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**The World Bank**  
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Report No: ICR00004721

**IMPLEMENTATION COMPLETION AND RESULTS REPORT**

TF 15896

ON A

GRANT

IN THE AMOUNT OF US\$8.92 MILLION

TO THE

PERUVIAN TRUST FUND FOR NATIONAL PARKS AND PROTECTED AREAS (PROFONANPE)

FOR THE

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

September 19, 2019

Environment, Natural Resources & Blue Economy Global Practice  
Latin America And Caribbean Region

## CURRENCY EQUIVALENTS

(Exchange Rate Effective August 27, 2019)

Currency Unit = Peruvian Nuevo Sol (NS)

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NS\$1.0 = US\$0.30

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US\$1.00 = NS\$3.38

FISCAL YEAR  
July 1 - June 30

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## ABBREVIATIONS AND ACRONYMS

|            |  |
|------------|--|
| AGRO RURAL | Rural Agricultural Productive Development Program<br>(Programa de Desarrollo Productivo Agrario Rural)                           |
| BP         | Bank Procedure   |
| CS         | Collaborative Sub-projects   |
| DICAPI     | General Direction of Captaincies and Coastguards<br>(Dirección General de Capitanías y Guardacostas)                             |
| 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<br>(Gestión Participativa de Áreas Naturales Protegidas)                             |
| ha         | Hectares   |
| IADB       | Inter-American Development Bank  |
| IBRD       | International Bank for Reconstruction and Development  |
| ICR        | Implementation Completion Report   |
| IDA        | International Development Association  |
| IMARPE     | Peruvian Sea Institute (Instituto del Mar del Perú)  |
| IRD        | Institut de Recherche pour le Développement<br>(French National Research Institute for Sustainable Development)                  |
| KfW        | Kreditanstalt für Wiederaufbau (German Development Bank)   |
| METT       | Management Effectiveness Tracking Tool   |
| MTR        | Mid-term Review  |
| NGO        | Nongovernmental Organization   |
| NPA        | Natural Protected Area   |
| OP         | Operational Policy   |
| PAC        | Project Administration Council   |
| PAD        | Project Appraisal Document   |
| PAES       | Program for Sustainable Economic Activities<br>(Programa de Actividades Económicas Sostenibles)                                  |
| PAN III    | Protected Natural Areas Project III<br>(Proyecto de Áreas Naturales Protegidas III)  |
| PCT        | Project Coordination Team  |
| PDO        | Project Development Objective  |
| PROFONANPE | The Peruvian Trust Fund for Natural Parks and Protected Areas<br>(Fondo de Promoción de las Áreas Naturales Protegidas del Perú) |
| PRONANP    | National Program for Natural Protected Areas<br>(Programa Nacional de Áreas Naturales Protegidas)                                |
| RF         | Results Framework  |
| RNSIIPG    | Guano Islands, Islets, and Capes National Reserve System<br>(Reserva Nacional Sistema de Islas, Islotes y Puntas Guaneras)       |
| SERNANP    | National Service of Natural Protected Areas<br>(Servicio Nacional de Áreas Naturales Protegidas)                                 |
| SINANPE    | National System of Natural Areas Protected by the State<br>(Sistema Nacional de Áreas Naturales Protegidas por el Estado)        |
| UNDP       | United Nations Development Programme   |

## TABLE OF CONTENTS

|  |           |
|--|-----------|
| <b>DATA SHEET .....</b>  | <b>1</b>  |
| <b>I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES.....</b>                          | <b>5</b>  |
| <b>A. CONTEXT AT APPRAISAL .....</b>   | <b>5</b>  |
| <b>B. SIGNIFICANT CHANGES DURING IMPLEMENTATION .....</b>                          | <b>8</b>  |
| <b>II. OUTCOME .....</b>   | <b>11</b> |
| <b>A. RELEVANCE OF PDOs .....</b>  | <b>11</b> |
| <b>B. ACHIEVEMENT OF PDOs (EFFICACY) .....</b>                                     | <b>12</b> |
| <b>C. EFFICIENCY.....</b>  | <b>16</b> |
| <b>D. JUSTIFICATION OF OVERALL OUTCOME RATING .....</b>                            | <b>17</b> |
| <b>E. OTHER OUTCOMES AND IMPACTS .....</b>   | <b>17</b> |
| <b>III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME.....</b>              | <b>18</b> |
| <b>A. KEY FACTORS DURING PREPARATION .....</b>                                     | <b>18</b> |
| <b>B. KEY FACTORS DURING IMPLEMENTATION .....</b>                                  | <b>18</b> |
| <b>IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME ..</b> | <b>19</b> |
| <b>A. QUALITY OF MONITORING AND EVALUATION (M&amp;E) .....</b>                     | <b>19</b> |
| <b>B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE.....</b>                     | <b>20</b> |
| <b>C. BANK PERFORMANCE .....</b>   | <b>21</b> |
| <b>D. RISK TO DEVELOPMENT OUTCOME .....</b>  | <b>22</b> |
| <b>V. LESSONS AND RECOMMENDATIONS .....</b>  | <b>22</b> |
| <b>ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS.....</b>                             | <b>25</b> |
| <b>ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION.....</b>           | <b>37</b> |
| <b>ANNEX 3. PROJECT COST BY COMPONENT .....</b>                                    | <b>39</b> |
| <b>ANNEX 4. EFFICIENCY ANALYSIS.....</b>   | <b>40</b> |
| <b>ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS ...</b>  | <b>42</b> |
| <b>ANNEX 6. SUPPORTING DOCUMENTS .....</b>   | <b>43</b> |
| <b>ANNEX 7. SIGNIFICANT CHANGES DURING IMPLEMENTATION .....</b>                    | <b>44</b> |
| <b>ANNEX 8. SUMMARY OF SYSTEMATIZATION OF EXPERIENCES.....</b>                     | <b>51</b> |

**DATA SHEET**

**BASIC INFORMATION**

**Product Information**

|                        |   |
|------------------------|---|
| Project ID             | Project Name  |
| P129647                | Peru Strengthening Sustainable Management of the Guano Islands, Isles and Capes National Reserve System Project |
| Country                | Financing Instrument  |
| Peru                   | Investment Project Financing  |
| Original EA Category   | Revised EA Category   |
| Partial Assessment (B) | Partial Assessment (B)  |

**Organizations**

|            |                     |
|------------|---------------------|
| Borrower   | Implementing Agency |
| PROFONANPE | SERNANP             |

**Project Development Objective (PDO)**

Original PDO

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.

## FINANCING

|  | Original Amount (US\$) | Revised Amount (US\$) | Actual Disbursed (US\$) |
|--|------------------------|-----------------------|-------------------------|
| <b>World Bank Financing</b>                      |                        |                       |                         |
| TF-15896   | 8,922,638              | 8,922,638             | 8,922,638               |
| <b>Total</b>                                     | <b>8,922,638</b>       | <b>8,922,638</b>      | <b>8,922,638</b>        |
| <b>Non-World Bank Financing</b>                  |                        |                       |                         |
| Borrower/Recipient                               | 5,000,000              | 5,000,000             | 4,777,641               |
| GERMANY: KREDITANSTALT<br>FUR WIEDERAUFBAU (KFW) | 2,000,000              | 2,000,000             | 2,000,000               |
| <b>Total</b>                                     | <b>7,000,000</b>       | <b>7,000,000</b>      | <b>6,777,641</b>        |
| <b>Total Project Cost</b>                        | <b>15,922,638</b>      | <b>15,922,638</b>     | <b>15,700,279</b>       |

## KEY DATES

| Approval    | Effectiveness | MTR Review  | Original Closing | Actual Closing |
|-------------|---------------|-------------|------------------|----------------|
| 06-Dec-2013 | 21-Apr-2014   | 23-Sep-2016 | 31-Mar-2019      | 31-Mar-2019    |

## RESTRUCTURING AND/OR ADDITIONAL FINANCING

| Date(s)     | Amount Disbursed (US\$M) | Key Revisions   |
|-------------|--------------------------|---|
| 21-Apr-2017 | 4.38                     | Change in Results Framework<br>Change in Components and Cost<br>Other Change(s) |

## KEY RATINGS

| Outcome                 | Bank Performance        | M&E Quality |
|-------------------------|-------------------------|-------------|
| Moderately Satisfactory | Moderately Satisfactory | Modest      |

#### RATINGS OF PROJECT PERFORMANCE IN ISRs

| No. | Date ISR Archived | DO Rating                 | IP Rating                 | Actual Disbursements (US\$M) |
|-----|-------------------|---------------------------|---------------------------|------------------------------|
| 01  | 20-Mar-2014       | Satisfactory              | Satisfactory              | .17                          |
| 02  | 25-Sep-2014       | Satisfactory              | Satisfactory              | .47                          |
| 03  | 03-Apr-2015       | Moderately Satisfactory   | Moderately Satisfactory   | 2.66                         |
| 04  | 10-Aug-2015       | Moderately Satisfactory   | Moderately Satisfactory   | 3.03                         |
| 05  | 21-Mar-2016       | Moderately Unsatisfactory | Moderately Unsatisfactory | 3.24                         |
| 06  | 09-Nov-2016       | Moderately Unsatisfactory | Moderately Unsatisfactory | 3.71                         |
| 07  | 17-May-2017       | Moderately Unsatisfactory | Moderately Unsatisfactory | 4.55                         |
| 08  | 15-Nov-2017       | Moderately Unsatisfactory | Moderately Unsatisfactory | 5.08                         |
| 09  | 20-Apr-2018       | Moderately Unsatisfactory | Moderately Satisfactory   | 5.51                         |
| 10  | 26-Jun-2018       | Moderately Satisfactory   | Moderately Satisfactory   | 5.86                         |
| 11  | 20-Dec-2018       | Moderately Satisfactory   | Moderately Satisfactory   | 6.95                         |
| 12  | 29-Mar-2019       | Moderately Satisfactory   | Moderately Satisfactory   | 8.41                         |

#### SECTORS AND THEMES

##### Sectors

| Major Sector/Sector                                     | (%)       |
|---|-----------|
| <b>Agriculture, Fishing and Forestry</b>                | <b>80</b> |
| Fisheries   | 10        |
| Public Administration - Agriculture, Fishing & Forestry | 50        |
| Livestock   | 10        |
| Other Agriculture, Fishing and Forestry                 | 10        |

|  |                          |                          |
|--|--------------------------|--------------------------|
| <b>Water, Sanitation and Waste Management</b>      | <b>10</b>                |                          |
| Water Supply                                       | 10                       |                          |
| <b>Industry, Trade and Services</b>                | <b>10</b>                |                          |
| Other Industry, Trade and Services                 | 10                       |                          |
| <b>Themes</b>                                      |                          |                          |
| Major Theme/ Theme (Level 2)/ Theme (Level 3)      | (%)                      |                          |
| <b>Private Sector Development</b>                  | <b>100</b>               |                          |
| Jobs   | 100                      |                          |
| <b>Environment and Natural Resource Management</b> | <b>100</b>               |                          |
| Renewable Natural Resources Asset Management       | 70                       |                          |
| Biodiversity                                       | 70                       |                          |
| Environmental policies and institutions            | 30                       |                          |
| <b>ADM STAFF</b>                                   |                          |                          |
| <b>Role</b>  | <b>At Approval</b>       | <b>At ICR</b>            |
| Vice President:                                    | Hasan A. Tuluy           | Axel van Trotsenburg     |
| Country Director:                                  | Susan G. Goldmark        | Marianne Fay             |
| Director:  | Ede Jorge Ijjasz-Vasquez | Anna Wellenstein         |
| Practice Manager/Manager:                          | Emilia Battaglini        | Valerie Hickey           |
| Project Team Leader:                               | Christian Albert Peter   | Gabriela Encalada Romero |
| ICR Co Author:                                     |                          | Victor David Malca       |



## I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

### A. CONTEXT AT APPRAISAL

#### Context

1. Peru is recognized as one of 17 “mega-diverse” countries with 11 ecological regions and 84 of the world’s 117 different types of life zones. It ranks first for genetic resources and species of fish, second for birds, and third for amphibians. It is located along a complex system of the Humboldt currents, which transport cold nutrient rich waters and upwell nutrient enriched subsurface waters along its shorelines, which is the basis for the country’s extraordinarily productive fisheries. Landings reached 4.9 metric tons in 2014, surpassed only by China, Indonesia, and the United States. However, the exploitation of these fisheries has also caused declines in the country’s marine and coastal diversity due to habitat disturbance and destruction, unregulated and illegal fishing, over-exploitation, tourism as well as solid and liquid waste pollution. As a result, important biological systems, particularly around the islands, islets and capes along the coastline are under intense pressure, threatening the marine and coastal biological diversity and sustainability.

2. To counter these pressures, the Government of Peru established in 2009 the Guano Islands, Islets, and Capes National Reserve System (RNSIIPG), a group of 22 islands/ islets and 11 capes with a total of 140,883 hectares -including terrestrial sites and 2 nautical miles around each site- to protect some of the most important areas and ecosystems in the Humboldt currents. These islands and rocky capes provide ideal conditions for the settlement and development of a wide variety of fish, mollusks, arthropods, annelids, echinoderms, cnidarians and seaweed prairies. Many have been overfished and need strict management plans to restore their numbers, these species include Octopus (*Octopus mimus*), Sea Urchins (*Loxechinus albus*), and Peruvian Scallop (*Argopecten purpuratus*). The islands, islets, and capes are also vital for the refuge, rest, and reproduction of endangered seabirds such as the Guanay (*Phalacrocorax bougainvillii*), the Humboldt Penguin (*Spheniscus humboldti*), and the Peruvian diving petrel (*Pelecanoides garnotii*), as well as marine mammals such as the South American Sea Lion (*Otaria flavescens*), the South American Fur Seal (*Arctocephalus australis*), and the Marine Otter (*Lontra felina*). The RNSIIPG represents one of the last refuges where most of these species are protected<sup>1</sup>.

3. Recognizing the importance of sustainable marine and coastal management and ecosystem protection, the National Service of Protected Areas (SERNANP), the technical agency under the Ministry of Environment in charge of protected areas (PAs), began managing the RNSIIPG in 2009. However, at Project approval in 2013, SERNANP had little expertise in managing other than land-based PAs, thus needed to develop the technical and institutional capacity to effectively manage marine and coastal PAs and its biodiversity. This required the development of new approaches in zoning, natural resource planning and management as well as conflict resolution mechanisms, related to artisanal fishing and growing, unregulated tourism.

