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Peru: Coastal Fisheries Initiative – Challenge Fund (CFI-CF)

Main objectives and preliminary project (Peru CFI-CF) outcomes

Peru: Coastal Fisheries Initiative - Challenge Fund (Peru CFI-CF) is financed by the Global Environment Facility (GEF) and aims to assure the sustainability of Peru's marine resources and ecosystems, and to promote the development of the fishing communities that harvest them.

OBJECTIVES:

GENERAL OBJECTIVE:

To identify new options for improving the sustainable usage and management of coastal fisheries in Peru through the pursuit of formal financing routes.

SPECIFIC OBJECTIVES:

1. To strengthen the capabilities of government authorities, the private sector and local fishing communities with a view to establishing a sustainable and responsible investment portfolio that generates returns for certain selected coastal fisheries.
2. To support those fisher organizations with an interest in accessing capital in drafting comprehensive investment readiness assessments.
3. To identify the barriers and limitations associated with drafting comprehensive investment readiness assessments, and to propose solutions based on policy recommendations.

MAIN OUTPUTS:

- Analysis of supply and demand of financing to the artisanal and small-scale fisheries sector in the regions of Ancash, Arequipa and Piura
- Estimation of Fishery Performance Indicators (FPI) for ten selected coastal fisheries in Peru.
- Elaboration of sustainable and comprehensive investment readiness assessments for ten associations, businesses or fishers from the artisanal and small-scale fisheries sector.

PROJECT (PERU CFI-CF) SCOPE

The project (Peru CFI-CF) is focused on the Ancash, Arequipa and Piura regions, in which companies, associations and fishers in the sector are in a better position to access formal sources of capital compared to other coastal regions. These regions have a greater number of artisanal vessels and boat owners that possess the certificates required by government authorities to operate formally (registration certificate and harvest rights); a high percentage of vessels with propulsion systems, onboard cooling systems, safety equipment (life jackets, first aid kits and fire extinguishers), and GPS navigation systems; and a high percentage of fishers with better socioeconomic conditions, more years of experience and membership of associations.

To promote the project (Peru CFI-CF) in the three prioritized regions, the marketing strategy required the design of a graphic line linked to the project (with a color palette and a logo) and a brand with which fishers and artisanal fishing companies feel identified. Hence, we chose the name Pesca Emprende as the project concept and we have used for all the purposes of the project.



SELECTED REGIONS FOR THE FIRST STAGE OF THE PROJECT



Current situation and issues facing artisanal and small-scale fisheries in Peru



INTRINSIC SECTOR CONDITIONS

1. Inadequate environmental management and limited resource sustainability:

- 79% of fishers have received no training on current fishing regulations, 60% have not been trained on good fishing practices and 95% do not have any knowledge of environmental sustainability.

2. Inadequate infrastructure at landing points:

- Only 51% of landing points nationwide have toilet facilities and 37% have potable water.
- Only 36% of landing points have a specialized primary-processing area, and less than 30% have coldrooms for fish storage.
- Less than 50% of the landing points provide waste collection services.

3. Unstable income flows in the industry, partly due to the negative effects of ocean temperature changes (for example, El Niño and La Niña events).

- An example of this, in 2016, the GDP of the fishing sector decreased by 11% because of the effects of the La Niña event.

ABSENCE OF SUCCESS FACTORS

1. Persistent informality in the artisanal sector nationwide:

- Artisanal boats: two out of every ten boats do not hold a registration certificate, four out of ten do not hold harvest rights, and eight out of ten do not hold the technical sanitation protocol certificate.
- Artisanal fishers: seven out of ten fishers do not hold a fisher's card, and nine out of ten do not hold a diving license.

2. Limited access to formal sources of financing:

- More than 85% of fishers receive financing through informal agents (informal “enablers” and lenders).
- There is distrust of the financial system due to the high costs of financing (high interest rates), stringent requirements for loan applications and limited flexibility in forms of repayment.

3. Low level of education, high poverty and limited entrepreneurship:

- Nationwide, only 52% of fishers have completed secondary education.
- Two out of every 100 employees in Peru are engaged in fishing.
- Fishers, boat owners and processors in the artisanal and small-scale sector prefer to receive assistance for their operations from the government, NGOs or informal agents.

STRUCTURAL CONDITIONS

1. Institutional weakness and high rotation of officials.

- There are several non-articulated government agencies and low-scale efforts to attend the sector needs.

