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The World Bank

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Report No: PAD496

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

FROM THE GLOBAL ENVIRONMENT FACILITY TRUST FUND  
IN THE AMOUNT OF US\$8.9MILLION

TO THE REPUBLIC OF PERU, PERUVIAN TRUST FUND FOR NATIONAL PARKS  
AND PROTECTED AREAS (PROFONANPE)

FOR A

STRENGTHENING SUSTAINABLE MANAGEMENT OF THE GUANO ISLANDS, ISLETS,  
AND CAPES NATIONAL RESERVE SYSTEM PROJECT

October 25, 2013

Sustainable Development Department  
Bolivia, Ecuador, Peru and Venezuela Country Management Unit  
Latin America and the Caribbean Region

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## **Currency Equivalents**

(Exchange Rate Effective October 22, 2013)

Currency Unit = Peruvian Nuevo Sol (NS)

NS\$1.0 = US\$0.36

US\$1.0 = NS\$2.77

## **Republic of Peru Fiscal Year**

January 1 – December 31

## **Abbreviations and Acronyms**

BP	Bank Procedure
DICAPI	Peruvian Coastguard (Dirección General Capitanías Guardacostas del Perú)
ENSO	El Niño Southern Oscillation
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographic Information System
GPAN	Participatory Management of Protected Areas (Gestión Participativa de Áreas Naturales Protegidas)
HCLME	Humboldt Current Large Marine Ecosystem Project
IADB	Inter-American Development Bank
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IMARPE	Peruvian Institute of the Sea (Instituto del Mar del Perú)
INRENA	National Institute of Natural Resources (Instituto Nacional de Recursos Naturales)
KfW	German Development Bank
METT	Management Effectiveness Tracking Tool
NGO	Nongovernmental Organization
OP	Operational Policy
PAC	Project Administration Council
PAD	Project Appraisal Document
PAES	Program for Sustainable Economic Activities (Programa de Actividades Económicas Sostenibles)
PCT	Project Coordination Team
PIF	GEF Project Identification Form
PROFONANPE	Peruvian Trust Fund for National Parks and Protected Areas (Fondo de Promoción para las Areas Naturales Protegidas del Perú)

PRONANP	National Program for Natural Protected Areas (Programa Nacional de Áreas Naturales Protegidas)
RNSIIPG	Guano Islands, Islets, and Capes National Reserve System (Reserva Nacional Sistema de Islas, Islotes y Puntas Guaneras)
SEPA	Procurement Plan Execution System (Sistema de Ejecución de Planes de Adquisiciones)
SERNANP	National Service of Natural Protected Areas (Servicio Nacional de Áreas Naturales Protegidas)
SIGA	Administrative Management Integrated System (Sistema Integrado de Gestion Administrativa)
SINANPE	National System of Natural Areas Protected by the State (Sistema Nacional de Áreas Naturales Protegidas por el Estado)
UNDP	United Nations Development Programme

Regional Vice President:	Hasan A. Tuluy
Country Director:	Susan G. Goldmark
Sector Director:	Ede Ijjasz-Vásquez
Acting Sector Manager:	Emilia Battaglini
Task Team Leader:	Christian Albert Peter



## PERU

### Strengthening Sustainable Management of the Guano Islands, Islets, and Capes National Reserve System Project

#### Contents

<b>I.</b>	<b>STRATEGIC context.....</b>	<b>1</b>
	A. Country Context.....	1
	B. Sectoral and Institutional Context.....	1
	C. Relationship to Country Partnership Strategy.....	2
	D. Higher-Level Objectives to Which the Project Contributes .....	2
<b>II.</b>	<b>PROJECT OBJECTIVES.....</b>	<b>3</b>
	A. Project Development Objective .....	3
	B. Project Beneficiaries .....	3
	C. Project Development Objective-Level Results Indicators .....	4
	D. Project Representative Pilot Sites .....	4
	E. Key Results .....	5
<b>III.</b>	<b>PROJECT DESCRIPTION .....</b>	<b>5</b>
	A. Project Components .....	5
	B. Project Financing .....	6
	C. Lending Instrument.....	6
	D. Project Cost and Financing .....	6
	E. Program Objective and Phases.....	7
	F. Lessons Learned and Reflected in the Project Design.....	7
<b>IV.</b>	<b>IMPLEMENTATION .....</b>	<b>8</b>
	A. Institutional and Implementation Arrangements .....	8
	B. Results Monitoring and Evaluation .....	9
	C. Sustainability.....	9
<b>V.</b>	<b>KEY RISKS AND MITIGATION MEASURES .....</b>	<b>10</b>
	A. Risk Ratings Summary Table .....	10
	B. Overall Risk Rating Explanation .....	10
	C. Key Risks and Issues .....	10
<b>VI.</b>	<b>APPRAISAL SUMMARY .....</b>	<b>11</b>
	A. Economic and Financial Analyses .....	11
	B. Technical.....	12
	C. Financial Management.....	12
	D. Procurement .....	13
	E. Social (Including Safeguards).....	13
	F. Environment (Including Safeguards).....	14

G. Other Safeguard Policies Triggered.....	15
<b>Annex 1. Results Framework and Monitoring.....</b>	<b>16</b>
<b>Annex 2. Detailed Project Description.....</b>	<b>19</b>
<b>Annex 3. Implementation Arrangements .....</b>	<b>31</b>
<b>Annex 4. Operational Risk Assessment Framework (ORAF) .....</b>	<b>46</b>
<b>Annex 5. Implementation Support Plan .....</b>	<b>51</b>
<b>Annex 6. Economic Analysis .....</b>	<b>54</b>
<b>Annex 7. Incremental Cost Analysis .....</b>	<b>58</b>

**PAD DATA SHEET**

*Peru*

*Strengthening Sustainable Management of the Guano Islands, Isles and Capes  
National Reserve System Project (P129647)*

**PROJECT APPRAISAL DOCUMENT**

*LATIN AMERICA AND CARIBBEAN  
LCSEN*

Report No.: PAD496

Basic Information			
Project ID P129647	EA Category B - Partial Assessment	Team Leader Christian Albert Peter	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ ]		
Project Implementation Start Date 01-Apr-2014	Project Implementation End Date		
Expected Effectiveness Date 01-Mar-2014	Expected Closing Date 31-Mar-2019		
Joint IFC No	GEF Focal Area Biodiversity		
Sector Manager Emilia Battaglini	Sector Director Ede Jorge Ijjasz-Vasquez	Country Director Susan G. Goldmark	Regional Vice President Hasan A. Tuluy
Borrower: PROFONANPE			
Responsible Agency: SERNANP			
Contact: Telephone	Pedro Gamboa	Title: Email:	Jefe pgamboa@sernanp.gob.pe
Project Financing Data(in USD Million)			
[ ]	Loan	[ X ]	Grant
[ ]	Credit	[ ]	IDA Grant
[ ]		[ ]	Guarantee
[ ]		[ ]	Other
Total Project Cost:	15.92	Total Bank Financing:	0.00
Financing Gap:	0.00		

<b>Financing Source</b>	<b>Amount</b>
Borrower	5.00
Global Environment Facility (GEF)	8.92
GERMANY KREDITANSTALT FUR WIEDERAUFBAU (KFW)	2.00
Total	15.92

#### **Expected Disbursements (in USD Million)**

Fiscal Year	2014	2015	2016	2017	2018	2019	0000	0000	0000
Annual	0.30	2.00	3.00	2.20	0.82	0.60	0.00	0.00	0.00
Cumulative	0.30	2.30	5.30	7.50	8.32	8.92	0.00	0.00	0.00

#### **Proposed Global Environmental Objective(s)**

The Global Environmental Objective/ Project Development Objective of the project is to improve the overall management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System of Peru (RNSIIPG) and protect its biological diversity in pilot sites.

#### **Components**

<b>Component Name</b>	<b>Cost (USD Millions)</b>
Component 1: Institutional strengthening. This component will build capacity at SERNANP and other institutions involved in the management of marine and coastal resources.	6.90
Component 2: Collaborative regional management. The project will develop socially viable marine management models through locally implemented collaborative subprojects in 11 pilot sites	4.22
Component 3: Monitoring and evaluation of biodiversity; management effectiveness; collaborative subprojects; and safeguards and administrative monitoring.	4.38
Component 4: Project management. Administrative and financial management of the Project.	0.42



<b>Institutional Data</b>				
<b>Sector Board</b>				
Environment				
<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	70		
Public Administration, Law, and Justice	Public administration-Agriculture, fishing and forestry	30		
Total		100		
<input checked="" type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.				
<b>Themes</b>				
Theme (Maximum 5 and total % must equal 100)				
Major theme	Theme	%		
Environment and natural resources management	Biodiversity	60		
Environment and natural resources management	Environmental policies and institutions	20		
Environment and natural resources management	Other environment and natural resources management	20		
Total		100		
<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>
Creation of Administration Council		30-Apr-2014	
<b>Description of Covenant</b>			
Not later than 30 days after the Effective Date, the Recipient shall create and thereafter operate and maintain at all times during Project implementation, an Administration Council with functions and responsibilities satisfactory to the World Bank.			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Creation of Technical Committee		30-Apr-2014	
<b>Description of Covenant</b>			
Not later than 30 days after the Effective Date, the Recipient shall create and thereafter operate and maintain at all times during Project implementation a Technical Committee with functions and responsibilities satisfactory to the World Bank.			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Project Coordination Team		30-Apr-2014	
<b>Description of Covenant</b>			
Not later than 30 days after the Effective Date, shall appoint and thereafter maintain and supervise until the completion of the Project, a Project Coordination Team.			

<b>Conditions</b>			
<b>Name</b>			<b>Type</b>
Execution and delivery of Grant Agreement authorized			Effectiveness
<b>Description of Condition</b>			
The Agreement shall not become effective until evidence satisfactory to the World Bank has been furnished evidence that the execution and delivery of this Agreement on behalf of the Recipient has been duly authorized or ratified by all necessary corporate action.			
<b>Name</b>			<b>Type</b>
SERNANP Agreement			Effectiveness
<b>Description of Condition</b>			
The Agreement shall not become effective until evidence satisfactory to the World Bank has been furnished that the Agreement between PROFONANPE and SERNANP has been executed.			
<b>Team Composition</b>			
<b>Bank Staff</b>			
<b>Name</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>
Laura E. Tlaiye	Adviser	Adviser	CMD
Christian Albert Peter	Lead Environmental Specialist	Team Lead	LCSEN
Raul Tolmos	Environmental Specialist	Environmental Specialist	LCSEN
Nelly Ikeda	Financial Management Specialist	Financial Management Analyst	LCFSM
Alonso Zarzar Casis	Sr Social Scientist	Sr Social Scientist	LCSSO
Mariana Margarita Montiel	Senior Counsel	Senior Counsel	LEGLE
Elizabeth Huaman Carnero	Team Assistant	Team Assistant	LCC6C
Gabriela Encalada Romero	E T Consultant	Environmental Specialist	LCSEN
Rachel Pasternack	Junior Professional Associate	Junior Professional Associate	LCSEN
Selene del Rocio La Vera	Procurement Specialist	Procurement Specialist	LCSPPT
<b>Non Bank Staff</b>			
<b>Name</b>	<b>Title</b>	<b>Office Phone</b>	<b>City</b>

<b>Locations</b>					
<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>
Peru	Piura	Region de Piura		X	Isla Lobos de Tierra
Peru	Lambayeque	Region de Lambayeque		X	Islas Lobos de Afuera
Peru	La Libertad	Region de La Libertad		X	Isla Santa, Isla Guañape
Peru	Moquegua	Departamento de Moquegua		X	Punta Coles
Peru	Lima	Region de Lima		X	Isla Asia, Islote Don Martín, Punta Salinas
Peru	Ica	Region de Ica		X	Islas Ballestas, Islas Chincha
Peru	Callao	Region de Callao		X	Isla Pachacámac

## **I. STRATEGIC CONTEXT**

### **A. Country Context**

1. Peru is one of the top 20 countries in terms of biological diversity in the world. It possesses 84 of the 117 existing life zones on the planet and it ranks first for genetic resources and species of fish, second for birds, and third for amphibians. The oceanographic characteristics of the Peruvian sea are governed by a complex system of marine currents that create a unique upwelling system (high in nutrient and biomass content), which in turn sustains one of the world's most productive fisheries, based mainly on Peruvian anchovies (anchoveta, *Engraulis ringens*), sardine (*Sardinops sagax sagax*), and hake (*Merluccius gayi peruanus*); Peru is the global leader in fishmeal exports. Threats to the country's marine and coastal diversity and resources are omnipresent and include habitat disturbance and destruction, overfishing, destructive fishing (such as illegal use of explosives and high seas bottom trawling), and other economic activities that have resulted in declines in fish stocks, marine biodiversity, and overall ecosystem health.

2. In addition to large-scale commercial fishing, according to the country's 2012 fisheries census there are 44,161 artisanal fishers and 16,045 artisanal fishing boats. There is wide variation in fishing techniques and target species being harvested (including scallops, mollusks, crustaceans, and algae). There is limited control of the volume of resource extraction and the Government lacks systematized information on impacts on the surrounding habitats. Aquaculture concessions have also been granted at various locations along the coast. Much scope exists to better understand the effect of artisanal fisheries on local marine habitats and to integrate them in management efforts to improve productivity and increase the sustainability of resource use.

3. In the 19th century, Peru was the world's largest exporter of guano fertilizer. From 1840 to 1870, an estimated 12 million tons of guano were extracted, mainly from Chincha Islands. While guano extraction is nowadays tightly controlled and produced for the domestic market only, and Peru's guano islands and capes are conserved in a relatively pristine state due to their ruggedness, difficult access, and lack of fresh water, a long history of human intervention generates potentially significant threats to their biodiversity.

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

4. Peru has a long tradition of protecting its terrestrial natural spaces and ecosystems, with national and international research efforts dating back decades. The National System of Natural Areas Protected by the State (Sistema Nacional de Áreas Naturales Protegidas por el Estado, SINANPE), managed under the umbrella framework of Peru's 2009 Protected Areas National Strategy,<sup>1</sup> comprises 71 protected areas, spanning 18.7 million hectares and representing 14.5 percent of the national territory. However, marine and other aquatic resources are relatively poorly represented in conservation programs.

5. In late 2009 the Government of Peru established the Guano Islands, Islets, and Capes National Reserve System (Reserva Nacional Sistema de Islas, Islotes y Puntas Guaneras, RNSIIPG), a group of 22 islands and 11 capes with a total of 140,883 hectares (including terrestrial sites and 2 nautical miles around each site).<sup>2</sup> Despite its relatively small size, the creation of the reserve has a major impact on ecosystem conservation and protected area management in Peru, as it is spread along 3,000 kilometers of coastline. RNSIIPG's coverage of three ecoregions and its ecological

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<sup>1</sup> Peru Ministry of Environment. 2009. *Plan Director de las Áreas Naturales Protegidas* [Plan for the Protected Natural Areas].

<sup>2</sup> Decreto Supremo No. 024-2009-MINAM, 2009.

representativeness provide refuge for numerous native and endemic species, including three main guano-producing seabirds, sea lions, endangered Humboldt penguins and marine otters, endemic mollusks, and a variety of other species.

6. RNSIIPG is managed by the National Service of Natural Protected Areas (Servicio Nacional de Áreas Naturales Protegidas, SERNANP), a government agency created in 2008 within the Ministry of Environment. Since the establishment of the reserve, SERNANP has strengthened its relationships with other national institutions – for example AGRO RURAL (an entity of the Ministry of Agriculture in charge of guano exploitation and trade), the Peruvian Coastguard Service (Dirección General Capitanías Guardacostas del Perú, DICAPI), and the Peruvian Institute of the Sea (Instituto del Mar del Perú, IMARPE) – to develop a strategy for filling gaps in the agency’s response capabilities in cooperative management, enforcement, and research inside and around the protected area. The RNSIIPG creation norm also established a Technical Coordination Group as the multi-agency body tasked with supporting SERNANP and ensuring mandatory coordination with and cooperation between all involved government stakeholders.

7. RNSIIPG is a new reserve and a relatively new line of engagement for SERNANP, which is still maturing in terms of protected area management and developing the systemic, institutional, and individual capacities required to effectively manage RNSIIPG. SERNANP’s experience so far has been focused on land-based protected areas, and RNSIIPG poses a significant challenge that will require the agency to develop new approaches to marine and coastal zoning, natural resource management, and conflict resolution, especially as they relate to traditional fisheries and growing but unregulated tourism.

8. Considering that the stricter conservation and management activities could lead to negative effects on coastal communities, who are among the poorest in Peru, the project is planning to put particular focus on activities which are designed to offset losses incurred through project interventions. This will not only offset restrictions in resource use and management in the short term, but also provide opportunities for local communities in diversifying their economic activities. Through a small grants program, the proposed project will increase income of resource-poor groups, while at the same time building capacity and improve the ability of these communities to develop and sustain income generating activities and alternative livelihoods in different areas, including ecotourism and value addition in artisanal fisheries and therefore support the World Bank’s broader mission to end extreme poverty and promote shared prosperity.

### **C. Relationship to Country Partnership Strategy**

9. The project is in line with the World Bank Group’s Country Partnership Strategy 2012-2016 (Report # 66187-PE) discussed by the Executive Directors on March 13, 2012. Results area 3.3 of strategic objective 3 of the Country Partnership Strategy focuses on “strengthening environmental management,” which is the guiding principle behind the project, as reflected in the project development objective.

10. The project contributes to Country Partnership Strategy milestones by supporting the integrated management of a regional natural protected area (milestone 3.3.F), developing and implementing a strong communication strategy (milestone 3.3.G), and developing groundbreaking tools for marine and coastal participatory management (milestone 3.3.H).

### **D. Higher-Level Objectives to Which the Project Contributes**

11. The project is fully consistent with Objective 1 of the Biodiversity Strategy under GEF-5: “Improve the sustainability of protected area systems.” The project will significantly increase

management effectiveness of an existing marine and coastal protected area, thereby expanding the marine and coastal ecosystem representation and supporting local efforts to address the ecosystem coverage gap within national-level systems through the creation and effective management of coastal and near-shore protected area networks, including no-take zones, to conserve and sustainably use marine biodiversity. The project will directly support the two key outcomes highlighted by Objective 1: (a) improve management effectiveness of existing protected areas; and (b) increase revenue for protected area systems to meet the total expenditures required for management.

12. In addition, the project supports objective 2 of the Biodiversity Strategy under GEF-5: “Mainstream biodiversity conservation and sustainable use into production landscapes, seascapes, and sectors.” Specifically, the project will support the main outcome: increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation.

13. The project is in line with, and contributes to, the achievement of World Bank goals regarding the promotion of healthy oceans and marine environments, including the reduction of overfishing and habitat loss, as reflected in the Bank’s Strategic Vision for Fisheries and Aquaculture<sup>3</sup> and its involvement in the Global Partnership for Oceans.<sup>4</sup> Although the project does not target the anchoveta fisheries per se, it will provide the necessary environmental baseline information to support the need for better fishery management policies. The project is also fully aligned with the Bank’s sustainable development goals, seeking both green and inclusive growth.

14. The project builds on Peru’s National Agreement Policy on Sustainable Development and Environmental Management, an objective of which is to institutionalize public and private environmental management to protect biodiversity. The project is consistent with the principles of the Convention on Biological Diversity, to which Peru is a signatory, in that it will promote conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services to society. The project also contributes to Peru’s National Biodiversity Strategy, which states that marine and coastal ecosystems play a significant ecological role by sustaining key species for the survival of human populations and by providing global services.

## **II. PROJECT OBJECTIVES**

### **A. Project Development Objective**

15. The project’s Global Environmental Objective/Project Development Objective is to improve the overall management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System of Peru (RNSIIPG) and protect its biological diversity in Pilot Sites.

### **B. Project Beneficiaries**

16. The project will directly benefit local populations living in the influence area of and working inside RNSIIPG, including local artisanal fishers and fishing communities, tour operators and their families, and people providing land-based support (such as caterers, mechanics, boatwrights, local communities involved in the processing of fishing produce, and tour guides). Other stakeholders involved with and likely to benefit indirectly from the project are students and educators who will become part of the project’s new outreach initiatives. Civil society groups, such as grassroots

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<sup>3</sup> World Bank. 2011. *The Global Program on Fisheries: Strategic Vision for Fisheries and Aquaculture*. Washington, DC: World Bank, Agriculture and Rural Development Department.