4. The Project was to assist in building SERNANP’s institutional capacity and strengthening SERNANP’s collaboration with strategic allies, such as the Rural Agricultural Productive Development Program (AGRORURAL), the Peruvian Coast Guard (DICAPI), and the Peruvian Institute of the Sea (IMARPE), to develop a strategy to coordinate management, surveillance, control and research of marine and coastal resources and articulate joint responses. This included socially

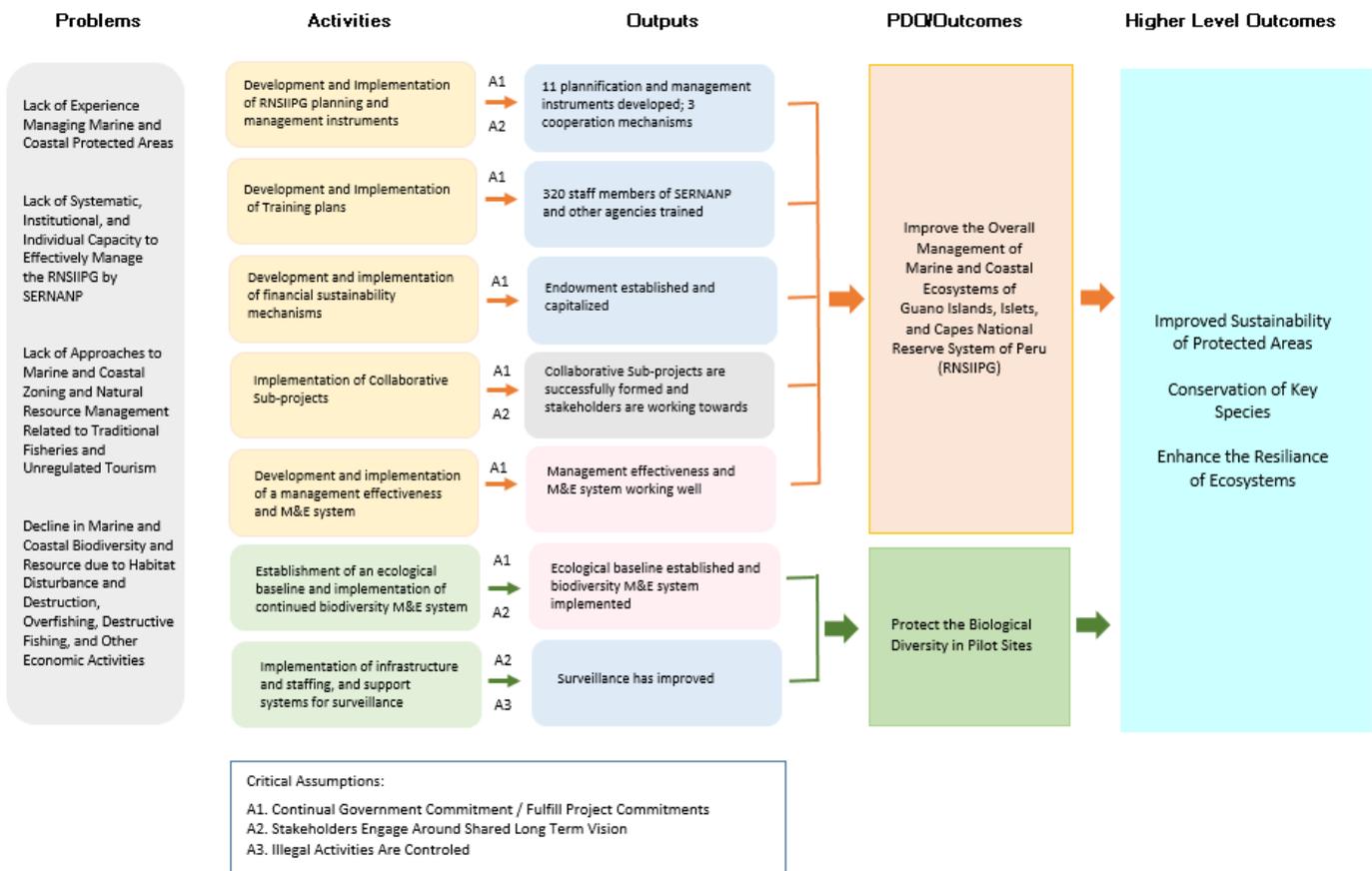
<sup>1</sup> Servicio Nacional de Áreas Naturales Protegidas por el Estado (SERNANP), Plan Maestro de la Reserva Nacional Sistema de Islas, Islotes y Puntas Guaneras 2016 – 2020, (SERNANP, 2016), 18



viable marine management models, through locally implemented Collaborative Subprojects (CS) in pilot sites, to allow the active participation of local stakeholders, such as fisherfolk associations and tourist operators, in developing economic activities that helped to protect the ecosystem. Furthermore, the Project aimed at establishing and implementing ecological baselines and monitoring and evaluation systems within SERNAP and the provision of support for the monitoring and evaluation of project performance.

### Theory of Change (Results Chain)

**Figure 1: Theory of Change - Illustrated**



5. The Theory of Change (ToC), as reflected in the Results Framework in the Project Appraisal Document (PAD), sought to improve the overall management of marine and coastal ecosystems of the RNSIIPG and protect its biological diversity in the pilot sites. The project identified four priority issues that included habitat loss, overexploitation of resources, pollution, and displacement of native species. The ToC builds on the understanding that conservation of PAs can only be successful if local stakeholders, public and private agencies and communities are active and willing participants in the area's planning and management processes. The Project focused on strengthening SERNANP's institutional capacity and the RNSIIPG's participatory processes, by (i) supporting the engagement and operation of its management committee; (ii) implementing Collaborative Sub-projects fully aligned with the objectives of the Master Plan for the RNSIIPG; (iii) determining the ecological baselines and resource utilization maps in pilot sites, so that zoning



of the areas could be developed and agreed upon; and (iv) establishing and implementing monitoring and evaluation systems within SERNANP. By doing so, the Project sought to strengthen capacities of SERNANP and other key RNSIIPG stakeholders.

**Project Development Objectives (PDOs):**

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

**Key Expected Outcome and Outcome Indicators:**

7. Two original core indicators were defined to measure progress towards the PDO: (i) Terrestrial areas brought under enhanced biodiversity protection (ha), and (ii) Marine areas brought under enhanced biodiversity protection (ha).

8. In addition, there were originally 12 intermediate results indicators contributing to the attainment of the PDO. (i) At least 35 percent of improvement in marine and coastal management effectiveness compared to METT baseline, (ii) Percentage of beneficiaries involved in subprojects have maintained or increased their disposable income, (iii) Increase financing of basic operations of the RNSIIPG, (iv) At least 320 staff members of SERNANP, other agencies and communities' actors trained, (v) Information system on RNSIIPG activities developed and operational, (vi) At least 3 control systems implemented, (vii) 14 planning and management instruments developed and implemented, (viii) Endowment established and capitalized, (ix) 3570 persons benefiting from project activities, of which 40 percentage are female, (x) 6 cooperation mechanisms established, (xi) Maintain Humboldt penguin population, (xii) Increase of Chita fish (*Anisotremus scapulari*) population in reproduction areas.

**Components**

9. The Strengthening Sustainable Management of the Guano Islands, Islets, and Capes National Reserve System Project comprised of three technical components and one project administration component:

**Component 1: Institutional strengthening.**

*Estimated Cost: US\$6,907,000; GEF: US\$3,397,000; SERNANP: US\$1,510,000; KfW matching fund towards endowment fund: US\$2,000,000.*

*Actual Cost: US\$6,150,774; GEF: US\$3,457,338; SERNANP: US\$693,435.55; KfW matching fund towards endowment fund: US\$2,000,000<sup>2</sup>.*

10. This component was designed to build capacity at SERNANP and other institutions involved in the management of marine and coastal resources by 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

<sup>2</sup> In June 2019 the value of the Endowment fund reached US\$2,100,065, excluding the US\$85,000 withdrawn in 2018 to finance SERNANP operations. KfW's Endowment Fund currently stands at US\$2,485,371.



establishment and capitalization of a new endowment fund to generate additional income to finance a portion of SERNANP's recurrent management costs and Collaborative Subprojects.

**Component 2: Collaborative regional management.**

*Estimated Cost: US\$4,216,000; GEF: US\$4,000,000; SERNANP: US\$216,000.*

*Actual Cost: US\$3,962,065; GEF: US\$3,896,467.55; SERNANP: US\$65,597.73; Others: US\$212,652.*

11. The Project supported the development of socially viable marine management models through carrying out of locally implemented CS in pilot sites selected by SERNANP and local stakeholders, eventually to benefit from the financial returns of the endowment fund established under Subcomponent 1.4. This component aimed at contributing to the PDO through the development of marine management models implemented locally through CS in 10 pilot sites, selected during project design. The CS were supposed to cover a representative range of economic activities; in the case of artisanal fisheries, demonstrating the economic and organizational conditions necessary to achieve post-project sustainability, such as sustainably harvested marine products. Other economic focus areas included tourism, research, and education, for which socially viable organizational models were to be developed with strong participation of the local community and other relevant stakeholders (including regional governments, research institutions, and NGOs).

**Component 3: Monitoring and evaluation.**

*Estimated Cost: US\$4,375,000; GEF: US\$1,101,000; SERNANP: US\$3,274,000.*

*Actual Cost: US\$5,140,527; GEF: US\$1,121,919.35; SERNANP: US\$4,018,607.49*

12. This component was designed to provide enabling conditions to allow SERNANP and its partner agencies to fulfill the PDO requirement to improve management of marine and coastal ecosystems and protect biological diversity. Ecosystem health was to be tracked through the establishment and implementation of ecological baselines and a monitoring and evaluation system.

**Component 4: Project management.**

*Estimated Cost: US\$425,000; GEF: US\$425,000.*

*Actual Cost: US\$445,813; GEF: US\$445,813*

13. The Component was designed to strengthen PROFONANPE's capacity to carry out the administrative and fiduciary management of the Project, that was to be carried out by a dedicated team of fiduciary experts, working in coordination with SERNANP, other institutions, and subproject executing entities. To optimize available resources and pending confirmation from KfW, PCT costs and staff were to be shared with KfW, once its project financed in parallel became effective. The arrangement foresaw sharing PROFONANPE staff costs for the project coordinator, procurement specialist, and administrative assistants, at a pro rata basis according to their participation in other projects implemented by PROFONANPE. Available funds were to 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. Other eligible expenditures needed for implementation of other Project components and subcomponents were financed from those components.

**B. SIGNIFICANT CHANGES DURING IMPLEMENTATION**

**Revised PDOs and Outcome Targets**

14. PDO/GEO and scope of the Project remained unchanged during the implementation of the Project.



**Revised PDO indicators**

15. The Results Framework (RF) had a number of inconsistencies and included several indicators that were not necessarily measuring progress in the medium (intermediate result indicators) and long run (outcome indicators) towards achieving the PDO. Changes are summarized below in table 1 (more detail is provided in Annex 1).

- (i) Original outcome indicators were not sufficiently representative of the key elements of the PDO (improved management of ecosystems, and protection of biodiversity in pilot sites), and therefore, two new PDO indicators were included: (i) Contribution to the maintenance of the Humboldt penguin population and (ii) Score of the “participation radar”, SERNANP’s official monitoring tool used to assess participatory management in protected areas).
- (ii) The original PDO indicator “Terrestrial areas brought under enhanced biodiversity protection (ha)” was revised to be “Areas brought under enhanced biodiversity protection (ha)”, to assess the reduction of impact of negative effects in terrestrial and marine areas.
- (iii) The original core indicator “Marine areas brought under enhanced biodiversity protection (ha)” was eliminated, as its definition was not consistent with the activities meant to be carried out under the Project by SERNANP, focusing on improving surveillance and control in marine areas only.
- (iv) Deficiencies in adequately defining a number of indicators, resulted in misinterpretations of the indicators and their monitoring methodologies. A clear definition for each indicator was provided to ensure consistency of measurements during the implementation of the Project.

*Table 1: Revision of PDO indicators*

| Original PDO Indicators   | Revised PDO Indicators   | Comments  |
|---|--|---|
| Terrestrial areas brought under enhanced biodiversity protection (ha) | Areas brought under enhanced biodiversity protection (ha) (Core indicator)   | This indicator used the “Effects generated by Activities” Tool, developed by SERNANP and used in all PAs in Peru. The tool assesses the reduction of impact of terrestrial and marine areas, as a result of a strengthened management system which seeks to reduce the degree of impact of the following: effects habitat loss, reduced use of resources, pollution, and exotic species.  |
| Marine areas brought under enhanced biodiversity protection (ha)      | Dropped  | The original Project design had two PDO level indicators one for Land area and another one for Marine areas. The restructuring took in consideration the difficulties for the Project to monitor these distinct indicators and combined both into a broader area brought under enhanced biodiversity protection indicator. Therefore, this core indicator was dropped. Nonetheless, information on protection activities in the marine part of the Reserve, as carried out by SERNANP, continued to be collected. |
|   | New: Score of SERNANP’s monitoring tool “participation radar” (an official tool of SERNANP, as established in the Reserve’s Master Plan, to assess participatory management in protected areas). | The indicator is representative of one key element of the PDO (improved management of ecosystems in pilot sites), which was not properly reflected by any original PDO indicators.  |
|   | New: Indicator (moved from intermediate outcome to PDO level indicator): Contribute to maintain the  | Penguin population monitored by AGRORURAL across the entire Reserve. The measure will take place once a year in summer, as recommended by a study on biological indicators undertaken within the framework of the Project. Target values did not consider the impact that external factors, including El Niño, could have on the Penguin population. Additional information was also to be included from measurements taken by St. Louis Zoo, which is limited to only specific areas                             |



|  |                              |  |
|--|------------------------------|--|
|  | Humboldt penguin population. | within the Reserve. Although this methodology is considered more rigorous than AGRORURAL's, there was no certainty that monitoring by the St. Louis Zoo would continue.<br>The indicator is a keystone species and represents one key element of the PDO (protection of biodiversity in pilot sites), not properly reflected by the original PDO indicators. The indicator wording "contribute to" acknowledged that the Project had only an indirect impact on the indicator. |
|--|------------------------------|--|

**Revised Components**

16. Components remained unchanged throughout the implementation of the Project.

**Other Changes**

17. **Intermediate outcome indicators.** The RF also included several intermediate outcome indicators, which were eliminated, since they were either: (i) output specific, (ii) not attributable to the Project, or (iii) redundant. Further details are provided for each indicator in the Restructuring Paper of the Project (refer to Annex 6).

- (i) *Information system on RNSIIPG activities developed and operational.* Following SERNANP's request during the first year of implementation and rather than developing a parallel information system, the Project supported SERNANP in adapting its existing system (which was developed for terrestrial PAs) to marine/coastal areas.
- (ii) *At least 3 control systems implemented.* This activity associated to this indicator was related to the acquisition of equipment for control and monitoring, among others, which corresponds to a product indicator and not to an outcome indicator. In this sense, it was maintained as an activity indicator, leaving it out of the RF.
- (iii) *Increase in financing of basic operations of the RNSIIPG.* This indicator was eliminated since it is subject to external factors beyond the control of (and not attributable to) the Project.
- (iv) *Percentage of beneficiaries involved in subprojects have maintained or increased their disposable income.* At appraisal, there was an assumption that information on the economic income of artisanal fishermen could be obtained. Nevertheless, artisanal fishing is an informal activity which does not meet several standards, is concentrated in small non-representative associations and is carried out by individuals in random places. As a result, fisherfolk are usually not forthcoming with information on their activities and are uncomfortable to share any income related data. In addition, income flows are very volatile and little information is available on inputs of the fishing operations (e.g. labor, operational cost, equipment). Therefore, no baseline could be established, and the indicator was eliminated.