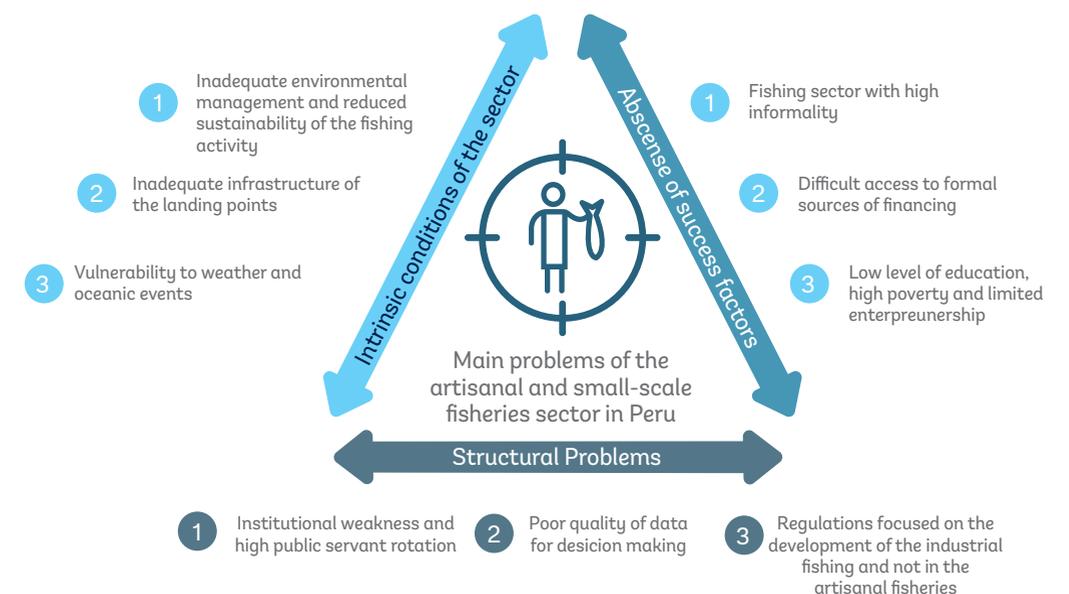
2. Deficient quality of information available for decision-making.

- Public databases are insufficient and outdated.

3. Regulations centered on developing the industrial sector and limited emphasis on the artisanal sector

- The main regulatory reforms and harvest rights have been assigned to the industrial sector

SUMMARY OF THE MAIN PROBLEMS OF THE SECTOR



A photograph showing a blue plastic crate filled with fresh squid, likely on a boat deck. The squid are piled together, showing their characteristic purple and white colors. The crate is sitting on a concrete or wooden surface. In the background, there is a body of water and the orange hull of a boat. The text "Financing the Peruvian Artisanal Small-Scale Fisheries Sector: an Analysis of Supply and Demand" is overlaid on the right side of the image in white font.

**Financing the Peruvian
Artisanal Small-Scale
Fisheries Sector: an
Analysis of Supply and
Demand**

OBJECTIVES:

GENERAL OBJECTIVE:

To identify fishers' investment opportunities and their barriers and limitations to accessing formal sources of capital.

SPECIFIC OBJECTIVES:

1. To propose policy recommendations to mitigate the risks and overcome the barriers that fishers face in accessing financing.
2. To identify financeable entrepreneurships (Peru CFI-CF) (by public and private institutions) and bridge different types of sustainability gaps (e.g. formalization, security, environmental management, human capital, among others).

MAIN RESULTS, BY DIMENSION:



FORMALIZATION:

- ① Fishers do not possess the resources needed to assume the costs of the formalization processes. Moreover, the application procedures are unknown and difficult to follow.
- ② Organizations believe that formalization creates more costs than benefits.
- ③ There is interest from public and private institutions in financing training on the various formalization processes and acquisition of the certification documents needed (for example, harvest rights and registration certificate).



SECURITY ON BOARD AND HABITABILITY

- ① Mandatory public insurance coverage is insufficient and acquisition costs are high.
- ② Fishers consider it important to invest in safety equipment on board, given the length of fishing trips and the age of the fleet.

- ③ Financing related to the security on board is concentrated on the acquisition of electroacoustic equipment, rescue equipment and GPS. However, there is no financing on the provision of training on its use.



EXTRACTION AND COST REDUCTION CAPACITY

- ① The limited availability of marine biological resources has increased the costs and duration of fishing trips.
- ② Public and private entities concentrate financing on infrastructure and equipment that does not contribute to the environmental sustainability of fishing.
- ③ There is an interest in financing better onboard cooling and propulsion systems in order to reduce the costs of fishing without undermining the sustainability of marine ecosystems.