<http://siteresources.worldbank.org/EXTARD/Resources/336681-1224775570533/2011StrategicVision.pdf>.

<sup>4</sup> Global Partnership for Oceans website: <http://www.globalpartnershipforoceans.org/about?active=1>.

conservation organizations and women’s associations, will benefit from the project’s highly participatory and equality-focused approach.

17. Collaborative subprojects will have a ripple effect throughout the tightly knit, small local communities. By creating know-how and establishing initial pilot operations, these subprojects will offer incentives for the establishment of new, independent operations. Technical assistance to be provided during the first years of implementation will support the development of new, structured, local participation in decision making related to protected areas. Preparing local site and resource management plans will benefit the associated communities by providing self-imposed regulatory mechanisms to secure resource sustainability.

18. The project will also contribute to developing the capacities of local and regional stakeholders, both public and private, through participation in project activities and targeted capacity-building initiatives. By investing in raising awareness, the project will create new constituencies for conservation and proper valuation of marine and coastal biodiversity within Peru. The project will also benefit the national and international research and conservation community by improving the availability and quality of the reserve’s biological data. By enhancing the protection of RNSIIPG biodiversity, the project will provide benefits to the local and global environment. Lessons learned in management will additionally contribute to marine and coastal management in similar locations around the globe.

### C. Project Development Objective-Level Results Indicators

19. Project development objective-level results indicators are the following World Bank biodiversity core sector indicators:

- Hectares of terrestrial area brought under enhanced biodiversity protection.
- Hectares of marine area brought under enhanced biodiversity protection.

### D. Project Representative Pilot Sites

20. Table II.1 shows the 11 pilot sites for which interventions have been designed.

**Table II.1 Project Pilot Sites**

No.	Name	Type of area	Ecological zone	Marine area (ha)	Terrestrial area (ha)
1	Lobos de Tierra	Island	Ecotone	16,661.36	1,617.54
2	Lobos de Afuera	Island	Ecotone	7,983.04	282.09
3	Guañape	Island	Central Peru	8,415.78	71.58
4	Santa	Island	Central Peru	6,432.51	230.20
5	Don Martín	Islet	Central Peru	3,293.39	18.63
6	Salinas	Cape	Central Peru	14,080.02	127.78
7	Pachacámac	Island	Central Peru	4,254.77	35.11
8	Asia	Island	Humboldtian	3,865.53	64.05
9	Chincha	Island	Humboldtian	9,143.88	267.03
10	Ballestas	Island	Humboldtian	7,129.00	68.01
11	Coles	Cape	Humboldtian	3,195.15	169.99
<b>Total ha</b>				<b>84,454.43</b>	<b>2,952.01</b>



21. The project will directly enhance the conservation status of 84,454 hectares of marine area and 2,952 hectares of land area, or approximately 62 percent of the reserve's total surface. This coverage does not represent a direct measure of project success, as it includes a wide array of social, ecological, and institutional issues that the project is targeting. In addition, the representativeness of this area means that the project is directly addressing RNSIIPG management topics in their entirety.

#### **E. Key Results**

22. Key expected results for the project are:

- (a) Planning and management instruments designed and implemented;
- (b) Training plans developed and implemented for stakeholders in communications, participatory management, and technical aspects of marine biodiversity;
- (c) Infrastructure and support systems implemented for enhanced surveillance and control;
- (d) US\$4,000,000 endowment to finance overall RNSIIPG recurrent and partial subproject costs established and financing strategy with mechanisms for additional revenue designed and implemented;
- (e) Collaborative projects in 10 representative pilot sites implemented under co-management and other forms of organization with communities and stakeholders;
- (f) Monitoring system for RNSIIPG, including baseline data for indicative species established and management effectiveness monitoring system implemented.

### **III. PROJECT DESCRIPTION**

#### **A. Project Components**

23. The project will have four components: (1) institutional strengthening; (2) collaborative regional management; (3) monitoring and evaluation; and (4) project management.

24. **Component 1: Institutional strengthening.** Total amount: US\$6,907,000; GEF: US\$3,397,000; SERNANP: US\$1,510,000; KfW matching fund towards endowment fund: US\$2,000,000.

This component will build capacity at SERNANP and other institutions involved in the management of marine and coastal resources through supporting (1) the development and implementation of planning and management instruments through, inter alia, (a) the development of: (i) the zoning module of the RNSIIPG Master Plan; and (ii) specific management instruments for Pilot Sites that are not targeted by activities under Components 2 and 3; as well as (b) the implementation of an RNSIIPG-specific ecological label to certify sustainable economic and conservation initiatives within RNSIIPG; (2) the development and implementation of training plans on, inter alia, management and conservation of marine and coastal protected areas; and (3) the implementation of SERNANP's infrastructure and support systems for enhanced surveillance and control (including data-sharing mechanisms) on Pilot Sites and (4) the establishment and capitalization of a new trust fund so as to generate sufficient income to finance a portion of SERNANP's recurrent management costs and Collaborative Subprojects.

25. **Component 2: Collaborative regional management.** Total amount: US\$4,216,000; GEF: US\$4,000,000; SERNANP: US\$216,000.

The project will develop socially viable marine management models through carrying out of locally implemented Collaborative Subprojects in pilot sites selected by SERNANP and local stakeholders during project design.

26. **Component 3: Monitoring and evaluation.** Total amount: US\$4,375,000; GEF: US\$1,101,000; SERNANP: US\$3,274,000.

Project monitoring and evaluation will be carried out through: (1) the provision of support for: (i) the development of ecological baseline approaches to monitor marine biodiversity; (ii) the implementation of regular ecological monitoring systems in Pilot Sites once the activity under (i) above has been completed; and (iii) the carrying out of a research initiative in Lobos de Afuera Islands to study the area's biodiversity; (2) supporting the development and implementation of a management effectiveness monitoring and evaluation system within SERNANP; and (3) the provision of support for the monitoring and evaluation of Project performance.

27. **Component 4: Project management.** Total amount: US\$424,000; GEF: US\$424,000. The Project will strengthen the Peruvian Trust Fund for National Parks and Protected Areas (Fondo de Promoción para las Areas Naturales Protegidas del Perú (PROFONANPE) capacity to carry out the administrative and financial management of the Project.

### B. Project Financing

28. The project will be funded by the Global Environment Facility (GEF) with a US\$8,923,000 grant. The government of Peru will provide an additional in-kind contribution of US\$5,000,000 through SERNANP. The German Development Bank (KfW) will provide US\$2,000,000 from a pre-existing debt-for-nature swap to match an endowment fund to be established as part of the project. Additionally, KfW has committed with the government of Peru a grant of €10,000,000 that will serve as parallel financing for the project, and will also support the financing of marine and coastal protected areas with a special emphasis in RNSIIPG. No allocation from this grant has been included in the project, as the preparation of the feasibility study for the grant has not yet begun. Specific cooperative measures and their corresponding financial arrangements will be identified once the feasibility study is completed.

### C. Lending Instrument

29. Funding from the GEF Trust Fund totaling US\$8,923,000 will be implemented by IBRD through the Bank's Investment Project Financing instrument under World Bank OP/BP 10.00 guidelines and procedures.

### D. Project Cost and Financing

30. Specific project costs as approved by the GEF Secretariat and funded by the GEF Trust Fund, KfW and the Government of Peru are summarized in Table III.1.

**Table III.1 Specific Project Costs**

Project components	Project cost (US\$)	GEF financing	Government (SERNANP)	KfW
1. Institutional strengthening	6,907,000	3,397,000	1,510,000	2,000,000
2. Collaborative regional management	4,216,000	4,000,000	216,000	0
3. Monitoring and evaluation	4,375,000	1,101,000	3,274,000	0
4. Project management	425,000	425,000	0	0
<b>Total baseline costs</b>				
Physical contingencies				
Price contingencies				
Total project costs	15,923,000	8,923,000	5,000,000	2,000,000
Interest during implementation				
Front-end fees				
<b>Total financing required</b>				

## **E. Program Objective and Phases**

31. The project is a stand-alone initiative and is not part of a program.

## **F. Lessons Learned and Reflected in the Project Design**

32. RNSIIPG and SERNANP are relatively new, thus effective management tools of marine and coastal protected areas are still being developed in Peru. These tools rely on knowledge being currently developed regarding management effectiveness (including inter-institutional relationships), legal frameworks, perceptions and realities of local stakeholders, gender dimension, the current state of ecological science, and monitoring and evaluation of marine protected areas.

33. Through GPAN and PRONANP, PROFONANPE and SERNANP have acquired substantial experience in managing subgrants to subnational government for the implementation of local initiatives. The PAES manual summarizes the lessons from these experiences; it has shaped the design of project component 2, and will be applied throughout project implementation. PROFONANPE and the Government of Peru (through the Ministry of Environment and SERNANP) also have significant experience with previous GEF-World Bank grants, which has allowed for streamlined and proven implementation arrangements to be incorporated into project design.

34. Even before they were declared a protected area, other projects were implemented, and nongovernmental organizations (NGOs) were active, in Peru's guano islands and capes. Most of these initiatives were restricted to certain locations or focused on particular topics, such as fishery management or transborder collaboration between Peru and Chile. While SERNANP, as the area administrator, has been involved in every one of these projects and has worked with NGOs and research institutions active in the reserve, the same limitations related to weaknesses in infrastructure, capacity, and know-how, lack of communication, and overlapping jurisdictions have also affected these relationships. Lessons can be learned from these projects and partners, including IMARPE and others (for example The Nature Conservancy), which can assist in strengthening the existing partnership arrangements with SERNANP.

35. The Humboldt Current Large Marine Ecosystem Project (HCLME) – funded by GEF and implemented by the United Nations Development Programme (UNDP) – has objectives and pilot sites that potentially overlap with the project. The HCLME, while active in three sites inside RNSIIPG, does not address the same issues of this project. HCLME is a planning an overall management-oriented initiative, while the present project focuses more on field-based, direct approaches to management strengthening. However, both projects will maintain coordination and complementarity in order to provide feedback and avoid duplications.

36. The Global Partnership for Oceans provides a platform that additionally guides project implementation. The Bank's focus on fighting poverty through balancing "protection of marine habitats and ecosystems with protection of livelihoods" is one of the underlying principles behind the project. Rights-based fisheries, sustainable tourism, research, and education are expected project interventions that are also recommended under the Global Partnership for Oceans approach. The Bank also has significant experience in establishing endowment funds and exploring and supporting additional funding mechanisms for protected areas. A recent Bank report provides detailed analyses and conclusions that are highly relevant for project implementation.<sup>5</sup>

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<sup>5</sup> Kemper, Karin, ed. 2012. *Expanding Financing for Biodiversity Conservation: Experiences from Latin America and the Caribbean*. Washington, DC: World Bank. <http://www.worldbank.org/content/dam/Worldbank/document/LAC-Biodiversity-Finance.pdf>.

37. KfW is expected to provide parallel financing to the project from 2014 onwards, which will be directed towards RNSIIPG. According to KfW (as of June 2013), these funds will be dedicated mainly to investments (for example infrastructure, vehicles, and equipment). During project preparation close coordination was maintained between the Bank, SERNANP, KfW, PROFONANPE, and the project design team to ensure complementarity between both initiatives. The project has been designed in such a way that its first two years of implementation will provide the necessary support to strengthen the capabilities of SERNANP and its partners both overall and in selected pilot sites. Once KfW funding becomes available, lessons learned in the project's pilot sites would be expanded to the rest of the reserve. To adjust for the expected KfW funding, which will likely be available during the second year of project implementation, the project will carry out its midterm review no later than month 24 of implementation.

#### **IV. IMPLEMENTATION**

##### **A. Institutional and Implementation Arrangements**

38. PROFONANPE will be the recipient of the GEF grant and will be responsible for the fiduciary implementation of the project, including financial management and procurement according to the project's operational manual and procurement plan. The World Bank, acting as the implementing agency of GEF, will sign a grant agreement with PROFONANPE.

39. SERNANP, as the main beneficiary and technical executing agency of the project, will retain its ownership and will ultimately be responsible for the implementation, supervision, and monitoring of the technical aspects of project activities in RNSIIPG. PROFONANPE will sign an agreement with SERNANP to detail the agreed activities, the financial plan, and the roles and responsibilities of each party.

40. Project implementation envisages active operational and (possibly) financial collaboration with IMARPE, AGRO RURAL, and DICAPI based on inter-institutional agreements and/or contracts.

41. IMARPE will be the main scientific partner for SERNANP; a comprehensive agreement will be signed between both agencies covering details regarding collection, processing, and use of data, as well as coordination and intellectual property issues. SERNANP will also recruit the help of third parties for research, monitoring, and information if IMARPE's institutional capabilities are deemed insufficient for the project's purposes. According to each individual case, PCT will coordinate with the Bank to identify the most appropriate contracting mechanism.

42. AGRO RURAL and DICAPI will provide operational support and data for project implementation. Existing framework agreements between both entities and SERNANP will be reviewed and modified, if required, to include more detailed descriptions of their institutional responsibilities regarding project implementation.

43. The Project will be implemented, monitored, and evaluated by a dedicated project coordination team (PCT) supporting SERNANP, which will be the project's technical and operational implementing agency. PCT staff, including the technical adviser, procurement specialist, and administrative assistants, will share their costs pro rata according to their participation in other project components. The PCT will be composed of (i) a technical team, under the supervision of SERNANP, responsible for the overall technical implementation and coordination of the Project and (ii) a fiduciary team, reporting to PROFONANPE, responsible for the administration, procurement and financial management of the Project. PROFONANPE will thus maintain the fiduciary responsibility for the project, providing disbursements, supervising the use of funds, and managing the endowment

fund. RNSIIPG's Technical Coordination Group will provide technical advice on project implementation. The PCT is comprised of (i) a fiduciary team, under the supervision of PROFONANPE, responsible for the administration, procurement and financial management aspects of the Project; and (ii) a technical team, under the supervision of SERNANP, responsible for the overall technical implementation and coordination of the Project.

44. A Project Administration Council (PAC) will be established to oversee implementation and will be composed of a representative of SERNANP; a representative of PROFONANPE's Board of Directors; a representative of project stakeholders who will be invited by the other two members on an annual basis; and the Executive Director of PROFONANPE, who will act as the technical secretary.

45. PCT will be in charge of supervising compliance with the Bank environmental safeguards triggered for the project and for the sound and timely implementation of environmental management measures identified in the Environmental Management Plan prepared as part of the project's environmental assessment.

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

46. Monitoring and evaluation will be carried out as an operational project component of its own (component 3).

47. Data for project outcome and results indicators will come from a number of sources, including field reports for ecosystem health and community participation in events, community perception and satisfaction surveys, and results evaluations of applications of METT and other effectiveness tracking mechanisms. No additional costs are expected to be required for monitoring and evaluation.

#### **C. Sustainability**

48. *Financial sustainability* will be achieved through the establishment of a US\$4,000,000 endowment fund, which will finance SERNANP's recurring operational costs and some costs associated to the implementation of subprojects in Component 2, and the development of a reserve-specific financial sustainability strategy and roadmap built on an existing legal and financial framework for Peru's SINANPE.

49. *Institutional sustainability* will be achieved through regular capacity building of staff and external stakeholders, the training of in-house trainers, and the provision of infrastructure at levels that can be maintained through reasonably expected national budget allocations and the expected annual returns of the new endowment fund.

50. *Socioeconomic sustainability* will be achieved through the successful implementation of collaborative subprojects at selected representative pilot sites. *Environmental sustainability* will be achieved by developing and implementing a solid ecological monitoring and evaluation system, which will run under a framework of increased inter-institutional coordination and collaboration among the agencies with direct jurisdiction over RNSIIPG management.

51. *Overall sustainability* of project results and lessons learned is ensured by having selected pilot sites and interventions that are representative of the wider reserve.

## V. KEY RISKS AND MITIGATION MEASURES

### A. Risk Ratings Summary Table

Risk Category	Rating
<b>Stakeholder Risk</b>	Moderate
<b>Implementing Agency Risk</b>	
- Capacity	Moderate
- Governance	Moderate
<b>Project Risk</b>	
- Design	Moderate
- Social and Environmental	Moderate
- Program and Donor	Low
- Delivery Monitoring and Sustainability	Low
<b>Overall Implementation Risk</b>	Moderate

### B. Overall Risk Rating Explanation

52. Implementing agency risks are moderate. SERNANP's management and project implementation capabilities are generally considered satisfactory, although a lack of resources and specialized manpower could affect the way project activities are carried out and supervised. Lack of effective coordination and communication with other government agencies needs to be addressed in order to implement coherent management strategies and actions. PROFONANPE's long and successful experience carrying out GEF-funded initiatives in Peru's protected areas will help mitigate those weaknesses.

53. Project stakeholder risks are moderate. Stakeholders include, in addition to government agencies with direct responsibilities in RNSIIPG management (besides SERNANP), subnational governments, artisanal fishers, tour operators, NGOs, research and academic entities, women's associations, and other civil society organizations. Social sustainability risks are related to a lack of understanding of the implications of RNSIIPG by local community-based stakeholders, including subnational governments at the local level.

54. Risks related to project design, program and donor, and monitoring and sustainability are low. A project preparation grant was provided to carry out extensive due diligence during project preparation. GEF and the Bank have extensive experience funding and implementing projects in Peru.

55. Environmental risk is moderate. The project will be undertaken in a very sensitive natural environment under implementation mechanisms that are relatively new for SERNANP. Social risk is moderate; while conflicts might arise from the implementation of protected area management models that might be perceived as restrictions to the existing access to natural resources, the project ensures stakeholder involvement in planning and implementation and is expected to provide improvements to local livelihoods and economic conditions.

### C. Key Risks and Issues

56. The following key risks and issues for implementation have been identified during project preparation:

- (a) In order to achieve anticipated results, there is a need to improve coordination across various national government and civil society stakeholder groups, including AGRO RURAL, DICAPI, IMARPE, and the Ministry of Production, as well as subnational governments, which have traditionally not worked together, which in areas of project implementation, will have to work closely together. Identified risks are related to achieving the necessary cooperation . *Risk mitigation:* The project will support SERNANP and its partner agencies to improve coordination and collaboration mechanisms. Management planning and project implementation will include local participation, and strong communication mechanisms will be implemented. Input from representative stakeholders was received and incorporated into project design.
- (b) Insufficient institutional capacity across the agencies with direct jurisdiction in RNSIIPG management is a key issue that can create risks for adequate project implementation. Lack of specialized manpower and resources does not provide an optimal implementation context. *Risk mitigation:* The project does include strong interventions to improve management effectiveness of the protected area through capacity building, provision of equipment, and enhancement of existing infrastructure.
- (c) Social sustainability risks are related to a lack of understanding of the implications of RNSIIPG by local community-based stakeholders, including subnational governments at the local level. Disagreements between reserve managers and local users might escalate and negatively impact project implementation. *Risk mitigation:* SERNANP already carries out intensive community outreach as part of its management strategy, including involvement of local stakeholders and community consultations. The project is promoting the development of even stronger ties by implementing a proactive communications strategy and providing subgrants for collaborative subprojects to be executed by local stakeholders. Subgrants are expected to demonstrate the social and economic benefits of resource management, conservation, and protected areas.

## **VI. APPRAISAL SUMMARY**

### **A. Economic and Financial Analyses**

57. RNSIIPG project has four components: 1) Institutional Strengthening; 2) Collaborative Regional Management; 3) Monitoring and Evaluation; and 4) Project Management. The project offers both tangible and intangible economic benefits. As a result, a cost benefit analysis of the activities presents various challenges. A marine protected area system offers numerous benefits and services to their immediate resource users, other citizens in the country and more globally. While in theory, all direct and indirect use values of natural resources are capable of being measured in monetary terms; in reality, only some of these goods and services can be valued through market mechanisms.

58. Given the limited information available regarding the economic benefits that could be derived from improved management, several assumptions (listed in **Annex 7**) are used for the costs and benefits associated with this project. One of the key assumptions made is that is that roughly US\$30/ha is the tangible net benefit that could be generated from tourism for the marine reserve. This includes spillover benefits to restaurants and other service providers in the tourism sector).