18. **Revision of activities within Subcomponents.** Modifications were introduced to a few activities within four sub-components (sub-components 1.1, 1.2, 3.1, and 3.3), to better align with SERNANP's work plan, adding and eliminating a number of activities. These changes did not have an impact on either the Project outcome or projected budget requirements per component. Detail changes are indicated in the Restructuring Paper (refer to Annex 6).

19. **Revision of the definition of operational costs in the Grant Agreement,** to better reflect all operational procedures as they were presented in the PAD. As the Project was originally designed to support increasing capacity for PROFONANPE (Component 4), different operational costs were envisioned, including the financing of pro-rated salaries and administrative costs. Nevertheless, the definition of "operating costs" in the grant agreement was limited and did not include any reference to these costs, which resulted in a modification of the Grant Agreement.



### Rationale for Changes and their implication to the original theory of change

20. None of the changes described above affected the Original ToC, rather they improved measuring PDO progress.

## II. OUTCOME

### A. RELEVANCE OF PDOs

**Rating: High**

#### Assessment of Relevance of PDOs and Rating

21. **Bank-country partnership priorities:** The Project's PDO/GEO were relevant at approval and remain highly relevant to this day. It supported the World Bank's Country Partnership Strategy (CPS) for the period 2012 to 2016, specifically its third strategic objective (sustainable growth and productivity in support to the further development of the environmental regulatory framework and biodiversity protection) and a corresponding sub-objective (strengthening environmental management), which highlights the contribution to strengthening the environmental management capacity in regional governments, as well as a more effective inclusion of biodiversity conservation into national and regional development plans. It also is aligned with the 2017-2021 Country Partnership Framework (CPF) that responds to the Government of Peru priorities, namely Strengthening the management of natural resources (Objective 8 under Pilar III - Natural Resource and Climate Change Risk Management).

22. **GEF-7 Strategic Focus:** The PDO/GEO remains aligned with the priorities of the current 2018-2022 Biodiversity Focal Areas of the GEF-7 Programming Directions that seek to "promote protected area co-management between government and indigenous peoples and local communities where such management models are appropriate." In this context, the Project contributes to biodiversity across sectors and landscapes/seascapes; address direct drivers to protect habitats and species; and further develop biodiversity policy and institutional frameworks.

23. **National Development priorities:** The Project is relevant at national level as it helps to achieve the natural resources pillar of Peru's Bicentennial Plan as well as critical priorities under the of the National Environmental Action Plan. In addition, strategic objectives of the Natural Protected Areas (NPA) Master Plan and the Multiannual Sectorial Strategic Plan of the environmental sector, that seek to "promote, disseminate and provide opportunities in the NPA for society for the sustainable use of services ecosystem" are reflected in the Institutional Strategic Plan of SERNANP, and are closely aligned with the RNSIIPG Master Plan. Similarly, results of the Project help achieving the National Biodiversity Strategy 2021 and its 2014 – 2018 Action Plan, by improving the state of biodiversity and maintaining the integrity of ecosystem services provided by it. Furthermore, Peru is not only mainstreaming experiences piloted under the Project to further promote innovative approaches in biodiversity conservation, but also committed to share knowledge with other countries. Evidence for that is the country's hosting of the 3<sup>rd</sup> Latin American and Caribbean Congress of Protected Areas in October 2019, in which it will share lessons from the Project on best management practices of protected areas at the service of society as well as collaborative conservation, social responsibility, necessary innovation and participation in the management of PAs.

24. **International commitments:** The Project has contributed fulfilling international commitments, such as under the Convention on Biological Diversity, specifically the second objective of the sustainable use of its components. In line with SDG 14 of underwater life and Aichi goal 6, the Project has contributed to develop effective regulation of fisheries based on ecosystem-based approaches, piloted the implementation of sustainable management plans and improved access of artisanal fishermen to marine resources and markets.



## B. ACHIEVEMENT OF PDOs (EFFICACY)

### Assessment of Achievement of Each Objective/Outcome

#### (i) **Objective 1: Improve the overall management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System of Peru (RNSIIPG)**

25. **Participatory development of the zoning module of the RNSIIPG Master Plan.** One of the most important Project achievements was the detailed zoning, mapping, and categorizing of protected areas based on conditions of the natural environment and specific protection needs in 10 pilot sites. This exercise was critical for the development of a terrestrial and marine biological baseline, required to determine the state of conservation in the Reserve and allowed the establishment of conservation categories (protection, restoration, sustainable exploitation). SERNANP benefitted from collaborating closely with IMARPE's laboratories (Santa Rosa, Huanchaco, Huacho and Ilo), that had experience in establishing marine biological baselines, based on abundance, distribution and reproduction status of conservation elements in intertidal and subtidal ecosystems. This collaboration, facilitated by an inter-institutional agreement, strengthened the technical capacity of SERNANP. In addition, active participation of local primary users (fisherfolk, divers and tourism operators), supported the establishment of agreements within a robust framework for conservation and sustainable use, that articulate user rules to be respected within the Reserve, something that had been applied with limited scope in coastal marine areas of Peru. Based on these agreements, stakeholders were allocated user rights based on certain requirements, including working jointly with SERNANP and other national and local agencies in management, surveillance, and research activities. Over the implementation period, 197 local stakeholders participated regularly in standing subcommittees established to promote protection and conservation of the biological diversity within the RNSIIPG.

26. **Improved inter-institutional coordination and strengthening RNSIIPG management.** At the time of Project appraisal, SERNANPs capacity to effectively manage the RNSIIPG and protect the marine and coastal diversity was inadequate, due to (i) limited experience outside land-based protected areas and (ii) institutional perceptions and practices that prevented collaboration and coordination among agencies and stakeholders. Traditionally there has been a lack of clarity given overlapping mandates of individual institutions and little trust and incentives to share information and knowledge across different agencies. Considering this, the Project supported SERNANP in collaborative consultation and negotiation processes, that resulted in the development of cooperation agreements with AGRORURAL, IMARPE, the French Research Institute for Development (IRD), and the National University San Luis Gonzaga of Ica. As these agreements spelled out terms of reference of institutional collaboration and clarified roles and responsibilities of participating partners, they formalized joint work planning, the opening of communication channels previously not available, and provided a foundation for developing a shared vision for the management of the Reserve. For example, with respect to the collaboration with AGRORURAL, the agreement established (i) joint monitoring protocols for key bird species (including the Humboldt penguin), (ii) planning of sustainable harvesting campaigns for guano as well as (iii) surveillance and control of illicit activities. Further strengthening of surveillance and control activities within the RNSIIPG will be achieved through an additional agreement between SERNANP and DICAPI, currently underway.

27. **Improved management effectiveness of the reserve as evidenced by the GEF Biodiversity Tracking Tool (METT).** The METT is a key Project indicator that is used to assess 40 different indicators, measuring progress in achieving outcomes. The application of the METT indicates critical improvements in nine of these indicators over the five-year Project implementation period. Improvements in seven of these indicators can directly be attributed to the Project, including (i) the integration of the Reserve Master Plan into the broader national System of PAs (and implementation of the Master Plan); (ii) increases in staff and budget resources; (iii) availability of information and baseline data to inform decision making processes, (iv) delineation of areas and categorization of conservation status; (v) improvements in



monitoring, surveillance and control through increased capacity and better equipment; (vi) increased stakeholder participation (evidenced through beneficiary surveys); and (vii) the development and implementation of site specific management plans. In the end this led to a final score of 62.1 percent, much higher than the envisaged target score of 35 percent.

28. **Enhanced capacity of SERNANP, other agencies, and local stakeholders.** A total of 484 people, of which 30 percent were women (staff from SERNANP and public and private institutions as well as local stakeholders), received training. Some of the marine and coastal PA management topics included biological monitoring, sustainable economic activities, ecological risk assessments, geographical information systems, monitoring and surveillance, and drones and yacht operation among others. The Project facilitated the participation of personnel in international and regional events, allowing for exchanges with other countries to improve management of the Reserve. A virtual training on marine protected areas was also organized in 2017 with the Foundation Interuniversity Fernando Gonzalez Bernaldez, in which a total of 40 people participated (of which 37.5 percent were women), laying the foundation for a standardized training program in those areas. The enhanced capacity has provided a more effective workforce by improving the working capabilities of SERNANP at the central and regional levels, as well as of key stakeholders from public and private institutions involved in the RNSIIPG. In addition, the preparation and implementation of the CS provided training opportunities for local actors that facilitated building trust between them and government institutions and strengthened local capacities. As a result, local stakeholders are aware of the benefits of participatory management and conservation approaches and the need to observe rules and regulations jointly that promote the sustainability of the Reserve's natural resources in the long-term.

29. **Evidence of increased protected area management effectiveness through participatory management.** This indicator was partially achieved. The "Participation Radar"<sup>3</sup> is a monitoring tool developed by SERNANP to measure the organization, structure and effectiveness of participatory management in PAs (through management committees). As this instrument was developed for terrestrial PAs, with Project support, SERNANP adapted the tool to marine and coastal PAs and improved it to better reflect realities of participatory management (including gender) and taking into consideration the significant contribution of local sub-committees. The tool assumes that a higher participation of stakeholders results in a more effective management, therefore measuring (i) whether a management committee is well represented by the majority of stakeholders involved in the management of the area, (ii) how frequently it meets and communicates effectively and (iii) whether it defines and implements commitments. Depending on the score (out of a maximum of 63) it identifies gaps and/or management needs in the area assessed.

30. The radar was first applied at the level of the reserve focusing on national stakeholders. Following Project start, and the realization that such focus would not reflect realities on the ground, it was decided applying the tool at the site level, focusing on local stakeholders/management committees. The tool was applied three times during Project implementation resulting in a final score of 39, which is an average of measuring participation at national level and local level. The fact that the application of the participation radar is a "work in progress" in coastal/marine PAs, as well as the complexity of participatory PA management processes are main reasons for not achieving the ambitious target score of 60 (95% of the perfect score).

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<sup>3</sup> The tool assesses seven different variables: (1) existence and functioning of management spaces of the different interests existing around PAs; (2) involvement of populations and different actors through commitments to conservation and sustainable development; (3) participation of stakeholders in the management processes of PAs; (4) articulation of PAs with local, regional and national development processes; (5) existence of communication and information mechanisms and practices; (6) existence of accountability mechanisms and practices; and (7) effectiveness of management.



31. The radar's upward trend<sup>4</sup> shows that the Project has increased participation of local actors in the management of PAs. Alliances with local actors and associations were established, strengthened and consequently their commitment was formalized through the above-mentioned conservation agreements. In addition, establishing the radar as a management/monitoring tool in coastal/marine PAs set a baseline that has been critical to strengthen SERNANP's capacity to improve monitoring and management for the Reserve.

32. **Collaborative Subprojects and Increased Stakeholder Engagement.** At local level, significant progress was achieved in strengthening the Reserve management through engaging with local users, including artisanal fisherfolk and tourist operators, as part of CS. The implementation of these CS was aligned with the objectives of the RNSIIPG Master Plan, supported by NGOs, universities, or consultants and focused on, inter alia, improving the participatory management and capabilities of local stakeholders. The CS contributed to (i) environmental monitoring of marine and/or insular areas; (ii) improving the participation of users in local subcommittees; (iii) developing a program for sustainable economic activities (PAES); (iv) conducting sociocultural assessment and (v) the socialization of the zoning process and as a result, benefited 5,240 people directly and indirectly (of which 25 percent were women), surpassing the set target of 3,750 beneficiaries.

33. **Financial mechanisms to sustain long-term management and financing.** The Decree that established the Reserve states that 70 percent of revenue derived from tourism will return to the Reserve to finance its operations, therefore providing resources to the Reserve and improving long-term sustainability. To further provide additional financial resources, the Project established an endowment fund and provided the initial capital of US\$2 million. As the capital generate income, US\$85,000 of the same was withdrawn to finance 2018 activities that strengthened the Management Committee of the Reserve.

34. The activities under the Project have been supplemented by an additional US\$2 million, provided by KfW through the Protected Natural Areas Project III. While it would have been more efficient to manage both donation in one single endowment fund, given (a) the timing of availability of funds from both donors, and (b) that World Bank and KfW required different processes in contracting the fund manager and selection of investment strategy, it was impossible to reconcile both donations into one single fund during the life time of the project. As a result, these additional resources will be managed in parallel, as KfW guidelines differ to some extent from those established under the GEF financed endowment fund. KfW's US\$2 million capital has so far generated KfW's Endowment Fund currently stands at US\$2,485,371.

**(ii) Objective 2: Protect its biological diversity of the in-pilot sites**

35. **Areas Brought under enhanced biodiversity protection.** Through the application of the Participation Radar SERNANP was able to identify four possible threats to the Reserve's biodiversity (habitat loss, overexploitation of resources, pollution, and displacement of native species), as well as 13 anthropogenic activities generating these threats. In December 2018, monitoring activities were carried out for 1,299 hectares either once (in very remote areas such as the Lobos de Afuera islands) or weekly (in more accessible areas such as Punta Coles). By March 2019, the area monitored had increased to 2,952 hectares. Monitoring results indicate that only 8.3 percent of the area were affected by any of above-mentioned threats. This number considers terrestrial areas only, yet with support of the Project, it was possible to carry out control and surveillance activities in marine areas at least once a year as well. In addition, due to drone technology and the engagement of artisanal fisherfolk in monitoring the Reserve, the monitoring capacity of the RNSIIP has been enhanced. As a result, the total monitored terrestrial and marine areas in Project pilot sites amount to

<sup>4</sup> Score 26 in 2016 to 39 in December 2018



87,405 hectares. The increased numbers of patrols, the training of staff in participative surveillance topics, as well as in Self-Monitoring, Analysis, and Reporting Technology (SMART) software, among others, has further enhanced efficiency and effectiveness surveillance in the Reserve. Therefore, the indicator is considered as achieved.

**36. Equipment procured by the Project (e.g., drones, boats, vehicles), and the installation of cameras and buoys, have improved the surveillance and control capabilities in the Reserve.** The use of drones has provided SERNANP with increased monitoring capacity in less accessible areas at lower cost, while increasing the coverage range and obtaining key decision-making information for extractive activities. The installation of buoys and signaling systems has increased the protection against potential threats by fishing and tourist activities in critical areas. The increased numbers of patrols, the training of staff in participative surveillance topics, as well as in management of the SMART software, among others, has further enhanced efficiency and effectiveness surveillance in the Reserve.

**37. Contribution to maintaining the Humboldt penguin population.** By providing support to control and surveillance activities, the Project had indirect impact over the achievement of the indicator. Yet, through the purchase of and training in the use of drone technology, it improved SERNANP’s monitoring capacity and ensured the proper implementation of Management Plans for “guano” extraction and the protection, including extraction campaigns in Humboldt’s penguin’s reproductive areas. Additionally, the data collected will serve to establish and assess trends in Penguin population over time. As a result, it will be possible to determine the existence of correlations with other external variables affecting the penguin population. The indicator represents the number of penguins on site at the day of the census. Fluctuation in the penguin population are common (the census December 2018 counted 8,580 individuals versus 8,035 in March 2019), which can be explained by the fact that only those penguins on land at the very moment of the census were counted, not considering those that were out at sea. Nevertheless, the data collected with support of the Project indicates that the population is stable at around the 8,000 individuals.

