vessel days used were collected.

10. In order to analyse the economic effects of the investments and their corresponding actions, a number of economic, behavioural, and production expectations and assumptions were made, as follows:

- *Base year:* 2014 was used as the base year. It is rare that the base year used is the same as expected project approval. Normally, it will take a year or two to get the relevant data, particularly the fishery production data. However, for these Pacific Island countries, because one of the main economic benefits will come from selling the vessel days, where the price and number of days each country is allocated have been determined a year before, data is available now on these parameters, including even the vessel day price in 2015.
- *Price-Taker:* The four participants in the PROP are minor suppliers in the wider regional vessel day market and have very limited individual or collective influence over its

performance. Therefore, by themselves these first four participants in the PROP are price-takers.

11. The difference between the “business as usual” scenario and the “with project” scenario are largely due the vessel day price difference, which reflects the quality of resource management. The quantity of Days supplied is not determined by the equilibrium between the supply curve and the demand curve. Neither is the market price determined by this equilibrium. Many transactions took place above and below the ‘market’ benchmark price in recent years. Essentially, there are opportunities to go around the management system, particularly if it is not further strengthened.

12. Without the program, the incentive to negotiate outside the VDS or fish in high seas (i.e. areas beyond national jurisdiction which are not covered by the VDS) is very high. Since there is a single regional fishery for the entire western and central pacific, of which the VDS is only a sub-set, demand for Days (or substitute Days) can be expected to be very price sensitive. For instance, greater catching costs of fishing on the high seas may make such ‘Days’ initially unattractive, but as the price of fishing within the VDS rises, the relative attractiveness of fishing the high seas will improve, and the quantity of ‘Days’ demanded there will increase. If business as usual continues, and the surveillance is weak, substitutes become very attractive – in many cases these substitutes include fishing illegally.

13. For 2015, the benchmark price has been determined at US\$8,000. The US Treaty and the FSM Arrangement will be fully integrated with the VDS. As a result, the total quantity of vessel days will increase from 12,592 in 2014 to 15,878 in 2015 (Table 3). This analysis assumed the total number of days will stay the same for the whole project cycle (i.e. the ‘cap’ on fishing will stay); even though it is very likely that both the price and number of days will decline if the management measures supported by the program are not implemented fully. In the short term, the fleet owners may be willing to pay the higher price. The number of vessels losing money will increase, and many of those vessels are locked into bilateral arrangements with Day sellers. This pressure from higher vessel day prices will be a destabilizing force on the VDS, encouraging fleets to go around the system. Conservatively, this analysis assumed that the new price of \$8,000 is sustainable even without the investment in strengthened management supported by the program, although this is questionable.

*Table 3: Basic Assumptions on Purse Seine Vessel Day Price and Quantity for without Project Scenario*

Scenario	Category	2014	Y1	Y2	Y3	Y4	Y5	Y6
Without the project	Price	\$6,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
	Total Quantity	12592	15871	15871	15871	15871	15871	15871
	FSM	6028	7266	7266	7266	7266	7266	7266
	Marshall Islands	2234	2753	2753	2753	2753	2753	2753
	Solomon Islands	3127	3973	3973	3973	3973	3973	3973
	Tuvalu	1203	1879	1879	1879	1879	1879	1879

14. With the project, not only is the price expected to increase, but also the total number of days, because the project will help (i) implement higher standards of compliance with the VDS which

will reduce the substitute possibilities; (ii) expand the scope of the VDS (including archipelagic waters and bringing in other nations who share the resource); and (iii) alter VDS settings where and when necessary to make the vessel days more economically attractive. The analysis assumes the Day price will be as follows:

- \$8,000 (all actions agreed in 2014 actually taken) for Y1 and Y2;
- \$10,000 (archipelagic waters incorporated into PAEs) for Y3 and Y4; and
- \$12,000 (Philippines, Indonesia, Cook Islands and New Zealand join Palau arrangement) for Y5 and Y6.

15. In order to calculate the total number of days, the analysis included two steps. Step one was to assume the percentage of tuna catch within a country's waters that is encompassed within the VDS or a compatible system will stay the same for the scenario without the project, the economic gain from the project will be the percentage expansion for VDS. For example, FSM will have 7,266 days in 2015 (Table 4), which is about 80 percent of the total days. It means the total days which could be included in VDS are 8,164 days. With the project, the target is to cover 100 percent from Y2. Therefore, for FSM, from Y2 to Y6, the analysis used 8,164 as the total number of days. Similar calculations were conducted for the other three countries.