59. Working within these constraints, the economic analysis for this project estimates the minimum annual benefit required for the project to generate a 12 percent return on investment over a period of 10 and 20 years using both a social and private discount rate of 4 and 10 percent respectively. To achieve this return on investment, the present value of the monetary benefits would range from US\$16.3 million to US\$ 21.1 million (using a 4 percent discount rate for the two time periods) and US\$14.3 million and US\$16.5 million (using a 10 percent discount rate for the two time

periods). Using the same discount rates and time periods, the analysis estimates tangible benefits from the project and the present value of net benefits from RNSIIPG.

60. Using the above assumptions, the calculations show that the project will generate a return on investment of 12% in the following cases:

- (a) If the benefits from tourism (including the spillover effects) are \$US21/ha, when using a discount rate of 4% for a period of 20 years.
- (b) If the benefits from tourism (including the spillover effects) are \$US25/ha, when using a discount rate of 10% for a period of 20 years.
- (c) If the benefits from tourism (including the spillover effects) are \$US49/ha, when using a discount rate of 4% for a period of 10 years.
- (d) If the benefits from tourism (including the spillover effects) are \$US55/ha when using a discount rate of 10% for a period of 10 years.

61. The project will be able to generate a 12 percent return on investment over a twenty-year period because the necessary benefits per hectare are below those generated just from tourism (including the spillover benefits). The returns per hectare need to be higher to generate a 12 percent return on investment in the 10 year scenarios. The higher values of benefits per hectare are likely to be achieved because of the benefits from research, improved monitoring and sustainable fisheries. The latter will be important because artisanal fisheries are one of the primary beneficiaries of the project. The analysis uses a very conservative estimation of economic benefits, both in terms of when benefits are accrued and also by only considering the direct and spillover benefits from tourism.

## **B. Technical**

62. The project will support the Government of Peru's capacities to successfully manage and protect RNSIIPG and its biodiversity. The project will support the development and implementation of new management mechanisms, specifically designed or adapted from experiences in similar locations in the region. Local, self-replicating capacities will be built. Local communities will be strengthened and turned into relevant actors for conservation and sustainable use of local resources. Lessons from the project may be applied in Peru's other current and future marine and coastal protected areas. Overall, the project will have a substantial, measurable impact on the country's ability to conserve and protect its biodiversity and natural resources.

## **C. Financial Management**

63. PROFONANPE will be responsible for the project's management, including fiduciary responsibilities, and to that end it will coordinate with SERNANP (responsible for the technical aspects of the project), and other partner organizations, as well subproject executors. As it relates to financial management tasks, PROFONANPE has expertise in working with donor funds and has maintained a satisfactory record during the implementation of GPAN<sup>6</sup> and the ongoing PRONANP.<sup>7</sup> PROFONANPE has implemented sound financial management arrangements, and it has proved to be a solid institution. Therefore project implementation would fully rely on those existing arrangements, strengthening them as needed mainly to ensure adequate coordination with other participating bodies.

64. Drawing from lessons learned in previous and ongoing initiatives and new operational challenges identified, PROFONANPE has strengthened its financial management arrangements; its

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<sup>6</sup> Project: Participatory Management of Protected Areas (GEF Project ID 1101; IBRD PO ID 68250).

<sup>7</sup> Project: Strengthening Biodiversity Conservation through the National Protected Areas Program (GEF Project ID 2693; IBRD PO ID 95424).



information system is working well, and it provides required information for monitoring purposes, the operational manual reflects specific financial management arrangements for the projects (including processes and procedures to control different sources of financing); and it is in the process of updating the PAES Manual. Overall, project FM risk is considered moderate, mainly because project design requires coordination and transfer of funds to various partner organizations, as well as disbursement of funds to a variety of beneficiary organizations, with different capacity level, for the implementation of subprojects. PROFONANPE has put in place different mitigating measures to address the associated risk; including the provision of reliable information for monitoring purposes. However, effective operation of those arrangements will need to be monitored. Based on the review performed and performance under the current operation the proposed arrangements can be considered acceptable to the Bank, subject to the updating of the subproject manual.

#### **D. Procurement**

65. Procurement for the project will be managed by PROFONANPE and carried out in accordance with World Bank Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011; Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credit & Grants by World Bank Borrowers, dated January 2011; and the provisions stipulated in the grant agreement.

66. An assessment of the implementation agency's capacity to implement procurement actions for the project was carried out. The assessment looked into PROFONANPE's (a) organizational structure; (b) facilities and support capacity; (c) qualifications and experience of the staff that will work in procurement; (d) record keeping and filing systems; (e) procurement planning, monitoring, and control systems used; and (f) capacity to meet the Bank's procurement contract reporting requirements. It also reviewed the procurement arrangements proposed in the procurement plan. The overall project risk for procurement is Moderate.

67. The proposed corrective mitigating measures are: (a) to implement and monitor the procurement plan through SEPA; (b) a yearly procurement review must be carried out by Bank staff.

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

68. A social assessment developed during project preparation contributed to understanding livelihood dynamics and guided the selection of pilot project activities and beneficiaries. In addition, five targeted stakeholder workshops at pilot side level were conducted between March 10 and April 12, 2013. Participants included local fishermen, NGOs, producer associations and sub-national government and research institutions and tourist operators. Local perceptions and socioeconomic needs were identified and incorporated into project design, and the project's collaborative subprojects will address the majority of issues identified in terms of social sustainability. In the long term, the project will have a positive impact on the socioeconomic conditions of target stakeholders. However, initial impacts on local livelihoods, either real or perceived, are possible, mostly due to reduced access to resources resulting from improved enforcement of existing RNSIIPG regulations and establishment of new zoning mechanisms. In consequence, the social safeguard on Involuntary Resettlement (OP 4.12), impact 3(b), has been triggered. In response, the borrower has prepared two

instruments: (a) an updated social assessment of the local stakeholders in the area of influence of the project's pilot sites of intervention; and (b) a Process Framework.<sup>8</sup>

69. In addition, during project preparation a detailed gender analysis was prepared, as per Bank OP 4.20, Gender Mainstreaming in Development. Recommendations regarding gender equality, women's empowerment, and active participation in the project's socioeconomic structure were incorporated into the subcomponents, activities, and Results Framework. The analysis took into account the Bank's Peru Country Partnership Strategy approach on gender issues (Country Partnership Strategy, paragraphs 16 and 17, and Annex 12).

70. **Involuntary Resettlement (OP/BP 4.12).** Given the size and economic importance of the existing and emerging threats, the management of RSNPIIG will require high levels of inter-institutional coordination, highly participatory approaches with local stakeholders, efficiency and specific management plans that provide both increased protection and that guide the interventions and investments of relevant sectors to prevent and mitigate the potential impacts of the existing threats. A Social Assessment was developed during the preparation stage to understand livelihood dynamics and guide the selection of pilot project activities that combine more sustainable marine resource use with enhanced livelihoods. The policy is triggered because the project will support the implementation of protected areas that could limit access to natural resources in some of the selected areas. To mitigate potential adverse impacts on livelihoods the client has prepared a Process Framework, which was disclosed on the World Bank's external website on August 29, 2013 and in-country on September 4, 2013, that includes the sub-projects identified during the preparation phase of the project which are part of Component 2. The project will not result in physical displacement.

#### **F. Environment (Including Safeguards)**

71. OPs 4.01, 4.04, and 4.11, have been triggered.

72. **Environmental Assessment (OP 4.01).** The project is classified overall as Category B. It is anticipated that the project will fund the upgrading or enhancement of existing infrastructure inside RNSIIPG without altering current footprints, or put in place small-scale, environmentally friendly infrastructure such as visitor trails and or signage. The impact of these interventions will be low level and carried out according to strict environmental criteria. An environmental assessment (which was disclosed on the World Bank's external website on August 29, 2013 and in-country on September 4, 2013) has been prepared, which includes environmental mitigation actions for these interventions.

73. **Natural Habitats (OP 4.04).** The project will not cause or facilitate any loss or degradation of natural habitats, as its main goal is to improve management of marine and coastal ecosystems and protect biological diversity. RNSIIPG has suffered from human intervention for over a century. The project is intended to reduce and, if possible, reverse the current levels of biodiversity and habitat degradation by enhancing government management capabilities and promoting sustainable use among local stakeholders. Project interventions that might alter existing ecosystems will follow strict environmental guidelines and will require prior edge effect and other impact assessment. In addition, staff and users will be properly trained to understand the implications of intervening in critical and sensitive natural habitats. The Environmental Assessment will guide appropriate mitigation measures.

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<sup>8</sup> As per paragraphs 26 and 27 of OP 4.12, Annex A.

74. **Physical Cultural Resources (OP 4.11).** Project interventions will be located in sites (capes and islands) dispersed along the Peru's coastline and marine and coastal area. This area was inhabited and used in the past by pre-Columbian cultures and it is likely that chance finds may occur (for example artifacts). Project activities do not include excavations, demolitions, movements of earth, or any similar disturbance, and no intervention will happen next to already known physical cultural resources outside the project's influence area. However, some of AGRO RURAL's field infrastructure and buildings are considered of historical heritage value, and some project activities might make use of this particular infrastructure. Project interventions in this case can arguably fall under the provisions of BP 4.11, paragraph 3(c). OP 4.11 has therefore been triggered. The environmental assessment required for OP 4.01 and OP 4.04 also includes a physical cultural resource assessment, mitigation measures, and a management plan, which will be included in the Environmental Assessment's mitigation actions.

75. **Pest Management (OP 4.09).** The project does not involve agricultural or public health issues. No pesticides or other agricultural chemicals will be purchased or promoted under any project intervention. While OP 4.09 is not triggered, it is mentioned since limited use of chemicals is expected in order to disinfect buildings prior to human use on selected project pilot sites. Disinfection is a regular procedure used by AGRO RURAL in order to secure the health of their field staff. No negative effects have been identified on bird populations or key habitats, given the limited and localized scale (mostly indoors) of pesticide use.

76. **Climate change.** The project does not specifically target issues around impacts of climate change in relation to RNSIIPG management. Peru's coastline is regularly affected by extreme weather conditions resulting from El Niño southern oscillation (ENSO) events, and links between ENSO and global climate change are only recently becoming clearer.<sup>9</sup> Understanding and applying these uncertainties is beyond the project's scope. However, through improved management, better monitoring, and enhanced conservation actions, the project will increase the resilience of target species and communities to potential changes in climate patterns, either seasonal (during ENSO events) or in the medium and long term (resulting from global climate change).

#### **G. Other Safeguard Policies Triggered**

77. The project will not trigger other safeguard policies.

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<sup>9</sup> "Global Warming: El Nino Link Stronger but Still Not Proven." Climate Central website: <http://www.climatecentral.org/news/global-warming-el-nino-link-stronger-but-still-not-proven-15427>.

## Annex 1. Results Framework and Monitoring

**Country: Peru**

**Project Name: Peru Strengthening Sustainable Management of the Guano Islands, Isles and Capes National Reserve System Project (P129647)**

### Results Framework

#### Global Environmental Objectives

PDO Statement

The Global Environmental Objective/ Project Development Objective of the project is to improve the overall management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System of Peru (RNSIIPG) and protect its biological diversity in pilot sites.

**These results are at** Project Level

#### Global Environmental Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	End Target			
Terrestrial areas brought under enhanced biodiversity protection (ha)	☒	Hectare(Ha)	817	817	817	2,507	2,507	2,952	Annual	SERNANP and METT Exercises	SERNANP; AGRORURAL; IMARPE.
Marine areas brought under enhanced biodiversity protection (ha)	☒	Hectare(Ha)	0	0	0	33,059	49,721	84,454	Annually	SERNANP reports and METT exercises	SERNANP; AGRO RURAL; IMARPE.

### Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	End Target			
At least 35% of improvement in marine and coastal management effectiveness compared to METT baseline	<input type="checkbox"/>	Percentage	0	0	0	20	20	35	Annually	Annual reports, METT evaluations and other management reports	RNSIIPG, SERNANP, Project PCT
Percentage of beneficiaries involved in subprojects have maintained or increased their disposable income	<input type="checkbox"/>	Percentage	0	0	20	30	50	80	Annually	Household surveys, M&E Reports	SERNANP, PCT, other partners (Universities, NGOs)
Increase in financing of basic operations of the RNSIIPG	<input type="checkbox"/>	Amount(USD)	640,000	600,000	800,000	1,100,000	1,150,000	1,200,000	Annually	Budget plan, Annual Report	SERNANP, PROFONANPE
At least 320 staff members of SERNANP, other agencies and communities' actors trained.	<input type="checkbox"/>	Number	10	10	160	200	250	320	Annually	Training progress reports from multiple sources.	RNSIIPG-SENANP; training providers; other facilitators.
Information system on	<input type="checkbox"/>	Yes/No	No System available	No system available	System developed	System implementation	System implementation	System operational	Annually	Project PCT, M&E	SERNANP-RNSIIPG

RNSIIPG activities developed and operational						underway	underway			Reports	
At least 3 control systems implemented.	<input type="checkbox"/>	Number	0	0	0	1	2	3	Annual	Progress reports; field verifications	SERNANP
14 planning and management instruments developed and implemented	<input type="checkbox"/>	Number	0	0	5	10	14	14	Annually	Reports, resolutions, planning documents	RNSIIPG-SERNANP
Endowment established and capitalized	<input type="checkbox"/>	Amount(USD)	0	2,000,000	4,000,000	4,000,000	4,000,000	4,000,000	Annually	Finance reports; mid-term and final review.	PROFONANPE
3570 persons benefiting from project activities, of which 40% are female	<input type="checkbox"/>	Number	0	350	900	1,800	3,570	3,750	Annually	Progress Reports, field surveys	SERNANP-RNSIIPG, PCT
6 cooperation mechanisms established.	<input type="checkbox"/>	Number	0	1	3	6	6	6	Annually	Agreements	RNSIIPG-SERNANP; Project PCT.
Maintain Humboldt penguin population	<input type="checkbox"/>	Number	8,000	8,000	8,000	8,000	8,000	8,000	Monthly	Monthly Census	AGRO RURAL, SERNANP
Increase of Chita fish ( <i>Anisotremus scapularis</i> ) population in reproduction areas	<input type="checkbox"/>	Percentage	0	0	5	10	20	30	Semi-annually	M&E Reports, field surveys	SERNANP, DICAPI, IMARPE

## Annex 2. Detailed Project Description

### Peru: Strengthening Sustainable Management of the Guano Islands, Islets, and Capes National Reserve System (RNSIIPG)

1. The project will be funded by GEF with a US\$8,923,000 grant. The government of Peru will provide an additional in-kind contribution of US\$5 million through SERNANP. The German Development Bank (KfW) will provide US\$2 million from a pre-existing debt-for-nature swap to match an endowment fund to be established as part of the project. Additionally, KfW has committed with the government of Peru a grant of €10 million that will serve as parallel financing for the project, and will also support the financing of marine and coastal protected areas with a special emphasis in RNSIIPG. No allocation from this grant has been included in the project, as the preparation of the feasibility study for the grant has not yet begun. Specific cooperative measures and their corresponding financial arrangements will be identified once the feasibility study is completed.

2. The project will have four components: (1) institutional strengthening; (2) collaborative regional management; (3) monitoring and evaluation; and (4) project management.

3. **Component 1: Institutional strengthening.** Total amount: US\$6,907,000; GEF: US\$3,397,000; SERNANP: US\$1,510,000; KfW matching fund towards endowment fund: US\$2,000,000.

This component will build capacity at SERNANP and other institutions involved in the management of marine and coastal resources through supporting (1) the development and implementation of planning and management instruments through, inter alia, (a) the development of: (i) the zoning module of the RNSIIPG Master Plan; and (ii) specific management instruments for Pilot Sites that are not targeted by activities under Components 2 and 3; as well as (b) the implementation of an RNSIIPG-specific ecological label to certify sustainable economic and conservation initiatives within RNSIIPG; (2) the development and implementation of training plans on, inter alia, management and conservation of marine and coastal protected areas; and (3) the implementation of SERNANP's infrastructure and support systems for enhanced surveillance and control (including data-sharing mechanisms) on Pilot Sites and (4) the establishment and capitalization of a new trust fund so as to generate sufficient income to finance a portion of SERNANP's recurrent management costs and Collaborative Subprojects.

**Subcomponent 1.1:** *Development and implementation of planning and management instruments.* Under this subcomponent the project will (a) support the development of the zoning module of the RNSIIPG Master Plan; (b) develop specific management instruments for pilot sites and management issues that are not covered under either subprojects in project component 2 or activities under project component 3; and (c) develop and implement an RNSIIPG-specific "green seal" certification scheme.

4. The project identification form (PIF) states that subcomponent 1.1 will develop the "Strategic Plan" for the reserve. However, the term "Master Plan" is the current definition used by SERNANP to identify the main planning and guiding document for protected areas in Peru. Although the terminology has changed, for project purposes both documents are equivalent.

5. In line with current SERNANP planning policy (which states that protected areas are ruled by one single Master Plan that incorporates all strategic approaches to area management), resource

management plans and master plans for pilot zones, originally considered in PIF as separate documents, are now considered part of one single reserve Master Plan and will therefore not be designed and implemented independently. However, in component 2 the project will design site-specific plans for pilot sites that will contribute to the overall implementation of the RNSIIPG Master Plan.

6. *Development of the zoning module of the RNSIIPG Master Plan.* The master plan for the reserve is in its initial stages of development. The first phase – identifying the vision and conservation goals of the protected area – is being funded by a partially concurrent GEF-UNDP grant,<sup>10</sup> scheduled to close in November 2014. While SERNANP will carry out the design and implementation of the remaining sections of the Master Plan, the project will support the development of the zoning module of the plan, including strengthening of GIS capabilities and infrastructure, procurement of required aerial and satellite imagery, field verification, and provision of technical assistance in marine spatial planning (including advanced techniques in gap analysis, dynamic area zoning, and mechanisms for use rights).

7. *Development of specific management instruments for pilot sites and management issues.* RNSIIPG endures a number of management problems that are either site or topic related, especially increasing pressures from unregulated fishing and tourism, and the absence of higher-level research to support management decisions. These problems derive essentially from the lack of planning instruments to guide management actions. SERNANP has identified two interventions that are considered key to provide solutions that can be replicated in similar locations of the reserve. These interventions are not targeted by specific collaborative subprojects or activities either in component 2 (because they cannot be solved under a collaborative co-management approach) or component 3 (because they are not related to the development of an ecological baseline or monitoring and evaluation). The project will contribute to SERNANP's conservation goals by supporting the development of the following management instruments:

8. *Development of a natural resource management plan for the sustainable harvest of giant Patagonian jackknife clam (*Ensis macha*) and Chilean blue mussel (*Mytilus sp.*) in Punta Salinas.* Salinas Cape, Huampanú Island, and Mazorca Island together form the RNSIIPG site collectively known as Punta Salinas.

9. *Development of a site plan for Asia Island.* Asia Island is located 2 kilometers offshore of its namesake town of Asia, a major tourist location due to its closeness to shore, Asia is a favorite place for seasonal tourist visits. In many regards, management in Asia is more advanced than in any RNSIIPG site: coordination and collaboration between local government and management authorities is strong, as is the support of the local police and coastguard to enforce (although with limited resources) existing regulations, especially regarding approach limits to the island's shores. Still, in order to complement advances in participatory management and enforcement, SERNANP needs to strengthen various management components. The project will support the development of a site-specific strategic plan that will set up an enhanced regulatory use framework for the site.

10. *Development and implementation of an RNSIIPG-specific, officially approved ecological certification mechanism.* Under its management category as a national reserve, RNSIIPG does allow for the sustainable extraction of natural resources in order to benefit local communities. The

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<sup>10</sup> Project: Towards Ecosystem Management of the Humboldt Current Large Marine Ecosystem (HCLME) (GEF Project ID 3749; UNDP PMIS ID 4147).



project is supporting a number of initiatives that will provide opportunities for enhancing quality of life through sustainable use of the reserve. SERNANP itself does not have a stand-alone mechanism to formally encourage and reward proper environmental management and sustainable use by the reserve's many stakeholders. Various international certification labels can be used to provide a framework on which SERNANP can develop its own ecological label within the particular context of the reserve, which could then be adapted and applied in other protected areas of the country. The project will support the development of SERNANP's own ecological label to certify sustainable economic and conservation initiatives within the reserve.

11. **Subcomponent 1.2: *Development and implementation of training plans.*** The reserve's young age and SERNANP's lack of experience in marine and coastal protected area management have been identified even prior to project design as one of the main obstacles to effective management. A 2008 consultancy report prepared as part of PRONANP's project preparation phase recommended a detailed array of training requirements to be applied in order to raise staff capabilities to minimum efficiency levels.<sup>11</sup> A second report, commissioned during project design, reviewed and ratified these recommendations, considering that in the years passed since the creation of RNSIIPG little progress had been made in terms of capacity building of reserve staff and within SERNANP's Coastal Marine Unit.<sup>12</sup>

12. The project will apply various approaches to build capacity and promote training as a management efficiency tool. Training will be provided to SERNANP staff and will also be extended to other agencies with direct responsibility for RNSIIPG management, including DICAPI and AGRO RURAL. Indirect stakeholders, such as local and regional authorities, artisanal fishers, tour operators, women's organizations, and academic and nongovernmental bodies, will be included in specifically tailored training activities to foster their understanding of conservation of marine and coastal protected areas and encourage their active participation in sustainable management issues.

13. *Development of training plans.* The project will develop custom-made training plans for various audiences, based on detailed perception studies and needs assessments to be carried out during project implementation. Stakeholder assessments have been developed and minimum management efficiency targets have been identified during project design and will also be considered. Plans will also include detailed and tailored indicators and monitoring and evaluation protocols. Plans will also build self-sustaining capacity by including training-for-trainers modules as an exit strategy for post-project sustainability.

14. *Development and implementation of standardized training modules.* The project will develop standardized training modules to be implemented across the reserve's staff and stakeholders. Modules will be designed in such a way as to be easily adjustable and self-contained, allowing for deployment at short notice. Socioeconomic assessments carried out during project design indicated that local communities in RNSIIPG's area of influence are relatively similar in terms of economic activities and knowledge (or lack thereof) of issues related to the existence of the protected area. Most of AGRO RURAL's field staff, the majority of whom are the only permanent enforcement presence on the islands and capes, shares the same basic level of understanding of

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<sup>11</sup> Austerhmühle, Stefan. 2008. *Identificación de Capacidades Requeridas para la Gestión de la Propuesta Reserva Nacional Sistema de Islas, Islotes y Puntas Guaneras por Parte de la Autoridad Nacional de Áreas Naturales Protegidas y Recomendaciones para su Diseño Organizacional.*

<sup>12</sup> Céspedes, Cynthia. 2013. *Identificación de Requerimientos y Metas Mínimas para el Fortalecimiento de la Gestión de la RNSIIPG.* Document produced during project design phase.

protected area management concepts. Standardization of training modules will allow for a desired minimum level of capabilities and knowledge regarding RNSIIPG.

15. *Training trainers.* The project will design and implement special training courses to create a pool of highly skilled trainers to continue training after project conclusion. For this activity, trainees will be selected from local communities and stakeholder groups, including staff from various management agencies, local and regional authorities, artisanal fishers, tour operators, women's organizations, and academic and nongovernmental bodies. It is expected that local trainers will be able to assume responsibility for the implementation of this component during the third year of project implementation.

16. *National and international knowledge exchange.* In order to provide fresh perspectives and to allow for the sharing of lessons learned with other, similar protected areas, the project will promote exchange activities with staff from other areas in Peru and abroad. Funds will be provided for locally organized training workshops with the participation of foreign specialists (for example management and technical staff from the Galapagos National Park), and local RNSIIPG staff (including SERNANP, AGRO RURAL, and DICAPI personnel) will be sent to specific training courses in protected area management abroad. The project will also promote exchange between stakeholders in similar locations and contexts, including coastal managers, fishers' associations, tour operators, and women's groups.

17. External trainers and specialists will be engaged during the first two years of project implementation until local capacity is available. Within the context of RNSIIPG as the main framework, training modules will focus on different topics relevant to the management and conservation of the reserve, including environmental management; natural resource management (including guano, fisheries, and tourism); communications and public outreach; participatory marine and coastal management; and gender.

18. **Subcomponent 1.3:** *Implementation of infrastructure, staffing, and support systems for enhanced surveillance and control.* Lack of sufficient infrastructure, staff, and support systems is generally considered a major hurdle for the efficient management of any protected area. In marine and coastal protected areas, difficulties are compounded by a hostile environment and long distances between management sites.

19. The project cannot solve all the institutional needs of the reserve but will support four scopes of intervention. These interventions will demonstrate how targeted and strategically implemented enhancements in infrastructure can increase management effectiveness and provide tangible conservation results. Lessons learned from these activities may be replicated across the reserve once additional investment funding (for example KfW parallel project financing) becomes available.

20. SERNANP, AGRO RURAL, and DICAPI will be supported by providing new and improved equipment, upgrading physical locations, and implementing additional support systems (for example better communications protocols and real-time access to monitoring data). Arrangements will be made to develop viable and operational inter-institutional agreements between all three agencies in order to share responsibilities and infrastructure and improve the effectiveness of joint surveillance, control, and monitoring activities.

21. *Strengthening of SERNANP's management, surveillance, and control capabilities in Punta Coles.* Punta Coles has been identified as a site where participative management of high-intensity tourism can be demonstrated. Punta Coles will benefit from a collaborative subproject funded by the

project as well as from training carried out under subcomponent 1.2. However, improvement of infrastructure, both at SERNANP's offices in the nearby city of Ilo and on site at the actual cape of Coles, are necessary to ensure proper control of the growing tourism operation. While no new infrastructure will be built, the project will provide equipment and materials to upgrade existing office space, improve working conditions for SERNANP and partner agency staff, and enhance visitor areas. Included here are office equipment and furniture, as well as up-to-date electronics and software, including equipment to connect the office to a new data network.

22. Local communications will be strengthened by procuring sufficient quantities of new equipment, including fixed and mobile radios and phones. Field staff of agencies with direct surveillance and control responsibilities will be adequately outfitted with necessary equipment and apparel. A minimum quantity of marine equipment and properly outfitted watercraft will also be acquired, as Punta Coles is exposed to frequent unauthorized approaches from the sea, for example by fishers or tourists. Signage will be developed and commissioned, following system-wide standards, if available. Altogether, the project will aim at achieving the minimum targets identified during project preparation.

23. *Strengthening of SERNANP's management, surveillance, and control capabilities in Guañape Islands.* Guañape Islands have been identified as a representative site where field-based outreach activities (on-site education and research) can become a key factor for effective participatory management and conservation of RNSIIPG. Guañape Islands will benefit from a collaborative subproject funded by the project as well as from training carried out under subcomponent 1.2. As in Punta Coles, improvement of infrastructure both at SERNANP's offices in the nearby city of Trujillo (or in one of several coastal communities next to the islands) and on site on the islands is necessary to ensure adequate supervision of the subproject. However, unlike coastal Punta Coles, Guañape Islands face threats from uncontrolled illegal fishing and guano theft, and strengthening will require an approach more directed towards control and surveillance.

24. No new infrastructure will be built either on land or offshore. The project will provide equipment and materials to upgrade existing office space, improve working conditions for SERNANP and partner agency staff, and enhance visitor areas. Local communications will be strengthened by procuring sufficient quantities of new equipment, including fixed and mobile marine radios and phones. Field staff of agencies with direct surveillance and control responsibilities will be adequately outfitted with necessary equipment and apparel, including field survival gear especially designed for arid island environments. In addition, upgrading of some of the existing offshore structures will also be carried out, including fuel and water storage capacities.

25. *Strengthening of SERNANP's surveillance and control infrastructure on Lobos de Tierra Island.* Lobos de Tierra Island is arguably one of the sites in the reserve with the highest level of conflict, due to intensive but illegal harvesting of Peruvian scallops inside the protected marine area. The island is located within the ecotone between the Central Peruvian and Guayaquil ecoregions and displays a significant and unique biodiversity, including a number of endangered terrestrial, marine, and coastal species. Neither SERNANP nor any of its partner agencies (including DICAPI and AGRO RURAL) have been able to prevent the constant influx of fishers from nearby coastal communities, and occasional enforcement actions have often resulted in confrontation.

26. Management issues in Lobos de Tierra are more related to enforcement matters than to socioeconomic aspects. Local fishers do have economic alternatives available and possible management and zoning actions have been discussed with SERNANP and local authorities and

communities. A wide array of formal scientific organizations (both private and public) and NGOs work in the waters around the island. Lobos de Tierra is one of the pilot sites for the GEF-UNDP HCLME initiative, which in this case focuses on the social aspects of the local fishery. The presence of large numbers of illegal fishers generates continuous conflicts between them and these groups and projects. As long as there is no practical and continuous enforcement around Lobos de Tierra, SERNANP will be in no position to exert its authority and motivate local fishers to participate in sustainable management actions.

27. Project intervention in Lobos de Tierra will focus mainly on strengthening surveillance and control mechanisms on and around the island, including provision of small-scale onshore support mechanisms. As on all islands of RNSIIPG, water shortages are a major problem for field-based staff. During project implementation best options for water supply will be evaluated (for example shore-based supply by boat or on-site small-scale desalination equipment). Altogether, the project will aim at achieving the minimum targets identified during project preparation.

28. Infrastructure and support systems will be shared on Punta Coles and Guañape Islands with activities to be implemented under component 2 and subcomponent 3.1. In addition, ecological baseline and monitoring activities to be implemented on Lobos de Afuera Islands will benefit from the improved infrastructure and support systems to be implemented in nearby Lobos de Tierra.

29. *Development and implementation of a system-wide networked database for monitoring, control, and surveillance.* The lack of data-sharing mechanisms has been consistently identified across project preparation documents as one of the key issues to be solved as a prerequisite for effective management of RNSIIPG. All four agencies with direct responsibilities inside the reserve (SERNANP, AGRO RURAL, IMARPE, and DICAPI) generate more or less significant volumes of information that are not available to or compatible with each other. Especially in IMARPE's case, there are weighty administrative and technical obstacles to sharing its vast ecological and scientific database with its partner agencies. SERNANP and IMARPE have agreed to enter a comprehensive cooperation agreement that will smoothen out internal organizational obstacles. The project will support the signing and application of this agreement as part of its implementation arrangements. Likewise, new or existing agreements with the other two agencies will be reviewed and modified to strengthen management coordination.

30. However, neither agency possesses the necessary networking infrastructure to meaningfully share information for management purposes. The project will support the development and implementation of an electronic server-based database that will be accessible to institutional managers and researchers. Specific software and protocols will be developed either from scratch or building on existing agency platforms, including access rights and management as well as real-time update procedures. External backup and storage will be provided, as well as training and initial system maintenance. Offices and field staff will be equipped with hardware and broadband high-speed Internet connections to be able to access the network. This subcomponent will also substantially support project component 3, as networked institutional access is considered a key element of an operational monitoring and evaluation system.

31. **Subcomponent 1.4:** *Development and implementation of financial sustainability mechanisms.* The project will provide two avenues of funding to sustain long-term management and financing of RNSIIPG.

32. GEF financing in the amount of US\$2 million will be allocated to operate a new trust fund to finance a portion of SERNANP's recurrent management costs. The fund was originally, during project concept stage, conceived as a subaccount of an already existing endowment fund managed

by PROFONANPE. However, during the PIF design phase it was decided that management efficiency would be better served by establishing a separate fund, specifically tailored for this project's requirements. The fund will be matched by a US\$2,000,000 grant to be provided by KfW financing. While the Fund's main goal is to support long-term recurrent management costs after Project completion, Fund returns will complement the budget allocated for subprojects under Component 2 during Project implementation.

33. In addition to establishing and managing the trust fund, SERNANP and PROFONANPE will develop a Financial Sustainability Strategy to identify potential funding sources and revenue-generating mechanisms. The strategy will include a roadmap to implement the identified financing options. There are at least three previous system-specific studies and legal instruments that provide a solid referential framework for the incremental development of this strategy:

- A groundbreaking consultancy report produced by Gutiérrez<sup>13</sup> in 2009 as part of the GEF-UNDP HCLME project preparation phase generated a detailed analysis of the financial sustainability of RNSIIPG and included recommendations for long-term funding mechanisms.
- Peru's 2009 Protected Areas National Strategy<sup>14</sup> demonstrated the need for long-term funding and proposed a series of potential mechanisms to provide financial sustainability to the protected areas system. While the strategy did not include RNSIIPG (as the reserve had not then been created), it does provide a systemwide framework on which to build.
- In 2009 a presidential resolution approved the Financial Plan for SINANPE, which expanded the outlines of the Protected Areas National Strategy, explored financial mechanisms, and set funding scenarios and targets until 2019.<sup>15</sup> The Financial Plan provides detailed approaches and recommendations to achieve sustainability and will be a key instrument in the development of the roadmap.

34. GEF has also funded other similar initiatives in the region that can be drawn from; for example, GEF has provided a UNDP-implemented grant to develop financial sustainability mechanisms for Ecuador's protected areas system.<sup>16</sup> Regional funding schemes, such as the Sustainable Financing Plan for Marine Ecosystems in the Eastern Caribbean developed under the GEF, World Bank, KfW, and The Nature Conservancy project,<sup>17</sup> can be used as further examples.

35. **Component 2: Collaborative regional management.** Total amount: US\$4,216,000; GEF: US\$4,000,000; SERNANP: US\$216,000. In addition, Component 2 will benefit from the financial returns of the Endowment Fund to be established under Subcomponent 1.4; amounts will be determined once the Fund is underway and planned actual returns are identified.

36. The project will develop socially viable marine management models through carrying out of locally implemented Collaborative Subprojects in pilot sites selected by SERNANP and local stakeholders during project design.

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<sup>13</sup> Gutiérrez, María Elena. 2009. *Opciones Financieras para la Sustentabilidad de la Gestión de la Reserva Nacional "Sistema de Islas, Islotes y Puntas Guaneras" – RNSIIPG.*

<sup>14</sup> Peru Ministry of Environment. 2009. *Plan Director de las Áreas Naturales Protegidas* [Plan for the Protected Natural Areas].

<sup>15</sup> SERNANP. 2009. *Plan Financiero del SINANPE.* Presidential Resolution 123-2009-SERNANP, published on July 30, 2009. Approval of this Financial Plan was one of the prior actions agreed between the Bank and the government of Peru as part of the Bank's Environmental Development Policy Loan series.

<sup>16</sup> Project: Sustainable Financing of Ecuador's National System of Protected Areas (SNAP) and associated private and community-managed protected area subsystems (GEF Project ID 3829; UNDP PIMS 4142).

<sup>17</sup> Project: Sustainable Financing and Management of Eastern Caribbean Marine Ecosystems (GEF Project ID 3858).

37. The project development objective reflects Peru's protected area management philosophy, which considers that conservation of protected areas can only be successful if local stakeholders are active and willing participants in the area's planning and management processes. This component will contribute to the project development objective by developing socially viable marine management models through locally implemented collaborative subprojects in 10 pilot sites, selected during project design.<sup>18</sup> These subprojects will cover a representative range of economic activities; in the case of artisanal fisheries, they will demonstrate the economic and organizational conditions necessary to achieve post-project success in sustainably harvested marine products. Other economic focus areas will include tourism, research, and education, for which socially viable organizational models will be developed with strong participation of the local community and other relevant stakeholders (including regional governments, research institutions, and NGOs). Successful implementation of the subprojects will directly relate to the project development objective by reducing conflicts of use, which in turn will significantly strengthen the ability of SERNANP and its partner agencies to manage the reserve with the proactive participation of local stakeholders.

38. Subprojects will be carried out by any of a number of potential local stakeholders, including fishers' associations, tour operators, research stations, women's associations, local universities, and NGOs. During project design, potential stakeholders were specifically identified and included in subproject profiles. Some sites did not offer clear candidates to take on subproject implementation; in those cases, subproject profiles included minimum requirements for stakeholders to be eligible for selection.

39. During implementation, subproject executing actors will be required to develop specific action plans, including detailed procurement plans, activities, and monitoring and evaluation mechanisms. Each subproject will, according to each particular case, develop its own natural resource management plans, site plans, zoning documents, and other management instruments required as per individual subproject profiles.

40. Subproject implementation will build on the model of the successful community-based Program for Sustainable Economic Activities (PAES), first devised for the GEF-World Bank GPAN<sup>19</sup> project and then refined for the ongoing GEF-World Bank PRONANP<sup>20</sup> grant. PAES establishes a number of detailed requirements for subproject management and implementation, including performance-based disbursement mechanisms, eligibility criteria, administrative and procurement procedures, monitoring and evaluation protocols, technical assistance, and knowledge management. Prior to implementation of the first subprojects, PROFONANPE and SERNANP will develop a project-specific PAES manual based on the existing GPAN and PRONANP documents.

41. Subprojects have been designed with their own individual and specific monitoring and evaluation systems, which have been outlined in the profiles drafted during project design. Subproject monitoring will be done at two levels: first, at the field and operational level by the subproject management team; and second, at a higher level by the Project Coordination Team (PCT). Subprojects have been designed to contribute to the project's overall goals; PCT will supervise the accomplishment of field-level objectives and will regularly evaluate the incremental contribution of subprojects to the project development objective.

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<sup>18</sup> Detailed criteria and profiles for each of the 10 selected sites are described in the "Tables" document, included in the project folder.

<sup>19</sup> Project: Participatory Management of Protected Areas (GEF Project ID 1101; IBRD PO ID 68250).

<sup>20</sup> Project: Strengthening Biodiversity Conservation through the National Protected Areas Program (GEF Project ID 2693; IBRD PO ID 95424).

42. **Component 3: Monitoring and evaluation.** Total amount: US\$4,375,000; GEF: US\$1,101,000; SERNANP: US\$3,274,000.

43. This component will provide enabling conditions that will allow SERNANP and its partner agencies to fulfill the project development objective's requirement to improve management of marine and coastal ecosystems and protect biological diversity. Ecosystem health will be tracked through the establishment and implementation of ecological baselines and a monitoring and evaluation system. Biological indicators have been developed during project design and will be monitored during implementation. Evaluation criteria have been drafted, and initial response protocols are available. In addition, component 3 will also monitor and evaluate subproject performance, which in turn relates directly to the project development objective.

44. Project monitoring and evaluation will be carried out through: (1) the provision of support for: (i) the development of ecological baseline approaches to monitor marine biodiversity; (ii) the implementation of regular ecological monitoring systems in Pilot Sites once the activity under (i) above has been completed; and (iii) the carrying out of a research initiative in *Lobos de Afuera* Islands to study the area's biodiversity; (2) supporting the development and implementation of a management effectiveness monitoring and evaluation system within SERNAP; and (3) the provision of support for the monitoring and evaluation of Project performance.

45. While overall responsibility for outcome and results monitoring and evaluation will remain with PCT, each project component and subcomponent will provide its own data-collecting resources. Indicators have been designed in such a way that they can be measured without the need for complex collection methods or specialized personnel. Capacity should be provided through individual activities and executing actors within each subcomponent. In cases where capacity is deemed not sufficient, training will be provided under project component 2 to reach the required technical levels.

46. **Subcomponent 3.1:** *Establishment of an ecological baseline and implementation of a continued biodiversity monitoring and evaluation system.* Project preparation activities as stated in the project preparation grant included (a) developing baseline approaches to monitor marine biodiversity; (b) refining the selection of target species; and (c) specifying indicators to track ecosystem health. These activities were carried out during project design as a prelude to the establishment of an initial ecological baseline, in turn required for the development of an ecological monitoring system during project implementation.

47. A consultancy report was prepared, which identified a number of gaps in the availability and quality of information regarding the reserve's biodiversity. Flaws in current methods of monitoring and evaluation of ecosystem health were detected and described, as well as biases in collection and evaluation of data. A needs assessment was prepared, including site- and species-specific recommendations for project implementation. Using the best available information and the most complete datasets possible, a list of indicator species was established, including monitoring and evaluation protocols. This report will support the initial design of the monitoring baseline, including target species and protocols, which will then be refined further during project implementation.