**Justification of Overall Efficacy Rating**

**Rating: Substantial**

**38.** The activities supported by the Project improved the institutional management capacity for marine and coastal resources of SERNANP at central and local levels. Furthermore, the Project supported the establishment of coordination and collaboration mechanisms with relevant stakeholders. At the institutional level, SERNANP has entered into agreements with agencies operating in the Reserve to avoid overlapping activities, share information, jointly plan and improve monitoring and control, therefore, collaborate in efforts to improve the overall management of the Reserve. At the local level, the Project has helped to increase awareness about the benefits of sustainably managing biodiversity in the RNSIIPG and engaging actively with local stakeholders to make them collaborators in economic and conservation activities. An endowment fund has been established and is generating returns, which together with income derived from tourism, will contribute to the financial sustainability of the Reserve in the medium to long term.

*Table 2: Achievement of indicators*

|   | Original Baseline | Target | At Project closure |
|---|-------------------|--------|--------------------|
| <b>Project Outcome Indicators</b>                                     |                   |        |                    |
| Areas brought under enhanced biodiversity protection (ha)             | 817               | 2,952  | 2,952              |
| Score of SERNANP’s monitoring tool “participation radar” (percentage) | N/A               | 60     | 33                 |
| Contribute to maintain the Humboldt penguin population.               | 8,000             | 8,000  | 8,025              |



| Project Intermediate Outcome Indicators   |    |           |           |
|---|----|-----------|-----------|
| Improvement in marine and coastal management effectiveness compared to METT baseline (percentage) | 0  | 35        | 61        |
| Staff members of SERNANP, other agencies and communities’ actors trained.                         | 10 | 320       | 484       |
| Number of planning and management instruments developed and implemented                           | 0  | 11        | 11        |
| Endowment established and capitalized (US\$)  | 0  | 4 million | 4 million |
| Number of persons benefiting from project activities  | 0  | 3,570     | 5,240     |
| Number of cooperation mechanisms established  | 0  | 3         | 4         |

39. As per the table above, all but one indicator have been met or exceeded their target value. The efficacy is therefore rated substantial.

**C. EFFICIENCY**

**Assessment of Efficiency and Rating**

**Rating: Modest**

40. **Economic and Financial Analysis.** An economic and financial analysis was carried out, comparing the Economic Rates of Return (ERR) and Net Present Value (NPV) before and after the project (a detailed Analysis is provided in Annex 4).

41. The Project generated a number of benefits direct and indirect ones, but mostly qualitative ones as the main results are related to the improvements of the overall management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System of Peru. With a more effective management of marine and coastal areas of the Reserve in place, the natural capital of Peru will remain an integral and important contributor to the sustainable growth and path of development.

42. The economic analysis focused on results of activities associated with Components 1 and 2, as these offer the most tangible (direct) and quantifiable benefit of the Project. As result of the modeling at completion, the NPV is as follows:

|                        |                       |                       |
|------------------------|-----------------------|-----------------------|
| <b>US\$104,462,479</b> | <b>US\$59,859,438</b> | <b>US\$39,813,066</b> |
| <b>NPV 4%</b>          | <b>NPV 10%</b>        | <b>NPV 15%</b>        |

43. **A Sensitivity Analysis** was carried out and included the following assumptions: (i) only 70 percent of revenue derived from tourism will return to the Reserve to finance its operations, providing resources to the Reserve and improving long term sustainability; (ii) there is no additional financing from KfW beyond the US\$ 2 million already received; and (iii) Recurrent Costs are increased by 25 percent. In this case, the NPV decreases, while ERR values are still positive.

|                       |                       |                       |
|-----------------------|-----------------------|-----------------------|
| <b>US\$83,995,830</b> | <b>US\$48,125,027</b> | <b>US\$31,832,318</b> |
| <b>NPV 4%</b>         | <b>NPV 10%</b>        | <b>NPV 15%</b>        |
|                       | <b>50.99%</b>         |                       |
|                       | <b>ERR</b>            |                       |



44. **Distribution of Benefits.** The distribution of benefits is closely tied to the category of benefits. Investments in improving monitoring capacity and surveillance yielded substantial public benefits from greater conservation and preservation efforts and private benefits generated through rise of tourist revenues. The CS Component has public and private benefits. Training was received by public servants and private individuals such as fisherfolk.

45. **Rating of Efficiency.** Given the limited number of quantifiable benefits, the efficiency of the Project is rated Modest, although, compared to appraisal and factoring in the importance of generated qualitative public and private benefits, the NPV is positive and the ERR increased.

#### **D. JUSTIFICATION OF OVERALL OUTCOME RATING**

46. **An overall outcome rating of Moderately Satisfactory** is justified by the (i) continued high relevance of the development objectives, (ii) the substantial achievement of intended project outcomes and targets, and (iii) the modest efficiency in allocating resources to achieve those outcomes

#### **E. OTHER OUTCOMES AND IMPACTS**

##### **Poverty Reduction and Gender Aspects**

47. **The Project did not have an explicit poverty focus, but targeted local communities and those earning lower incomes**, mostly artisanal fishermen and their families, through CS. In addition, the Project's focus on inclusion was important since the Project sought to integrate artisanal fisherfolk actively into the market by formalizing their activities and providing them with opportunities to work with the government in the development of policies and conservation activities. In this context, the Project achieved (i) the participation of 20 local community groups in conservation and monitoring of 25 sites within the Reserve; and (ii) the establishment of the management committee (comprised of members from all income groups, including fisherfolk organizations, tourism operators, relevant public and private institutions, academia and NGOs, in which 22 percent of women participated) as a strategic space to promote participatory management.

48. **The project was not gender-tagged, but it had a positive impact on women's economic empowerment in the local context.** While only one CS was truly women managed, more than 30 percent of women took advantage of the formalization of economic activities, attended training and certification sessions, participated in sub-committees as part of the CS, and took part of empowerment programs and government initiatives available to them through the Project. In addition, women worked as crew members in fishing and diving operations, while others owned boats and employed boat crews. The latter was against the traditional believe that women would not participate actively in fishing activities and were only carrying out supporting tasks, such as unloading, preparing and selling fish. With this, the Project was able to successfully support women's participation in creating alternative livelihoods that reduce the pressure on the marine environment, while contributing to increasing women's assets, income earning, employment, and meaningful participation in managing marine resources and project activities.

49. **Overall, women made up 25 percent of direct and indirect beneficiaries of livelihood sub-projects and training workshops.** This percentage was achieved by promoting women's participation in CS. Apart from participating in fishing activities, women prioritized production of handicrafts and textile products as a business activity.

##### **Institutional Strengthening**

50. **The Project directly contributed to SERNANP's institutional strengthening** by improving inter-institutional relationships with key partners, who had direct influence in the RNSIIPG management, facilitating collaboration among



government agencies towards common goals. The Project assisted not only in activities designed to increase national and sub-national collaboration and provide needed equipment, but also improving existing policies and practices. Additionally, CS helped strengthen SERNANP's capacity at local level through staff training, the development of natural resource management plans, site plans, zoning documents, and equipment. In addition, the Project supported and facilitated joint activities with relevant local stakeholders –such as fishers' associations, tour operators, research stations, local universities, and NGOs. The Project changed the rules of engagement with respect to interagency cooperation by formalizing agreements between SERNANP and four other institutions, that have traditionally not worked together, even competed at site level. Other agencies are interested to enter into similar arrangements.

### III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

#### A. KEY FACTORS DURING PREPARATION

51. **Risk Analysis and Mitigation:** The PAD analysis of potential risks was appropriate and prescient. Mitigation measures were rational and persuasive. Yet, given that SERNANP had limited experience in managing marine and coastal ecosystems, in retrospect risk ratings with respect to capacity were too optimistic. As SERNANP field staff had limited expertise in participatory planning processes, critical for engaging with local stakeholders, the associated risks in this regard were not fully appreciated at appraisal. As a result, mitigation measures, that would have called for identifying and addressing capacity issues early in Project life, were implemented late.

52. **Institutional Design:** Project design was ambitious for a five-year project, but appropriate, given the longstanding working relationship between SERNANP and PROFONANPE and considering that much of the design (particularly the CS) had been tested and implemented in two previous GEF financed operations (albeit in terrestrial PAs). These operations were implemented by a team of external consultants contracted by and based in PROFONANPE headquarters in Lima. As it was not clear at Appraisal whether there would be additional GEF financing to support SERNANP, providing the institution with the necessary capacity and instruments to implement the project only, but also attract financing and projects from donors, was critical. Therefore, Project design foresaw technical implementation responsibility for SERNANP, with only fiduciary responsibility remain with PROFONANPE, given its experience with World Bank procedures. While this arrangement was agreed among all parties, as indicated in the previous paragraph SERNANP did not have all necessary resources (staff, equipment, etc.) in place to start implementation immediately after effectiveness.

#### B. KEY FACTORS DURING IMPLEMENTATION

53. **Delays in activity start up.** In part due to the above outlined capacity constraints, the start-up of Project activities on the ground required longer than anticipated preparation. The time necessary to build consensus among key stakeholders on the need to incorporate conservation principles and sustainable biodiversity use into planning and economic activities in the Reserve, was underestimated. For instance, there were delays in the zoning process and in the development of the CS, which required the revival or establishment of sub-committees

54. Once the Project gained momentum, in part through strengthened capacity and changes in SERNANP, management of the Reserve improved significantly, and activities advanced on the ground, guaranteeing the achievement (in some cases overachievement) of the majority of the indicators. Over time, SERNANP's team of managing the Reserve and the Project Coordination Team became more cohesive in effectively and proactively implementing the Project. As a result, the Project advanced participatory management approaches involving local and



regional stakeholders, which was critical to increase local ownership and sustainability, building broader awareness and cooperation around conservation activities and policies.

55. **Complexity of Participative Process.** The complexity of the participatory process required the involvement of consultations with and buy in of local stakeholders, public and private agencies, and NGOs to reach mutually beneficial agreements, that are crucial to improve collaboration. For instance, the development of the Chincha-Ballestas Islands Site Plan was carried out under a participatory process involving 22 local communities and stakeholders (13 associations of fishermen and hundreds of members, six public sector institutions, one private institution, and three NGOs). In addition, it allowed SERNANP to build and strengthen relationships with agencies (AGRORURAL, DICAPI, IMARPE) to develop a joint strategy in the management, enforcement, and research of marine and coastal resources, as well as a coordinated response. While these processes took time (often longer than originally anticipated), in retrospect it was an important investment, leading to greater ownership of decisions necessary to foster multi-sectoral collaboration benefitting the Reserve.

56. **Availability of Local Expertise.** The limited availability of NGOs or universities with suitable regional experience - to assist in the execution of collaborative subprojects- was overcome by contracting local implementation teams that were embedded in the Reserve’s regional coordination headquarters. These teams worked closely with communities in different sites to, strengthen capabilities and promote local participation in conservation activities.

57. **Staffing.** Changes in staffing occurred throughout. This involved both SERNANP staff and consultants. At the national level, there were two RNSIIPG heads and one interim one. In addition, the Project had two Senior Technical Advisors within the Project Coordination Team, with a lengthy period in between until the vacancy was filled. At local levels, there were also changes in the regional coordinators, specialists, and park rangers working in the different pilot sites. The lack of continuity and shortages of staffing affected the implementation of the Project and is one of the main reasons for the Moderately Unsatisfactory rating of the Project for more than two years. However, the quality and disposition of existing staff was commendable despite increases in workload and the additional responsibilities that often went beyond their scope of work.

#### IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

##### A. QUALITY OF MONITORING AND EVALUATION (M&E)

Rating: Modest

###### M&E Design

58. **The theory of change** was clear and realistic, in that (i) conservation of PAs can only be successful if local stakeholders are active and collaborative participants in PA planning and management and that (ii) strengthening capacities not only of SERNANP, but also of other key RNSIIPG stakeholders, helps to better manage ecosystems, address threats to marine and coastal biodiversity, gather and analyze useful information about the RNSIIPG ecosystem, and improve monitoring and evaluation approaches.

59. **Shortcomings of the M&E design related to unclear indicators.** The original key Outcome Indicator measured “marine areas brought under biodiversity protection”. However, as its definition of the indicator was not consistent with the activities carried out under the Project by SERNANP, focusing on improving surveillance and control in marine areas only, this indicator was dropped as part of the 2018 restructuring. The restructuring addressed also deficiencies in adequately defining a number of indicators. This resulted in misinterpretations of the indicators and their monitoring



methodologies. Subsequently, clear definitions were provided to ensure consistency of measurements during the implementation of the Project.

#### **M&E Implementation & Utilization**

60. **Full implementation of the M&E program was initially delayed**, in part because an M&E specialist had not been appointed at Project start up, and in part because M&E mechanisms had not been properly defined and implemented. The latter was largely due to the vague and unclear results framework approved at appraisal, which did not enable effective monitoring of project activities. In addition, and rather than developing a parallel information system for the Reserve as foreseen at appraisal, the Project supported SERNANP in adapting the tool to marine and coastal PAs and improved it to better reflect realities of participatory management (including gender) and take into consideration the contribution of local sub-committees. As the tool provides information on organization, structure, and effectiveness of participatory management of the Reserve, it was well suited to be used as the basis for the Project's M&E system. In addition, establishing the system as a management/monitoring tool in coastal/marine PAs, helped setting a baseline that has been critical for SERNANP to strengthen its capacity to improve monitoring and management for the RNSIIPG.

61. **Monitoring and evaluation data were collected and analyzed in a systematic way** by SERNANP and the Project Team once the M&E system was in place. Progress reports were regularly transmitted to the World Bank and updated prior to missions, to ensure that any issues affecting implementation could be reviewed and addressed. It also helped tracking Project implementation, numbers of participants in meetings and consultations reported, and contracting of national specialist entities to undertake environmental and socio-economic monitoring coordinated.

62. **M&E data was regularly reviewed** by SERNANP and Project staff and was effectively used as an adaptive management tool to plan activities and to inform decision-making about any necessary Project course-correction. At the MTR, monitoring data was used to facilitate restructuring of the Project. The lack of clarity and progress of several results indicators underlined the need to revise the results framework in order to be able to better assess progress towards achievement of Project results.

#### **Justification of Overall Rating of Quality of M&E**

63. **Overall quality of project monitoring and evaluation is rated Modest.** Once established, the M&E system was adequate to capture and systematize results facilitated by developed formal data collection and interpretation protocols. However, considering deficiencies in adequately defining indicators and initial delays in setting up a functioning system and having the necessary capacity to manage system in place, the M&E is rated Modest

#### **B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE**

64. **The project was rated B (partial assessment) with expected significant positive environmental and social impacts.** The project triggered three safeguards policies: OP/BP 4.01 Environmental Assessment; OP/BP 4.04 Natural Habitats; and OP/BP 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.

65. **An Environmental Analysis (EA) appropriate for the operation was prepared**, which included preliminary mitigation measures for proposed interventions. As a complementary document to the EA, an Environmental Management Guide was prepared in 2017. The guide took into account (i) conditions of the interventions up to that date and (ii) expected modifications necessary to address technical changes due to the restructuring of the Project.



Overall, even considering the implementation of complex and dispersed activities with low capacity at local levels, the Project was always in compliance with the Bank's environmental safeguard policies.