*Table 4: Formula Used to Calculate the Total Number of Days*

Vessel Days in 2015	Percentage Included in VDS	
	Without project	With project
<ul style="list-style-type: none"> <li>• FSM: 7266</li> <li>• RMI: 2753</li> <li>• Solomon Island: 3937</li> <li>• Tuvalu: 1879</li> </ul>	<ul style="list-style-type: none"> <li>• FSM: Y1-Y6: 89%;</li> <li>• RMI: Y1-Y6: 90%</li> <li>• Solomon Island: Y1-Y6: 59%</li> <li>• Tuvalu: Y1-Y6: 94%;</li> </ul>	<ul style="list-style-type: none"> <li>• FSM: Y1: 89%; Y2: -Y6: 100%</li> <li>• RMI: Y1: 90%; Y2-Y6: 100%</li> <li>• Solomon Island: Y1: 59%; Y2:-Y4: 73%; Y5-6Y6: 100%</li> <li>• Tuvalu: Y1: 94%; Y2-Y6: 100%</li> </ul>

16. Step two: when the price increases to \$12,000/day, it is likely that there will be a modest reduction in the total allocation of days (say 10 percent more conservatively) in Y5 and Y6. This is due to the inflation in the Day price partially as a result of increased average tonnages taken under a Day because of various efficiency gains by the fleet. The analysis assumes Y5 and Y6 will only have 90 percent of the level of Y3 and Y4.

*Table 5: Basic Assumptions on Purse Seine Vessel Day Price and Quantity for with Project Scenario*

Scenario	Category	2014	Y1	Y2	Y3	Y4	Y5	Y6
With the project	Price	\$6,000	\$8,000	\$8,000	\$10,000	\$10,000	\$12,000	\$12,000
	Total Quantity	12592	15871	18137	18137	18137	16322	16322
	FSM	6028	7266	8164	8164	8164	7347	7347
	Marshall Islands	2234	2753	3059	3059	3059	2753	2753
	Solomon Islands	3127	3973	4915	4915	4915	4423	4423
	Tuvalu	1203	1879	1999	1999	1999	1799	1799

#### D. Model Outputs

17. With both the price and quantity information, the economic benefit of the program were calculated. Shown in Table 5 with a 10 percent discount rate, the net present value (NPV) of the

difference from the program within the project cycle is big, ranging from the smallest, US\$15 million for Tuvalu, to \$75 million for FSM, leading to an internal rate of return (IRR) of 121 percent for FSM, 55 percent for Marshall Islands, 45 percent for Solomon Islands, and 16 percent for Tuvalu (Table 7). Some of these results are high relative to average investments, because both the vessel day price and quantities are high for countries like FSM under the “with project” scenario.

*Table 6: Economic Benefit Difference between Two Scenarios*

Scenario	Country	NPV	Y1	Y2	Y3	Y4	Y5	Y6
Without the project	FSM		\$58,128,000	\$58,128,000	\$58,128,000	\$58,128,000	\$58,128,000	\$58,128,000
	Marshall Islands		\$22,024,000	\$22,024,000	\$22,024,000	\$22,024,000	\$22,024,000	\$22,024,000
	Solomon Islands		\$31,784,000	\$31,784,000	\$31,784,000	\$31,784,000	\$31,784,000	\$31,784,000
	Tuvalu		\$15,032,000	\$15,032,000	\$15,032,000	\$15,032,000	\$15,032,000	\$15,032,000
With the project	FSM		\$58,128,000	\$65,312,000	\$81,640,000	\$81,640,000	\$88,164,000	\$88,164,000
	Marshall Islands		\$22,024,000	\$24,472,000	\$30,590,000	\$30,590,000	\$33,036,000	\$33,036,000
	Solomon Islands		\$31,784,000	\$39,320,000	\$49,150,000	\$49,150,000	\$53,076,000	\$53,076,000
	Tuvalu		\$15,032,000	\$15,992,000	\$19,990,000	\$19,990,000	\$21,588,000	\$21,588,000
Differences	FSM	\$75,265,647	\$0	\$7,184,000	\$23,512,000	\$23,512,000	\$30,036,000	\$30,036,000
	Marshall Islands	\$27,363,168	\$0	\$2,448,000	\$8,566,000	\$8,566,000	\$11,012,000	\$11,012,000
	Solomon Islands	\$56,376,079	\$0	\$7,536,000	\$17,366,000	\$17,366,000	\$21,292,000	\$21,292,000
	Tuvalu	\$15,676,239	\$0	\$960,000	\$4,958,000	\$4,958,000	\$6,556,000	\$6,556,000

