



1. Project Data

Project ID P129647	Project Name PE-Strengthening Sust Mgmt Guano Islands	
Country Peru	Practice Area(Lead) Environment, Natural Resources & the Blue Economy	
L/C/TF Number(s) TF-15896	Closing Date (Original) 31-Mar-2019	Total Project Cost (USD) 8,921,597.80
Bank Approval Date 06-Dec-2013	Closing Date (Actual) 31-Mar-2019	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	8,922,638.00	8,922,638.00
Revised Commitment	8,922,638.00	8,921,597.80
Actual	8,922,638.00	8,921,597.80

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2. Project Objectives and Components

a. Objectives

According to the Project Appraisal Document (PAD) (p. vi) and the Financing Agreement of February 11, 2014 (p. 5) the objective of the project was “to improve the overall management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System of Peru (RNSIIPG) and protect its biological diversity in pilot sites”.



b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

The project included four components:

Component 1: Institutional strengthening (appraisal estimate US\$6.9 million, actual US\$6.1 million): This component was to finance the development and implementation of planning and management instruments through a) the development of i) the zoning module of the Guano Islands, Islets, and Capes National Reserve System (RNSIIPG) Master Plan and ii) specific management instruments for pilot sites that are not targeted by activities under components 2 and 3; and b) the implementation of a RNSIIPG-specific ecological label to certify sustainable economic and conservation initiatives within RNSIIPG; 2) the development and implementation of training plans on management and conservation of marine and coastal protected areas; and 3) the implementation of National Service of Natural Protected Areas' (SERNANP) infrastructure and support systems for improved surveillance and control on pilot sites and 4) the establishment and capitalization of a new endowment fund to generate additional income to finance a portion of SERNANPs recurrent management costs and Collaborative Sub-projects (CSs).

Component 2: Collaborative regional management (appraisal estimate US\$4.2 million, actual US\$3.9 million): This component was to finance the development of marine management models implemented locally through CSs in 10 pilot sites. According to the PAD (p. 9), the pilot sites were identified since they were representative of the wider reserve. The CSs were to represent different economic activities such as artisanal fisheries, 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 such as regional governments, research institutions, and NGOs.

Component 3: Monitoring and Evaluation (M&E) (appraisal estimate US\$4.3 million, actual US\$5.1 million): This component was to finance the establishment and implementation of ecological baselines and a M&E system.

Component 4: Project Management (appraisal estimate US\$425,000, actual US\$445,813): This component was to finance the strengthening of the Peruvian Trust Fund for Natural Parks and Protected Areas' (PROFONANPE) capacity to implement the project. The cost of the Project Coordination Team (PCT) were to be shared with Kreditanstalt fuer Wiederaufbau (KfW) once the parallel financed project of KfW was to become effective.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost:

The project was estimated to cost US\$15.9 million. Actual cost was US\$15.7 million.

Financing:



The project was to be financed through a Bank grant in the amount of US\$8.92 million which fully disbursed and a fund of US\$ 2.0 million by the Kreditanstalt Fuer Wiederaufbau (KfW).

Borrower Contribution:

The Borrower was to contribute US\$5.0 million. Actual contribution was US\$4.7 million.

Dates:

On April 21, 2017 the project was restructured to (i) revise the Results Framework, addressing changes in external environment affecting the original design and to adjust a number of indicators accordingly; (ii) revise activities within some sub-components, to better align with National Service of Natural Protected Areas' (SERNANP) work plan, adding and eliminating a number of activities; and, (iii) revise the definition of operational costs in the Grant Agreement, to better reflect all operational procedures as they were presented in the PAD.