66. **Even though no social safeguard policies were triggered, the Project put emphasis on participation and social inclusion.** A social specialist was an integrated part of the Project team, responsible for ensuring that participatory activities were carried out during Project implementation, as well as due diligence was provided at site level by other team members ensuring compliance.

67. **A Grievance Redress Mechanism (GRM) was implemented** in all sites prioritized by the Project. Socialization meetings and assembly events in all sites, offered readily accessible channels to voice grievances, that were preferred by project affected people and beneficiaries. The implementation of an adequate GRM is critical for the sustainability of the participatory management of the Reserve.

68. **Procurement plans were updated regularly to develop the budget and submitted on time to the Bank by PROFONANPE.** Activities were executed according to the different processes and procedures as defined in the procurement plans. Bi-annual post procurement reviews were carried out by the Bank. No issues regarding procurement arose during implementation.

69. **PROFONANPE put in place Financial Management arrangements for an adequate implementation of funds;** budget preparation was clearly defined; financial reports were used by the Project for monitoring progress; and approval and authorization controls were well documented. Auditors issued unqualified opinions for all Financial Audit reports during Project implementation. The reports were always submitted on time to the Bank. Slow disbursements during the first half of Project implementation, related to the time it took to develop and implement the CS, led to a Moderately Unsatisfactory rating for more than two years. Once CS were under implementation, disbursement picked up and all funds were disbursed by Project closure.

## **C. BANK PERFORMANCE**

### **Quality at Entry**

70. Design was complex, but appropriate and necessary for a Project that aimed at strengthening the sustainable management of marine and coastal ecosystems and requiring the cooperation and coordination among numerous ministries, agencies and private sector partners, each with distinct mandates and responsibilities on a topic that requires a multidimensional approach. The Project was the first one in Peru to establish zones for multipurpose use and users of the natural resources, according to the conditions of the natural environment and to the specific protection needs, within coastal and marine protected areas. The Project built on World Bank and GEF support and experiences and considered lessons from previous operations in PAs that implemented activities at various levels within different ecological regions.

71. While the Project design foresaw significant participatory management processes, the time and capacity required to build trust and foster collaboration on the ground, should have been known and build into the implementation timeline. Having underestimated this resulted in delays in the implementation of the CS, some of which could only be executed within the last year of implementation.

72. There were shortcomings related to risks, design and baselines for a number of indicators which required a restructuring to strengthen the Project with more relevant indicators and to better reflect progress towards achieving PDOs and assessing outcomes.



### Quality of Supervision

73. **The Bank provided timely and adequate guidance to the Project** and supported the implementation of project activities in bi-annual supervision missions. The Bank team provided proactive and results focused support on Project-implemented activities within the broader framework of the country's commitments and process. The restructuring was the result of recommendations of the Mid-Term review and the team used the opportunity to improve implementation and processes forward, as well as correct issues with the original design. In addition, supervision missions during the last year of the Project were instrumental to advance activities and meet objectives more efficiently, resulting in full disbursement of grant proceeds. Fiduciary aspects were supervised routinely, with periodic post reviews of procurement and financial assessments, and issues that surfaced were addressed timely and pragmatically. The ISRs and Aide Memoirs were realistic in their reporting of implementation progress and included good description of issues and progress with action items.

### Justification of Overall Rating of Bank Performance

74. **The World Bank's Overall Performance is rated Moderately Satisfactory**, based on the ratings attributed for Quality at Entry and for Supervision. The Bank team worked proactively and decisively with the executing agencies to focus the Project on implementing the lagging activities and on the consolidation of key outcomes. The overall quality of the World Bank's support for the Project's supervision, and of its support provided during implementation was critical for achieving the Project results and one of the main drivers for making advances during implementation.

### D. RISK TO DEVELOPMENT OUTCOME

75. **Sustainability of institutional arrangements and sub-committees.** The Project contributed to the strengthening of the management of marine and coastal resources at the local level, through CS. These were completed at a record time, in one year or less compared to the expected two to three years, since they were implemented only towards the end of the Project. As a result, some fisherfolk associations will still need continued support for strengthening after Project closure. This could entail an increase in chances for the associations to become inactive and consequently lead to a decrease in effectiveness. While local commitment, institutional capacity and the income generated by the Endowment Fund at this point can finance the support required for this task to fully ensure the sustainability of the operation of subcommittees, in the future it will depend on the capitalization of the fund and how this will be applied annually by SERNANP.

76. **Availability of sustainable financing.** Very few PAs in the world are self-financing and funding generally relies on a mix of sources. Budgetary support to PA management is generally insufficient and usually relies heavily on external sources. Given the fact that the Reserve receives 70 percent of the revenue generated by the entrance to a protected natural area (as tourist number are steadily increasing, so will revenues), the income generated by the endowment fund established by the Project, plus additional funding from KfW, will contribute to the sustainability of the Reserve in the medium term. In the long term, it will be critical to raise additional sources of funding, and it will be important to have a well-defined strategy to generate predictable income or appropriate mechanisms for creating future sustainable revenue streams.

### V. LESSONS AND RECOMMENDATIONS

77. **Participatory management requires a significant amount of sustained technical and operational capacity, as well as proactive engagement.** In-depth technical work sets the foundation for joint conservation and protection activities by providing scientific and policy information to assign resource management objectives and priorities and



establish a strong framework for conservation agreements. Constant engagement is critical to reach mutually beneficial agreements and develop robust inter-agency relationships through extensive consultation and negotiation processes. Therefore, it is paramount to work effectively and consistently towards Project goals, taking into account the multi-dimensional and multi-step nature of participatory management, while engaging proactively in Project activities to address issues and make adjustments.

78. **Participatory management projects are complex in nature and require the engagement of highly motivated champions to ensure a high degree of government ownership and Project success.** This is especially true in situations where institutional capacity is weak. In the Project, the management role of the head of the RNSIIPG was particularly important to advance site-level activities that had substantially fallen behind and to liaise with communities that required a hands on approach to trust building. In this context, the role of the head of the technical team supporting the implementing agency played an essential role as it closely coordinated activities with the RNSIIPG head to move Project goals. Operational and management skills, along with unified, cohesive, and focused efforts, make implementation more robust and expeditious.

79. **Projects promoting gender sensitive capacity building have a positive impact on women's economic empowerment.** While women play an important part in the economy of coastal fishing communities in Peru, their role is often limited to activities that are traditionally performed by women, such as unloading, preparing and selling fish or gastronomy and crafts. This is in part a result of lacking opportunities, more often men preventing women to take on other tasks. However, if given training opportunity in business development, administration and management of resources as well as other activities that complement family incomes, women will not only eagerly participate, but become crew members in fishing and diving operations, boat owners and employers of boat crews. It is therefore important to provide training not only on technical topics to women, but also consider and address gender related sensitivities within the communities to ensure that women can develop their potential, while men are not feeling threatened.

80. **Address capacity issues early in Project life.** Innovative projects inherently have strategic and operational complexities, especially in countries with low technical and administrative capacities. Investments in training and capacity building need to be considered in project design and made early to strengthen implementation capacity related to technical and operational specialties. In addition, participatory management of protected areas place a heavy burden on existing regional coordinating agencies -such as SERNANP's North, Central, South, and Mid-South regional offices, - which are often thinly-staffed and pulled in many directions due to Project demands. For Projects involving countries with capacity constraints, having a dedicated full-time regional staff for essential functions such as safeguards, and M&E supported under the Project could help to ensure smooth functioning.

81. **Biodiversity conservation and protected areas management requires inter-institutional cooperation.** Coastal and marine protected areas were part of the Project; thus, requiring inter-institutional cooperation with other agencies is critical to implement cooperative strategies and articulate responses in the management, enforcement, and research of the protected area. When designing institutional and implementation arrangements, the effect of inter-institutional perceptions and long-standing practices that prevent collaboration and information exchange, need to be considered, as they are fundamental to the development of a well-functioning inter-institutional work relationship. In this context, the buy-in and subsequent negotiation processes, leading to formal agreements, are pivotal to increase cooperation and commitments.



82. **Public finance for biodiversity and ecosystem services, represents only a fraction of the resources needed.** In the future, much of the financing for sustainably managing, using and conserving biodiversity and ecosystem conservation will need to come from other than public sources. Future fund-raising efforts for the endowment of conservation funds must be varied and commence in a timely fashion if targets for capitalization are to be achieved. There are often restrictions on bi-lateral funds being invested directly into endowment funds and therefore alternative, creative ways to attract and contribute to the overall fund must be developed, targeting all potential sources of monies particular the private sector.



**ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS**

**A. RESULTS INDICATORS**

**A.1 PDO Indicators**

**Objective/Outcome:** Areas brought under enhanced biodiversity protection.

| Indicator Name  | Unit of Measure | Baseline    | Original Target | Formally Revised Target | Actual Achieved at Completion |
|---|-----------------|-------------|-----------------|-------------------------|-------------------------------|
| Areas brought under enhanced biodiversity protection (ha) | Hectare(Ha)     | 817.00      | 2952.00         |                         | 2952.00                       |
|   |                 | 18-Oct-2013 | 31-Mar-2019     |                         | 26-Mar-2019                   |

**Comments (achievements against targets):**

This indicator has been achieved. This indicator was measured by using a monitoring tool developed by SERNANP “ (“Effects Generated by Activities”), which identifies four possible impacts on biodiversity, (i) habitat loss, (ii) overexploitation of resources, (iii) pollution, and (iv) displacement of native species as a result of the introduction of exotic ones) and 13 anthropogenic activities, generating these impacts (e.g., fishing, tourism, etc.). It is important to note that the tool only assesses land areas. With support of the Project, the tool was improved to include marine areas. The indicator value of 2,952 hectares refers to land areas in project pilot sites that had been monitored at least (i) once a year within remote areas (e.g., Lobos de Afuera island), or (ii) once a week in areas with easier access (e.g., Punta Coles). Of the total land area monitored, only 8.3% were affected by any of the four impacts indicated above. Nonetheless, with the support of the Project, it was also possible to carry out at least once a year control and surveillance activities in the marine areas. Thus, the total monitored terrestrial and marine areas in project pilot sites amount to 87,405 hectares. The implementation of surveillance and control strategies, such as the availability of equipment procured under the Project (e.g., drones, boats, vehicles) the increased numbers of patrols, the training of staff in participative surveillance topics, as well as in management of the SMART software, among others, has allowed to enhance efficiency and



effectiveness surveillance in the Reserve. In addition, buoys and signaling systems were installed in areas where there is a strong presence of fishing and tourists activities -such as those in the islands of Guañape, Santa, Ballestas, Chincha, and Punta Coles- and as part of the zoning of the RNSIIPG. The latter was coordinated with DICAPI, agency responsible for control, surveillance and enforcement in marine areas. The use of drones (procured under the Project) has increased the monitoring capacity of SERNANP, as their use has: (i) facilitated monitoring of less accessible areas (at lowers cost); (ii) increased overall area covered, and (iii) provided relevant information for decision making (e.g., when and where to grant access to AGRORURAL for guano extraction).

**Objective/Outcome:** Score of SERNANP's monitoring tool "participation radar"

| Indicator Name   | Unit of Measure | Baseline            | Original Target      | Formally Revised Target | Actual Achieved at Completion |
|--|-----------------|---------------------|----------------------|-------------------------|-------------------------------|
| Score of SERNANP's monitoring tool "participation radar" | Percentage      | 0.00<br>15-Dec-2016 | 60.00<br>31-Mar-2019 |                         | 33.00<br>26-Mar-2019          |

**Comments (achievements against targets):**

This indicator was partially achieved. The "Participation Radar" is a monitoring tool develop by SERNANP to measure the organization, structure and effectiveness of participatory management in PAs (through management committees). As this instrument was developed for terrestrial PAs, with the Project's support, SERNANP adapted the tool so that it can be applied in coastal marine protected areas.

The tool establishes that (i) the higher the participation of stakeholders, the more effective is their management, and (ii) depending on the score (out of a maximum of 63) it identifies gaps and/or management needs in the area assessed. Therefore, this tool measures whether the



management committee is well represented by the majority of stakeholders involved in the management of the area, how frequently it meets and communicates effectively and whether it defines and implements commitments.

The radar was first applied at the level of the reserve focusing on national stakeholders. Following Project start, and the realization that such focus would not reflect realities on the ground, it was decided applying the tool at the site level, focusing on local stakeholders/management committees.

The tool was applied three times during project implementation resulting in the following values: 2016 = 26, 2017 = 26, 2018 = 33. It needs to be pointed out that the score of 39 reported in December 2018 is an average of measuring participation at national level and local level. As this prevents the comparison with earlier application results, the score reported at project closing corrects this mistake and reports local level application only.

The fact that the application of the participation radar is a “work in progress” in coastal/marine PAs, as well as the complexity of participatory PA management processes are main reasons for not achieving the ambitious target score of 60 (95% of the perfect score). Nevertheless, apart from establishing the participation radar as a management/monitoring tool in coastal/marine PAs, establishing a baseline and showing an upward trend in the score, has been critical to SERNANP to strengthen its capacity to improve monitoring and management for the RNSIIPG.



**Objective/Outcome:** Contribute to maintain the Humboldt penguin population

| Indicator Name   | Unit of Measure | Baseline    | Original Target | Formally Revised Target | Actual Achieved at Completion |
|--|-----------------|-------------|-----------------|-------------------------|-------------------------------|
| Contribute to maintain the Humboldt penguin population | Number          | 8000.00     | 8000.00         |                         | 8035.00                       |
|  |                 | 18-Oct-2013 | 31-Mar-2019     |                         | 26-Mar-2019                   |

**Comments (achievements against targets):**

This indicator has been achieved. The Project had limited direct influence over this indicator, as it only provided support to activities of control and surveillance. Nevertheless, the use of drone technology has helped improve the monitoring capacity of SERNANP and has ensured proper implementation of Management Plans for “guano” extraction campaigns, including the protection (no-extraction) of reproductive areas of Penguins. In addition, the measurement was taken for the entire Reserve, while the Project is only working in 10 of the 25 sites of the Reserve. Still, the value of the indicator shows improvement, exceeding the target value. Further, more precise measurements (different from the methodology used for the baseline) reveal an increase in the penguin population, exceeding 20,000 individuals across the Reserve.

Even, while the value of the indicator is limited for project success, measuring it is important. This in particular, since over time, collected data will serve to assess and establish trends in the Penguin population. In addition, it will be possible to determine the existence of correlations with other external variables affecting the population.



The project has contributed to the improvement of the guano management plans, including restriction of guano extraction in areas where penguins are reproducing. With the use of drone technology, one guano island was identified as a penguin reproduction site, resulting in the suspension of guano extraction for the island.

This indicator is measured monthly by AGRORURAL, thus represents the number of penguins at site level on the day of the census. The fact that those penguins, that are at sea at the moment when the census is carried out using a drone, are not counted, explains the fluctuation in the penguin population (8,580 in December, 8,035 in March). Nevertheless, the data collected with support of the project shows that the population has stabilized at around the 8,000 individuals as stated in the target.