*Table 7: Internal Rate of Return (IRR) for Each Country*

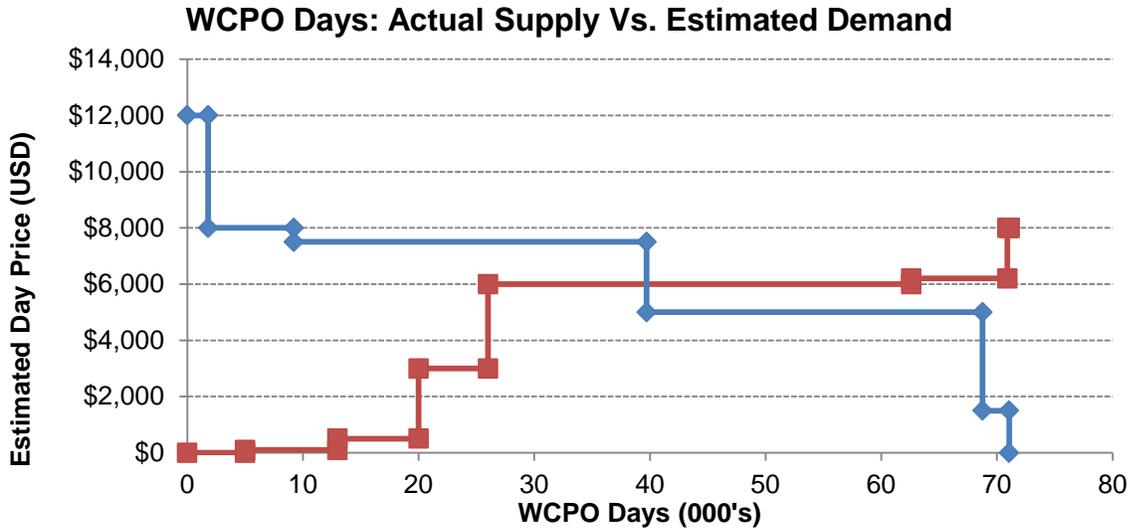
Country	Cost	Y1	Y2	Y3	Y4	Y5	Y6	IRR
FSM	-5,500,000	0%	7,184,000	23,512,000	23,512,000	30,036,000	30,036,000	121%
Marshall Islands	-6,750,000	0	2,448,000	8,566,000	8,566,000	11,012,000	11,012,000	55%
Solomon Islands	-18,620,000	0	7,536,000	17,366,000	17,366,000	21,292,000	21,292,000	45%
Tuvalu	-12,500,000	0	960,000	4,958,000	4,958,000	6,556,000	6,556,000	16%

## E. Sensitivity analysis

18. Several sensitivity analyses were conducted to illustrate the uncertainty effect:

(i) Vessel day price decreases in the “without project” scenario

19. As indicated previously, without strong management in place, it is very likely that substitutes will replace vessel days to certain degree, which will lead to the vessel day price decreasing. In the sensitivity analysis, the “without project” scenario from Y3 assumes the price will drop to \$6,000 where most of the vessels can operate with a profit (Figure 1), based on a demand and supply analysis. For Y5 and Y6, the price may go down further to \$5,000, *ceteris paribus*.



Source: McClurg, 2014

Table 8: Vessel Day Price Changes for the “without Project” Scenario

Scenario	Category	2014	Y1	Y2	Y3	Y4	Y5	Y6
Without the project	Price	\$6,000	\$8,000	\$8,000	\$6,000	\$6,000	\$5,000	\$5,000
	Total Quantity	12592	15871	15871	15871	15871	15871	15871
	FSM	6028	7266	7266	7266	7266	7266	7266
	Marshall Islands	2234	2753	2753	2753	2753	2753	2753
	Solomon Islands	3127	3973	3973	3973	3973	3973	3973
	Tuvalu	1203	1879	1879	1879	1879	1879	1879

20. With the new price assumption, the difference between the two scenarios increases. The NPV for FSM increases from previous \$75 million to \$121 million, for Marshall Island from previous \$27 million to \$45 million, Solomon Island from \$75 million to \$81 million, and for Tuvalu from \$15 million to \$27million (Table 9), leading IRR of 147 percent for FSM, 75 percent for Marshall Islands, 59 percent for Solomon Islands, and 32 percent for Tuvalu.