48. *Establishment of an ecological baseline in Punta Coles, Chincha Islands, and Guañape Islands.* A detailed consultancy report prepared during project design established a preliminary baseline building on available information. A gap analysis was carried out, identifying weaknesses in coverage of species and habitats. Despite the lack of full datasets, the report selected the most important sites for project baseline work. The sites were chosen based on the significance of their

biodiversity, the level and potential impact of current and possible threats, their representativeness across RNSIIPG, and their contribution to ecological baselines being worked on through other projects and agencies.

49. The project will establish an environmental baseline in Punta Coles, Chincha Islands, and Guañape Islands. Punta Coles has been chosen because of its significant biodiversity and the potential threat posed by a diverse human presence in the area, which includes artisanal fishers and a growing but unregulated tourism operation. Chincha and Guañape Islands have been chosen because of the representativeness of their biodiversity among the reserve's sites belonging to the Humboldtian and Central Peruvian ecological zones, respectively. At each site coordinated fieldwork will be carried out on a number of species and habitats selected during project preparation. Standardized protocols will be developed, building and expanding on existing sampling procedures identified during project design.

50. The project will provide the necessary field and diving equipment and materials and will encourage the pilot use of high-level, cost-effective sampling tools designed specifically for ecological sampling and monitoring in developing countries and inaccessible locations, such as conservation drones<sup>21</sup> and remote-controlled submarine vehicles. Data will be shared making use of the institutional arrangements and networks established in project component 1.

51. *Implementation of regular ecological monitoring in Punta Coles, Chincha Islands, Guañape Islands, and Lobos de Afuera Islands.* Once baselines have been established, regular monitoring will be implemented on four pilot sites. Comprehensive lists of indicator species and species communities, sampling protocols, and evaluation criteria have been developed during project preparation; monitoring will be carried out at regular intervals, also already defined. As is the case with baseline research, monitoring and data evaluation will be implemented jointly between SERNANP and IMARPE, with the collaboration of third parties (such as other research institutes, universities, or NGOs) when needed. Monitoring sampling protocols have been purposefully designed to be simple and easily collectable, considering that local actors (fishers, divers, tour operators, students, and others) will be recruited to act as field sampling agents.

52. *Development of an applied research plan in Lobos de Afuera.* Together with Lobos de Tierra, the Lobos de Afuera island group is considered one of the most biodiverse sites in the reserve. Its distance from the shore has resulted in inadequate attention being given to threats such as illegal fishing, resource harvesting, and uncontrolled tourism. On Lobos de Afuera, the project will support establishment of an ecological baseline and a fully-fledged research initiative to study the area's biodiversity.

53. Operationally, this intervention will share many characteristics of the baseline work done on the other three pilot sites. However, the project will support additional field equipment and gear to allow larger research groups to be based on the island for longer periods of time. Logistical support will be provided making use of the infrastructure that will be implemented in nearby Lobos de Tierra under project component 1. SERNANP and IMARPE will lead the research initiative, although support will be provided to encourage third parties (such as other research institutes, universities, or NGOs) to participate.

54. Additionally, this subcomponent will be complemented by a collaborative subproject that will execute a comprehensive science-based research and management initiative on Pachacamac

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<sup>21</sup> See <http://conservationdrones.org/>.



Islands. The subproject will include the establishment of an ecological baseline and implementation of biological monitoring and evaluation systems that will contribute to component 3.

55. **Subcomponent 3.2:** *Development and implementation of a management effectiveness monitoring and evaluation system.* GEF rules and the project PIF determine that management effectiveness has to be measured following guidelines established in the GEF-World Bank Management Effectiveness Tracking Tool (METT). METT has to be implemented three times during project implementation: at project effectiveness, during the midterm review, and for project closure.

56. METT is available in various iterations, two for terrestrial ecosystems and one for marine protected areas. During project design, the preparation team carried out an experimental application of METT. The version used was modified and adapted from the official GEF version available online, as it was determined that this document did not include the questions and evaluation criteria of the METT marine version. METT guidelines allow for the modification of the tool as long as the core components are maintained and changes are properly documented and explained.

57. A consultant was contracted to evaluate the results of the experimental METT and to design additional management effectiveness mechanisms. During project preparation, SERNANP's in-house effectiveness evaluation system was also tested for its potential use in RNSIIPG, and additional indicators were developed based on an adapted version of that system. A management effectiveness baseline was developed combining both systems, including minimum management targets to be used as additional indicator options during project implementation. The consultancy and the pilot METT implementation identified weaknesses and strengths in SERNANP's management effectiveness; in fact, these exercises provided the background for the design of project components related to improvements of management, monitoring, and evaluation.

58. The subcomponent will apply the new management effectiveness indicators developed specifically for this project, which include the modified METT and SERNANP's adapted in-house effectiveness evaluation system. Baseline data defined during project preparation have been included in the project's Results Framework and monitoring and evaluation criteria and protocols have already been established. It is expected that monitoring and evaluation will be done annually during the first quarter of each new project year. A baseline has been established for Q1 2014, which is the expected project effectiveness period. Final evaluation will be done in Q1 2019, after project field implementation has concluded.

59. **Subcomponent 3.3:** *Monitoring and evaluation of overall project performance.* Overall project performance (including financial and administrative) monitoring and evaluation will be carried out as a project subcomponent of its own and implemented by PCT. Progress will be measured against indicators as per the Results Framework on an annual basis, except for collaborative subprojects, which include their own monitoring and evaluation systems.

60. **Component 4: Project management.** Total amount: US\$425,000; GEF: US\$425,000.

61. The Project will strengthen PROFONANPE's capacity to carry out the administrative and financial management of the Project.

62. Project management will be implemented, monitored, and evaluated by a dedicated PCT, who will be working in coordination with SERNANP, other institutions, and subproject executing entities. In order to optimize available resources and pending confirmation from KfW, PCT costs and staff will be shared with KfW once its parallel project begins implementation. Technical

project-wide PCT staff, including the project coordinator, procurement specialist, and administrative assistants, will also share their costs pro rata according to their participation in other project components.

63. Available funds will cover costs associated with the procurement of goods and services related to project management, including utilities, communications, minimum operating expenses, and other indirect expenses incurred by PROFONANPE. Consulting services, meetings and travel, operating expenses for subprojects, monitoring and evaluation, and incremental costs needed for implementation of other project components and subcomponents will be covered directly by those components.

64. Additional details of how the project will be managed are described in Annex 3, on implementation arrangements.

### **Annex 3. Implementation Arrangements**

#### **Peru: Strengthening Sustainable Management of the Guano Islands, Islets, and Capes National Reserve System (RNSIIPG)**

##### **A. Project Institutional and Implementation Arrangements**

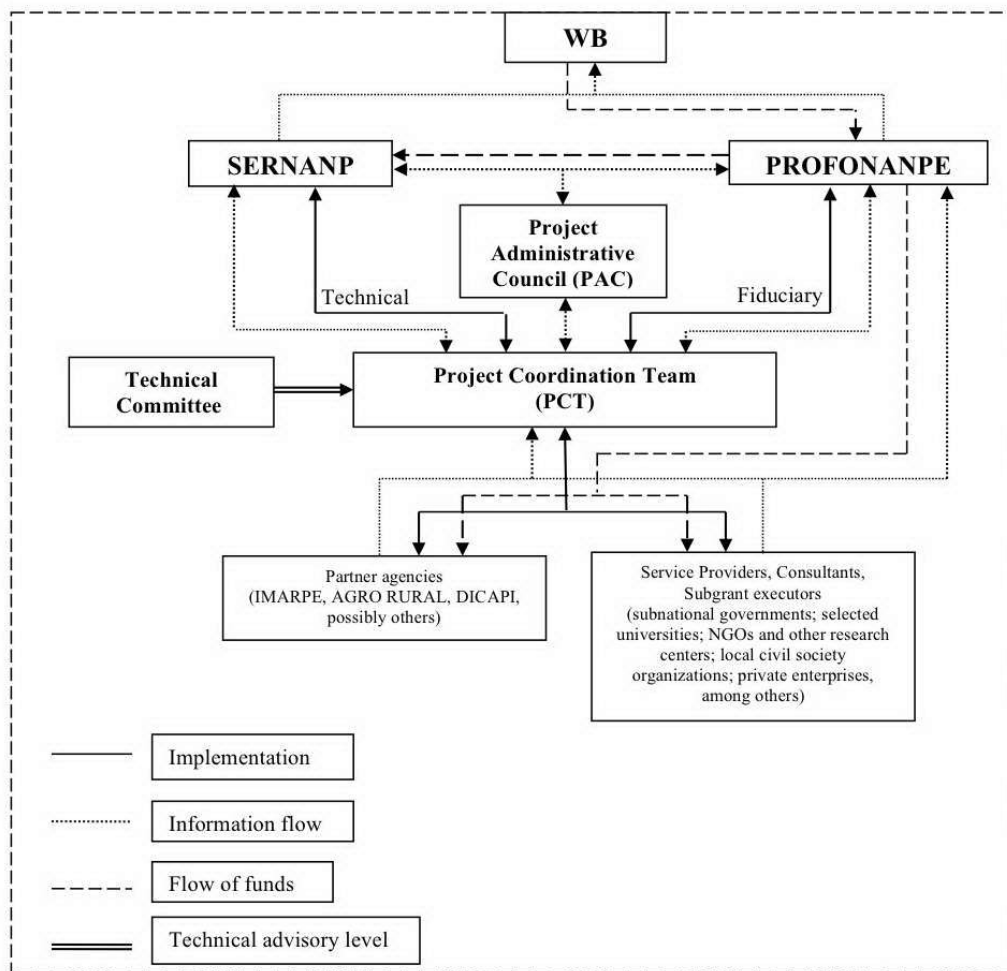
###### ***Project Administration Mechanisms***

1. **Direct operational level.** PROFONANPE will be the recipient of the GEF grant and will be responsible for the fiduciary execution of the project, including financial management and procurement according to the project's operational manual and procurement plan. Further to this, PROFONANPE will (a) coordinate with SERNANP, other national level institutions (such as IMARPE, DICAPI and AGRO RURAL), and other subgrant executors or fund recipients to ensure proper implementation and monitoring of project interventions; (b) lead the reporting function to the World Bank; and (c) ensure the auditing function.
2. The technical aspects of the project will be implemented by SERNANP, supported by a dedicated Project Coordination Team (PCT). The PCT will be comprised of (a) a fiduciary team, under the supervision of PROFONANPE, responsible for the administration, procurement and financial management aspects; and (b) a technical team, under the supervision of SERNANP, responsible for the overall technical implementation and coordination of the Technical staff will be based in Paracas, which has been chosen due to its closeness to SERNANP's already existing management infrastructure and its strategic location in relation to some of the more potentially complex project sites. Fiduciary staff will be based in Lima.
3. Specifically, the PCT will (a) implement the project according to the grant agreement, project implementation plan, annual operational plan, and procurement plan; (b) prepare the aforesaid plans; (c) carry out the monitoring of objectives and targets outlined by the project; (d) provide overall assistance to SERNANP and local stakeholders for project implementation; (e) prepare and submit to the PAC the operational plans and management reports; (f) prepare the technical documents, terms of reference, and other relevant documentation required to carry out the procurement and contracting of goods and services; and (g) organize meetings with the project's Technical Committee to obtain technical assistance.
4. PROFONANPE's internal procedures require the creation of a Project Administration Council (PAC) for each project to oversee implementation. In the case of the project, PAC will be composed of a representative of SERNANP; a representative of PROFONANPE's Board of Directors; a representative of project stakeholders who will be invited by the other two members on an annual basis; and the Executive Director of PROFONANPE, who will act as the technical secretary. The stakeholder representatives will serve a one-year term and will be selected in such a way as to reflect the many local stakeholders participating in the project. PAC will meet twice a year to review project progress and approve annual workplans, progress reports, and annual procurement plans. If necessary, PAC will have additional meetings, for example to review modifications to the procurement plans.
5. SERNANP is the national authority in charge of SINANPE's management and is the main beneficiary of the project, of which it will be considered to retain ownership. SERNANP will be ultimately responsible for the implementation, supervision, and monitoring of the project activities in RNSIIPG. PROFONANPE will sign an agreement with SERNANP to detail the agreed activities, the financial plan, and the roles and responsibilities of each party. In addition, SERNANP will (a)

supervise the technical staff of the PCT; (b) prepare the terms of reference for technical studies and conduct the quality control of these studies in coordination with PCT; (c) if applicable, in coordination with PROFONANPE participate in the selection and recruitment of private sector nonprofit organizations to manage administration contracts within RNSIIPG; (d) prepare the annual operational plans and progress reports that may be required by PAC or PROFONANPE; and (e) conduct the necessary coordination and communication with PROFONANPE and local executing agencies. SERNANP will carry out and supervise field activities in RNSIIPG through PCT, the Coastal Marine Unit, and the protected area's administration.

6. Figure 3.1 shows an organigram with the proposed project implementation arrangements.

**Figure 3.1 Implementation Arrangements**



7. Local stakeholders selected to implement collaborative subprojects under project component 2 will be responsible for the implementation, supervision, and monitoring of these subprojects, in direct and regular coordination with PCT. Supervision mechanisms will be based on the successful community-based Program for Sustainable Economic Activities (PAES), first devised for the GEF-World Bank GPAN project and then refined for the GEF-World Bank PRONANP grant. The Bank has already approved the PAES manual; once adapted to this project, its application will considerably reduce implementation risks related to the provision of subgrants under component 2.

8. **Advisory level.** The project will establish a Technical Committee to provide overall technical assistance for the implementation of the project and to serve as a consultative body. The Technical Committee will include government agencies, research entities, and NGOs with proven expertise in management of marine areas. At least, the Technical Committee will include a representative of SERNANP, a representative of IMARPE, a representative of PROFONANPE's PAC, a representative of PROFONANPE, and the project coordinator. The Technical Committee will meet twice a year to ensure that field experience is taken into consideration in workplans and to overcome operational difficulties. Committee members will not receive honoraria or other kind of financial remuneration. Project component 4 will cover costs associated with meetings and travel when alternatives (such as carrying out meetings in institutional offices) are not available.

9. **Inter-institutional coordination.** In addition to SERNANP and PROFONANPE, IMARPE, AGRO RURAL, and DICAPI have been identified as key partners with direct influence in RNSIIPG management. The current regulatory framework already establishes mandatory levels of coordination between all three agencies and SERNANP. However, inter-institutional relationships need to be strengthened and made more operational in order to increase management effectiveness. While the project already includes specific activities to increase field collaboration and provide needed equipment and infrastructure, PCT will also assist in enhancing existing or facilitating new cooperation mechanisms. Agreements with DICAPI and AGRO RURAL will be reviewed and reinforced in order to include field staff of both agencies in management actions. AGRO RURAL staff will be included in the area's monitoring and evaluation activities, while DICAPI personnel will have a relevant role in joint surveillance, control, and enforcement actions.

10. During project preparation it was determined that the relationship between SERNANP and IMARPE required a significant overhaul in order to channel individual agency efforts towards a consolidated management system for the reserve. The project will encourage the signing of a draft inter-agency cooperation agreement that has been under discussion for various months (as of final stages of project preparation) or its proactive implementation if signed by the date of project effectiveness. IMARPE will be significantly strengthened so it is able to fully assume its role as the main scientific entity and data repository with experience and knowledge to support area management, and PCT will maintain continuous coordination with the agency's technical and operational teams both at headquarters in Lima and in the field in order to ensure fluid and coordinated project implementation. Regular coordination meetings will be held to discuss progress and to overcome initial difficulties expected to occur during initial stages of project implementation.

11. For the implementation of project activities implemented with the above mentioned institutions, jointly signed agreements will be signed to detail the agreed activities, the financial plan, and the technical assistance required.

12. **Subproject implementation.** Collaborative subprojects under project component 2 will be expected to follow the detailed subproject profiles drafted during project design. Profiles are fully developed and include detailed background, objectives, tentative activities, suggested implementation arrangements, and monitoring and evaluation guidelines.<sup>22</sup>

13. Subprojects will be carried out by any of a number of potential local stakeholders, including fishers' associations, tour operators, research stations, women's associations, local universities, and

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<sup>22</sup> Profiles in Spanish for all subprojects are included in digital version in the project folder, located in the project portal, or on the Bank's website.

NGOs. During project design, potential stakeholders were specifically identified and included in subproject profiles. Some sites did not offer clear candidates to take on subproject implementation; in those cases, subproject profiles include minimum requirements for stakeholders to be eligible for selection.

14. During implementation, subproject executing actors will be required to develop specific action plans, including detailed procurement plans, activities, and monitoring and evaluation mechanisms. Each subproject will, according to each particular case, develop its own natural resource management plans, site plans, zoning documents, and other management instruments required as per individual subproject profiles.

15. Subprojects have been designed with their own individual and specific administration, monitoring, and evaluation systems, which have been outlined in the profiles. Following PAES guidelines each executing entity will supervise the proper execution of the grant, and will in turn be regularly supervised by PCT.

### ***Knowledge Management***

16. Inadequate management of information regarding RNSIIGP has consistently been identified during project preparation as a key obstacle for effective administration of the protected area. The lack of data-sharing mechanisms is a fundamental issue to be solved as a prerequisite for effective management. All four agencies with direct responsibilities inside the reserve (SERNANP, AGRO RURAL, IMARPE, and DICAPI) generate more or less significant volumes of information that is not available to or compatible with each other. Especially in IMARPE's case, there are weighty administrative and technical obstacles to sharing its vast ecological and scientific database with its partner agencies. As mentioned in this annex's section on inter-institutional cooperation, the project will aim at establishing formal cooperation mechanisms between all involved agencies, which will include data-sharing tools. The project will support the development of an electronic server-based database that will be accessible to institutional managers and researchers. Details of this can be found under subcomponent 1.3 in Annex 2.

17. In addition to management-oriented, real-time data sharing, the project will promote the publication and distribution of scientific and technical information that its activities will generate. Lack of proper knowledge regarding RNSIIPG and its relationships with and potential benefits to local livelihoods is considered one of the potential risks for successful community involvement in proactive area management. While SERNANP does operate an electronic web-based database, the contents are limited and not properly publicized. The project will eventually produce large amounts of unique information regarding the area's biodiversity, management, and community issues that can be used as showcase scenarios in similar regional and global locations. As part of its communications strategy and its exchange approach within its training subcomponent, the project will support intensive knowledge sharing of its results.

### ***Coordination with Other Projects***

18. **GEF-UNDP HCLME.**<sup>23</sup> During project preparation the design team maintained permanent communication with GEF-UNDP HCLME, including the project's coordination team, staff at SERNANP as the area's manager, and staff at IMARPE as the project local implementing agency.

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<sup>23</sup> Project: Towards Ecosystem Management of the Humboldt Current Large Marine Ecosystem (HCLME) (GEF Project ID 3749; UNDP PMIS ID 4147).

19. HCLME focuses on RNSIIPG under the framework of the design of a binational Strategic Action Program between Peru and Chile. In Peru, the project carries out three pilot operations under the concept of a multiple-use protected marine area, seeking linkages with various activities as well as intersectoral coordination with the participation of various actors to promote management with an ecosystem focus. Two of HCLME's pilot sites in Peru were determined to overlap with the project's pilot sites (the islands of Lobos de Tierra and Ballestas). Coordination and planning meetings were held between HCLME's coordination team and the project's design team in order to avoid duplication of efforts and develop complementary field interventions.

20. In addition, one of HCLME's results according to the project's Results Framework was the development of the reserve's Master Plan. During project design it was determined that HCLME would be funding the plan's initial stages of development, consisting in identifying the vision and conservation goals of the protected area. SERNANP will carry out the design and implementation of the remaining sections of the Master Plan, while the project will support the development of the zoning module of the plan, including strengthening of geographic information system (GIS) capabilities and infrastructure, procurement of required aerial and satellite imagery, field verification, and provision of technical assistance in marine spatial planning (including advanced techniques in gap analysis, dynamic area zoning, and mechanisms of use rights).

21. **Inter-American Development Bank (IADB)-IMARPE Adaptation to Climate Change on Peru's Coastal Marine Ecosystem and Fisheries.**<sup>24</sup> While not a GEF-funded initiative, this climate change-oriented proposal, currently in preparation (IADB project number PE-G1001), will be implemented by IMARPE in two sites that are also project pilot sites (Punta Salinas and Don Martín). Following IMARPE's main line of action, the project will develop and implement pilot actions to adapt local fisheries to the potential consequences of climate change and mitigate its impact.

22. During project preparation, the design team reviewed and incorporated the approach<sup>25</sup> of PE-G1001 in order to avoid potential duplication of efforts and outcomes. As IMARPE's project is still in the preparation stage, no assurance exists that some overlap might not occur. However, the proactive insertion of IMARPE into project implementation as a direct executing agency and as a member of the Technical Committee will increase the probability of complementarity between both initiatives.

## **B. Financial Management, Disbursements, and Procurement**

23. A financial management capacity assessment was performed to determine the adequacy of PROFONANPE's financial management arrangements to support project implementation. PROFONANPE will be responsible for the project's management, including fiduciary responsibilities, and to that end it will coordinate with SERNANP (responsible for the technical aspects of the project), and other partner organizations, as well subproject executors. As it relates to financial management tasks, PROFONANPE has expertise in working with donor funds and has maintained a satisfactory record during the implementation of GPAN<sup>26</sup> and the ongoing PRONANP.<sup>27</sup> PROFONANPE has implemented sound financial management arrangements, and it

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<sup>24</sup> Project profile available at <http://www.iadb.org/en/projects/project-description-title,1303.html?id=PE-G1001>.

<sup>25</sup> Project description available as a pdf document at <http://www.iadb.org/en/projects/project-description-title,1303.html?id=PE-G1001>.

<sup>26</sup> Project: Participatory Management of Protected Areas (GEF Project ID 1101; IBRD PO ID 68250).

<sup>27</sup> Project: Strengthening Biodiversity Conservation through the National Protected Areas Program (GEF Project ID 2693; IBRD PO ID 95424).

has proved to be a solid institution. Therefore project implementation would fully rely on those existing arrangements, strengthening them as needed mainly to ensure adequate coordination with other participating bodies.

24. Drawing from lessons learned in previous and ongoing initiatives and new operational challenges identified, PROFONANPE has strengthened its financial management arrangements; its information system is working well, and it provides required information for monitoring purposes, the operational manual reflects specific financial management arrangements for the projects (including processes and procedures to control different sources of financing); and it is in the process of updating the PAES Manual. Overall, project FM risk is considered moderate, mainly because project design requires coordination and transfer of funds to various partner organizations, as well as disbursement of funds to a variety of beneficiary organizations, with different capacity level, for the implementation of subprojects. Based on the experience developed in former similar projects, PROFONANPE has put in place different mitigating measures to address the associated risk; including the provision of reliable information for monitoring purposes. However, effective operation of those arrangements will need to be monitored. Based on the review performed and performance under the current operation the proposed arrangements can be considered acceptable to the Bank, subject to the updating of the subproject manual (PAES).

25. **Organizational arrangements and staffing.** PROFONANPE will coordinate very closely with SERNANP. Although interventions under project component 2 will be contracted out or assigned as subgrants within a wide pool of possible executing agencies (including regional or local governments, NGOs, or other organizations of civil society) under the direct supervision of SERNAP with the support of PCT, PROFONANPE will retain sole responsibility for the management of project funds, including endowment fund returns. However, SERNAP as part of its technical responsibility will play an important role in the approval of project activities, including disbursements to subproject grants. A framework agreement between PROFONANPE and SERNANP will be set up to reflect their respective roles and responsibilities.

26. PROFONANPE's Administration and Finance Unit is familiar with Bank policies and procedures and will be responsible for the fiduciary aspects of the project and will be accountable for all financial and investment activities. The Administration and Finance unit includes: Control Office (1 staff), Administration Office (6 staff), Operations Office (1 staff), Accounting Office (3 staff), Treasury Office (2 staff), Filing Office (1 staff), and Procurement Office (3 staff). To better support project implementation, an accountant assistant, an administrative assistant and a procurement specialist will be fully dedicated to the project.

27. **Programming and budget.** Within PROFONANPE, the preparation of the annual budget falls under the responsibility of the operations specialist in coordination with the Administration and Finance unit and the Development and Supervision unit. The annual budget is based on the annual operational plan (or program of activities), which includes sufficient details to provide meaningful information to monitor the performance and analyze variances. For project purposes, it is expected that SERNAP, through PCT will play a critical role in the definition of project specific activities. Annual Program and budget will be approved by the Administration Council, in conjunction with the World Bank. The budgetary control will consist of (a) timely preparation and approval of annual programs, budget, and procurement plans, establishing a clear relation among them; (b) proper recording of the approved budget in the financial management system; and (c) timely recording of commitments and payments as needed to allow adequate budget monitoring and to provide accurate information on project commitments for programming purposes.



28. **Accounting policies and procedures.** The main financial management regulatory framework for the project will consist of (a) Peru's laws governing budget and financial management for the private sector; and (b) PROFONANPE's operating manuals and norms, which include acceptable accounting policies and procedures. PROFONANPE's tailor-made Administrative Management Integrated System (Sistema Integrado de Gestión Administrativa, SIGA), allows the recording of the entity's transactions following international accounting standards. Financial statements are prepared following the accrual basis of accounting and using the standard Chart of Accounts accepted in Peru. Likewise, SIGA allows the recording of project transactions by source of financing and project component /categories, including reconciling items such as advances to partner organizations and disbursements to subprojects. However, counterpart contributions made by subproject grants' beneficiaries can only be recorded in the subproject module. Therefore, project financial reports will be prepared in Excel based on the information provided by the accounting module on GEF funds and the information provided by the subproject module on counterpart contributions. Procedures for preparation of financial reports are adequate though.

29. According to PROFONANPE's policies disbursement of funds to partner organizations (for carrying out specific activities) will be recorded as advances until they are fully documented; and disbursement of funds to beneficiaries' bank accounts for the implementation of subprojects will be accounted as uses (investments). Notwithstanding, PROFONANPE has the mechanism and procedures to ensure that activities approved under each subproject are duly implemented and documented.

30. **Endowment.** Similarly PROFONANPE has clear procedures and arrangements for the separate administration and accounting of the endowment fund. Advances made to the protected area of the endowment fund revenues will be accounted as advance until they are documented. Separate financial statements for the endowment fund will be prepared and provided on an annual basis.

31. In general, processes, procedures, and internal controls implemented by PROFONANPE have proved to be acceptable. However, the operational manual is being complemented to reflect implementation of RNSIIPG. Processes and procedures for disbursement of funds to partner organizations and to subproject executors also identify SERNANP's responsibility (through PCT) for the approval of payment requisition. Accordingly, SERNANP will also be responsible for verifying in-situ technical aspects of activities implemented by all participating entities. Overall, it is expected that advances made to partner organizations (e.g. protected areas, Agrorural, etc.) for activities approved by PCT will be fully documented over a 30-day period. As it relates to subproject grants, the technical committee will approve the subproject grants and SERNANP through PCT (technical team) will supervise the physical implementation of the activities. Upon approving the physical implementation, supporting documentation will be submitted to PROFONANPE for approval, review and recording in the subproject module.

32. PROFONANPE does not have an internal audit department. However, PROFONANPE has a control specialist to review most of the ex-ante transactions. In addition, the administrative staff of PROFONANPE has established periodic review (in-situ) to the protected areas and subprojects that have received advances of funds of the project to verify the veracity of the documents and to ensure that agreed activities have been implemented.

33. **Financial reports.** As described in the accounting section, the financial reports will be prepared in Excel based on the information provided by SIGA from the accounting and subproject

module. On a *semester basis*, PROFONANPE will prepare unaudited internal financial reports (IFRs) containing at least (a) a statement of all sources of funds, including the contribution from project counterparts and private entities (in cash and in-kind contributions), uses of funds by project component/subcomponent, and cash balances; (b) a statement of budget execution with expenditures classified by major project components and subcomponents that allows comparison with estimated amounts; (c) reconciliation items to reflect advances pending to be documented; and (d) subproject grant report which should include amounts disbursed, amount documented and outstanding balances. Specific format and contents of internal financial reports have already been defined and agreed with the Bank taking into consideration the accounting policies and procedures established for the project. PROFONANPE will submit the IFRs to the Bank no later than 45 days after the end of each semester.

34. On an *annual basis*, PROFONANPE will prepare project financial statements including cumulative figures for the year and year-end figures for financial statements cited in the previous paragraph. The project financial statements will also include explanatory notes in accordance with the cash basis of accounting, and the entity’s assertion that grant funds were used in accordance with the intended purposes as specified in the grant agreement.

35. **Audit.** PROFONANPE will prepare annual financial statements of the project and financial statements of the endowment fund, which will be audited following International Standards on Auditing by an independent firm acceptable to the Bank. The audit terms of reference of the project would require the Bank’s no-objection. PROFONANPE will request the contracting of the first external audit within six months after the grant comes into effect, and will submit the audit report to the Bank no later than six months after the end of each fiscal year. Audits of the project and the endowment fund will be funded through the project funds. Audit requirements would include the following:

<b>Audit type</b>	<b>Due date</b>
Project Financial Statements	June 30
Project Special Opinion (SOE and subproject statements)	June 30
Management Letter	June 30
Financial Statements of the Asset Manager Financial Statement of income and uses of funds generated from the Endowment Fund (Part 1.4 of the Project)	June 30

Project financial statements will be made publicly available by the Bank and PROFONANPE on a timely basis.

***Disbursement***

36. The following disbursement methods may be used to withdraw funds from the grant: (a) reimbursement; (b) advance; and (c) direct payment. Under the advance method, PROFONANPE will have access to a segregated designated account in US dollars, which will be opened and maintained in the commercial bank of Banco de Crédito del Perú in the name of the project (this financial institution is being used currently for the PRONANP project). Funds deposited into the designated account as advances will follow Bank disbursement policies and procedures as described in the Disbursement Letter and disbursement guidelines.

37. The ceiling for advances to be made into the designated account would be US\$1,000,000. The reporting period to document eligible expenditures paid out of the designated account is

expected to be on a quarterly basis. Supporting documentation for documenting project expenditures under advances and reimbursement methods would be specified in the Disbursement Letter. The minimum value of applications for direct payments and reimbursements will be US\$100,000.

38. **Disbursement of funds to subproject grants under project component 2.** Transfers of funds processed to the subgrants may be included as expenses in a statement of expenses following the instructions included in the disbursement letter. Transference of funds to the subgrants will be based on lump sum tranches according to the programmed activities approved by Technical Committee and SERNANP. PROFONANPE has the responsibility to perform due diligence to verify that expenses have been incurred for the intended purpose of the project.

39. **Endowment fund.** Under project subcomponent 1.4 the amount of US\$2,000,000 will be disbursed by the Bank as a single direct payment to an endowment fund account upon PROFONANPE provide evidence of the establishment of the endowment fund account in a manner satisfactory to the Bank.

40. **Retroactive financing.** The Bank has agreed to finance retroactive eligible expenditures for a maximum of US\$100,000 for expenses made one year prior to the agreement date but on or after October 1, 2013.

***Procurement: General***

41. Procurement for the project will be carried out in accordance with World Bank Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011; Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011; and the provisions stipulated in the grant agreement. The general description of various items under different expenditure categories is given below. For each contract to be financed by the grant, different procurement methods and consultant selection methods, need for prequalification, estimated costs, prior review requirements, and time frame will be agreed upon between the recipient and the Bank project team in the procurement plan.

42. The borrower has prepared a preliminary procurement plan for the entire scope of the project and a detailed and comprehensive procurement plan that includes all contracts for which bid invitations and invitations for proposals are to be issued in the first 18 months of project implementation. The procurement plan will be made available under the Procurement Plan Execution System (SEPA). Goods and works shall be procured under contracts awarded on the basis of international competitive bidding, national competitive bidding, shopping, or direct contracting. Consultants' services shall be procured under contracts awarded on the basis of quality and cost-based selection, quality-based selection, selection under a fixed budget, least-cost selection, selection based on the consultants' qualifications, single source selection, or procedures set forth in section V of the consultant guidelines for the selection of individual consultants, including single source selection for individual consultants.

43. The grant includes US\$2,000,000 to be deposited into an endowment fund, which will be invested to produce interest earnings to be used for RSNIIPG recurrent operating costs.

44. **Procurement of works.** Works procured under this project will include different infrastructure investments for the reserve. The project does not foresee new infrastructure, but upgrades and enhancements to existing buildings, docks, and similar infrastructure could be carried out. Procurement will be done using the Bank's standard bidding documents for all international

competitive bidding (not envisioned) and sample standard bidding documents for national competitive bidding, agreed with or satisfactory to the Bank. Shopping procedures will be used for contracts below US\$250,000 on the basis of comparison of at least three quotations from qualified contractors in response to a written invitation, which will include a detailed scope of work, specifications, and relevant drawings, as well as, a form of agreement acceptable to the Bank.

45. **Procurement of goods.** Goods procured under this project will include computers and other data-processing hardware, peripherals, accessories, and software; office equipment, materials, supplies, and furniture; communications equipment, vehicles, boats, engines, spare parts, fuel, and safety gear; field equipment, gear, and apparel; apparel for permanent and contract staff; and literature, maps, and aerial and satellite imagery. The list is not exhaustive; additional categories and specific quantities will be identified during annual procurement plan updates. Contracts for these goods will be grouped in bidding packages according to every annual operational plan and procured following international competitive bidding procedures. Contracts with estimated values below this threshold per contract may be procured using national competitive bidding procedures and standard bidding documents agreed with and satisfactory to the Bank. Contracts for goods that cannot be grouped into larger bidding packages and estimated to cost less than US\$50,000 per contract may be procured using shopping (national or international) procedures based on a model request for quotations satisfactory to the Bank. The procurement will be done using the Bank's standard bidding documents for all international competitive bidding and national standard bidding documents agreed with (or satisfactory to) the Bank in the operational manual.

46. **Procurement of non-consulting services.** Procurement of non-consulting services will include items such as printing, materials reproduction, publication, and dissemination; and contracts for upgrading or otherwise improving infrastructure or other items included in the procurement plan. The procurement will be done using the standard bidding document agreed with (or satisfactory to) the Bank.

47. **Selection of consultants.** Consultant services under this project will include protected area management, capacity building, public awareness campaigns, participatory planning, training, biodiversity conservation activities, technical assistance, legal and advisory services for community processes, and financial management. Shortlists of consultants for services estimated to cost less than US\$350,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the guidelines for selection of consultants. Where firms are not required, individual consultants will be hired according to section V of the guidelines to provide technical advisory, supervision, and support services.

48. **Protected area management services.** According to Peruvian law, complete or partial protected area management can be delegated by SERNANP to nonprofit organizations. While the project does not consider the establishment and funding of management service agreements as one of its main implementation arrangements, it is conceivable that SERNANP could delegate management of portions of RNSIIPG during project implementation for reasons of management effectiveness or capabilities. If such services were funded by the project, the decision to do so would be analyzed and eventually incorporated into the project during any of the planned review processes. If applicable, SERNANP and PROFONANPE would select a nonprofit organization following quality and cost-based selection procedures.

49. **Asset manager.** The grant includes US\$2,000,000 to be deposited into an endowment fund, which would be invested to produce interest earnings. This fund will be managed by an asset manager, who will be selected according to PROFONANPE's operational manual.

50. **Training.** The project will finance all costs associated with training and workshops for the implementation of the project.

51. **Operational costs.** Operational costs under this project will include incremental and reasonable expenditures that would not have been incurred by PROFONANPE without the project, such as office supplies, communications (including Internet connectivity), travel expenses, daily allowances, insurance, and vehicle and equipment operation and maintenance.

52. **Collaborative subprojects.** Under component 2, the project will provide subgrants for the implementation of collaborative management subprojects in pilot sites of RNSIIPG. Works, goods, and services financed under these subgrants will follow shopping procedures. Eligibility requirements and other aspects, along with specific procurement and financial procedures, are detailed in the subprojects operational manual.

***Procurement: Assessment of Capacity and Risk to Implement Procurement***

53. PROFONANPE will be responsible for fiduciary aspects (financial management and procurement) of the project. An assessment of the implementation agency’s capacity to implement procurement actions for the project was carried out. The assessment looked into PROFONANPE’s (a) organizational structure; (b) facilities and support capacity; (c) qualifications and experience of the staff that will work in procurement; (d) record keeping and filing systems; (e) procurement planning, monitoring, and control systems used; and (f) capacity to meet the Bank’s procurement contract reporting requirements. It also reviewed the procurement arrangements proposed in the procurement plan. The proposed corrective measures are: (a) the procurement plan must be included and managed through SEPA; (b) a yearly procurement review must be carried out.

54. **Risk assessment.** The overall project risk for procurement is Moderate. The level of risk for this project will be reassessed and revised according to the recommendations of procurement reviews conducted by Bank staff.

***Procurement Plan***

55. At Negotiations , PROFONANPE developed a procurement plan for project implementation, which provides the basis for the procurement methods. The plan has been agreed upon between PROFONANPE and PCT. It will be available in the project’s database and in PROFONANPE’s Procurement Plan Execution System (SEPA). The plan will be updated in agreement with PCT annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

56. **Prior Review Threshold:** Procurement Decisions subject to Prior Review by the Bank as stated in Appendix 1 to the Guidelines for Procurement:

<b>Thresholds for procurement methods and prior review (thousands of US\$)</b>			
<b>Expenditure Category</b>	<b>Contract Value</b>	<b>Procurement Method</b>	<b>Contracts Subject to Prior Review</b>
<b>1. Works</b>	>3,000	ICB	All
	250 – 3,000	NCB	First
	<250	Shopping	First
	Regardless of value	DC	All
<b>2. Goods and Non-Consulting Services</b>	>250	ICB	All
	50 - 250	NCB	First
	<50	Shopping	First

	Regardless of value	DC	All
<b>Note:</b>	ICB = International Competitive Bidding, NCB = National Competitive Bidding, DC = Direct Contracting		

57. **Prior Review Threshold – Selection of Consultants:** Selection decisions subject to Prior Review by Bank as stated in Appendix 1 to the Guidelines Selection and Employment of Consultants:

<b>Thresholds for methods and prior review (thousands of US\$)</b>			
Consulting Services	Contract Value	Procurement Method	Contracts Subject to Prior Review
<b>3.a Firms</b>	>100	QCBS, QBS, FBS, LCS	>200; <200 Terms of Reference
	<100	QCBS, QBS, FBS, LCS, CQS	Terms of Reference
	Regardless of value	SSS	All
<b>3.b Individuals</b>		Comparison of 3 CVs in accordance with Chapter V of the Guidelines	>100; <100 Terms of Reference
<b>Note:</b>	QCBS = Quality- and Cost-Based Selection, QBS = Quality-Based Selection , FBS = Fixed Budget Selection, LCS = Least-Cost Selection, CQS = Selection Based on Consultants' Qualifications, SSS: Single Source Selection		

***Frequency of Procurement Supervision Missions***

58. In addition to the initial supervision missions to be carried out by the Bank, assessments of implementing agency capacity have recommended a regular annual supervision mission. The supervision plan will be revised and the number of yearly supervision missions updated according to the risk rating identified during the first year of project implementation.

**C. Environmental and Social, Including Safeguards**

59. The project triggered environmental safeguard policies OP 4.01 (Environmental Assessment) and OP 4.04 (Natural Habitats) and OP 4.11 (Physical Cultural Resources) . Potential impacts were identified in the environmental assessment according to the project’s activities, especially related to the upgrade or placement of physical infrastructure (for example visitor trails, docks, and signage) or equipment (for example remote monitoring stations, solar panels, and desalination equipment), and the increased presence of marine vehicles.

60. All interventions involving infrastructure and equipment will follow strict guidelines provided by SERNANP either through the reserve’s Master Plan or according to the current Protected Areas Law (1997) and its regulations (2001), if plans are not yet in place. No project resources will be spent on works that are incompatible with activities allowed according to RNSIIPG zoning. Whenever possible and feasible, infrastructure will use building materials that are certified or otherwise considered sustainable, and environmentally sensitive waste management mechanisms will be put in place. Equipment will be purchased under standard criteria of ecological friendliness (for example four-stroke marine engines as opposed to two-stroke ones, and solar-powered electronic devices with low-maintenance batteries instead of engine-based electric

generators). Specific mitigation measures and monitoring mechanisms have been developed as part of the project's environmental assessment.

61. The project also triggered social safeguard policy OP 4.12 (Involuntary Resettlement), impact 3(b), as access to resources inside the protected areas will be initially restricted due to the enforcement of area regulations. In the long term the project will provide adequate compensation mechanisms, but immediate mitigation measures were deemed necessary to prevent social conflict and possible hardship for local communities. A social assessment developed during project preparation contributed to understanding livelihood dynamics and guided the selection of pilot project activities and beneficiaries.

62. During project preparation, local perceptions and socioeconomic needs were identified and incorporated into the design. Mitigation measures to remedy access restriction to resources have been incorporated into project design, mostly through collaborative subprojects in component 2. These subprojects will address the majority of issues identified in terms of social sustainability.

63. In a strict sense, while in some cases project interventions are restricting conventional access to resources, no overall reduction in the volume of captures or the number of fishers and tour operators is expected. Project activities are focused on developing mechanisms that guarantee the sustainable use of resources and not on use cutback, unless required for ecological reasons under the framework of SERNANP's management plans. Species diversification, new regulatory and management frameworks – such as the task, user, representation, and function (TURF) framework – new tourism operations, and better zoning aim to provide improved access to currently in use or new resources.

64. As required by Annex A of OP 4.12, a Process Framework was produced for the project. The framework identified eligibility criteria for communities affected, confirmed the findings of the social assessment as related to potential impacts derived from use restrictions, and provided detailed strategies for social engagement. The framework also includes specific approaches on the gender dimension that were developed using the detailed gender analysis that was prepared for the project as per Bank OP 4.20 (Gender Mainstreaming in Development) and the Bank's Peru Country Partnership Strategy approach on gender issues.

65. As mentioned, the project has incorporated required mitigation measures as part of its components, subcomponents, and activities. Monitoring and evaluation of these measures are already part of the project's monitoring and evaluation; stand-alone mitigation measures for OP 4.12 are not required. In addition to engaging local stakeholders through direct actions, the project will also work at various levels to ensure the adequate involvement of the wide range of diverse stakeholders possibly affected by implementation.

66. An awareness and communication strategy was developed during project preparation and it will be further refined during project implementation. The strategy (targeting local, regional, and national institutional and civil society stakeholders) will support the proposed mitigation measures by increasing knowledge on the importance of RNSIIPG to conserve critical ecosystems and species, providing information on the linkages between the welfare of such species and local development, and proactively involving local stakeholders in RNSIIPG management and conservation.

67. Overall monitoring and evaluation of safeguard management plans will be carried out by PCT as part of its regular activities. As with all other project field interventions (not only safeguard related), specific actions will be designed and included in the project's annual operational plans.

#### **D. Monitoring and Evaluation**

68. Monitoring and evaluation will be carried out as an operational project component of its own (component 3) as opposed to being considered a project management activity under component 4. Sections on project component 3 in PAD and Annex 2 contain detailed descriptions of mechanisms to be applied for results monitoring and evaluation.

69. Project component 3 will provide enabling conditions that will allow SERNANP and its partner agencies to fulfill the project development objective's requirement to improve management of marine and coastal ecosystems and protect biological diversity. Ecosystem health will be tracked through the establishment and implementation of ecological baselines and a monitoring and evaluation system. Biological indicators have been developed during project design and will be monitored during implementation. Evaluation criteria have been drafted, and initial response protocols are available. In addition, component 3 will also monitor and evaluate subproject performance, which in turn relates directly to the project development objective.

70. Project monitoring and evaluation will be carried out at four levels: (a) biodiversity monitoring; (b) monitoring of management effectiveness of the reserve; (c) monitoring and evaluation of collaborative subprojects (for component 2); and (d) financial and administrative monitoring. The first level includes the establishment of an ecological baseline in pilot sites of the reserve and the implementation of a system for monitoring of ecosystem health. The second level refers to monitoring of project progress against the overall objectives and targets in the project Results Framework, including tracking protected area management through the GEF METT. The third level pertains to tracking specific targets of the collaborative subprojects. The fourth level refers to tracking efficiency in overall project implementation, contrasting progress in project activities with use of funds and procurement decisions.

71. Data for project outcome and results indicators will come from a number of sources, including field reports for ecosystem health and community participation in events, community perception and surveys (including satisfaction surveys), and results evaluations of applications of METT and other effectiveness tracking mechanisms. Monitoring and evaluation covers four specific lines of implementation, each with its own set of indicators, evaluation protocols, and data sourcing.

72. Monitoring and evaluation will be implemented by PCT, who will be working under supervision of SERNANP and in coordination with other institutions and subproject executing entities. Costs associated with PCT operations are usually covered with project management funds. As this is not possible in this project, alternate mechanisms have been devised. Technical projectwide PCT staff, including the project coordinator, procurement specialist, and administrative assistants, will share their individual costs pro rata according to their participation in other project components.

73. While overall responsibility for outcome and results monitoring and evaluation will remain with PCT, each project component and subcomponent will provide its own data-collecting resources. Indicators have been designed in such a way that they can be measured without the need for complex collection methods or specialized personnel. Capacity should be provided through individual activities and executing actors within each subcomponent. In cases where capacity is deemed insufficient, training will be provided under project component 2 to reach the required technical levels.



74. No additional costs are expected to be required for monitoring and evaluation. However, progress will be evaluated during the midterm review no later than month 24 of implementation, and funding availability will be evaluated.

#### **E. Role of Partners**

75. The German Development Bank (KfW) has confirmed that parallel financing in the amount of EUR10,000,000<sup>28</sup> will be provided after a feasibility study is completed.<sup>29</sup> Funding is part of KfW's support to the third phase of the National System of Protected Areas program, which includes the Project for the Conservation of Marine and Coastal Areas in Peru, with emphasis on the RNSIIPG Reserve (Decreto Supremo No. 112-2011-EF). While formal partnership mechanisms have yet to be discussed, it is anticipated that KfW funds will be administered by PROFONANPE, as has been successfully done in three previous grants since 1995. By mid-2013 KfW's contribution was still in the project design phase; review and approval processes are expected to last into early 2014.

76. During project design phase, the design team was advised by KfW to anticipate its contribution to focus on investment financing, including infrastructure and equipment, to strengthen SERNANP's management of RNSIIPG. While final decisions have not yet been made, it is estimated that approximately 70–80 percent of KfW funding will go towards supporting the protected area. GEF-World Bank disbursements for the project are expected to begin in early 2014, and those of KfW possibly in late 2014 or early 2015. The project has been designed to take these dates into account in such a way that most planning instruments, training and research needs, and infrastructure requirements have been identified or developed by the time KfW financing becomes available. This will enable a smooth transition from an initial management-strengthening phase (supported by the project) to a larger-scale infrastructure-building phase (supported by KfW).

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<sup>28</sup> KfW financing was confirmed as per the July 2010 minutes of bilateral discussions held in Bonn (for a €10 million grant) and earlier debt-for-nature swap agreements (for US\$2,000,000 to go to the endowment fund for RNSIIPG). KfW financing was discussed again and confirmed on several instances during the project design phase in Q1 and Q2, 2013.

<sup>29</sup> The KfW feasibility study is under way as of November 2013.

## Annex 4. Operational Risk Assessment Framework (ORAF)

### Peru: Peru Strengthening Sustainable Management of the Guano Islands, Isles and Capes National Reserve System Project (P129647)

#### Stage: Negotiations

Risks							
1. Project Stakeholder Risks							
<b>1.1 Stakeholder Risk</b>	Rating	Moderate					
<p><b>Risk Description:</b></p> <p>Given the large number of stakeholders, there is a risk that some stakeholders, particularly marine biodiversity users, will resist the implementation of management mechanisms that could result in potential economic losses. Risks are related to a lack of understanding of the implications of RNSIIPG by local community-based stakeholders, including subnational governments at the local level. Assessments carried out during project preparation seem to signal that there are mixed feelings regarding the existence of RNSIIPG, including acknowledgment of the need for resource management and distrust related to the possibility of additional restrictions of use, especially in tourism and fisheries-related sectors. Disagreements between reserve managers and local users might escalate and negatively impact project implementation.</p>	<p><b>Risk Management:</b></p> <p>In terms of social sustainability, the project will work at various levels to ensure that the wide range and diversity of stakeholders related to project implementation are adequately involved. SERNANP already carries out intensive community outreach as part of its management strategy, including involvement of local stakeholders and community consultations. These efforts will be supported by an awareness and communication strategy that has been developed during project preparation and will be further refined during project implementation. The strategy (targeting local, regional, and national institutional and civil society stakeholders) aims at increasing knowledge on the importance of RNSIIPG to conserving critical ecosystems and species, providing information on the linkages between the welfare of such species and local development, and proactively involving local stakeholders in RNSIIPG management and conservation. The project is promoting the development of even stronger ties by providing subgrants for collaborative subprojects to be executed by local stakeholders. Improvement of local livelihoods is the key premise behind these grants, which are expected to demonstrate the social and economic benefits of resource management, conservation, and protected areas.</p>						
	Resp: Client	Status: Not Yet Due	Stage: Both	Recurrent:	Due Date: December 31, 2014	Frequency:	

2. Implementing Agency (IA) Risks (including Fiduciary Risks)						
<b>2.1 Capacity</b>	Rating	Moderate				
<p><b>Risk Description:</b></p> <p>The government of Peru has been making substantial progress on the expansion of the system of protected areas. However, this expansion is often constrained by the lack of financial resources and limited staffing and implementation capacity at SERNANP. In recent years the agency has acquired experience in overall protected area management, but marine and coastal issues are still new territory. The lack of adequate inter-institutional coordination and data sharing has been identified as an important obstacle for effective project implementation.</p>	<p><b>Risk Management:</b></p> <p>SERNANP’s weaknesses will be addressed through close supervision, facilitation, and timely interventions by PROFONANPE and the Bank team to improve implementation capacity. Partnerships and formal agreements with IMARPE, DICAPI, AGRO RURAL, other private research and conservation institutions, and other government agencies will help strengthen institutional capacity on marine protected areas management. Capacity building and funding of RNSIIPG recurrent costs through the proceedings of a dedicated endowment fund will further strengthen the agency’s management capabilities. PROFONANPE’s experience with Bank procedures will help mitigate fiduciary risks. Close supervision will be undertaken throughout project implementation.</p>					
	Resp: Bank	Status: In Progress	Stage: Both	Recurrent:	Due Date: March 31, 2015	Frequency:
<b>2.2 Governance</b>	Rating	Substantial				
<p><b>Risk Description:</b></p> <p>Changing government priorities throughout project implementation may divert attention from project activities, though the current government of Peru has demonstrated a noteworthy political will to promote and support conservation and environmental sustainability. Upcoming regional and municipal (in 2014) and presidential (in 2016) elections have the potential to drastically alter the institutional landscape, including Ministry of Environment and SERNANP management. Weak coordination capacity and decision-making authority by SERNANP’s Coastal Marine Unit might challenge project implementation.</p>	<p><b>Risk Management:</b></p> <p>The project is fully aligned with government of Peru and SERNANP management and intervention priorities for RNSIIPG. The project itself has been designed to strengthen SERNANP and support it in overcoming identified weaknesses. Although staffing is not a project component, funding for developing joint management and coordination mechanisms with other RNSIIPG government stakeholders and providing overall institutional enhancement is expected to reduce management pressure on the Coastal Marine Unit by sharing field responsibility for control, surveillance, and monitoring. Discussions with SERNANP authorities, which will be reflected in the project agreement with PROFONANPE, have emphasized the need for additional decision-making authority for the Coastal Marine Unit and RNSIIPG management.</p>					
	Resp: Bank	Status: In Progress	Stage: Both	Recurrent:	Due Date: December 31, 2014	Frequency:

<p><b>Risk Description:</b> Allegations of fraud and corruption that halt the bidding processes.</p>	<p><b>Risk Management:</b> PROFONANPE will maintain strong supervision of procurement processes through various layers of control and financial management. Current Bank protocols and guidelines will be applied; coordination and communication with SERNANP and the Bank team will be permanent. Procurement processes for subgrants for collaborative subprojects will follow specific rules designed for and successfully implemented in prior GEF-World Bank grants.</p>					
Resp: Bank		Status: Not Yet Due	Stage: Both	Recurrent:	Due Date: October 31, 2014	Frequency:
<p><b>3. Project Risks</b></p>						
<p><b>3.1 Design</b></p>	Rating	Moderate				
<p><b>Risk Description:</b> Successful project implementation will require close collaboration between SERNANP, PROFONANPE, other government agencies with direct influence in RNSIIPG management, private and public research institutions, subnational governments, and local stakeholders and executing agencies in project pilot sites. Enabling conditions will have to be created, and project interventions will have to reflect realities on the ground. Project funds will involve subproject grants that would be implemented by beneficiaries of different capacity level, and this component is a considerable percentage of the project.</p>	<p><b>Risk Management:</b> The project has been designed in close consultation with the involved institutions and stakeholders and is aligned with national and local priorities. A social assessment, including a gender dimension, was prepared and guided the design of reality-based collaborative subprojects for local execution. Participatory workshops in representative pilot sites were carried out to evaluate community response to the project. Pilot sites and specific activities were designed and cleared with SERNANP at various levels, including the Coastal Marine Unit, RNSIIPG management and planning, and protected area directors. Activities were designed based on current management capabilities at SERNANP in order to avoid being overambitious to the point where activities might become unfeasible. Ecological and management effectiveness baselines were established and will serve as a starting point for project monitoring and evaluation. Overall, project design responds to actual needs and provides solutions that are considered viable with available time and budget. Extensive due diligence was carried out during project preparation, and risks have been identified and rated. In addition, the project will include a Project Coordination Team and an advisory level to facilitate and supervise the implementation of activities.</p>					
Resp: Client		Status: Not Yet Due	Stage: Both	Recurrent:	Due Date: March 31, 2015	Frequency:
<p><b>3.2 Social and Environmental</b></p>	Rating	Moderate				
<p><b>Risk Description:</b> 60 percent of the country's population lives in the coastal region. Dependence and pressure on marine and coastal resources are consequently very high. Various government and subnational stakeholders have levels of</p>	<p><b>Risk Management:</b> Mitigation measures to compensate for reduced access to resources have been incorporated into project design. An environmental assessment has been prepared, which has identified key potential problem areas and has recommended environmental mitigation measures. The project will be implemented in close coordination with other government agencies, taking into account overlapping policies and jurisdictions. Subnational actors will be engaged to ensure political and local support for conservation actions; civil society organizations will be</p>					

<p>jurisdiction over socioeconomic activities that overlap with the protected area. RNSIIPG contains highly sensitive ecosystems that are home to species and communities, of which some are considered threatened or endangered. Project interventions may restrict access to resources by enforcing protected area regulations. Though the project itself is designed to improve the conservation of RNSIIPG and its biodiversity, specific interventions might cause negative impacts on certain sites of the reserve.</p>	proactively involved in project implementation.					
<b>3.3 Program and Donor</b>	Rating	Low				
<p><b>Risk Description:</b> KfW parallel financing has been delayed. While a feasibility study is under way as of May 2013, funding focus and partnership mechanisms are as yet unknown. Lack of certainty regarding KfW funding priorities could prevent the project from achieving the project development objective in time and under optimal conditions.</p>	<p><b>Risk Management:</b> During project preparation, the design team was advised by KfW to anticipate its contribution and to focus on investment financing, including infrastructure and equipment to strengthen SERNANP's management of RNSIIPG. While final decisions have not yet been made, it is estimated that approximately 70–80 percent of KfW funding will go towards supporting the protected area. GEF-World Bank disbursements for the project are expected to begin in early 2014, and KfW disbursements possibly in late 2014 or early 2015. The project has been designed to take these dates into account in such a way that most planning instruments, training and research needs, and infrastructure requirements will have been identified or developed by the time KfW financing becomes available. Moreover, in order to account for possible delays, the project's midterm review has been scheduled to take place no later than month 24 of project implementation. As it is expected that KfW funding will by then be available, this review will allow the project to be adjusted to incorporate KfW priorities and resource allocations.</p>					
<b>3.4 Delivery Monitoring and Sustainability</b>	Rating	Low				
<p><b>Risk Description:</b> Delays in the establishment of adequate coordination and monitoring arrangements may undermine project implementation and monitoring. Project sustainability will depend on the successful implementation of</p>	<p><b>Risk Management:</b> Solid monitoring arrangements have been developed. Monitoring and evaluation is now a fully funded project component of its own, which will cover all levels of project delivery monitoring. Subprojects have been designed with sustainability as their implied exit strategy, and their execution will be supervised and closely monitored by PCT. Financial sustainability will be guaranteed by the establishment of the endowment fund. Project activities have been designed taking into account the expected revenue from this fund; ex-post recurrent</p>					

collaborative subprojects, which in turn will require effective local participation and adequate project management, and the establishment and operation of a proposed endowment fund.	costs resulting from project activities have been calculated to remain within that revenue.					
	Resp: Client	Status: Not Yet Due	Stage: Both	Recurrent:	Due Date: October 31, 2014	Frequency:
<b>3.5 Other (Optional)</b>	Rating: Moderate					
<p>Risk Description:</p> <p>Financial: Funding available for project management has been set by GEF Secretariat rules at a ceiling of 5 percent of total project costs. While project operations are effectively funded and co-financing is considered adequate, project management funding is considered insufficient to cover management needs for the project's 60-month period.</p>	<p><b>Risk Management:</b></p> <p>PROFONANPE and project design have considered mitigation measures to ensure flawless project implementation, including allocating PCT costs pro rata across project components, subcomponents and activities, and inviting KfW to share PCT costs and staff once KfW's parallel grant begins implementation (KfW has provided a letter of Intent to parallel finance the project on September 10, 2013). Additional actions might be necessary to cover possible funding gaps; project review instances will assess this risk and develop additional mitigation measures if needed.</p>					
	Resp: Both	Status:	Stage: Implementation	Recurrent:	Due Date: March 31, 2015	Frequency:
<b>4. Overall Risk</b>						
<b>Overall Preparation Risk: Moderate</b>			<b>Overall Implementation Risk: Moderate</b>			
<p>Risk Description:</p> <p>The overall preparation risk is rated as moderate given that the country status is stable and that PROFONANPE has effectively managed the preparation of various projects, with high levels of engagement from SERNANP.</p>			<p>Risk Description:</p> <p>The overall implementation risk is also moderate, as no substantial risks are identified except for governance due to a changing government, which could mean changing government priorities throughout the lifetime of the project. The project team will watch this closely, and will work with SERNANP to strengthen their management capacity, and build upon existing programs like their intensive community outreach.</p>			

## Annex 5. Implementation Support Plan

### Peru: Strengthening Sustainable Management of the Guano Islands, Islets, and Capes National Reserve System (RNSIIPG)

#### Strategy and Approach for Implementation Support

1. The strategy and approach for implementation support will include formal supervision, including field visits to be carried out in the sites where project activities will take place, and will focus on the following main areas:

2. **Overall project management.** Special attention will need to be paid to: (i) the supervision of the sub-projects to be implemented in different and geographically distant sites, especially in the context of promoting biodiversity-friendly practices and their monitoring; (ii) the process and content of technical assistance to stakeholders for implementation of biodiversity-friendly practices, including the effectiveness of the proposed use of implementation partners, and the implementation of the Process Framework; (iii) coordination across implementing agencies and geographical locations to identify early lessons learned from implementation; (iv) implementation of proactive communication and participatory management strategy, engaging a variety of stakeholders at local and national levels (across Components); (v) monitoring the key elements of project sustainability; and (vi) monitoring of project implementation, including results indicators (as defined in Annex 1) and biodiversity monitoring (as defined in the GEF Tracking Tools).

3. **Fiduciary requirements and inputs.** Supervision will involve review of yearly independent audit reports on the Endowment Fund submitted by PROFONANPE to the Bank, following the guidelines agreed with the World Bank. Key points of supervision of endowment fund management will involve review of annual investment reports submitted to the PAC and then to the Bank; any reports of changes to the approved investment strategy; and, if indicated, review of monthly reports on investments and/or minutes of quarterly PROFONANPE Investment Committee meetings.

4. In addition, the scope of project supervision will review the implementation of financial management arrangements and financial management performance, identify corrective actions if necessary, and monitor fiduciary risk. It will take place twice a year and include updating the financial management rating in the Implementation Status Report (ISR).

5. **Environmental and Social Safeguards.** SERNANP will have to be supported to strengthen its capacity to manage social and environmental issues, due to the complexity of the project and the processes managed. Implementation support will therefore have to be provided to effectively ensure the implementation of the recommendations derived from the Social Assessment, Environmental Assessment and Environmental Management Framework as defined in the Operational Manual.

This includes the engagement with stakeholders, including local communities, implementation on consultations and monitor social and environmental safeguards.

**Table A5.1: Detailed Implementation Support required**

<i>Time</i>	<i>Focus</i>	<i>Skills Needed</i>	<i>Resource Estimate</i>	<i>Partner Role</i>
<i>First twelve months</i>	Establishment of implementation capacity	Procurement and FM	4 SWs	
	Revision of consultant terms of reference	Technical expertise in management and sustainable financial for PA	4 SWs	
	Capacity strengthening in social and environmental safeguards	Safeguard expertise	4 SWs	
<i>12-48 months</i>	Implementation support on needs basis	Procurement and FM	6 SWs	
	Implementation support on needs basis	Safeguard expertise	6 SWs	
	Participatory planning and community engagement	Social development specialist	4 SWs	
	Management planning and capacity building for fisher folk	Fisheries specialist	2 SWs	
	Long terms sustainable financing of PA	Economist on sustainable financing	2 SWs	
	Revision of technical documents for quality control of consultants	GIS remote sensing ICT specialist	4 SWs	
	Capacity strengthening, quality control of consultants,	Marine and coastal management-conservation specialist	3 SWs	
	Capacity building, quality control of consultants	Marketing-value chain specialist	2 SWs	
	Capacity building, quality control of consultants	Tourism specialist	2 SWs	
<i>Other</i>				



*Skills Mix Required*

<b><i>Skills Needed</i></b>	<b><i>Number of Staff Weeks</i></b>	<b><i>Number of Trips</i></b>	<b><i>Comments</i></b>
Social development specialist	10	5	
Fisheries specialist	6	3	
Economist on sustainable financing	4	2	
GIS remote sensing ICT specialist	8	2	
Marine and coastal management-conservation specialist	6	3	
Marketing-value chain specialist	4	2	
Tourism specialist	4	2	

*Partners*

<b><i>Name</i></b>	<b><i>Institution/Country</i></b>	<b><i>Role</i></b>
KfW	Germany	Cofinancier

## Annex 6. Economic Analysis

### Peru: Strengthening Sustainable Management of the Guano Islands, Islets, and Capes National Reserve System (RNSIIPG)

1. This annex provides an economic analysis for the GEF financed project called Strengthening Sustainable Management of the Guano Islands, Islets and Capes National Reserve System (RNSIIPG). It also includes a brief description of the challenges for carrying out the analyses, the assumptions made, and the results of the economic analyses.

2. RNSIIPG project has four components: (1) Institutional Strengthening; (2) Collaborative Regional Management; (3) Monitoring and Evaluation; and (4) Project Management. . From an economic analysis standpoint, activities associated with component 2 which will involve development of socially viable and environmentally sound marine management models offer the most tangible (direct) benefits. However, during project implementation, based on socioeconomic information generated in collaborative subprojects, other indirect benefits might be estimated as well as strategic non-market values.

#### Challenges in conducting economic analysis

3. The RNSIIPG project offers both tangible and intangible economic benefits. As a result, a cost benefit analysis of the activities presents various challenges.

4. The table below provides information on some of the direct and indirect benefits (use values) and non-use values.

Use Values				Non-Use Values
Direct Use	Indirect Use	Bequest Value	Option Value	Existence Value
Goods/services that are consumed/ enjoyed directly.  Extractive: - Capture fisheries  Non-extractive: - Tourism/ Recreation - Research - Education	Functions and services (provisioning, cultural, supporting and regulating services) providing indirect and off-site benefits.  - Shoreline protection - Biological Support for other species and eco-systems	Value arising from leaving ecosystems and the good/services they generate to future generations.	Value of the option to maintain future direct and indirect use of good/ services	Values arising from knowledge of continued existence of:  - Habitats  - Species

5. Only some of these goods and services can be valued through market mechanisms. Furthermore, it can be difficult to quantify the off-site benefits (stemming from shoreline protection or biological support for other species) unless long-term data and biophysical modeling is undertaken. It also will be difficult to quantify the benefits from institutional strengthening and monitoring and evaluation

6. Working within these constraints, the economic analysis for this project estimates the minimum annual benefit required for the project to generate a 12 percent return on investment over a period of 10 and 20 years<sup>30</sup> using both a social and private discount rate of 4 and 10 percent respectively. To achieve this return on investment, the present value of the monetary benefits would range from 16.3 million to 21.1 million (using a 4 percent discount rate for the two time periods) and 14.3 million and 16.5 million (using a 10 percent discount rate for the two time periods). Using the same discount rates and time periods, the analysis estimates tangible benefits from the project and the present value of net benefits from RNSIIPG.

**Assumptions:**

7. Several assumptions are used to estimate costs, including the following:

- Total costs include both the fixed and recurrent costs.
- The recurrent costs were estimated using the operational costs borne using GEF funds and 70% of the financial resources (in kind) being provided by SERNANP (the percentage was provided through a personal by PROFONANPE staff). The operational costs used are those specified under the cost categories of personnel and operational in the GEF budget table. The costs for each component are averaged over the life of the project (five years). The total average value of the operational costs is calculated and used to estimate GEF's contribution to the recurrent cost in the subsequent years.
- Activities associated with different components span different lengths of time, accordingly the costs are incurred at different points in time. The total value of the grants issued for activities in component 2.1 will increase over the first three years and then decrease in the final two years. The justification for this assumption is the time required to have concrete activities for financing in the first year. A second reason is the grant activities will span more than one year. Therefore, activities financed by grants disbursed during the third year of the project may still be ongoing during the last two years of the project

8. It is also assumed that the financial resources in the trust fund are used to cover recurrent costs. Using information on the funding sources for SERNANP indicated in the PAD, it is assumed that 49% of the recurrent costs are obtained from the trust fund. The main assumptions made regarding the benefits include the following

- The minimum economic benefit required to justify this project should generate a 12% rate of return
- The trust fund earns, on average, 10 percent interest per annum

9. There currently is limited information available regarding the economic benefits that could be derived from improved management. One of the objectives of the management plans is to facilitate sustainable tourism in 37,493 hectares. There are also objectives to ensure sustainable fisheries, and enable research. For purposes of estimating the benefits for this project, the analysis uses the estimated tangible net benefits generated from tourism for the marine reserve area of Paracas in 2001 (including spillover benefits to restaurants and other service providers in the

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<sup>30</sup> Governments and societies establish protected areas to be there in perpetuity. Accordingly the economic analysis could be done into perpetuity. However, the change in net present value is often minimal after 20 years even with a low discount rate. Accordingly the analysis is done for the window of 10-20 years to show that the investment generates positive returns even in this shorter timeframe.

tourism sector). The 2001 value is approximately US\$30/ha<sup>31</sup>. It is assumed that the reserve should be able to generate the same unit value of benefits from tourism. This is done recognizing that the infrastructure and accessibility for Paracas in 2001 was different from the infrastructure and accessibility in RNSIIPG. It is assumed that the national institutions accrue interest on the \$4,000,000 trust fund and that this would be considered a benefit. An annual interest rate is assumed to be 10%. It is also assumed that a value of approximately \$364,000 is assumed to be withdrawn per year, as the Trust Fund is meant to cover part of the recurrent cost of managing RNSIIPG.<sup>32</sup>

10. It is assumed that by the third year of the project benefits from tourism are accrued from roughly a third of the area with plans for tourism (i.e., one third of roughly 37,500ha). It is also assumed that for the next two subsequent years an additional third of the area designated for tourism generates revenues. This is a conservative estimate, but assumes that necessary infrastructure and other preconditions for sustainable tourism will take time to create.

11. Due to lack of information, there are no estimates made from improved fisheries development at the selected sites or the alternative economic activities that are being proposed. Similarly, there is not value associated with the indirect and direct non-cash benefits from improved management of RNSIIPG.

#### **Analysis of Benefit**

12. Using the above assumptions, the analysis uses a range of values net benefits per hectare to determine what would be the return from tourism required to meet the minimum economic benefit. If the values are below the unit value of \$30/ha, it is assumed feasible for the project to generate the necessary benefits.

13. The calculations show that the project will generate a return on investment of 12% in the following cases:

- (i) If the benefits from tourism (including the spillover effects) are \$21/ha, when using a discount rate of 4% for a period of 20 years
- (ii) If the benefits from tourism (including the spillover effects) are \$25/ha, when using a discount rate of 10% for a period of 20 years
- (iii) If the benefits from tourism (including the spillover effects) are \$49/ha, when using a discount rate of 4% for a period of 10 years
- (iv) If the benefits from tourism (including the spillover effects) are \$55/ha when using a discount rate of 10% for a period of 10 years

14. In summary, the project will be able to generate a 12 percent return on investment over a twenty year period because the necessary benefits per hectare are below those that could be generated from tourism (including the spillover benefits).

15. Returns per hectare need to be higher to generate a 12 percent return on investment in the 10 year scenarios. The higher values of benefits per hectare are likely to be achieved if the grants and improved surveillance materialize earlier than assumed in the analysis. Furthermore, there are additional tangible benefits from research, improved monitoring and sustainable fisheries that could

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<sup>31</sup> This value is based on dividing the total revenue from tourism (including positive spillover benefits) by the total area (i.e., US\$ 10,100,000/335,000ha)

<sup>32</sup> This value is estimated using budgetary information from SERNANP that shows that 49% of the financial resources required are provided from PROFONANPE

not be quantified. The latter will be important because artisanal fisheries are one of the primary beneficiaries of the project.

16. It should be noted that this analysis uses a very conservative estimation of economic benefits, in terms of when benefits are accrued and also by only considering the direct and spillover benefits from tourism. There are other direct and indirect benefits and benefits from sustainable fisheries and non-extractive uses of the resource that are not captured in this calculation (see table X above).

17. To reinforce the point that not accounting for the benefits of this project to the fisheries industry is significant, it is important to note that the main fisheries export for Peru (export of anchoveta) thrives in the cold, plankton-saturated Humboldt current along the coast of Peru. A recent study found that 1 ton of fish can earn between USD 110 and USD 160 if sold directly to a fishmeal plant. Anchovy are a heavily exploited fish. Illegal, unregulated and unreported activities have resulted in overfishing of the Peruvian anchoveta which seems to have affected the food chain, as stocks of bigger fish and marine animals that eat anchovy have also declined. Actual enforcement of measures mentioned in the country context section of this PAD and greater engagement with artisanal fisheries to sustainably manage the resource will help reverse the situation and improve revenue generation for local fishermen. The lack of necessary economic data and information underscore the importance of dedicating financial resources from this project to collect and compile relevant data on biophysical and economic parameters. There is the need to quantify both the tangible and intangible values from the marine protected area, and help optimize management decisions and ensure they are factoring these economic considerations appropriately. Data collection and analysis can be done as part of the monitoring and evaluation component. Linking the economic data with the monitoring of the outcome and results indicators will enhance understanding how improved management affects the population of guano birds, fish and other wildlife in the marine protected areas.

## Annex 7. Incremental Cost Analysis

### Overview

1. The baseline costs as estimated over the five years of the Project. The baseline costs are based on recently completed, ongoing and planned management relevant activities in RNSIIPG and estimated using information available on annual budgets.
2. The Project costs of the GEF Alternative represent the sum of the baseline and incremental costs associated with proposed additional actions required to secure biodiversity conservation objectives of global importance within the RNSIIPG sites of concern in this activity (including the necessary management measures). This includes the costs for both the site specific interventions and the central and regional governments' interventions

### Baseline Scenario

3. The baseline scenario is one in which the CMU's performance has been hampered by a lack of resources and experience in coastal and marine management. Using budget information for RNSIIPG, in 2012, the total budget allocated for the reserve was \$946,000 (of which 94% was spent). In 2013, the budget allocation is approximately \$1,670,000
4. The annual budget for 2013 for SERNANP and the counterpart funding information that was provided was used to estimate the funds that the government would be providing from their direct budget as well as the direct revenues generated by the entrance fees of the park. Approximately 65% of the resources available will cover the cost of staff for the RNSIIPG reserve (including a team leader, 1 marine specialist, 4 zoning specialists, 18 park guards, and 1 assistant). These financial resources will also cover approximately 30% of the cost of staff at the SERNANP headquarters (including specialists and other key members of SERNANP's administration and management). The financial resources will also cover a few land based and sea based transportation equipment (e.g., trucks, zodiacs and some patrol vehicles). The general expenses covered by any RNSIIPG funds will be used to cover a portion of the recurrent expenses, such as rent, gasoline, insurance, food, and so on.
5. **Component 1: Institutional Strengthening** Under this component, the baseline scenario points to shortage of resources (human and financial) to undertake the necessary management planning for the coastal marine reserve. There also are inadequate resources to build capacity needed among staff and other stakeholders to carry out the necessary tasks. The financial resources available are also inadequate for essential infrastructure needed managing RNSIIPG. The Coastal Marine Unit is constrained by budget, and management has relied on the assistance of AGRORURAL for monitoring data of seabirds and sea lions. **The resources available for the baseline scenario are \$3,510,000. This includes \$1,510,000 from SERNANP and \$2,000,000 from KfW.** The SERNANP resources are largely used to cover the cost of staff. The KfW funds will be put into a special fund being established to meet the Project's requirements.
6. **Component 2: Collaborative Regional Management** Under the baseline scenario, this component will provide the planning tool needed for regional management. While the resources would be adequate to develop plans in some of the sites, it is not clear that there would be resources for implementation of the management plans. Moreover, resources and capacity to ensure coherence in the management strategies is lacking. **The financial resources available for the baseline scenario under this component are: US\$ 216,000 from SERNANP.** All of these financial resources will be used to cover the cost of staff for this component.

7. **Component 3: Monitoring and Evaluation** There are several national institutions that are active in the RNSIIPG area and working on monitoring and enforcement issues (AGRO RURAL, ,DICAPI.), There also is a Technical Coordination Group (TCG) that serves as the multi-agency body tasked with supporting SERNANP and ensuring mandatory coordination with and cooperation between all involved government stakeholders. The financial resources available for the baseline scenario of this component are estimated at **US\$ 3,274,000**. Approximately 40% of the SERNANP resources will be used to cover staff costs and 59% will be used for equipment and associated recurrent expenditure.

8. **Component 4: Project Management** Under the baseline scenario, there are no financial resources for project management being allocated by SERNANP, the regional governments or other development partners.

### **The Scope and Benefits of the GEF Alternative Scenario**

9. The GEF project will increase the management effectiveness of an existing coastal/marine protected area and increase revenue for protected area systems to meet total expenditures requires for management. Improved management of RNSIIPG will help promote a healthy coastal ecosystem and marine environment. It will reduce overfishing and any associated habitat loss or loss of species. Overall the project will build the institutional capacity and information base that will help Peru promote the sustainable use of aquatic resources, fisheries and water bodies and preserve the significant ecological role of coastal/marine ecosystems. The project will also directly benefit local populations in the area, including local fishermen and associated communities, tour operators and others working in sectors that are indirectly related to these sectors. The project will also build the capacity of researchers.

10. **Component 1: Institutional Strengthening** During the lifetime of the Project, the GEF Alternative Scenario for this component is \$6,907,000, with a GEF contribution of \$3,397,000. GEF resources will be used to develop the zoning module of the plan and strengthen the GIS capabilities to enable the necessary spatial planning, to procure the necessary equipment and data, and to develop natural resource management plans in two sites that are not covered by other activities associated with the project. They will also be used to develop an ecological label for the reserve to help reward sustainable use and environmental management of the reserve. A key application of GEF resources will include training and capacity building of stakeholders as well as building the capacity of the SERNANP's CMU and reserve staff to implement participatory management and technical monitoring. The GEF funds will also be used to strengthen the surveillance activities and to establish a new trust fund to finance a portion of SERNANP's recurrent management costs. The GEF funds will be matched by funds from KfW made available through parallel financing.

11. **Component 2: Collaborative Regional Management** During the lifetime of the Project, there will be ***\$4,216,000 available under the GEF Alternative Scenario The GEF contribution will be \$ 4,000,000.*** The GEF Alternative Scenario enables the development of socially viable marine management models to be locally implemented through collaborative subprojects in 10 selected priority zones. Associated with this component is also a grant making arrangement that would provide financial and technical support to implement activities that are identified in the planning process and management plan.

12. **Component 3: Financial Sustainability of the Selected Ecological Corridors** During the lifetime of the Project, there will be ***\$4,375,000 under the GEF Alternative Scenario that contribute to the achievement of Component 3 objectives. The GEF contribution is approximately***

**\$1,101,000.** Under this scenario the activities will include monitoring and evaluation at four levels: (a) biodiversity monitoring; (b) monitoring of management effectiveness of the Reserve; (c) monitoring and evaluation of collaborative subprojects; and, (d) safeguards, financial and administrative monitoring.

**13. Component 4: Project Management** During the lifetime of the Project, the cost of activities under the GEF Alternative Scenario will be **\$425,000.**

**Incremental Costs**

14. The total incremental cost for achieving global environmental benefits the amount beyond the baseline that would be guaranteed to be spent under the GEF Alternative would be **\$8,923,000.** The following matrix summarizes the incremental costs and benefits over the Project’s five-year period.

<b>Incremental Cost Matrix</b>				
<b>Cost Category</b>		<b>US\$</b>	<b>Domestic Benefit</b>	<b>Global Benefit</b>
Component 1: Institutional Strengthening	Baseline	1,510,000	RNSIIPG legally established with clear demarcation and modest but useful institutional core is in place	Establishment of a reserve that includes some of the diverse sites and habitat for key marine wildlife and fish in the region, and linked to the larger coastal marine protected area system.
	GEF Alternative	3,397,000	Adequate staffing and clear responsibilities of management Training of SERNANP’s staff at marine and coastal area levels and other relevant institutions Functioning communication arrangement Well-functioning inter-institutional coordination mechanisms Funds from trust fund to cover recurrent costs	Necessary capacity and coordination for improved management of the marine protected area. The MPA is habitat for endemic marine and coastal species in Peru. In Peru, as much as 6% of its marine microalgae, almost 40% of the bivalve mollusks and 70% of its perciform marine fish are endemic.
Component 2: Collaborative Regional Management	Baseline	216,000	Availability of planning tool needed for regional management. Planning in some of the sites	
	GEF Alternative	4,000,000	Develop collaborative management projects in at least 10 priority zones with strong participation of local community and	Reversal of the decline in important stock of fish (anchoveta) and other key marine biodiversity (including clams, scallops,



			<p>other relevant stakeholders</p> <p>Training and development of skills for local fisherman communities and associations</p> <p>Incentives for conservation while strengthening local economies – giving fisherman tourism related options that could generate income</p> <p>Improved fishing condition and artisanal fishing opportunities</p>	<p>mussels). The reduction in overfishing and the destruction of habitat resulting from the regulating tourism and introducing sustainable fishing practices will protect habitat for important Guano birds, and resident populations of penguins, fur seals, sea lions and sea otters</p>
Component 3: Monitoring and Evaluation	Baseline	3,274,000	<p>Logistical support (boats and rangers) for selected operations. Collection of monitoring + baseline information and pilot projects in three islands of the reserve</p>	<p>Monitoring of the reserve and overall coastal protected area system, enabling the reduction in illegal activities that are identified</p>
	GEF Alternative	1,101,000	<p>Basic equipment, infrastructure and telecommunications for enhanced surveillance and control</p> <p>Build scientific basis for management action (develop baseline data on marine and coastal biodiversity )</p> <p>Improve management, tracking and monitoring</p>	<p>Availability and analysis of data for informing management of RNSIIPG. Insights regarding MPA management and biodiversity conservation</p>
Component 4: Project Management	Baseline	0		
	GEF Alternative	425,000	Project management	