### A.2 Intermediate Results Indicators

**Component:** Institutional Strengthening. Capacity building at SERNANP and other institutions.

| Indicator Name                        | Unit of Measure | Baseline            | Original Target           | Formally Revised Target | Actual Achieved at Completion |
|---------------------------------------|-----------------|---------------------|---------------------------|-------------------------|-------------------------------|
| Endowment established and capitalized | Amount(USD)     | 0.00<br>18-Oct-2013 | 4000000.00<br>31-Mar-2019 |                         | 4000000.00<br>26-Mar-2019     |

Comments (achievements against targets):



The endowment fund was established in 2017 and was initially capitalized with the resources from the GEF (US\$ 2 million). In June 2019 the value of the Endowment fund reached US\$ 2,100,065, excluding the US\$85,000 withdrawn in 2018 to finance SERNANP operations. KfW's Endowment Fund currently stands at US\$2,485,371.

| Indicator Name  | Unit of Measure | Baseline             | Original Target       | Formally Revised Target | Actual Achieved at Completion |
|---|-----------------|----------------------|-----------------------|-------------------------|-------------------------------|
| Staff members of SERNANP, other government agencies and local communities' actors trained | Number          | 10.00<br>18-Oct-2013 | 320.00<br>31-Mar-2019 |                         | 484.00<br>26-Mar-2019         |

**Comments (achievements against targets):**

The indicator has been achieved. The Project has provided capacity building to 484 beneficiaries in the form of (i) training on a variety of topics related to the management of marine protected areas (e.g., biological monitoring, control and surveillance, geographical information system, assessment of ecological risks, etc.), and (ii) supported the exchange of experiences on management of marine and tourist resources. Beneficiaries of the capacity building include personnel of SERNANP and allied institutions, as well as local actors. Of the 484 people, 337 were men and 147 were women. Likewise, the CS strengthened the capacities of local actors.

| Indicator Name         | Unit of Measure | Baseline | Original Target | Formally Revised Target | Actual Achieved at Completion |
|------------------------|-----------------|----------|-----------------|-------------------------|-------------------------------|
| Number of planning and | Number          | 0.00     | 14.00           | 11.00                   | 11.00                         |



|  |             |             |             |             |
|--|-------------|-------------|-------------|-------------|
| management instruments developed and implemented | 18-Oct-2013 | 31-Mar-2019 | 23-Sep-2016 | 26-Mar-2019 |
|--|-------------|-------------|-------------|-------------|

**Comments (achievements against targets):**

This indicator has been achieved. This indicator considered the number of instruments to which the Project has contributed for the planning and management of the RNSIIPG. It included: (i) final phase of the Master Plan of the RNSIIPG (initiated with the GEF Humboldt project), (ii) detailed zoning of the Lobos de Tierra Island (started with the GEF Humboldt project), (iii) detailed zoning of Ballesta Islands (initiated with the GEF Humboldt project), (iv) detailed zoning of Punta Salinas, (v) detailed zoning of Islote Don Martín, (vi), Tourism diagnostics of Isla Asia, (vii) detailed zoning of Isla Lobos de Afuera, (viii) detailed zoning of Asia Island, (xv) detailed zoning of Pachacamac Island, (x) detailed zoning of Chincha Island and Punta Coles); (xi) detailed zoning of Guañape Island.

| Indicator Name                               | Unit of Measure | Baseline    | Original Target | Formally Revised Target | Actual Achieved at Completion |
|--|-----------------|-------------|-----------------|-------------------------|-------------------------------|
| Number of cooperation mechanisms established | Number          | 0.00        | 6.00            | 4.00                    | 4.00                          |
|  |                 | 18-Oct-2013 | 31-Mar-2019     | 23-Sep-2016             | 26-Mar-2019                   |

**Comments (achievements against targets):**

This indicator has been achieved. The cooperation agreements established within the Project framework were between SERNANP and IRD, AGRORURAL, IMARPE, and the National University San Luis Gonzaga of Ica. Under the agreement with IRD, a research project to assess the impacts of tourism activities on the population of sea lions was conducted. This work was carried out in Punta Coles, Ballestas and Palomino Islands. The results of the study in Punta Coles was used as technical inputs for the opening of Punta Coles to tourism in a sustainable manner. With respect to AGRORURAL agreement, a work plan was prepared for its implementation. This plan has been partially implemented focusing on the topics of environmental monitoring, control and surveillance, and guano management. The continuation of the implementation of the agreement was resumed with the new AGRORURAL authorities. SERNANP has coordinated with IMARPE the



preparation of the detail work plan to the agreement. The agreement seeks to facilitate the exchange of information between both institutions in order to facilitate research projects. The agreement between SERNANP and the National University San Luis Gonzaga of Ica (November 2018) seeks to enhance the sustainability of the CS of the Chincha and Ballestas islands in regard to research, monitoring, and volunteered park rangers, coming from the biology and tourism concentrations. An additional agreement between SERNANP and DICAPI is on the way and it will further strengthen the surveillance and control within the RNSIIPG. As part of the efforts with DICAPI, buoys and surveillance cameras have been installed and will assist in the remote surveillance of protected areas.

**Component:** Collaborative regional management. Develop socially viable marine management models

| Indicator Name                                       | Unit of Measure | Baseline    | Original Target | Formally Revised Target | Actual Achieved at Completion |
|--|-----------------|-------------|-----------------|-------------------------|-------------------------------|
| Number of persons benefiting from project activities | Number          | 0.00        | 3570.00         |                         | 5240.00                       |
|  |                 | 21-Oct-2013 | 31-Mar-2019     |                         | 26-Mar-2019                   |

**Comments (achievements against targets):**

This indicator has been achieved. The Project has developed a methodology for a more objective identification of beneficiaries which will be applied as a standard methodology by SERNANP. A document has been prepared in this regard. The number of direct beneficiaries reached 1,310 persons, among which 1,196 were artisanal fisherfolk and 114 were involved in the tourism industry. Given the fact that family members benefited from the activities indirectly, the total number of beneficiaries is estimated at about 5,240 of the Project.



**Component:** M&E of biodiversity, management effectiveness, collaborative subprojects, and safeguards.

| Indicator Name  | Unit of Measure | Baseline            | Original Target      | Formally Revised Target | Actual Achieved at Completion |
|---|-----------------|---------------------|----------------------|-------------------------|-------------------------------|
| Improvement in marine and coastal management effectiveness compared to baseline as measured by METT | Percentage      | 0.00<br>18-Oct-2013 | 35.00<br>31-Mar-2019 |                         | 62.10<br>26-Mar-2019          |

**Comments (achievements against targets):**

This indicator has been achieved. The GEF Biodiversity Tracking Tool (METT) methodology assesses 40 different indicators, measuring progress in achieving the impacts and outcomes established at the Reserve level. The management of the Reserve shows improvement in nine of these indicators, seven to which the Project has contributed substantially (e.g., control and surveillance, planning, education, and equipment). This has been measured four times. The first measurement (58 points) used a slightly different methodology from the other three measurements. If only the 2nd and 3rd measurements are considered (77 and 88 points, equivalent to 41.4% and 62.7% of the total METT points, respectively), the improvement in management between the last two measurement is equivalent to 52.6%. The last METT measurement was done on March 18, 2019, resulting on a score of 94 , equivalent to 62.1%.



**B. KEY OUTPUTS BY COMPONENT**

|   |  |
|---|--|
| <b>Objective/Outcome 1: Improving the overall management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System Project (RNSIIPG)</b> |  |
| Outcome Indicators  | 1. Score of SERNANP’s monitoring tool “participation radar”  |
| Intermediate Results Indicators   | <ol style="list-style-type: none"> <li>1. Staff members of SERNANP, other government agencies, and local communities’ actors trained</li> <li>2. Number of planning and management instruments developed and implemented</li> <li>3. Number of cooperation mechanisms established</li> <li>4. Number of persons benefiting from project activities</li> <li>5. Endowment established and capitalized</li> <li>6. Improvement in marine and coastal management effectiveness compared to baseline as measured by METT</li> </ol>  |
| Key Outputs by Component<br>(linked to the achievement of the Objective/Outcome 1)  | <p><b>Component 1: Institutional strengthening</b></p> <p><i>The goal of this component was to build capacity of SERNANP and other institutions involved in the management of marine and coastal resources of the RNSIIPG. The component was focused on the following main interventions:</i></p> <ol style="list-style-type: none"> <li>(1) 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; as well as (b) the implementation of an RNSIIPG-specific ecological label to certify sustainable economic and conservation initiatives within RNSIIPG;</li> <li>(2) Formalization of cooperation agreements between SERNANP, AGRORURAL, IMARPE, IRD and the national University of Luis Gonzaga of Ica.</li> <li>(3) Development and implementation of training plans on, management and conservation of marine and coastal protected areas; and</li> <li>(4) Implementation of SERNANP’s infrastructure and support systems for enhanced surveillance and control (including data-sharing mechanisms) on Pilot sites and</li> </ol> |



- (5) Establishing and capitalization of an endowment fund to generate income to finance a portion of SERNANP's recurrent management costs and Collaborative Subprojects.

**Component 2: Collaborative regional management**

*The objective of this component was to support the development of socially viable marine management models. The main interventions included:*

- (1) Carrying out locally implemented CS in pilot sites selected by SERNANP and local stakeholders, which will eventually benefit from the financial returns of the endowment fund established under Subcomponent 1.4.
- (2) The development of marine management models implemented locally through CS in 10 pilot sites. The CS were supposed to cover a representative range of economic activities; in the case of artisanal fisheries, demonstrating the economic and organizational conditions necessary to achieve post-project sustainability, such as sustainably harvested marine products. Other economic focus areas included tourism, research, and education, for which socially viable organizational models were to be developed with strong participation of the local community and other relevant stakeholders (including regional governments, research institutions, and NGOs).

**Component 3: Monitoring and evaluation.**

*This component was designed to provide enabling conditions to allow SERNANP and its partner agencies to improve management of marine and coastal ecosystems of the Reserve through:*

- (1) Establishment of ecological baselines that includes information on species, indicators and implementation of a system of continuous monitoring and evaluation of biodiversity.
- (2) Adaptation and improvement of the participation radar tool to marine and coastal PAs.

**Objective/Outcome 2: Protect the biological diversity of the RNSIIPG in pilot sites**

|                                 |   |
|---------------------------------|---|
| Outcome Indicators              | <ul style="list-style-type: none"> <li>1. Areas brought under enhanced biodiversity protection (ha)</li> <li>2. Contribute to maintain Humboldt penguin population</li> </ul> |
| Intermediate Results Indicators |   |



Key Outputs by Component  
(linked to the achievement of the  
Objective/Outcome 2)

Considering that the two outcomes under the PDO are closely interrelated, all outputs under the different components contributed to the achievement of these outcomes. As such, the outputs under the “Improving the overall management of marine and coastal ecosystems” outcome supported the Protection of the biological diversity of the RNSIIPG in pilot sites as well. Therefore, the outputs mentioned above are also relevant here. Of particular importance with respect to biodiversity protection are:

- (1) the development of the zoning module of the RNSIIPG Master Plan; as well as
- (2) specific management instruments for pilot sites under Components 1, 2 and 3;
- (3) the implementation of SERNANP's infrastructure and support systems for enhanced surveillance and control (including data-sharing mechanisms) on Pilot sites.
- (4) tracking of ecosystem health through the establishment and implementation of ecological baselines and a monitoring and evaluation system.

**ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION****A. TASK TEAM MEMBERS**

| Name                        | Role                            |
|-----------------------------|---------------------------------|
| <b>Preparation</b>          |                                 |
| <b>Supervision/ICR</b>      |                                 |
| Gabriela Encalada Romero    | Task Team Leader(s)             |
| Juan Carlos Martell Rivera  | Procurement Specialist(s)       |
| Juan Paulo Rivero Zanatta   | Financial Management Specialist |
| Carla Della Maggiora        | Team Member                     |
| Nelly Ikeda                 | Team Member                     |
| Catarina Isabel Portelo     | Counsel                         |
| Rory Narvaez                | Social Specialist               |
| Mara Elena La Rosa          | Team Member                     |
| Carlos Tomas Perez-Brito    | Social Specialist               |
| Ximena Rosio Herbas Ramirez | Environmental Specialist        |

**B. STAFF TIME AND COST**

| Stage of Project Cycle | Staff Time and Cost |  |
|------------------------|---------------------|--|
|                        | No. of staff weeks  | US\$ (including travel and consultant costs) |
| <b>Preparation</b>     |                     |  |
| FY12                   | 7.275               | 40,487.75                                    |
| FY13                   | 20.210              | 124,874.95                                   |
| FY14                   | 12.440              | 66,004.36                                    |
| FY17                   | 0                   | 474.10                                       |



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|                        |              |                   |
|------------------------|--------------|-------------------|
| <b>Total</b>           | <b>39.93</b> | <b>231,841.16</b> |
| <b>Supervision/ICR</b> |              |                   |
| FY14                   | 3.995        | 26,876.09         |
| FY15                   | 14.008       | 61,590.26         |
| FY16                   | 7.500        | 27,912.70         |
| FY17                   | 17.765       | 73,249.69         |
| FY18                   | 7.625        | 61,606.21         |
| FY19                   | 8.475        | 96,574.33         |
| FY20                   | 1.075        | 4,880.07          |
| <b>Total</b>           | <b>60.44</b> | <b>352,689.35</b> |

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**ANNEX 3. PROJECT COST BY COMPONENT**

*Project cost by component*

| <b>Components</b>                  | <b>GEF at Approval (US\$M)</b> | <b>Co- and Parallel-Finance at Approval* (US\$M)</b> | <b>TOTAL at Approval (US\$M)</b> | <b>GEF at Project Closing (US\$M)</b> | <b>Co-finance at Project Closing* (US\$M)</b> | <b>TOTAL at Project Closing** (US\$M)</b> | <b>GEF Percentage of Approval (US\$M)</b> |
|------------------------------------|--------------------------------|--|----------------------------------|---------------------------------------|---|---|---|
| Institutional Strengthening.       | 3.397                          | 3.510  | 6.907                            | 3.458                                 | 2.694   | 6.150                                     | 100                                       |
| Collaborative regional management. | 4.000                          | 0.216  | 4.216                            | 3.897                                 | 0.065   | 3.962                                     | 100                                       |
| Monitoring and Evaluation          | 1.101                          | 3.274  | 4.375                            | 1.121                                 | 4.019   | 5.141                                     | 100                                       |
| Project Management                 | 0.425                          | -  | 0.425                            | 0.446                                 | -   | 0.446                                     | 100                                       |
| <b>Total</b>                       | <b>8.923</b>                   | <b>7.000</b>   | <b>15.923</b>                    | <b>8.922</b>                          | <b>6.778</b>                                  | <b>15.699</b>                             | <b>100</b>                                |

\* Includes co-financing from SERNANP and KfW.

\*\* As of July 31, 2019



## ANNEX 4. EFFICIENCY ANALYSIS

**Economic and Financial Analysis.** The following economic and financial analysis compares the Economic Rates of Return (ERR) and Net Present Value (NPV) before and after the project. The analysis provided here updates the assumptions made at appraisal and uses actual data from each of the project's components and compares the results "with" and "without" project.

The Project generated a number of benefits direct and indirect ones, but mostly qualitative ones as the main results are related to the improvements of the overall management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System of Peru. The Project activated the inter-institutional coordination and enhanced the capacity of SERNANP, other agencies and local stakeholders. With a more effective management of marine and coastal areas of the Reserve in place, the natural capital of Peru will remain an integral and important contributor to the sustainable growth and path of development. More indirect benefits could have been included in this economic analysis at completion, if studies related to the Project's impact to the shoreline protection; biological support for other species and ecosystems would have been available.

Moreover, based on Project conditions, any quantitative measure to value Project benefits or Project effectiveness is likely to be under-estimated and unable to show a true benefit. It is highly unlikely that the substantial benefits derived from the project could be valued. For example, it is difficult to associate an economic value to the Project as enabler or catalyst for conservation initiatives in the Project area. Without Project financing, it is more likely that areas intended for conservation would have experienced persistent degradation, loss of unique biodiversity and natural resources and a subsequent forfeiture of opportunities for sustainable coastal management. Likewise, it is also challenging to provide a value regarding the Project's role in keeping the protected area system up/running within a context of severe resource limitations.

At the same time, from an economic analysis standpoint, results of activities associated with Components 1 and 2 offer the most tangible (direct) and quantifiable benefit of the Project - a revenue from tourism activities. At appraisal stage, it was assumed that roughly US\$30/ha will be the tangible net benefit that could be generated from tourism for the marine reserve including the spillover benefits<sup>5</sup>. At the completion stage, based on the actual information provided by the SERNANP, the revenue generated by tourism is US\$18/ha, or US\$846,936, from tourism in 2018. It should be noted that for two Project supported sites (RNSIIPG and Paracas) total revenue of SERNANP are increasing, a trend that has been observed since Project start.

Also, as part of Component 1, a financial mechanism established in the form of the endowment funds generated net return and allowed in 2018 to withdraw US\$85,000 to implement the 2018 Annual Operating Plan. The six CS in 10 pilot sites were also aimed to create new jobs directly and indirectly. Per the SERNANP actual data, in Ballestas Island the number of direct jobs amount to 196, while indirect jobs were 922. In Guañape Islands the direct number of jobs were 16. While it is difficult to judge which direct and indirect new jobs can be attributed to the Project, the trend of jobs creation is important. As result of the modeling at completion, the NPV is as follows:

<sup>5</sup> This number included the spillover effect of other benefits generates and dated 2001, while the RSNPIIG was created in 2009.



|                        |                       |                       |
|------------------------|-----------------------|-----------------------|
| <b>US\$104,462,479</b> | <b>US\$59,859,438</b> | <b>US\$39,813,066</b> |
| <b>NPV 4%</b>          | <b>NPV 10%</b>        | <b>NPV 15%</b>        |

Such values compared with appraisal results, are mainly driven by a set of benefits - higher level of ecotourism revenues, revenue from the endowment fund; additional financing of US\$2 million and in the absence of project costs details (e.g. costs of electricity, water, etc.; staffing (unit cost) an approximation was made of the SERNANP co-financing. The ERR is positive for 5, 10, 15 and 20-years periods and amounts 57 percent, compared to 12 percent at appraisal

**Sensitivity Analysis** was carried out and included the following assumptions: (i) only 70 percent of revenue derived from tourism will return to the Reserve to finance its operations, providing resources to the Reserve and improving long term sustainability; (ii) there is no additional financing from KfW beyond the US\$ 2 million already received; and (iii) Recurrent Costs are increased by 25 percent. In this case, the NPV decreases, while ERR values are still positive.

|                       |                       |                       |
|-----------------------|-----------------------|-----------------------|
| <b>US\$83,995,830</b> | <b>US\$48,125,027</b> | <b>US\$31,832,318</b> |
| <b>NPV 4%</b>         | <b>NPV 10%</b>        | <b>NPV 15%</b>        |
|                       | <b>50.99%</b>         |                       |
|                       | <b>ERR</b>            |                       |

It needs to be highlighted that, important benefits that have been achieved by the Project but cannot easily be quantified, including: (i) enabling upcoming conservation initiatives in the Reserve; (ii) developing and providing of important management tools and strengthened local institutions through targeted capacity building for planning, management of biodiversity conservation; (iii) strengthening monitoring and conservation of specific endangered and flagstone species; (iv) supplying sustainably harvested guano, an important renewable fertilizer, used throughout Peru (though the implementation of harvesting campaigns, that would only allow guano extraction outside breeding season of the Humboldt Penguin and other important seabirds); (v) improved biodiversity conservation and scenic beauty, which are bringing direct benefits to Peru through the contribution to the tourism sector; and (vi) leveraging resources and sustainable financing for conservation, through the establishment of the endowment fund (revolving revenue streams to secure financing in perpetuity), which has helped to leverage resources and sustainable financing for conservation, supporting financing of core recurrent activities on biodiversity conservation efforts.

**Distribution of Benefits.** The distribution of benefits is closely tied to the category of benefits. Investments in improving monitoring capacity and surveillance yielded substantial public benefits from greater conservation and preservation efforts and private benefits generated through rise of tourist revenues. The CS Component has public and private benefits. Training was received by public servants and private individuals such as fisherfolk.

With respect to the efficiency of project implementation, while (i) implementation agencies had limited experience in working in marine coastal areas, and (ii) project sites were distributed along the entire Peruvian coast line, it was initially expected that Project management cost would be high, compared with previous GEF financed PA projects in Peru. Nevertheless, as only the fiduciary management was carried out by PROFONANPE, while the technical oversight and day-to-day management was undertaken by a joint team of SERNANP staff and few specialized consultants, Project management cost was in fact lower. An additional benefit of this implementation arrangement was the strengthening of implementation capacity of SERNANP.



## ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

### Comments provided by SERNANP and PROFONANPE

1. The National Service of Protected Areas by the State (SERNANP) and PROFONANPE express their gratitude to the GEF and the World Bank for the financing granted to our country, to implement the project “Strengthening Sustainable Management of the Guano Islands, Islets and Capes National Reserve System”.
2. Throughout project implementation, technical and financial monitoring of the programmed activities as well as the monitoring of project results framework indicators were adequate. Monitoring was used as an adaptive management tool to provide timely feedback that allowed to overcome the difficulties that occurred during project implementation.
3. The Project was challenging for SERNANP and PROFONANPE due to its high complexity, given that it was implemented in 10 pilot sites (8 islands and 2 capes) distributed along the Peruvian coast, each with its socio-economic characteristics and diversity of stakeholders. Despite this complexity, the Project allowed the strengthening of SERNANP's actions, by connecting it with the users of natural resources, committing them to get involved with the protected area management, not only in the planning processes, participatory surveillance, beaches and seabed cleaning activities, among others, but through an alliance of common interests that were formalized in conservation agreements, mainly with artisanal fishermen.
4. The Project laid the foundations for various strategic aspects for the Reserve, such as participatory management, focused on strengthening participatory processes, mainly of the Reserve Management Committee and Subcommittees, as the central axis of the Reserve's management. In this sense, the Project supported SERNANP to join efforts with different public and private stakeholders at national, regional and local levels, to achieve the integrated management of the Reserve and, therefore, the conservation of its coastal and marine ecosystems. In this way, the project became an instrument of facilitation, technical assistance and, financial support to guarantee the permanence of these efforts over time.
5. The project also provided technical support for the development of planning instruments specially designed for marine ecosystems, such as the methodology for marine zoning, the protocol for participatory marine monitoring and the adjustment of SERNANP's methodology to measure the effect by activities in marine areas. These instruments will be applied not only in the Reserve but also in other marine protected areas of the country.
6. PROFONANPE considers that the ICR adequately reflects the main contributions of the project to the Reserve management.
7. The project leaves a legacy and lessons learned for SERNANP and PROFONANPE, which will be applied in future projects that benefit the conservation of Peru's marine protected areas and the local communities that use their natural resources.



## ANNEX 6. SUPPORTING DOCUMENTS

### World Bank Project and Financing Documents

- Grant Agreement – February 11, 2014 (Grant Number TF015896)
- Project Appraisal Document – October 25, 2013 (Report No: PAD496)
- Aide Memoires for Project Supervision Missions
- Project Implementation Status and Results Reports (ISRs)
- Restructuring Paper dated April 21, 2017 (Report No.: RES26291).  
<https://hubs.worldbank.org/docs/ImageBank/Pages/DocProfile.aspx?nodeid=27516955>

### WBG Engagement Strategy Documents

- Republic of Peru Partnership Strategy (CPS) FY12-16
- Republic of Peru Country Partnership Framework (CPF) FY17-21.

### Other Documents

- Final Borrower ICR from SERNANP (In Spanish)
- Half yearly progress reports.



**ANNEX 7. SIGNIFICANT CHANGES DURING IMPLEMENTATION**

**REVISED RESULTS FRAMEWORK**

| REVISION OF PDO INDICATORS  |   |                   |                |        |
|---|---|-------------------|----------------|--------|
| Original PDO Indicators <sup>6</sup>                                  | Proposed Changes  | Original Baseline | Current Status | Target |
| Terrestrial areas brought under enhanced biodiversity protection (ha) | <p><b>Replaced by:</b> Areas brought under enhanced biodiversity protection (ha) (Core indicator)</p> <p><b>Rationale:</b> This indicator used the “Effects generated by Activities” Tool, developed by SERNANP<sup>7</sup> and applied in terrestrial PAs in Peru. The tool assesses the reduction of impact of terrestrial and marine areas, as a result of a strengthened management system which seeks to reduce the degree of impact of the following: effects habitat loss, reduced use of resources, pollution, and exotic species.</p>  | 0                 | 0              | 2,952  |
| Marine areas brought under enhanced biodiversity protection (ha)      | <p><b>Dropped</b></p> <p><b>Rationale:</b> The approach employed by SERNANP was not consistent and differed with the activities required under indicator definition, as stated in the core indicators guidelines. Therefore, it was proposed to eliminate this core indicator. Nonetheless, information on protection activities in the marine part of the Reserve, as carried out by SERNANP, continued to be collected throughout the implementation of the Project.</p>  | 0                 |                |        |
| None  | <p><b>New indicator:</b> Score of SERNANP’s monitoring tool “participation radar” (an official tool of SERNANP, as established in the Reserve’s Master Plan, to assess participatory management in protected areas).</p> <p><b>Definition:</b> Monitoring tool that assesses 7 different variables:<br/>           (1) The existence and functioning of management spaces of the different interests existing around Protected Areas<br/>           (2) Involvement of populations and different actors through commitments to conservation and sustainable development<br/>           (3) The participation of stakeholders in the management processes of Protected Areas</p> | N/A               | 49%            | 60%    |

<sup>6</sup> As presented in the PAD.

<sup>7</sup> Methodology of "Effects generated by Activities" consists on dividing the National Protected Area (NPA) into grids. The grids cover terrestrial and marine areas, buffer zone, NPA boundary, patrol sector and management sector. The methodology registers the probability of occurrence of effects that might cause loss of biodiversity, as well as the anthropogenic activities associated to these effects and their generation. There are four main effects that are taken into account: habitat loss, reduced use of resources, pollution, and exotic species. This information is summarized in quarterly and / or semi-annual reports that are forwarded to the NPA’s General Direction for integration into semi-annual technical reports. Finally, these reports feed the SMART program, which is a tool to systematize the information generated in the control and monitoring actions, records of flora and fauna, human activity and biodiversity.



|      |  |       |                                 |       |
|------|--|-------|---------------------------------|-------|
|      | <p>(4) The articulation of protected areas with local, regional and national development processes<br/>           (5) The existence of communication and information mechanisms and practices<br/>           (6) The existence of accountability mechanisms and practices<br/>           (7) The effectiveness of management.</p> <p><b>Rationale:</b> The indicator was representative of one key element of the PDO (improved management of ecosystems in pilot sites), which was not properly reflected by any original PDO indicators.</p>   |       |                                 |       |
| None | <p><b>New indicator (moved from intermediate outcome to PDO level indicator; slightly edited):</b> Contribute to maintain the Humboldt penguin population.</p> <p><b>Definition:</b> Penguin population was measured by AGRORURAL in the whole Reserve. The measure takes place once a year in the summer time, as recommended by an assessment of biological indicators undertook within the framework of the project. Target values do not take into account the impact that external factors, such as El Niño, could have on the Penguin population. Additional information could also be drawn from measurements taken by Saint Louis Zoo, which is limited to only specific areas within the Reserve. Although this methodology is considered more rigorous than AGRORURAL's, there is no certainty that monitoring by the Zoo will continue.</p> <p><b>Rationale:</b> The indicator was representative of one key element of the PDO (protection of biodiversity in pilot sites), which was not properly reflected by any original PDO indicators. The indicator added the words "contribute to" to acknowledge that the project only has an indirect impact on the indicator.</p> | 8,000 | 7,364<br>(2016 monthly average) | 8,000 |

| PROJECT INTERMEDIATE OUTCOME INDICATORS  |   |          |                |        |
|--|---|----------|----------------|--------|
| Original Output Indicator  | Proposed changes  | Baseline | Current Status | Target |
| At least 35% of improvement in marine and coastal management effectiveness compared to METT baseline | <p><b>Replaced by:</b> Improvement in marine and coastal management effectiveness compared to METT baseline.</p> <p><b>Definition:</b> The indicator reflected the increase in the METT score, which sums the values of 40 indicators. Each indicator was assigned a value from 0 to 3. The improvement in efficiency is understood as an increase in the total METT score. The analysis of the result indicated in which of the indicators have directly contributed the actions of the project. The percentage increase is measured on the baseline value that was 41 (measured in the year 2013) from which the percentage increase is measured.</p> <p><b>Rationale:</b> The target value of 35% should not be part of the indicator.</p> | 0        | 26%            | 35%    |



|  |   |                     |  |     |
|--|---|---------------------|--|-----|
| Percentage of beneficiaries involved in subprojects have maintained or increased their disposable income | <p><b>Dropped</b></p> <p><b>Rationale:</b> The RF included another indicator related to the beneficiaries of the Project (3,570 people benefited by project activities), and therefore it was considered redundant.</p>   | 0                   |  |     |
| Increase in financing of basic operations of the RNSIIPG   | <p><b>Dropped</b></p> <p><b>Rationale:</b> The indicator was subject to external factors and could not be attributed to the Project.</p>  | 640,000             |  |     |
| At least 320 staff members of SERNANP, other agencies and communities' actors trained.                   | <p><b>Replaced by:</b> Staff members of SERNANP, other agencies and communities' actors trained.</p> <p><b>Definition:</b><br/>The indicator measured the number of people trained in the topics prioritized in the training plan of the RNSIIPG under the Project framework or in the training carried out in the different Subprojects.<br/>The "other government agencies" refer to AGRORURAL, DICAPI, IMARPE. Local actors refer to fishermen, tour operators, local authorities, members of the management committee, among others.<br/>"Trainees" refer to those who passed (60% of the maximum qualification) the course or courses prioritized in the annual training plans of the Project prepared by SERNANP and in the training plans of the Collaborative Subprojects.<br/>In addition to the target of 320 people, the percentage of those who qualified as "satisfactory" to the course were measured and obtained at least 70% of the maximum score in the knowledge exam that will be prepared for each course.</p> <p><b>Rationale:</b> The target value of 320 should not be part of the indicator.</p> | 10                  | 97                                     | 320 |
| Information system on RNSIIPG activities developed and operational                                       | <p><b>Dropped</b></p> <p><b>Rationale:</b> According to the institutional policy of SERNANP, the RNSIIPG had to implement the information system that had already been developed and established by the institution, so it was not necessary to develop a parallel one. In this sense, the contribution of the Project was to support the RNSIIPG to feed this already existing system, so it did not constitute an intermediate result and corresponded to an activity indicator and not to an outcome indicator; therefore, it was proposed to eliminate this indicator.</p>  | No system available |  |     |
| At least 3 control systems implemented   | <p><b>Dropped</b></p> <p><b>Rationale:</b> The PAD does not provide detailed information on this indicator. The activity associated to this indicator was related to the acquisition of equipment for control and monitoring, among others, which corresponded to a product indicator and not to a result indicator.</p>  | 0                   |  |     |
| 14 planning and management instruments developed and implemented   | <p><b>Replaced by:</b> Number of planning and management instruments developed and implemented.<br/>The target is reduced to 11.</p>  | 0                   | 3 (1 Master Plan for RNSIIPG approved. | 11  |



|  |  |   |  |           |
|--|--|---|--|-----------|
|  | <p><b>Definition:</b> A developed planning or management tool refers to a plan (for example a master plan) or any other document that contains guidelines for management. It does not necessarily have to be approved with a legal norm, unless it is required according to the legislation on the matter.</p> <p>Planning and management instruments are considered: zoning, zoning updates, local management plans as part of the Subprojects, site plans, management plans, diagnostics, among others.</p> <p><b>Rationale:</b> The target value of 14 should not be part of the indicator.</p>   |   | 2 Zoning Maps available (Ballestas Islands, Lobos de Tierra Island). |           |
| Endowment established and capitalized                                    | <p><b>Unchanged</b> Except for indicator target value for 2015 and 2016, which changed from US\$4 to US\$2 million.</p> <p><b>Rationale:</b> The reduction was introduced to address the delay in the availability of KfW funds (expected to be disbursed during the first semester of 2017).</p>  | 0 | 2,000,000  | 4,000,000 |
| 3570 persons benefiting from project activities, of which 40% are female | <p><b>Replaced by:</b> Number of persons benefiting from project activities.</p> <p><b>Definition:</b> Beneficiaries included local actors involved in sustainable economic activities (marketing, crafts, tourism, fishing, etc.), training and other activities of the collaborative Subprojects.</p> <p><b>Rationale:</b> A typo in the end-of-Project target value in the PAD is corrected. The correct value is 3,570 instead of 3,750. The mentioning of 3,570 in the indicator was eliminated as it was mentioned as target value. A specific mention of % of benefitted woman was eliminated. The social guidelines developed for and applied to the Collaborative Subprojects encourage the active involvement of women. Nevertheless, it was difficult to pre-determine the effectiveness of the guidelines as the involvement of women depends of a serious of other factors external to the project (e.g., culture).</p> | 0 | 0  | 3,570     |
| 6 cooperation mechanisms established                                     | <p><b>Replaced by:</b> Number of cooperation mechanisms established.</p> <p><b>Definition:</b> The mechanism of cooperation established refers to the agreement formalized between the SERNANP and the strategic allies of the RNSIIPG: AGRORURAL, IRD and IMARPE through an agreement. These agreements focus on formalizing the cooperation frameworks that help to improve the management of the RNSIIPG, according to the competencies of each institution.</p> <p><b>Rationale:</b> Based on the characteristics of the Project, it was considered that, at least, agreements should be established with AGRORURAL, IRD and IMARPE. In this sense, the target value were the agreements signed with AGRORURAL, IRD and IMARPE (three agreements) Actions should be made visible to promote the cooperation of various actors. There was a reduction of the target value from 6 to 3.</p>  | 0 | 2  | 3         |



|  |   |       |                                 |       |
|--|---|-------|---------------------------------|-------|
|  | It should be noted that the agreements generate obligations and commitments of the parties, which are audited by government control bodies.   |       |                                 |       |
| Maintain Humboldt penguin population   | <b>Moved</b> to PDO level<br><br><b>Reasoning:</b> See above (PDO level indicators) under the same indicator  | 8,000 | 7,364<br>(2016 monthly average) | 8,000 |
| Increase of Chita fish (Anisotremus scapularis) population in reproduction areas | <b>Dropped</b><br><br><b>Rationale:</b> Although the distribution of this species had been reported as extensive, it was not being monitored in all sites of the RNSIIPG and no baseline information was available. Additionally, due to its mobility, monitoring has proven to be difficult. Therefore, it was recommended to eliminate this indicator from the result framework. Nonetheless, the Project, with the support of continued measuring other benthic species (invertebrates). | 0     |                                 |       |

**Revision of activities within Sub-components**

| Originally activities as indicated in the PAD   | Proposed changes  | Rationale   |
|---|---|---|
| <b>Component 1: Institutional strengthening.</b>  |   |   |
| <i>Sub-component 1.1: Development and implementation of planning and management instruments:</i>  |   |   |
| a) Zoning module of the RNSIIPG Master Plan.  | Unchanged   | This was the main activity within this sub-component. It included the development of the original zoning modules for some sections of the Reserve, which provided the required data to issue the Master Plan. It also included the detailed update of the zoning modules of at least all pilot sites. |
| b) Specific management instruments for pilot sites and management issues.   | Unchanged   |   |
| c) Natural Resources Management plan for the sustainable harvest of giant Patagonian jackknife clam and Chilean blue mussel in Punta Salinas. | Eliminated  | The development of management plans economically managed marine resources falls out of the competencies given to SERNANP. They were the responsibility of the production sector.  |
| d) Site Plan from Asia island   | Replaced by a diagnostic of tourism activity in Asia Island | Given the particularities of the site and the need for assessing the touristic potential of the island first, which guided the definition of norms to regulate, and strategies to define the most appropriate management instruments to be used for tourism in the island.                            |
| e) RNSIIPG-specific ecological label to certify sustainable economic and conservation initiatives within the Reserve will be eliminated       | Eliminated  | SERNANP’s strategy is to have a unique green label common to all protected areas, including the RNSIIPG, on which was developed.  |



|   |   |   |
|---|---|---|
| <i>Sub-component 1.2: Development and implementation of training plans</i>  | Unchanged                               | This sub-component was not revised; however, a new activity was added as explained below.   |
|   | New activity:<br>Communication Strategy | Implementation of the Project indicated the need to strengthen communication and dissemination activities to better report on the achievements of the project across all the interventions.   |
| <i>Subcomponent 1.3: Implementation of infrastructure, staffing, and support systems for enhanced surveillance and control</i>                    |   |   |
| a) Strengthening of SERNANP's management, surveillance, and control capabilities in Punta Coles.  | Unchanged                               |   |
| b) Strengthening of SERNANP's management, surveillance, and control capabilities in Guañape Islands.  | Unchanged                               |   |
| c) Strengthening of SERNANP's surveillance and control infrastructure on Lobos de Tierra Island.  | Eliminated                              | This activity is being financed with resources from another project (PAN III), financed by KfW, which started at the end of 2019.<br>This decision was made taking into account that any publicly financed infrastructure investment requires a number of steps, including the incorporation in the National System of Public Investment (SNIP), thus there was a likelihood that the implementation of the activity would go beyond the closing date of the Project. |
| d) Development and implementation of a system-wide networked database for monitoring, control, and surveillance.                                  | Eliminated                              | The project envisaged the development and implementation of a database, however, SERNANP had already designed different systems that included biodiversity monitoring aspects and promoted the use of SMART as a tool for the control and surveillance.   |
| <i>Subcomponent 1.4: Development and implementation of financial sustainability mechanisms.</i>   | Unchanged                               |   |
| <b>Component 2: Collaborative regional management</b>   | Unchanged                               |   |
| <b>Component 3: Monitoring and evaluation</b>   |   |   |
| <i>Subcomponent 3.1: Establishment of an ecological baseline and implementation of a continued biodiversity monitoring and evaluation system.</i> |   |   |
| a) Establishment of an ecological baseline in Punta Coles, Chíncha Islands, and Guañape Islands.  | Unchanged                               |   |
| b) Implementation of regular ecological monitoring in Punta Coles, Chíncha Islands, Guañape Islands, and Lobos de Afuera Islands.                 | Unchanged                               |   |
| c) Development of an applied research plan in Lobos de Afuera.  | Activity relocated to another component | It expected to be included within Component 2 as part of the designed and development of collaborative subprojects, not within Subcomponent 3.1   |



|  |  |   |
|--|--|---|
| <i>Subcomponent 3.2: Development and implementation of a management effectiveness monitoring and evaluation system</i> | Unchanged  |   |
| <i>Subcomponent 3.3: Monitoring and evaluation of overall project performance.</i>                                     | New activity:<br>Financing the central office of the RNSIIPG | The PAD indicated that the Project would strengthen the capacity of several sites in the Reserve. However, in practice, it was also important to partially support the central office. This is especially the case given the role this office has in coordinating and facilitating to operation of the Reserve’s management committee (governing body of the Reserve), and their role in monitoring of activities on the ground in the whole Reserve. The project financed the rental of the offices of the RNSIIPG, where the technical area of the central office of the PA worked together with the project coordination team. This office is responsible for the technical management of the RNSIIPG. |
|  | New activity:<br>Security of regional offices                | After one of the regional offices was subject of burglary of the money generated by the tourist activities in Islas Ballestas, it became necessary to reinforce the security in the different offices, through a surveillance service   |
| <b>Component 4: Project management.</b>  | Unchanged  |   |

**Operating Costs Definition**

The PAD acknowledged that the Project will strengthen the capacity of PROFONANPE under component 4 (project management), and thus, the need to finance prorated salaries and administrative costs incurred by this organization for the Project. Nevertheless, the definition of “operating costs” utilized in the grant agreement was limited and did not include any reference to prorated salaries and administrative costs. A proposed modification was reflected in the Grant Agreement under Article III, Schedule 2 Section IV. Withdrawal of Grant Proceeds, literal A. General, numeral 3. (a) “Operating Costs”.



## ANNEX 8. SUMMARY OF SYSTEMATIZATION OF EXPERIENCES

The National Service of Natural Protected Areas (SERNANP) and the Peruvian Trust Fund for National Parks and Protected Areas (PROFONANPE), with the financial support of the Global Environment Fund (GEF) and the assistance of the World Bank, started the implementation of the Project “Strengthening the Sustainable Management of the Guano Islands, Islets and Capes National Reserve System” in 2014. In this context, the project aimed at improving the management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System (RNSIIPG) and protecting the reserve’s biodiversity. The project was fully implemented in 2019. This document is a summary of the project systematization, which includes lessons learned and results achieved, and has been divided in four chapters. These chapters resulted from the collection and analysis of information, as well as interviews with actors involved in the management and execution of the project.

**Chapter 1** provides an overview of the operating context and the RNSIIPG strategic stakeholders, along with the roles and objectives of SERNANP, the RNSIIPG, and SINANPE within the Reserve.

**Chapter 2** describes the project in more detail by concentrating on three components, institutional strengthening, collaborative regional management, and monitoring and evaluation. It highlights the components’ role in strengthening the management of the RNSIIPG and the advances made.

**Chapter 3** provides a detailed account of the project achievements based on five objectives: conservation of land and marine ecosystems, development of sustainable activities, promotion of the participation of local actors in the RNSIIPG management, promotion of women in the RNSIIPG management, and implementation of social and environmental safeguards<sup>8</sup>.

**Chapter 4** describes the lessons learned from the project in four areas, which are the project’s management and administration, the implementation of Collaborative Sub-projects (CS) in pilot sites, social and gender aspects, and environmental aspects. It provides the following lessons in the management and administration:

- **Process Continuity and Key Personnel:** During the first years of implementation, there was a high turnover of personnel. Thus, the General Management of Protected Areas (DGANP) was responsible for the hiring and transition of new personnel. The DGANP, PROFONANPE, and the World Bank were also instrumental for the training and incorporation of a new Principal Technical Advisor. Despite efforts, these changes affected process continuity. Therefore, it will be critical to involve key staff more actively to further facilitate transition processes.
- **Project Administration and Acquisition:** The project was designed to implement component 2 via organizations that would support some activities. However, due to the lack of local organizations in some areas, teams of consultants were hired. As a result, it took longer to move forward and

<sup>8</sup> In the first objective, there are four results: a) improvement in control and surveillance systems, b) establishment of a zoning scheme in marine areas, c) improvement of environmental monitoring, and d) recovery of ecosystems. Similarly, in the second objective, there are two results: a) improvement of artisanal fisheries management and b) improvement of tourism management. In the third objective, SERNANP: a) strengthened the participative spaces at the local level, b) introduced participation mechanisms such as conservation agreements, and c) developed and applied participatory mechanisms such as the participation radar. In the third objective, the project generated the conditions to involve women into the management of the RNSIIPG. Finally, in the fourth objective, the implementation of the social and environmental safeguards has allowed their incorporation into the work of SERNANP.



increased the administrative burden in PROFONANPE. Therefore, it will be critical to work with PROFONANPE in analyzing the needs that might come up in project administration in order to take the necessary measures to ensure effective project management.

In regard to Collaborative Sub-projects, the following lesson is provided:

- **Organization and Implementation of the CS:** It took between 12 and 18 months to do the pilot site implementation due to the time taken to define the functioning of the CSs and the identification of the organizations and local teams in charge of the implementation. Therefore, it will be critical that in future projects the implementation be jointly organized with the organizations involved and if necessary extend implementation time.

In the regard to the social and environmental aspects of the intervention, the following lessons are provided:

- **Research of Socio-Cultural Aspects:** The development of diagnostics had many differences between the organizations and the consultant teams hired, generating results that were difficult to compare and limiting the decision-making capacity related to the analyzed information. Despite these challenges, data was analyzed successfully for most of the reserve users. Thus, it is advisable that in the future research be done at the beginning of the project.
- **Trust Building and Participation Spaces:** At the local level, the work with the CS required continuous involvement with strategic actors to establish or improve trust levels between users and SERNANP. After a few months of implementation, the activities increased substantially, creating challenges for RNSIIPG personnel involvement and engagement with strategic actors. Therefore, it will be important for the RNSIIPG team to have full time specialists able to engage in social management and park rangers capable to engage communities.
- **Social Safeguards and Gender:** There are lessons learned as a result of the activation of the operational policy 4.12 of involuntary resettlement, which was based on the possibility that economic activities were displacement due to the implementation of a zoning scheme. In this context, it was critical the decision that the zoning scheme would be based on the active participation of direct users to ensure that economic activities would be improved through the norms, standards, and compromises defined and implemented by the users themselves. In regard to gender, women expressed their need and desire to train in activities supporting fishing activities and related to business management, administration, and maintenance of natural resources. It will important to account for those findings in future projects and promote entrepreneurial activities for women within the fishing activities.
- **Environmental Safeguards:** The main lesson generated by the implementation of the environmental safeguards is that they should not be viewed as an added requirement, but a practice to ensure better environmental performance and protection of people engaged in the RNSIIPG. In the development of the safeguards, some of the main contributions were the visibility and recognition of the occupational health and security of fishing activities to improve the management of the RNSIIPGE, as well as the implementation of adequate environmental management through best practices.