3. Relevance of Objectives

Rationale

According to the Project Appraisal Document (PAD) (p. 1) Peru is one of the top 20 countries in terms of biological diversity in the world. It possesses 84 of the 117 existing life zones on the planet and it ranks first for genetic resources and species of fish, second for birds, and third for amphibians. Also, Peru is the global leader in fishmeal exports, which are dependent on the Guano Islands. Peru faces several threats to its marine and coastal diversity and resources. Threats include habitat disturbance and destruction, overfishing, destructive fishing (such as illegal use of explosives and high seas bottom trawling), and other economic activities that have resulted in declines in fish stocks, marine biodiversity, and overall ecosystem health. In order to address these issues, in 2009, the government of Peru established the Guano Islands, Islets, and Capes National Reserve System (RNSIIPG) to protect some of the most important areas and ecosystems that depend on the Pacific Humboldt currents.

According to the PAD (p. 3) the project builds on Peru's National Agreement Policy on Sustainable Development and Environmental Management, an objective of which is to institutionalize public and private environmental management to protect biodiversity.

The second sub-objective of the project supported the achievement of Peru's National Biodiversity Plan 2021. The Bicentennial Plan is a long-term strategy document that lays out national development policies, framed under six strategic pillars. The project is aligned to Strategic Pillar 6 (Natural Resources and Environment), and specifically aligns with objective 1 on the conservation and sustainable use of natural resources and biological diversity, achieved through the participation of and benefiting local populations.

The overall project objective was also in line with the country's the National Environmental Action Plan 2011-2021 (PLANAA), which is a long-term national environmental planning instrument that contains 7



priority goals. The Project contributes to goals 4, 5 and 7 (territorial planning, biological diversity and environmental governance, respectively).

The project objective supported the Bank's Country Partnership Strategy for the period 2012 to 2016, especially its third objective "sustainable growth and productivity in support to the further development of the environmental regulatory framework and biodiversity protection" and a sub-objective "strengthening environmental management".

The project was in line with the Bank's Country Partnership Framework for 2017-2021 which under Pillar III aimed to strengthen the management of natural resources. The objective is also aligned with the 2018-2022 Biodiversity Focal Areas of the Global Environmental Facility-7 Programming Directions "to promote protected area co-management between government and indigenous peoples and local communities where such management models are appropriate".

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To improve the overall management of marine and coastal ecosystems of the Guano Islands, Islets, and Capes National Reserve System of Peru (RNSIIPG)

Rationale

The project's theory of change linked the delivery of project outputs such as the development of planification and management instruments and cooperation mechanism, the training of staff members of the National Service of Natural Protected Areas (SERNANP) and other agencies, the establishment and capitalization of an endowment fund, the implementation of collaborative sub-projects and the management being effective and the M&E system working well with the improvement of the overall management of marina and coastal ecosystems. Also, the project's theory of change linked the establishment of an ecological baseline, the implementation of a biodiversity M&E system and the improvement of surveillance with protecting the biological diversity in pilot sites.

Outputs:

- The zoning module of the RNSIIPG Master Plan was developed through a participatory approach. The module included detailed zoning, mapping and categorizing of protected areas based on conditions of the natural environment and specific protection needs in 10 pilot sites. The ICR (p. 12) stated that this exercise was critical for the development of a territorial and marine biological baseline, required to determine the state of conservation in the Reserve. This allowed establishing conservation categories such as protection, restoration, and sustainable exploitation.