TRACEABILITY AND SELECTIVITY

- ① Public statistical databases do not contain indicators on the use of traceability systems by fishers.
- ② There is no product tracking between landing and the final sale point for each artisanal vessel. However, some NGOs have conducted traceability studies and developed mobile applications for use by fishers.
- ③ There is little financing for the acquisition of selective fishing gear specific to each fishery. Moreover, to date, training on traceability and selectivity has been scarce.



ASSOCIATIVITY AND COMMERCIALIZATION

- ① The benefits of joining associations are undervalued or unknown by fishers.
- ② Fishers do not have the resources they need to market their products, so limit their role to harvesting.
- ③ There is interest on the part of public entities in developing programs that foster association membership among users who are active in different parts of the supply chain and strengthen marketing networks.



FINANCIAL RISK MITIGATION

- 1 Their limited possession of certification documents or collateral (movable or immovable guarantees) makes it difficult for fishers to access to formal sources of financing.
- 2 80% of fishers do not engage in any other economic activity, which limits their prospects of securing a sustained income stream and, thus, of meeting their financial obligations.
- 3 Certain rural savings and credit banks (the primary lenders in the artisanal and small-scale fisheries sector) offer quarterly debt repayment schemes and training in accounting and finance. This facilitates compliance with financial obligations and improves the financial literacy of fishers.



SUSTAINABLE ENVIRONMENTAL MANAGEMENT

- 1 Poor sanitary practices reduce the sales value of harvested products, which encourages increases in harvesting intensity to maintain income levels.
- 2 Some artisanal and small-scale boats have developed manual solid waste management systems.
- 3 There is interest from public institutions in financing training programs on environmental sustainability and onboard waste management.



SOCIAL AND HUMAN CAPITAL

- 1 Fishers are reluctant to access the financial system (due to high financing costs).
- 2 The involvement of women and young people in the industry is largely limited to primary and secondary processing.
- 3 There is no financing for programs to promote the involvement of women and young people in the fisheries supply chain.

BARRIERS AND LIMITATIONS IDENTIFIED BY THE FISHERS AND MAIN STAKEHOLDERS OF THE SECTOR



Barriers and limitations, according to the demand

High dependency to informal financing sources

Little to none financial culture

Restrictions of current regulations (tax and legal)



Barriers and limitations, according to the supply

Low scalability project (Peru CFI-CF)s

Lack and inadequate association among fishers

Absence of consolidated commercial networks



Transversal barriers and limitations

Lack of financial guarantees (real and transferable)

Lack of entrepreneurial vision

High income volatility and low saving capacity

Little confidence in the financial system

FISHERS' CONCERNS

MILTHON DELGADO

PRESIDENT AT ASOCIACIÓN DE ARMADORES ARTESANALES DE CONSUMO HUMANO DIRECTO PAITA – AAARCUDIPA (PIURA)

“Limited access to education and the low involvement of young people in fishing stand in the way of generational renewal, so it is necessary to provide training on regulatory, technical and environmental management issues to ensure the sustainability of local economic dynamics.”

JOSÉ TOLEDO

PRESIDENT AT ASOCIACIÓN DE CONSERVADORES Y EXTRACTORES MARISQUEROS ARTESANALES - ACEMAR (AREQUIPA)

“The radio equipment financed through the PNIPA program allowed members to be informed about the areas with the greatest shellfish catch and the types of gear that should be used. Likewise, it was useful when one of the members had to be towed to the shore, because the boat’s engine was letting in water and with this equipment, we were able to locate it.”

DORIS CARRASCO

GENERAL MANAGER AT EMPRESA MAR DEL ÑURO S.R.L. (PIURA)

“The merchant I work with only has the capacity to transport 30 boxes of hake per day, but my company catches 300 boxes. The loss of the 270 boxes, added to the low prices at which I have to sell my product, means that my company does not make a profit. That’s why I am applying for a loan from FONDEPES to buy a truck with an isothermal chamber and reach more markets.”



**Estimation of
Fishery Performance
Indicators (FPIs) for
ten selected coastal
fisheries in Peru**

OBJECTIVES:

GENERAL OBJECTIVE:

To analyze various dimensions related to the development and sustainability of ten of the most important coastal fisheries in Peru.