Table 9: Difference in Economic Benefits between the Two Scenarios When Prices Change

Scenario	Country	NPV	Y1	Y2	Y3	Y4	Y5	Y6
Without the project	FSM		\$58,128,000	\$58,128,000	\$43,596,000	\$43,596,000	\$36,330,000	\$36,330,000
	Marshall Islands		\$22,024,000	\$22,024,000	\$16,518,000	\$16,518,000	\$13,765,000	\$13,765,000
	Solomon Islands		\$31,784,000	\$31,784,000	\$23,838,000	\$23,838,000	\$19,865,000	\$19,865,000
	Tuvalu		\$15,032,000	\$15,032,000	\$11,274,000	\$11,274,000	\$9,395,000	\$9,395,000
With the project	FSM		\$58,128,000	\$65,312,000	\$81,640,000	\$81,640,000	\$88,164,000	\$88,164,000
	Marshall Islands		\$22,024,000	\$24,472,000	\$30,590,000	\$30,590,000	\$33,036,000	\$33,036,000
	Solomon Islands		\$31,784,000	\$39,320,000	\$49,150,000	\$49,150,000	\$53,076,000	\$53,076,000
	Tuvalu		\$15,032,000	\$15,992,000	\$19,990,000	\$19,990,000	\$21,588,000	\$21,588,000

Differences	FSM	\$121,948,551	\$0	\$7,184,000	\$38,044,000	\$38,044,000	\$51,834,000	\$51,834,000
	Marshall Islands	\$45,050,759	\$0	\$2,448,000	\$14,072,000	\$14,072,000	\$19,271,000	\$19,271,000
	Solomon Islands	\$81,901,977	\$0	\$7,536,000	\$25,312,000	\$25,312,000	\$33,211,000	\$33,211,000
	Tuvalu	\$27,748,517	\$0	\$960,000	\$8,716,000	\$8,716,000	\$12,193,000	\$12,193,000

*Table 10: New IRR under “without Project” Scenario with Vessel Day Price Change*

Country	Cost	Y1	Y2	Y3	Y4	Y5	Y6	IRR
FSM	-5,500,000	0	7,184,000	38,044,000	38,044,000	51,834,000	51,834,000	147%
Marshall Islands	-6,750,000	0	2,448,000	14,072,000	14,072,000	19,271,000	19,271,000	75%
Solomon Islands	-18,620,000	0	7,536,000	25,312,000	25,312,000	33,211,000	33,211,000	59%
Tuvalu	-12,500,000	0	960,000	8,716,000	8,716,000	12,193,000	12,193,000	32%

(ii) Discount rate changes from 10% to 15%

21. When using a discount rate of 15 percent, the benefit NPV drops to \$62million for FSM, \$22 million for Marshall Islands, \$46 million for Solomon Islands, and \$12 million for Tuvalu (see Table 11). As a result, the net NPV of the project for FSM is \$56 million for FSM, indicating a benefit/cost ratio of 11.32 ( $62.2/5.5=11.32$ ). It suggests that US\$1 investment through this project will yield US\$11.32 which is a very attractive rate of return. Even for Tuvalu, this project will bring over \$400,000 net NPV to the country, with just a little above 1 of cost/benefit ratio under this high discount scenario.

*Table 11: NPV Based on Discount Rate of 14% and Benefit/Cost Ratio*

Country	Benefit NPV	Cost	Net NPV	Benefit/Cost Ratio
FSM	\$62,253,312	-5,500,000	\$56,753,312	11.32
Marshall Islands	\$22,616,664	-6,750,000	\$15,866,664	3.35
Solomon Islands	\$46,836,799	-18,620,000	\$28,216,799	2.52
Tuvalu	\$12,914,446	-12,500,000	\$414,446	1.03

## **F: Conclusions**

22. The results above show that this proposed program in the Pacific Islands is a sound investment for the countries, on the strength of the benefits just from component one, without including the benefits in livelihoods, food security and sustainability generated from components two and three. Even with high discount rate of 15 percent, and assuming the 2015 vessel day price is sustainable without the proposed investments, this program still results in a high IRR (the lowest is 16 percent) and benefit ratio (above 1).

23. It is likely that the real benefits and efficiency have been underestimated by this analysis, because (i) relatively conservative assumptions were used for the expected impact of the program; and (ii) the economic benefits in terms of livelihoods, food security and sustainability from components 2 and 3 were not quantified. The program will collect socio-economic data during implementation which will help quantify the impact of these components.