- Cooperation agreements between SERNANP, Rural Agricultural Productive Development Program (AGRORURAL), Peruvian Sea Institute (IMARPE), French National Research Institute for Sustainable Development (IRD) and the national University of Luis Gonzaga of Ica were formalized. According to the ICR (p. 12) these agreements defined terms of reference of institutional collaboration and roles and responsibilities of participating partners. Also, joint workplans were formalized. The target of establishing four cooperation mechanisms was achieved.
- Agreements within a framework for conservation and sustainable use with defined user rules to be followed within the Reserve were established. The ICR (p. 12) stated that based on these agreements, user rights were allocated to stakeholders based on certain requirements such as working jointly with SERNANP and other national and local agencies in management, surveillance, and research activities.
- While only 10 people were trained in 2013, this number increased to 484 people during 2019, surpassing the target of 320 people. 30% were female and all people came from SERNANP, public and private institutions and local stakeholders and were trained in relevant areas such as biological monitoring, sustainable economic activities, ecological risk assessments, geographical information systems, monitoring and surveillance, and drones and yacht operations.
- In 2017 a virtual training on marine protected areas was organized in cooperation with the Foundation Interuniveristy Fernando Gonzalez Bernaldez. 40 people participated (of which 37.5 percent were female).
- An Endowment Fund, to sustain long-term management and financing, was established and capitalized with US\$4.0 million, achieving the target of US\$4.0 million.
- 11 planning and management instruments were developed and implemented, achieving the target of 11 instruments. These instruments included: i) final phase of the Master Plan of the RNSIIPF; ii) detailed zoning of the Lobos de Tierra Island; iii) detailed zoning of Ballesta Islands; iv) detailed zoning of Punta Salinas; v) detailed zoning of Islote Don Martin; vi) tourism diagnostics of Isla Asia; vii) detailed zoning of Isla Lobos de Afuera; viii) detailed zoning of Asia Island; viii) detailed zoning of Pachacamac Island; x) detailed zoning of Chincha Island and Punta Coles; xi) detailed zoning of Guanape Island.

Outcomes:

- The score of the GEF Biodiversity Tracking Tool (METT) was 62.10 percent, surpassing the target of 35 percent. This indicator lacked a baseline. The METT assesses 40 different indicators which measure progress in achieving the impacts and outcomes established at the Reserve level. The management of the Reserve showed improvement in nine of these indicators over the five-year project implementation period. Improvements in seven of these indicators can be attributed to the project: i) integration of the Reserve Master Plan into the broader national System of Protected Areas (PAs) (and implementation of the Master Plan); ii) increase 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 demonstrated through beneficiary surveys; and vii) the development and implementation of site-specific management plans.
- The score of SERNANP's monitoring tool "participation radar" was 33 percent, not achieving the target of 60 percent. The "participation radar" is a monitoring tool to measure the organization, structure and effectiveness of participatory management in PA through management committees. For example, is the management committee well represented by the majority of stakeholders involved in the



management of the area, how frequently does it meet, does it communicate effectively, and does it define and implement commitments. 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.

Rating

Substantial

OBJECTIVE 2

Objective

To protect its biological diversity in pilot sites

Rationale

Outputs:

- The project provided training in the use of the technology to support SERNANP's monitoring capacity. The data collected is expected to help establish and assess trends in penguin population over time.
- Purchase of equipment: Eight drones (2 planned), 15 outboard motors (one planned), five pick-up trucks (three planned), 23 GPS instruments (two planned) and the installation of three video surveillance systems has supported SERNANP's monitoring capacity in less accessible areas at a lower cost while increasing the coverage range and obtaining key decision-making information for extractive activities. The ICR did not state how much lower the cost was. According to the Bank team (December 5, 2019) project and counterpart resources were used to purchase the equipment and tools identified as needed during the implementation of the project. Other equipment and infrastructure identified as needed to strengthen the management of the Reserve through SERNANP is being financed by KfW.

Outcomes:

- The size of the areas brought under enhanced biodiversity protection increased from 817 hectares in 2013 to 2,952 hectares in 2019, exactly achieving the target.

Rating

Substantial

OVERALL EFFICACY

Rationale

The achievement of both objectives was Substantial.



Overall Efficacy Rating

Substantial

5. Efficiency

Economic Efficiency:

Ex ante net benefits:

According to the PAD (p. 11), the economic analysis conducted at project appraisal assumed that approximately US\$30/hectare would be the tangible net benefit that could be generated from tourism for the marine reserve, including spillover benefits to service providers in the tourism sector. The analysis estimated the minimum annual benefit required for the project to generate a 12 percent return on investment over a period of 10 and 20 years using a social and a private discount rate of 4 and 10 percent, respectively. To achieve this return on investment, the net present value (NPV) of the monetary benefits would need to range from US\$16.3 million for 10 years to US\$ 21.1 million for 20 years (using a 4 percent discount rate for the two time periods) and US\$14.3 million to US\$16.5 million, respectively (using a 10 percent discount rate for the two time periods).

Ex post net benefits:

The ICR defined the project's benefits as a higher level of ecotourism revenues and revenue from the endowment fund over a 30-year period (2014-2044) (according to the Bank team December 5, 2019), with an estimated NPV of US\$104.5 million (using a 4 percent discount rate) and an NPV of US\$59.9 million (using a 10 percent discount rate), and an NPV of US\$39,813 (using a discount rate of 15 percent). The Bank team stated that a cumulative Economic Rate of Return (ERR) was estimated at 57 percent for 5, 10, 15 and 20-years periods versus 12 percent over a 20-year period at appraisal.

The ICR (p. 41) also reported a sensitivity analysis. The following assumptions were made: i) only 70 percent of revenue derived from tourism will return to the Reserve to finance its operation, providing resources to the Reserve and improving long-term sustainability; ii) no additional financing from KfW beyond the US\$ 2 million; and iii) recurrent costs are increased by 25 percent. Over a 30-year period, an NPV of US\$83.4 million (at a discount rate of 4 percent), an NPV of US\$48.1 million (at a discount rate of 10 percent), and an NPV of US\$31.8 million (at a discount rate of 15 percent) were calculated. The cumulative ERR was 50.99 percent.

According to the ICR (p. 41) the project also achieved some benefits that were not quantifiable such as: i) enabling upcoming conservation initiatives in the Reserve; ii) developing and providing important management tools and strengthened local institutions through targeted capacity building for planning and management of biodiversity conservation; iii) strengthening monitoring and conservation of specific endangered and flagstone species; iv) supplying sustainably harvested guano; v) improved biodiversity conservation and scenic beauty; and vi) leveraging resources and sustainable financing for conservation through the establishment of the endowment fund.

Operational Efficiency:



The project experienced several delays such as at the beginning of project implementation due to challenges in building consensus among key stakeholders on the need to include conservation principles and in the implementation of the collaborative sub-projects (CS) of which some were only implemented during the last year of the project period. Also, the full implementation of the M&E program was initially delayed due to the lack of an M&E specialist and implementation of an M&E mechanism.

While taken at face value, the reported NPVs and ERRs, reported ex ante and ex post, as well as the sensitivity analysis, imply positive economic efficiency. However, the number of quantifiable benefits is limited. Also, the differences in assumptions, methodologies, data considered and time horizons make it difficult to draw robust conclusions about efficiency over time. Moreover, operational efficiency was hindered by significant delays and other issues. Therefore, efficiency is rated Modest.

Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of the objective was High given its alignment with the Bank’s Country Partnership Framework for 2017-2021. Achievement of both objectives was Substantial. Efficiency was Modest. Taking everything together, the outcome rating is Moderately Satisfactory.

a. **Outcome Rating**
Moderately Satisfactory

7. Risk to Development Outcome

According to the ICR (p. 22) through collaborative sub-projects (CS) the project contributed to the strengthening of the management of marine and coastal resources at the local level. However, since the CSs were only completed during the last year of project implementation, fisherfolk associations will need continuous strengthening even after project closure. The ICR (p. 22) stated that the strengthening process



will benefit from local commitment, institutional capacity built, and the income generated from the Endowment Fund. However, in the future the capitalization of the fund will be critical for ensuring such support.

8. Assessment of Bank Performance

a. Quality-at-Entry

According to the ICR (p. 21) the project was built on lessons learned from Bank and GEF Protected Areas (PAs) operations, which implemented activities at various levels within different ecological regions. The project's design was complex and required the coordination and cooperation among several ministries, agencies and private sector partners with different responsibilities. However, given the project's aim to strengthen the sustainable management of marine and coastal ecosystems this degree of complexity was necessary.

The Bank team identified relevant risk factors such as SERNANP's lack of resources, specialized staff, and effective coordination and communication with other government agencies. Mitigation measures were not adequate, and project implementation was negatively affected by the lack of continuity and shortages of staffing.

Also, according to the ICR (o, 21) the project did not plan sufficient time for building capacity and trust and foster collaboration on the ground which resulted in delays in the implementation of CS of which some were only implemented during the last year of project implementation.

The project's M&E framework had several shortcomings such as lack of baseline and several inconsistencies of the selected indicators (see section 9a for more details).

Quality-at-Entry Rating Moderately Satisfactory

b. Quality of supervision

According to the ICR (p. 22) the Bank conducted bi-annual supervision missions and provided timely and adequate implementation support.

During the project restructuring in April 2017 the Bank addressed issues of the project's M&E and activities under components 1 and 3 to better align them with SERNANP's work plan. The ICR (p. 22) stated that the Bank conducted periodic post reviews of procurement and financial assessments and addressed bottlenecks in a timely manner. Also, the Implementation Status Reports (ISRs) and Aide Memoires were realistic in reporting implement progress.

According to the Bank team (December 5, 2019) as part of an exit strategy the Bank provided guidance to SERNANP's technical team to ensure an adequate transition. For example, inter-institutional agreements



were signed, and institutional arrangements established to facilitate coordination between the parties for the continuous and adequate management of marine-coastal areas. Also, the Bank provided several trainings to SERNANP's personnel on fiduciary and environmental and social safeguards aspects to ensure not only the continuation of activities, but also to build capacity within SERNAP to implement Official Development Assistance (ODA) financed projects.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The project's objective and its theory of change and how key activities and outputs would lead to intended outcomes was clearly specified. However, indicators did not encompass all outcomes of the PDO statement such as "improved management of ecosystems" and "protection of biodiversity in pilot sites". According to the ICR (p. 9), some indicators were not sufficiently specified which resulted in misinterpretation of these indicators and their monitoring methodologies. Furthermore, some intermediate outcome indicators were output specific, not attributable to the project or redundant. For example, the Results Framework included the PDO indicator "contribution to maintain the Humboldt penguin population" even though the project had limited direct influence over this indicator as the project only supported control and surveillance activities. Also, one out of three PDO indicators and five out of six intermediate outcome indicators lacked a baseline.

M&E activities were to be carried out as an operational project component of its own (component 3). Data for project outcome and results indicators were to be derived from a number of sources, including field reports for ecosystem health and community participation in events, community perception and satisfaction surveys, and results evaluations of applications of Management Effectiveness Tracking Tool (METT) and other effectiveness tracking mechanisms.

b. M&E Implementation

According to the ICR (p. 20) M&E activities were initially delayed since a M&E specialist had not been assigned when project implementation started. Also, the lack of clarity of the project's Results Framework did not support effective monitoring of project activities. Finally, instead of developing a parallel information system for the Reserve as the project's design had planned, the project supported SERNAP in its efforts to adapt the tool to marine and coastal PAs to better reflect realities of participatory management and to take the contribution of local sub-committees into account.

In April 2017 the project was restructured to address some inconsistencies of the Results Framework and revise/add/drop some PDO and intermediate outcome indicators. According to the ICR (p. 20) M&E data



was collected and analyzed systematically by SERNANP and progress reports were submitted to the Bank on a regular basis.

According to the Bank team (November 14, 2019) M&E functions were strengthened within SERNANP and were sustainable following project closing. With project support, SERNANP was able to increase capacity at both local and system levels.

c. M&E Utilization

According to the ICR (p. 20) M&E data was used to manage project implementation and inform decision making. Also, at the Mid-Term Review the M&E data was used to restructure the project.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified as category B and triggered the Bank's safeguard policies OP 4.01 (Environmental Assessment), OP 4.04 (Natural Habitats), and OP 4.11 (Physical Cultural Resources). The ICR (p. 20) stated that an Environmental Analysis was prepared and included mitigation measures for project activities. Also, an Environmental Management Guide was prepared in 2017, which included conditions of the interventions up to that date and expected modifications necessary to address technical changes due to the restructuring of the project.

According to the Bank team (November 14, 2019) in order to address OP 4.11 (Physical Cultural Resources), a chance find procedure was developed, applicable to all those activities that involved earthworks. The chance find procedure was included within the project's Environmental Analysis (EA), published in SERNANP's institutional website on August 2013. Mitigation measures included in this procedure were in compliance with both OP 4.11 and regulations defined by the Ministry of Culture regarding the preservation of historical sites and/or archaeological monuments and artifacts. Since chance findings did not occur throughout the life of the Project, the procedure was not applied. With respect to OP 4.04 (Natural Habitats), the project's EA included a series of environmental mitigation and management measures applicable to Collaborative Subprojects (CS) to address potential adverse environmental risks and impacts. Such measures included, among others: solid waste management to prevent contamination and degradation of the protected area, measures to prevent fauna displacement, landscape alteration, avoidance of fuel and oil spills. Corresponding mitigation measures were integrated into the project's structure, through the analysis of impacts and proposition of mitigation measures at the level of each CS.

According to the ICR (p. 21) the project always complied with the Bank's safeguard policies.

A Grievance Redress Mechanism was implemented in all sites. Also, meetings and assembly events offered the opportunity to express grievances by affected people and beneficiaries.



b. Fiduciary Compliance

Financial Management:

According to the ICR (p. 21) the project had adequate financial management arrangements in place. Also, budget preparation was clearly defined, financial reports were used for monitoring progress, and approval and authorization controls were well documented. Furthermore, auditors issued unqualified opinions for all financial audit reports and submitted the reports on a timely basis. Due to slow disbursements related to the development and implementation of collaborative sub-projects, the project’s Financial Management performance was rated Moderately Unsatisfactory for two years. Disbursement speeded up once the collaborative sub-projects were implemented.

Procurement:

According to the ICR (p. 21) procurement plans were updated on a regular basis and submitted on time to the Bank by PROFONAPE. The project followed the defined procurement plans. Also, bi-annual post procurement reviews were conducted by the Bank. Overall, the project did not encounter any procurement related challenges.

c. Unintended impacts (Positive or Negative)

NA

d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

12. Lessons



The ICR (p. 22-24) provided lessons learned which were adapted by IEG:

- **Planning adequate time for building capacity and providing training at the beginning of implementation of a project intended to improve environmental management and protect biodiversity is an important aspect of project design. Also, sufficient time needs to be allowed for collaborating and building consensus with local communities and among different stakeholders.** In this project, SERNANP had limited experience in managing marine and coastal ecosystems and participatory planning processes which resulted in initial implementation delays and in some collaborative sub-projects only being executed only during the last year of project implementation. Also, the Chincha-Ballestas Island Site Plan was developed under a participatory process involving 22 local communities and stakeholders. While this took some time, it resulted in greater ownership and better collaboration.
- **Public financing for biodiversity and ecosystem services will require subsidizing from other sources.** Therefore, it is important that fund-raising efforts for the endowment of conservation funds start early if targets for capitalization are to be achieved and the sustainability of biodiversity and ecosystem conservation is to be ensured.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provided a good overview of project preparation and implementation and included a limited Economic analysis. Given the nature of the project, the ICR focused on outputs rather than outcomes. Also, the ICR was internally consistent, relatively concise and provided useful lessons learned. However, the ICR would have benefited from those lessons being more specific and referring to project implementation experience.

- a. **Quality of ICR Rating**
Substantial