SPECIFIC OBJECTIVES:

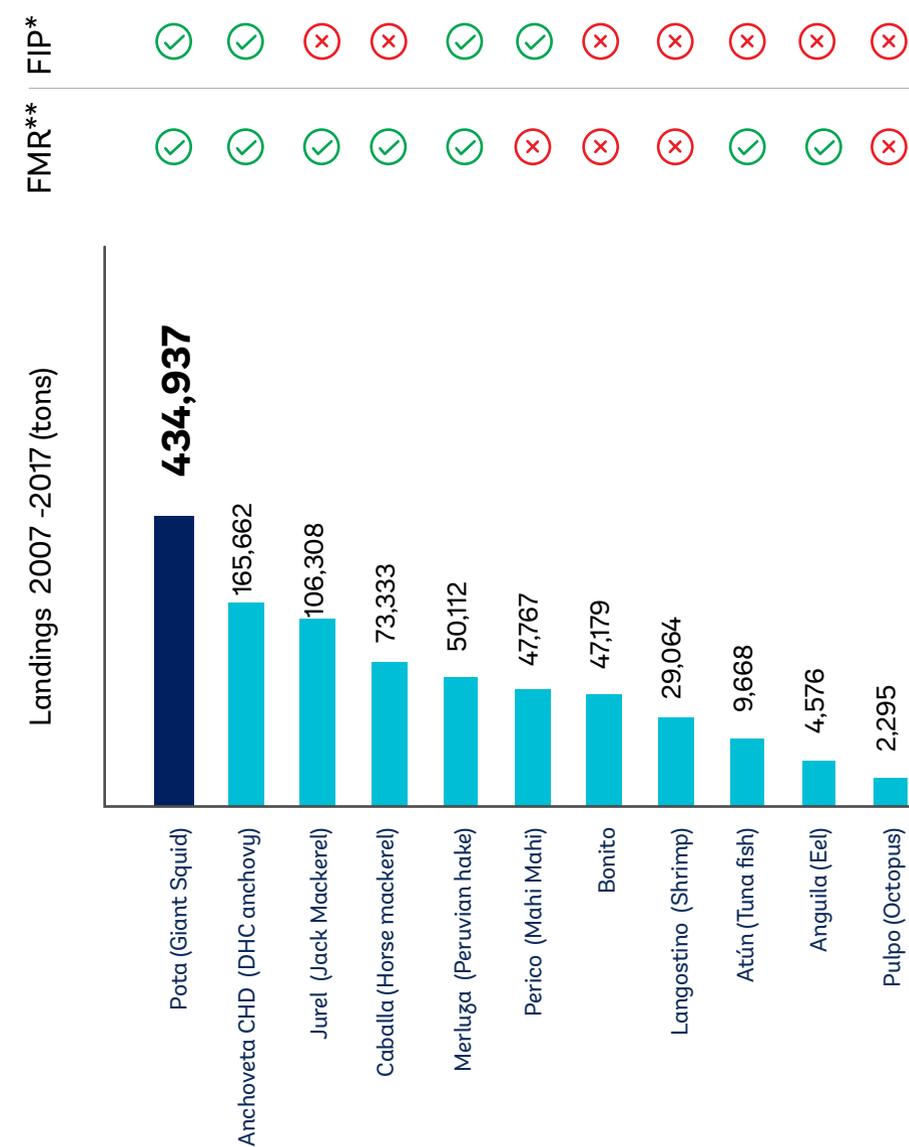
1. To identify the barriers and limitations facing selected coastal fisheries in terms of sustainability and access to formal sources of financing.
2. To develop policy recommendations for each fishery and transversal for the industry as a whole.

SELECTED FISHERIES

Ten coastal fisheries were selected based on the following criteria:

1. Average landings, 2007-2017 (in tonnes)
2. Fisheries in which there is a Fishery Improvement Project (Peru CFI-CF) (FIP) in place
3. Existence of an individual regulatory framework (Fisheries Management Regulation, FMR)
4. Fisheries with a high impact on local communities.
5. Fisheries in which there is room for improving performance across different dimensions.

SELECTED FISHERIES FOR THE FPI ASSESSMENT



*The FIP is a tool that seeks to eliminate the gap between individual fisheries and the Marine Stewardship Council's (MSC) standard for sustainable fishing. They are generally developed as a step prior to obtaining MSC certification. The areas covered by these project (Peru CFI-CF)s are: product, harvesting strategy, species monitoring, habitats and ecosystem, governance and policies; and specific fishery management systems.

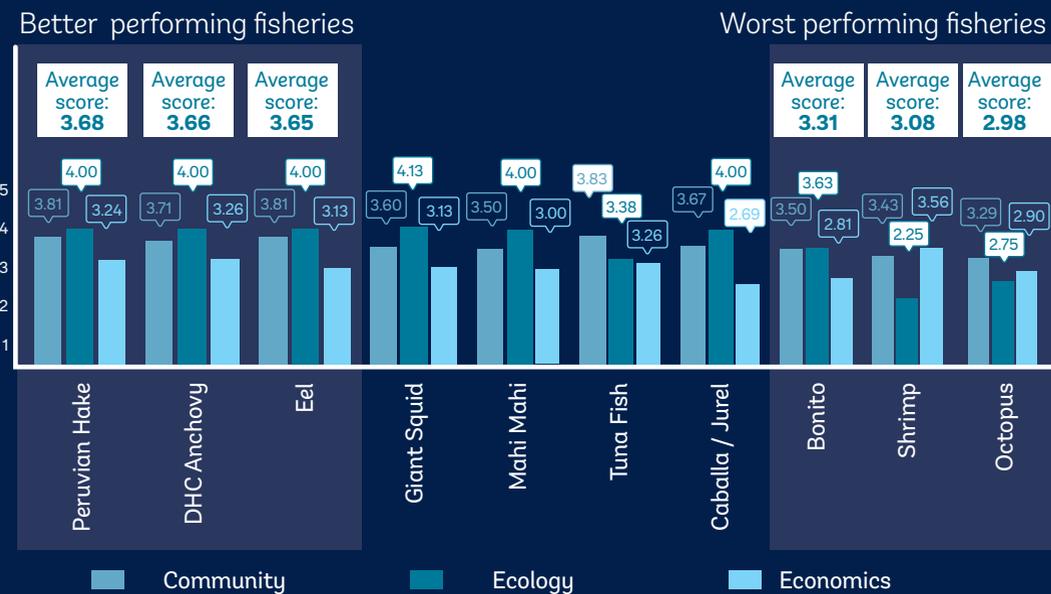
**FMRs are a set of rules and actions that allow the management of a particular fishery. They take into account factors such as access regimes; total permitted catch; extent of fishing effort; closure periods; fishing seasons; minimum catch sizes; prohibited or reserved areas; fishing gear, methods and systems; and monitoring, control and supervisory actions.

Sources: INEI, PRODUCE

MAIN RESULTS

1. The fisheries with the best outcome indicators (Peruvian hake, DHC anchovy and eel) are subject to access rights, specific regulations and supervisory efforts by government authorities. This contributes directly to resource sustainability and reducing informality.
2. Some drivers of the success in these fisheries include the availability of technology, technical assistance, quality and quantity of information for decision-making, and the organizational structure of the private sector. The fisheries with the worst results (bonito, shrimp and octopus) lack of these factors.
3. Finally, the fisheries with the best outcome indicators sell their catch to high-value international markets, which contributes to improving quality standards and supply chains.

SCORES OBTAINED IN THE FPI OUTPUT INDICATORS BY THE 10 COASTAL FISHERIES ASSESSED (1 = very poor performance, 5 = outstanding performance)



Sources: PRODUCE, INEI, IMARPE, World Bank, experts' opinions and field work.





Sustainable and comprehensive investment readiness assessments for ten associations from the artisanal and small-scale fisheries sector

OBJECTIVES:

GENERAL OBJECTIVE:

To develop comprehensive and sustainable investment readiness assessments alongside with fishers, shipowners, processors and businesspersons.

SPECIFIC OBJECTIVES:

1. To propose investment ideas that are scalable and include sustainability components
2. To identify and address gaps across different dimensions, in line with the technical and financial training needs of each venture
3. To facilitate access to formal financing routes

LIST OF SELECTED BENEFICIARIES

COMPANY	REGION	SPECIES HARVESTED
Mujeres del Mar del Puerto de Quilca	Arequipa	Giant squid, mahi mahi and corvina
Martin Bayona and associates	Piura	Peruvian hake, tuna fish and Peruvian rock seabass
Asociación de Extracción y Comercialización de Productos Hidrobiológicos del Puerto de Huarmey y Anexos	Ancash	Octopus, sea snail and shellfish
Cesar Augusto Lima Condori	Ancash	Giant squid, mahi mahi and octopus
Productos del Mar Grexhibuc Chimbote S.A.C	Ancash	Octopus, sea snail and conger eel
Asociación de Pescadores Artesanales San Pedrito	Ancash	Peruvian grunt and Peruvian rock seabass
Jessica Velatuanamá	Ancash	Silverside, liza, Peruvian rock seabass and Peruvian grunt
Huaytas S.A.C	Arequipa	Giant squid, mahi mahi and horse mackerel
Carlos Alberto Cerdan Calderon	Arequipa	Giant squid, mahi mahi and octopus
Empresa Pesquera Nordvik Eirl	Arequipa	Giant squid, mahi mahi and octopus

TESTIMONIES: EXPECTATIONS OF SUCCESS

ALMENZOR GÓMEZ

ARTISANAL FISHER FROM CHIMBOTE (ANCASH) WITH 35 YEARS OF EXPERIENCE.

“Peruvian artisanal fishers often lose their business vision, but if we are able to implement technology, we can be successful. With the help of Pesca Emprende, I hope to finance upgrades to my vessel and exploit my fishing grounds sustainably.”

CARLO NAVARRETE

ARTISANAL BOATOWNER FROM MATARANI (AREQUIPA) WITH 27 YEARS OF EXPERIENCE.

“I hope that through Pesca Emprende, I will be able to get out of the traditional (capture of giant squid, mahi mahi and other lesser species) and enter into the sustainable capture of other species through the implementation of new technology.”

MARTÍN BAYONA

ARTISANAL FISHER FROM EL ÑURO COVE (PIURA) WITH 20 YEARS OF EXPERIENCE.

“Pesca Emprende project will let me formalize my operations and I will be able to obtain better sales conditions and enter new markets.”

FABIOLA OVIEDO ZUÑIGA

GENERAL MANAGER OF MUJERES DEL MAR DEL PUERTO DE QUILCA (AREQUIPA).

“We hope that through Pesca Emprende, we can develop our investment idea: provide storage and reach the market directly. The workshop we received to prepare our investment readiness assessment amazed us, due to the expositors’ knowledge of the sector. Fishing is not the same as it used to be and it is necessary to look for other opportunities to get ahead and strengthen our role as women in artisanal fishing.”

Topics covered in the investment readiness assessments



ASSOCIATIVITY AND FORMALIZATION



HUMAN CAPITAL AND SOFT SKILLS



TRANSPORTATION SYSTEMS



COMMERCIALIZATION NETWORKS



TRACEABILITY SYSTEMS



WOMEN AND YOUTH PARTICIPATION



WASTE MANAGEMENT



SAFETY ON BOARD



BUSINESS MANAGEMENT



TECHNOLOGY ADOPTION

Acknowledgments

The Coastal Fisheries Initiative (CFI) is a collaborative, global effort funded by the Global Environment Facility (GEF) bringing together UN agencies and international conservation organizations at the forefront of efforts to improve fisheries management and conserve marine biodiversity in coastal areas through better governance and strengthening the seafood value chain. CFI is implemented by Conservation International (CI), FAO, UNDP, UNEP, the World Bank and WWF.

A key objective of the CFI Program is to find new ways to achieve the sustainable use and management of coastal fisheries, particularly through its Challenge Fund. The CFI Challenge Fund (CFI-CF) currently operates in six countries: Cabo Verde, Côte d'Ivoire, Senegal, Indonesia, Peru and Ecuador.

The present document was produced by a core team of The World Bank Group and external partners led by Sylvia Michele Diez, Senior Environmental Specialist. Members of the World Bank team include Miguel Angel Jorge, Senior Fisheries Specialist; Griselle Vega, Senior Agriculture Specialist; and, Jorge Guillermo Barbosa, Environmental Specialist. External consulting partners contributing to this work include the Intelfin Estudios y Consultoría team composed of Carlos Paredes, General Manager; Carlos Aparicio, Project (Peru CFI-CF) Manager; Alberto Saldarriaga, Consultant; Celina Chigne, Consultant; and Camila Alegría, Consultant. The WWF Peru team which includes Evelyn Luna Victoria, Marine Program Manager; Nicolás Rovegno, Marine Program Specialist; and Julia Maturrano, Marine Program Assistant, contributed as well in close partnership with Intelfin Estudios y Consultoría.

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The findings, interpretations, and conclusions expressed in this document are those of the authors and do not necessarily reflect the view of the Executive Director of the World Bank, the governments they represent, or the counterparts consulted during the study process. Any factual errors are the responsibility of the team.



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FURTHER INFORMATION:

For more information about the Peru: Coastal Fisheries Initiative
- Challenge Fund (Pesca Emprende), go to:
<http://www.pescaemprende.com>

To find the Peru CFI-CF (Pesca Emprende) reports, go to:

