GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title
The Digital Seafood Revolution: Electronic catch documentation and traceability systems (eCDT) for sustainable and legal fisheries in Chile, Peru, and Ecuador

Region	GEF Project ID
Regional	11674
Country(ies)	**Type of Project**
Regional Chile Ecuador Peru	FSP
GEF Agency(ies):	**GEF Agency ID**
UNEP	
Executing Partner	**Executing Partner Type**
World Wildlife Fund, Inc.	Others
GEF Focal Area (s)	**Submission Date**
International Waters	9/12/2024

Project Sector (CCM Only)

Taxonomy
Climate Change, Focal Areas, International Waters, Fisheries, Large Marine Ecosystems, Biodiversity, Mainstreaming, Strengthen institutional capacity and decision-making, Influencing models, Demonstrate innovative approache, Stakeholders, Civil Society, Academia, Private Sector, Individuals/Entrepreneurs, Financial intermediaries and market facilitators, Local Communities, Public Campaigns, Communications, Strategic Communications, Beneficiaries, Participation, Type of Engagement, Information Dissemination, Partnership, Gender Equality, Gender-sensitive indicators, Gender Mainstreaming, Sex-disaggregated indicators, Gender results areas, Awareness Raising, Access to benefits and services, Knowledge Generation and Exchange, Capacity Development, Capacity, Knowledge and Research, Innovation, Indicators to measure change, Learning, Adaptive management, Knowledge Generation, Workshop, Course, Climate Change Adaptation, Livelihoods, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Participation and leadership

Type of Trust Fund	Project Duration (Months)
GET	48
GEF Project Grant: (a)	**GEF Project Non-Grant: (b)**
8,000,000.00	0.00
Agency Fee(s) Grant: (c)	**Agency Fee(s) Non-Grant (d)**
760,000.00	0.00
Total GEF Financing: (a+b+c+d)	**Total Co-financing**

8,760,000.00	80,079,269.00
PPG Amount: (e) 200,000.00	PPG Agency Fee(s): (f) 19,000.00
PPG total amount: (e+f) 219,000.00	Total GEF Resources: (a+b+c+d+e+f) 8,979,000.00
Project Tags CBIT: No NGI: No SGP: No Innovation: Yes	

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B “project description”.(max. 250 words, approximately 1/2 page)

Illegal, unreported, and unregulated (IUU) fishing is a major threat to global fisheries, marine ecosystems, and biodiversity. Weak Monitoring, Control, and Surveillance (MCS) systems, coupled with inadequate law enforcement and limited resources, exacerbate these problems. This leads to overexploitation, corruption, and weakened governance frameworks, particularly in developing countries. Countries affected by IUU fishing, like Chile, Ecuador and Peru, face difficulties in accessing international markets due to concerns about sustainability and legality, which can represent a significant loss of economic income and trade opportunities.

In 2022, Peru, Chile, and Ecuador together accounted for 10.3% of global fish production.[1]1

Electronic catch documentation and traceability systems (eCDTs) are one of the main strategies globally to combat IUU fishing.

This project aims to promote the adoption of Electronic Catch Documentation and Traceability (eCDT[2]2) systems in fisheries in Ecuador, Peru, and Chile through the harmonization and strengthening of government traceability schemes and implementing international standards along the fisheries value chain, resulting in improved management of over-exploited marine fisheries.

It is intended to be transformative by addressing the root causes of IUU fishing and improving fisheries management through data-driven decisions and traceability systems, enhancing market access by assuring consumers of sustainable practices, strengthening governance by improving accountability and policy development, and positively impacting the environment by reducing overfishing and protecting marine biodiversity and habitats.

The project will be executed through three interlinked components:

1. **Harmonization of national eCDT systems:** ensuring consistency and interoperability between different countries' systems.
2. **Regional cooperation and exchange of good practices:** will facilitate knowledge sharing and best practices.

3. **Industry engagement and stakeholder empowerment** (including artisanal fishers)**:** will ensure the project's relevance and sustainability.

The project will benefit over 10,000 individuals (2,163 women and 8,562 men) and contribute to the sustainability of 220,000 tons/year of fisheries, involving the public sector, scientific entities, national and regional fisheries management organizations and private sector. It will focus on overfished or at-risk fisheries[3] impacted by illegal fishing activities.

[1] https://openknowledge.fao.org/items/fc569ba1-b7d4-42fc-96ae-aef050d11d37
[2] eCDTS include satellite equipment (VMS/AIS/GPS), electronic logs, on-board cameras, databases, web platforms, mobile applications, etc.
[3] Fisheries preliminarily prioritized by Ecuador: tuna, mahi-mahi, swordfish, titi shrimp. Peru: giant squid, mahi-mahi, hake, and five species of sharks. Chile: anchovy, common sardine, huiro algae.

Indicative Project Overview

Project Objective

Promote the adoption of eCDT systems in fisheries in Ecuador, Peru, and Chile through the alignment and strengthening of government traceability schemes and implementing international standards along the fisheries value chain resulting in improved management of over-exploited marine fisheries.

Project Components

Component 1: Promoting and harmonizing national eCDT systems for local fisheries and global markets

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
2,819,048.00	24,663,193.00

Outcome:

Outcome 1.1: Increased adoption of eCDT systems throughout the supply chain in the fisheries sectors of Chile, Ecuador and Peru, with increased effective coverage for 100% of landings in prioritized fisheries.

Output:

Output 1.1.1: A comprehensive gap analysis of the current eCDT systems and MCS coverage completed including recommendations for the region to improve the fisheries supply chain, **by Q4Y1**.

Output 1.1.2: An action plan developed and implemented to support the transition to eCDT harmonizing and strengthening the 3 government eCDT systems so that they are interoperable and use international best practices and standards **by Q1Y2**, covering 100% of the total catch volume of the prioritized fisheries by the project.

Output 1.1.3: Policies and legal instruments recommendations to improve the current regulatory framework related to the adoption, application, and expansion of eCDT at the national and subnational levels (for the 3 countries and 6 subnational governments), are designed and proposed **by Q4Y2**.

Output 1.1.4: Three financial mechanisms to increase funding allocation by 15% for national MCS programs of priority fisheries, **by Q3Y4**.

Component 2 Strengthening regional cooperation, policy coherence, and exchange of good practices

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
1,752,381.00	10,287,844.00

Outcome:

Outcome 2.1: Regional cooperation mechanisms are established and strengthened for harmonized eCDT systems and to combat IUU fishing, through enhanced information-sharing and joint decision-making based on eCDT data.

Output:

Output 2.1.1. A regional cooperation mechanism is identified and implemented to strengthen dialogue, decision making, and coordination between the 3 countries, by Q1Y3.

Output 2.1.2 Based on stakeholders including fishing authorities' preferences and assessed best methods, a suitable approach for **accessing and sharing eCDT system data is developed** to enhance regional collaboration and knowledge sharing by Q3Y2.

Output 2.1.3. A tri-national cooperation agreement is established for the effective implementation of eCDT systems in the fight against IUU fishing and for improved MCS.

Component 3 Industry engagement and stakeholder training and empowerment

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
2,819,048.00	41,119,708.00

Outcome:

Outcome 3.1: Capacities are strengthened and actors across the entire value chain of the prioritized fisheries are effectively involved.

Output:

Output 3.1.1. **A capacity building programme** is developed participatively on the use of eCDT systems and the adoption of international standards (i.e., GDST) to support decision-making and regulatory enforcement for key actors in prioritized fisheries (with emphasis on women having a role in value chains and artisanal fishers), by Q2Y2.

Output 3.1.2. At least 10,500 officials, fishers (incl artisanal actors), processors, and traders from Chile, Ecuador, and Peru (with at least 50% women participating through workshops aimed exclusively to them,

focused on topics of interest related to the project and specifically adapted to their needs) are **trained in eCDT** systems and international standards (i.e., GDST), by Q4Y4.**Output 3.1.3. Electronic traceability pilot systems** along value chains are implemented in prioritized fisheries of Chile, Ecuador, and Peru, by Q4Y4.

Output 3.1.4. Documented project results, which are gender responsive, disseminated through the project platform and IW:LEARN (1% of the project budget) by Q4Y4.

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
228,571.00	199,000.00

Outcome:

Outcome 4.1: Monitoring and evaluation of project results in an effective and timely manner.

Output:

Output 4.1.1. Documented monitoring and reporting of project performance, including gender indicators.

Output 4.1.2. Independent evaluations and information analysis to understand the progress, success, and effectiveness of project activities.

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Component 1: Promoting and harmonizing national eCDT systems for local fisheries and global markets	2,819,048.00	24,663,193.00
Component 2 Strengthening regional cooperation, policy coherence, and exchange of good practices	1,752,381.00	10,287,844.00
Component 3 Industry engagement and stakeholder training and empowerment	2,819,048.00	41,119,708.00
M&E	228,571.00	199,000.00
Subtotal	**7,619,048.00**	**76,269,745.00**
Project Management Cost	380,952.00	3,809,524.00
Total Project Cost ($)	**8,000,000.00**	**80,079,269.00**

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Fisheries management represents a global challenge encompassing economic, social, and environmental dimensions. More than 90 million people are employed in the fisheries sector globally and more than 3 billion rely on seafood consumption as their main source of protein (FAO 2020), highlighting the importance of sustainable fisheries management. However, unsustainable fishing practices are among the primary contributors to the decline of marine wildlife populations. According to the FAO, the number of overfished species globally has tripled in half a century, and today a third of the world's assessed fisheries are pressured beyond their biological limits.

In 2022, Peru, Chile, and Ecuador together accounted for 10.3% of global fish production.[1][4] These countries not only contribute to global fish production, but fisheries also play a crucial role in food security, employment, and foreign exchange generation in the three countries' economies. However, recent years have seen an increase in fishing efforts in these countries, coinciding with a significant decline in their fish stocks.

- In Peru, seven coastal species have shown signs of overexploitation and subsequent collapse. The Humboldt endemic species of catches shrinking more than 99% (Castagnino et al. 2023).[2][5] Similarly, deep-sea fisheries of great economic and social importance, such as mahi mahi and giant squid in Peru, have been classified as "exploited" fisheries by the Peruvian government; however, in recent fishing seasons both species have been fished above the maximum sustainable yield and the established global quotas.
- In Chile, the Undersecretary of Fisheries and Aquaculture published in 2023[3][6] the status of the main Chilean fisheries, stating that 53% of Chile's main fisheries are in a state of overexploitation or collapsed.[4][7]
- In Ecuador, the Public Institute for Aquaculture and Fisheries Research (IPIAP) evaluates 12 main species, of which approximately 33% of the main targeted species are at risk of overfishing, have significantly reduced biomass, or have collapsed. Assessments show that titi shrimp (*Protrachypene precipua*) and several small pelagic fish species, such as frigate tuna (*Auxis spp*.) and chub mackerel (*Scomber japonicus*), are under significant pressure, indicating a risk of overexploitation or overfishing. Assessed demersal resources, such as Pacific bearded brotula (*Brotula clarkae*), have

shown a state of continuous overexploitation and collapse in the past, indicating the need for stricter management measures to ensure the long-term sustainability of these fisheries.

IUU fishing is one of the greatest threats to marine ecosystems, and accounts for 20 percent of the world catch and up to 50 percent in some areas (Widjaja et al. 2020). IUU fishing includes fishing without the necessary permits, out of season, or in protected areas; using prohibited fishing gear; not respecting regulations; fishing above the maximum sustainable yield (MSY); and not declaring or giving false information about the species caught. It also includes practices such as illegal trade between bordering countries, such as the trade in sharks between Peru and Ecuador without the appropriate CITES permits and certificates of origin (Hernandez 2021).

The three main drivers of IUU fishing are (1) economic incentives that make IUU fishing a low risk, high profit activity; (2) weak governance that fails to enact or live up to fisheries management regulations; and (3) weak enforcement of fishing regulations caused by lack of political will, limited enforcement capacity, and corruption (Widjaja et al. 2020).

Globally, about 1 in 5 fish that reach the table comes from illegal fishing. This situation results in the annual loss of between 11 and 26 million tons of fish (Agnew et al. 2009), generating economic losses of up to 50 million dollars (Sumaila et al. 2020). Similarly, countries affected by IUU fishing face difficulties in accessing international markets due to concerns about sustainability and legality, which can represent a significant loss of economic income and trade opportunities. The main international markets, such as the European Union (EU), the United States (USA), and Japan, have implemented strict requirements to prevent the entry of illegal imports and ensure the traceability of fishery products. EU Regulation (EC) 1005/2008, in force since 2010, requests that fishery products imported into the EU have catch certification that ensures compliance with national and international regulations and establishes a system of sanctions based on warning cards. In the U.S., the Seafood Import Monitoring Program (SIMP), in force since 2018, requires importers to record key data on seafood products from their origin to their entry into the country, covering 13 priority species vulnerable to IUU fishing such as tuna, shark, mahi mahi, and shrimp. Japan applies catch documentation system (CDS) requirements and regulates trade in marine products through a pre-confirmation process, including species protected by international bodies.

Continued IUU fishing poses a significant threat to marine ecosystems and global food security. It depletes fish stocks, destroys habitats, reduces the value of fisheries, jeopardizes species extinction, disrupts marine food webs, increases food security risks, and undermines the social cohesion of coastal communities (Widjaja et al. 2020).

Given the complex nature and scale of IUU fishing, a comprehensive global and regional system of enforcement and compliance is needed to address this issue. While there are many global efforts to curb IUU fishing, it is important to promote regional efforts in shared ecosystems. Governments must initiate and strengthen actions, including regulating their own coastal fisheries, enacting regulations at ports of entry, ratifying international agreements, and employing new tracking and transparency technologies (Widjaja et al. 2020).

Electronic catch documentation and traceability systems (eCDTs) are one of the main strategies globally to combat IUU fishing, transforming the fisheries sector by improving the accuracy, speed, and accessibility of data critical to fisheries management and decision-making, identifying and preventing illegal and mislabeled products from entering national and international markets, and strengthening MCS systems.

eCDT systems are any type of digital system that facilitates the collection, analysis, exchange, and storage of key data (ecological, social, and economic) throughout the entire supply chain, from resource extraction at sea to the final consumer. These systems can be composed of one or more technologies, such as satellite tracking equipment (VMS/AIS/GPS), electronic logs, on-board monitoring cameras, databases, web platforms, mobile applications, and others.

Although these tools have been commonly used to ensure the safety and health of fishery products (PTEPA 2012), they are also essential tools in the fight against unsustainable fishing practices (Naaum and Hanne 2016) as they improve the electronic verification of the legality and origin of fishery products, improving transparency and MCS in the supply chain and generating key information for the sustainable management of fisheries. Likewise, these systems not only support compliance with international regulations, but also strengthen confidence for market actors that have an interest in sourcing more sustainable and responsible fisheries.

Chile, Ecuador and Peru, are part of the Permanent Commission for the South Pacific (CPPS), have demonstrated their interest in regional cooperation and coordination since 1945 and have ratified several international and regional agreements (see table 1).

[1] https://openknowledge.fao.org/items/fc569ba1-b7d4-42fc-96ae-aef050d11d37
[2] https://afspubs.onlinelibrary.wiley.com/doi/10.1002/mcf2.10272
[3] https://www.subpesca.cl/portal/618/articles-121344_recurso_1.pdf
[4] https://www.subpesca.cl/portal/618/articles-121344_recurso_1.pdfhttps://www.subpesca.cl/portal/618/articles-121344_recurso_1.pdf

Table 1. Membership of relevant international and regional agreements

	Chile	Ecuador	Peru
International agreements			
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (London Convention)	1977		2003
Protocol to the London Convention 1996	2011		2019
International Convention for the Prevention of Pollution from Ships 1973 (MARPOL) – Annex I-V	1995	1990	1983
MARPOL Protocol – Annex VI	2007		2014
International Convention on Maritime Search and Rescue 1979 (SAR Convention)	1985	1988	1988
United Nations Convention on the Law of the Sea 1982 (UNCLOS)	1997	2012	
Convention on Biological Diversity 1992 (CBD)	1994	1993	1993
Food and Agriculture Organization (FAO) Compliance Agreement 1993	2004		2001
Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks 1995 (United Nations Fish Stock Agreement; UNFSA)	2016	2016	
Port State Measures Agreement 2009 (PSMA)	2012	2019	2017
Regional agreements			
Inter-American Treaty of Reciprocal Assistance 1947	1945	1950	1950
Declaration on the Maritime Zone 1952 (Santiago Declaration)	1952	1952	1952
Convention on Monitoring and Control Measures of the Maritime Zones of the Signatory Countries 1954	1954	1964	1955
Convention for the Protection of the Marine Environment and Coastal Area of the Southeast Pacific 1981 (Lima Convention)	1986	1983	1988
Convention for the Strengthening of the Inter-American Tropical Tuna Commission 2003 (Antigua Convention)	*	2000	2018
Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean 2009 (SPRFMO Convention)	2012	2015	2016

Green: ratified; yellow: signed, but not ratified; red: not signed or ratified. *Cooperating non-contracting party

Source: Modified from Cremers et al. 2020

The national laws that enable progress towards sustainable fisheries are detailed below:

In **Chile**, the General Law of Fisheries and Aquaculture (Law No. 18,892 of 1991) establishes a comprehensive regulatory framework for the conservation and sustainable use of hydrobiological resources, promoting a precautionary and ecosystem-based approach to fisheries regulation. The National Action Plan to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PAN-IUU), implemented by Supreme Decree No. 267 in 2005, reinforces this legislation by addressing illegal fishing and promoting more effective fisheries management.

The proposed project will align with these regulatory frameworks by introducing advanced electronic traceability systems to optimize monitoring and control of fishing activities and facilitate accurate data collection for decision-making thereby fighting against IUU fishing. The project supports the goals of the National Biodiversity Strategy 2017-2030, contributing to the conservation and sustainable use of marine biodiversity, and complements the Plan for the Recovery, Conservation and Management of Aquatic Species (PRECOP) through responsible practices and technologies that seek to protect vulnerable species.

The Fisheries and Fisheries Development Law of **Ecuador** (Official Registry Supplement 389, 2020) establishes a comprehensive regulatory framework to promote the sustainable development of aquaculture and fishing activities, from extraction to commercialization, with a focus on the conservation and responsible use of hydrobiological resources. Article 35 of the law requires that the National Plan for Animal Health in Aquaculture and the National Plan for Sanitary Control include surveillance, registration, and traceability protocols throughout the entire production chain, while Article 36 specifies the need for transparent mechanisms to ensure the traceability and legality of products. The National Action Plan to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PAN-IUU), based on paragraph 25 of the International Plan of Action for IUU Fishing, addresses illegal fishing through four fundamental pillars: strengthening sanctions, improving the Monitoring, Control and Surveillance (MCS) system, national coordination against IUU fishing, and cooperation with competent international organizations.

This project will help advance these objectives through the implementation of eCDT systems that optimize monitoring and control at all stages of the production chain. Through harmonization of national systems, the project will improve transparency and regulatory compliance. By strengthening regional cooperation and the exchange of good practices, it will promote effective collaboration to address common challenges. Finally, by training private sector (including artisanal fisheries) and stakeholders, the project will ensure that all actors in the sector are prepared to meet sustainability and traceability standards, thus contributing to the sustainable and responsible management of marine resources in Ecuador.

The General Fisheries Law of **Peru**, enacted through Legislative Decree No. 25977 in 1992, establishes the regulatory framework for fishing activities in the country, promoting the rational and sustainable use of hydrobiological resources. The law emphasizes the need to implement fishery management measures along with monitoring, control, and surveillance actions to ensure the sustainability of fisheries.

The proposed project aligns with these objectives by introducing eCDT systems which enable more efficient and transparent monitoring, optimizing regulatory compliance and strengthening control mechanisms, which contributes to reducing illegal, unreported, and unregulated (IUU) fishing.

The three countries have implemented the PSMA (see table 1), to prevent, deter, and eliminate IUU fishing. This international agreement allows the countries to align with global regulations and improve its tools to restrict access to national ports for vessels involved in illegal fishing activities. The project reinforces this strategy by integrating advanced technologies for vessel monitoring, thus supporting the control and sustainability of national fisheries and fulfilling Peru's international commitments in the fight against illegal fishing.

In Ecuador, Peru, and Chile, implementation of eCDT systems has made significant progress in some specific fisheries, but there are still areas to improve regarding scale, interoperability, replication, and

institutionalization of these efforts. Appendix 1 shows the current baseline regarding the implementation of traceability systems in each country.

- In Ecuador the tuna fleet is subject to on-board monitoring by scientific observers, and the longline fleet is in the process of reaching 20% catch monitoring. In addition, the Integrated System of Aquaculture and Fisheries (SIAP) centralizes data on fishing and aquaculture activities and is integrating applications such as the Marking System for the Identification and Control of Artisanal Titi Shrimp Nets (SIMICRAP). However, the traceability system faces challenges in fully integrating and scaling up to all the fisheries in the value chain.
- In Peru, the Fisheries and Aquaculture Traceability System (SITRAPESCA) automates the collection of data throughout the supply chain. The design and initial implementation of this tool has been focused on the industrial anchovy fishery. Through electronic logs, the system records 100% of the catches destined for Indirect Human Consumption (CHI). However, the implementation of SITRAPESCA has not yet been extended to the smaller-scale and artisanal fishing fleet, thus limiting its coverage and effectiveness in the broader, more complex, and less regulated fishing sector.
- In Chile, the national traceability system, supervised by SERNAPESCA, requires the online declaration of fishery and aquaculture products. This system requires 100% industrial vessels, regardless of gear type, to maintain electronic logs of their estimated catch. However, this requirement has not yet been extended to the artisanal fishing fleet, which limits the coverage and effectiveness of the traceability system in the country.

The fight against IUU fishing has intensified through various international initiatives and regulations to promote fisheries sustainability. FAO has developed and promoted a series of documents and guidelines to address this problem, such as the Code of Conduct for Responsible Fisheries and the International Plan of Action to Prevent, Deter and Eliminate Illegal Fishing (IUU-IPA). In addition, the Asia-Pacific Economic Cooperation (APEC) released the 2020-2025 Roadmap that establishes priority actions to address the adverse effects of IUU fishing that include traceability and MCS of fisheries-related activities and increased coordination of APEC economies.

Globally, the United Nations Environment Programme (UNEP) contributes to the development of international policies, capacity-building, research, financing, and partnerships to combat IUU fishing and promote sustainable fisheries management. The UNEP Financing Initiative has formed a partner coalition made of the FAIRR Initiative, WWF US, Planet Tracker and the World Benchmarking Alliance as a Collaborative Investor Engagement to encourage major seafood companies to develop and implement full-chain, digital and interoperable traceability systems. The UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) is working globally on the definition of "destructive fishing" which will meaningfully support countries to monitor and reduce destructive fishing practices.

In the region, WWF has played a key role in promoting the design and use of eCDT systems, collaborating with authorities, artisanal fishing communities, and industries to implement electronic fishing logs, install on-board cameras, digitize administrative procedures, use mobile applications to record their activities, and more. In 2017 WWF co-founded the Global Dialogue on Seafood Traceability (GDST), an international standard for digital, interoperable global seafood traceability, but so far has not yet been implemented in the region.

Despite the multiple benefits of implementing eCDT systems to combat IUU fishing, there are still several challenges and barriers that do not allow for their scaling and replicability, which are crucial to address. Barriers can be grouped into: (a) institutional barriers, (b) cultural and educational barriers, (c) technological barriers, (d) lack of standardization of supply chains, and (e) gender inequality.

Institutional barriers

a. a. **Regulatory framework:** The absence of clear, coherent requirements and published standards for the collection and exchange of information may limit the effectiveness of eCDT systems and create opportunities for mislabeling and fraud (Helyar et al. 2014; European Commission 2000). The complexity and variability of fisheries regulations at the national and international levels can also be a significant obstacle, as regulations vary considerably between countries and regions, creating challenges for actors in the fisheries sector. This regulatory disparity can make it difficult to implement harmonized traceability systems, as legal requirements can be confusing and contradictory for fishers and fishing companies operating in different jurisdictions (Bailey, Bush, and Oosterveer 2015).

b. **Coordination:** Insufficient coordination and collaboration at both national and regional levels complicates standardization and data sharing (Kelleher and DeYoung 2017) and prevents effective integration, resulting in duplication of effort, gaps in oversight, and loss of critical data (Garcia and Rosenberg 2010). The lack of a common language and the use of different names for key elements contribute to this fragmentation, making it difficult to create a unified traceability platform.

   At the regional level, differences in policies, regulations, and approaches between countries make it difficult to articulate the traceability of fishery products (Pomeroy et al. 2018; FAO 2016; Hatcher et al.2019; Cox et al. 2020). The lack of technological interoperability between government databases and traceability platforms also limits the ability to track seafood products along the entire supply chain (OECD 2018). This not only affects transparency and accountability, but also increases operational costs and administrative burdens for actors in the fisheries sector. To overcome these barriers, it is essential to strengthen regional cooperation efforts and develop common agreements and standards that facilitate a more integrated and effective implementation of traceability systems along borders (Harris et al. 2021).

c. **Document management and manual processes:** The dependence on manual procedures and physical documents makes it difficult to accurately verify and update information between different databases and opens the door to corruption (Bailey et al. 2016; OECD 2018).

d. **Limited resources for supervision and control:** Inadequate supervision and control, due to limited resources, severely compromise the effectiveness of fisheries management systems. Weak MCS systems create an environment conducive to IUU fishing. Without proper oversight, compliance with regulations becomes tenuous, hindering the ability to verify fishing activities and facilitating the prevalence of illegal, unreported, and unregulated (IUU) fishing practices (Cunningham et al. 2014; Sampson and Kavanagh 2011). This not only undermines the efficacy of traceability systems, which rely on accurate catch data and verification, but also directly contributes to the persistence of IUU fishing.

Cultural and educational barriers

a. **Resistance to change:** Fishers and fishing companies used to traditional methods may be reluctant to adopt new technologies due to a lack of understanding of their benefits and fear of the unknown (Grafton and Kompas 2005). This resistance is compounded by a lack of financial resources to acquire the necessary equipment and make other investments (Ainsworth and Sumaila 2008). Hardt, Flett, and Howell (2017) pointed out that incentives to demonstrate the value of digital traceability are often poorly defined, making it difficult to accept. Graaf et al. (2011) also highlight that the absence of incentives for small-scale fishers to collect data and improve transparency on fishing vessels constitutes an additional barrier. A pilot project conducted by Yayasan Masyarakat Dan Perikanan Indonesia (MPDI) and Fair-Trade USA found that Indonesian fishers resisted using electronic logs, arguing that they disrupt post-harvest activity and do not perceive value in the data collected (Doddema et al. 2020). In addition, Fujita et al. (2018) point out that electronic logging devices can

reveal sensitive information about fishing locations and activities, which can be perceived as an invasion of privacy by fishers (Probst 2019).

Another major problem is the use of data for purposes other than fisheries monitoring objectives (Michelin et al. 2020). Bradley et al. (2019) indicate that some fishers distrust the government and are apprehensive about information management initiatives, which adds complexity to the implementation of traceability systems.

b. **Lack of training and education:** This can limit the ability of fisheries sector actors to use systems effectively (Hernández et al. 2019) and contributes to the resistance to adopting new practices (Cunningham et al. 2014). Insufficient education in sustainable fishing practices and in the preservation of marine ecosystems perpetuates the lack of interest and adoption of technologies necessary for responsible fisheries (Pita et al. 2015). The absence of specific educational programs and ongoing training are crucial to overcome these barriers and ensure successful implementation of traceability systems (Kelleher and DeYoung, 2017).

Technological barriers

Poor infrastructure in coastal areas includes problems such as lack of access to modern technologies, limited connectivity, poor cellular coverage, and poor internet reception and electricity supply. These factors create additional obstacles to the implementation of electronic traceability systems (Duggan and Kochen 2016; Fujita et al. 2018).

Lack of standardization of supply chains

Fisheries supply chains range from artisanal fishers to large processing companies, each with different practices and technologies (FAO 2018). This variability makes it difficult to create a uniform and efficient traceability system that can be effectively integrated throughout the supply chain and interoperate with other traceability systems (Liu et al. 2020; Cullen et al. 2019).

Gender inequality

In general, in all three countries, men are mainly engaged in harvesting activities, while women are involved in other aspects of the fishing industry, such as processing, trade, and community management. Women's roles often go unnoticed, leading to a lack of formal recognition and undervaluation of their economic contribution to the sector. Persistent gender norms and beliefs, as well as traditional roles and responsibilities assigned to women, may limit their participation in project-related activities. Inequalities in access to and control over the resources needed to participate in these initiatives, as well as decision making and governance, also pose a challenge (FAO 2020; Rao et al. 2021; Smith et al. 2021).

Justification

Effective monitoring, control and surveillance (MCS) of maritime activities is critical for the success of marine conservation and management. MCS encompasses a wide range of tools, technologies and policies that can be used in a variety of contexts to promote compliance, increase transparency and contribute to the effective conservation and sustainable use of marine resources (Cremers et al. 2020).

The project will strengthen existing information management systems, enhance the interoperability of databases and systems, harmonize coherence among the countries' policies and regulations and promote regional joint approaches in eCDTs, and strengthen the commitment and capacities of key value chain actors and public sector organizations for the transition to digitalization.

With this, the project seeks to improve the MCS of fishing activities, combat the risks of corruption and IUU fishing, strengthen trade relations and access to international markets that are demanding legality and sustainability, and provide key data (ecological, social, and economic) in each link of the chain with greater precision, speed, and accessibility for better decision-making in fisheries management.

This project will use the lessons learned and results of past GEF projects in Peru, Chile and Ecuador, such as Humboldt I[1], Humboldt 2[2], IFC,[3] and Beyond 30x30[4] which have promoted collaboration between governments, civil society, and private sector actors for sustainable fishing practices. These projects have included some specific activities to improve traceability and MCS, however, efforts have fallen short despite the fact that eCDTs have great potential to combat IUU fishing and promote sustainable fisheries. For example, the CFI project contributed to the implementation of electronic monitoring cameras for the mahi mahi fishery in Ecuador and the implementation of electronic systems for the issuance of certificates of origin and catch in a region of Peru.

In the case of the Humboldt II, traceability systems are being implemented to promote the quality and safety of fishery products in benthic resources. Furthermore, the Beyond 30x30 initiative aims to enhance regional governance and financial sustainability in the Eastern Tropical Pacific, supporting the development of financial mechanisms for monitoring, control, and surveillance (MCS) programs. In addition, according to the Transzonal Ecosystem-Based Diagnostic Analysis (TEDA) of the Humboldt Current Large Marine Ecosystem (HCLME), the fisheries sector faces inappropriate exploitation of resources and anthropogenic disturbances in marine habitat. This has led to a reduction in biomass and catches, altering the population structure of exploited resources. As a result, there is a decline in net income, employment, and the provision of fishery resources for seafood sovereignty and food security. Factors contributing to this problem include excessive exploitation of fishery resources that exceeds appropriate levels, illegal fishing practices, species substitution, inefficient supply chains, and inadequate traceability of products. Among the barriers are insufficient monitoring and control capacity, coupled with limited punitive measures. In addition, inadequate financial resources hinder the strengthening of monitoring and control systems within the exclusive economic zone, and the scarcity of information on hydrobiological resources further exacerbates the challenges of the sector.

This project addresses a real need with a compelling value, which is key to ensure long-term sustainability and future scaling. The early engagement with relevant stakeholders allows to ensure their support and alignment of the project with broader needs increasing the possibility of durability. Additionally, the project considers pilots to test feasibility, using technology and data to optimize processes and measure impact. Capacity building and training are also major components which will allow to maintain the project long-term and develop strong partnerships with key stakeholders for additional support. The project also aligns with, and helps promote coherence within, national and/or regional policies to ensure institutional backing, and document processes for easy replication in other contexts. Finally, the implementation of a robust monitoring and evaluation system to track progress, adapt as needed, and facilitate scaling when the time is right.

The project will foster the involvement of various government agencies and key stakeholders to promote policy coherence and ensure the effective implementation of actions based on the utilization of eCDT systems. Fisheries authorities (PRODUCE, MINAM, SERNAPESCA, and VMAP) and Coast Guard agencies (DICAPI, DIRECTEMAR, and COGUAR) will play a fundamental role in the project. In the case of fisheries authorities, the information generated by this project will allow them to establish and strengthen regulatory frameworks and standards that promote transparency in fishing and maritime activities. The information generated through eCDT systems will allow them to monitor fishing activities in real time and detect illegal practices more quickly and effectively. Coast Guard agencies, such as DICAPI and DIRECTEMAR, will use this data to carry out interventions on the high seas, track suspicious vessels, and ensure compliance with regulations, thereby strengthening maritime enforcement efforts in the countries. Meanwhile, judicial authorities can use this information as solid evidence in cases of illegal, unregulated, and unreported fishing, which could expedite judicial processes.

Scientific entities, such as IMARPE, IPIAP, and IFOP, play a fundamental role in adapting traceability systems to the specific needs of fisheries research. These entities are actively involved in monitoring and evaluating the data obtained, ensuring the effectiveness and reliability of the information collected. The information collected through eCDT systems will allow for a more accurate assessment of fish populations, providing a solid basis for making informed recommendations to fisheries authorities to establish management measures appropriate for each fishery. This integration of data into research and monitoring programs will allow for a better understanding of the dynamics of fisheries and marine ecosystems, improving the quality of research and the development of effective conservation strategies.

With respect to regional fisheries management organizations, IATTC and SPRFMO, the adoption of eCDT systems has a positive impact on at least five of the seven fundamental pillars of the IATTC in the scientific aspect. These include the assessment and mitigation of the ecological impacts of fishing and benefit from improved data and monitoring. Understanding the interactions between the environment, the ecosystem, and fishing becomes more accurate with data from eCDT systems. Within the SPRFMO, traceability aligns closely with its Conservation and Management Measures. These measures include aspects such as the creation of lists of vessels suspected of engaging in illegal fishing activities, the maintenance of records of authorized vessels, the implementation of robust Vessel Monitoring Systems for tracking, and the establishment of compliance and monitoring schemes. eCDT systems help ensure information, transparency, and accountability in fishing activities and set standards for vessels operating within the SPRFMO Convention Area.

The project will contribute to three Global Environmental Benefits (GEB)[5]8:

Conservation and sustainable use of marine biodiversity in a productive and megadiverse seascape: The project will contribute to the fight against IUU fishing and overfishing through improving fisheries MSC systems, reduce corruption risks through digitizing administrative procedures and databases, improving the accuracy, speed, and accessibility of critical data necessary for decision making and sustainable fishery management.

Cooperation between multiple States and institutions to combat a main threat in international waters: The project will strengthen regional cooperation mechanisms to harmonize eCDT systems and strengthen national and international regulations and, inter-institutional coordination to fight IUU fishing.

Greater resilience of ecosystems: The implementation of eCDT systems will generate a greater volume, quality, and exchange of fisheries data, which will allow better decisions to be made for fisheries management in the face of the challenges of climate change. This will improve fishery resilience, guaranteeing the sector's long-term health and productivity.

Stakeholder roles

For the project to be a success, it will involve coordinated work between several stakeholders, namely:

Governments: The fisheries and environmental authorities (PRODUCE, MINAM, SERNAPESCA, and VMAP) will play a fundamental role in the project, assuming the responsibility of establishing and strengthening the regulatory frameworks and standards that promote transparency in fishing activities. Their main task will include the design and implementation of regulations that require the adoption of eCDT systems. Government agencies will lead the organization of training initiatives and capacity building programs, ensuring smooth implementation of traceability systems. In addition, these partners will drive regional collaboration, working together to harmonize regulatory frameworks, align policies,

and monitor compliance with these regulations. Finally, efforts will be made during the PPG to consider how to involve additional government stakeholders with relevant remits, especially those (like treasuries or economic ministries and ministries of foreign affairs) whose policies could counter or support the efforts of this project (to promote policy coherence) and who supports or leads legal enforcement (to support the link in the theory of change connecting eCDT to reduced IUU fishing).

Scientific entities: Scientific entities, such as IMARPE, IPIAP and IFOP, play a critical role in the design and implementation of eCDT systems by providing technical support and advice based on scientific evidence. Their involvement covers several critical areas, starting with technical support to adapt traceability systems to specific research needs in fisheries. These entities are actively involved in the monitoring and evaluation of the data obtained and will engage in capacity building programs by facilitating workshops and training sessions, thereby improving the skills and knowledge of actors involved in fisheries.

Regional fisheries management organizations: Regional organizations, specifically SPRFMO and IATTC, play roles in the supervision and regulation of fishing activities related to Chilean jack mackerel, squid, and tuna. Their vast experience and track record of involvement in promoting sustainable fishing practices make them key players in the project. The implementation of traceability systems offers significant benefits to the IATTC and SPRFMO. For the IATTC, the adoption of eCDT systems positively impacts at least five of its seven fundamental pillars on the scientific side, and within the SPRFMO, traceability aligns closely with its Management and Conservation Measures.

Private sector: The private sector, comprised of cooperatives or associations that bring together several key processing and exporting companies (such as PMA, CAPECAL, Tunacons, Conservation Mahi-Mahi), as well as U.S. seafood buyers (retailers, foodservice, and others), will play a role in the implementation and adoption of eCDT systems. These actors will not only provide technical expertise and financial support but will also promote traceability systems alignment with industry standards. Processing plants will be able to use the eCDT systems to access the data needed to ensure the legal origin and quality of the product, as well as to comply with the data reporting requirements set by various importing countries, companies, and certification bodies.

Fisheries organizations: Artisanal fisheries organizations will play a crucial role in the project as primary data providers. Their primary responsibility will be to record and document fishing activities in an accurate and timely manner, ensuring compliance with reporting protocols and promoting the adoption of eCDT systems. This system allows the collection, storage, sharing, and visualization of data in real time, which offers multiple benefits.

[1] Project Towards the Ecosystem Management of the Large Marine Ecosystem of the Humboldt Current (GEF - 4) implemented in Chile and Peru
[2] Catalyst for the implementation of a Strategic Action Programme for the Sustainable Management of Shared Living Marine Resources in the Humboldt Current System (HCS) (GEF - 6), a project implemented in Chile and Peru
[3] Coastal Fisheries Initiative (PROGRAM) Project (GEF-6) implemented in Ecuador, Peru, Indonesia, Cape Verde, Senegal and Côte d'Ivoire
[4] https://www.thegef.org/projects-operations/projects/11267
[5] https://www.thegef.org/documents/global-environmental-benefits

B. PROJECT DESCRIPTION

Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

The project supports the principles of the United Nations Convention on the Law of the Sea (UNCLOS)[1][9] and the United Nations Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks[2][10], which establishes a framework for the conservation and management of fish stocks that cross national boundaries or migrate over vast distances, ratified by Chile and Ecuador.

The project process will be highly participatory, gender responsive and inclusive, collaborative, fully involving all key stakeholder groups (governments, scientific entities, regional fisheries management organizations, private sector and fisheries organizations, as described in Section A).

The project seeks to address illegal, unreported, and unregulated (IUU) fishing, which is one of the main threats to marine ecosystems as it contributes to overfishing, increases biodiversity loss, threatens food security, and undermines the income and employment of vulnerable communities. The main enablers of IUU fishing are insufficient capacity for monitoring, control, and surveillance (MCS) of fisheries that facilitate informality and non-compliance with regulations, inadequate traceability of seafood that perpetuates the entry of illegal products, lack of timely and accurate data available for informed decision-making, paper-based information management systems that may be vulnerable to corruption risks, and weak regulatory frameworks at regional, national, and subnational levels.

Based on the above, through a consultative process, a preliminary Problem Tree (Figure 1) was developed to identify the main effects and causes of IUU fishing and supports the choice of strategy for promoting and strengthening eCDT systems in the fisheries of Ecuador, Peru, and Chile. The Problem Tree will be further defined at PPG stage.

[1] https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf
[2] https://www.un.org/oceancapacity/unfsa

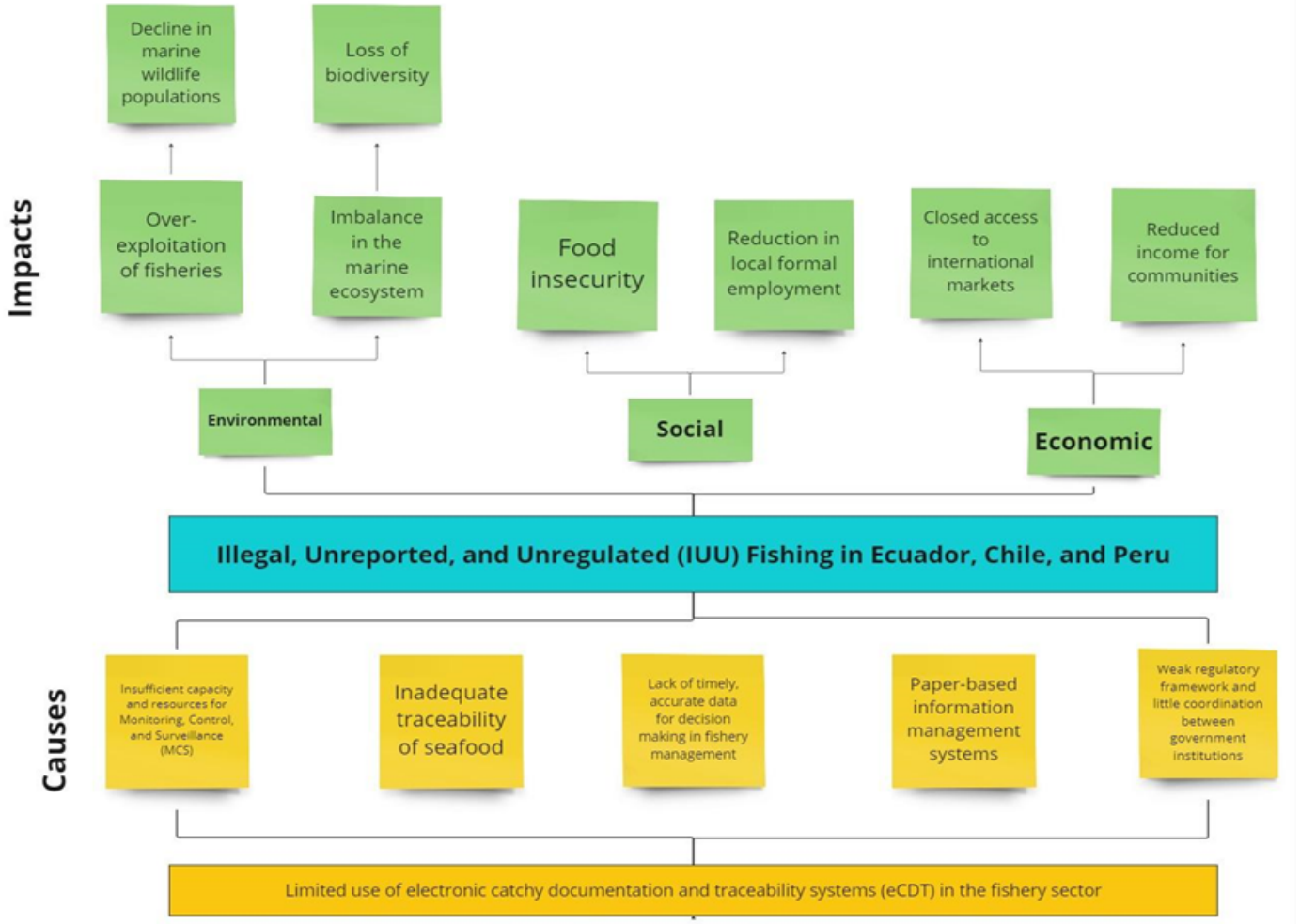

Figure 1. Problem Tree

The project proposes that **IF** eCDT systems in the fisheries sector of Peru, Chile, and Ecuador are improved through the strengthening of government capacities and national regulatory frameworks, following international standards and promoting multilevel and multi-stakeholder coordination and collaboration and empowering and involving the sector's value chain actors; **THEN**, the MCS of fisheries will be improved, as well as the accuracy, speed, and accessibility of critical data that are necessary for fisheries management and decision-making at the national and regional levels; and **THEN**, corruption and IUU fishing that contribute to the overexploitation of species will be reduced (see Theory of Change diagram in figure 2).

In each country, the project will seek to improve and innovate current information management systems, enhance the interoperability of databases and systems, work towards the harmonization of regulations and regional joint approaches in eCDT systems, and strengthen the commitment and capacities of key value chain actors and public sector organizations in transition towards the digitalization of fisheries. It will also foster the sharing of lessons learned and enhance knowledge and resource capacity for more aligned and effective efforts in support of the long-term sustainability of the region's marine ecosystems. This project will also address some barriers to system interconnectivity, such as the widespread lack of standardized key data elements (KDEs), standardized data storage protocols, and communications protocols.

The project will enhance enforcement efforts by building capacity, establishing regional information-sharing mechanisms, and fostering cooperation among relevant stakeholders. This will enable actors responsible for

enforcing national regulations to learn from best practices in other countries and develop collaborative strategies to combat IUU fishing on a regional scale.

Key assumptions:

The effective implementation and long-term sustainability of the project will depend on several key assumptions and enabling conditions.

Inter-institutional commitment and coordination: The project will have a strong commitment and coordination between fisheries authorities, scientific entities, regional organizations, the private sector, and artisanal fishing organizations. The governments of Peru, Ecuador, and Chile have committed to promoting and scaling up the use of eCDT systems in their fisheries, in accordance with international standards such as those of the Global Dialogue on Seafood Traceability (GDST). This commitment will be supported by regulatory frameworks, guidelines, and agreements that facilitate the implementation and compliance of the eCDT systems and information sharing.

Adequate technical and financial capacity: The project will have sufficient technical and financial capacity to adopt and implement the eCDT systems. Governments will have the financial resources to hire the minimum staff necessary for MCS. All actors involved, from fishers to processing companies, have the appropriate technical training and resources to use and maintain traceability systems.

Political stability and policy support: The project will have a stable policy environment and a strong regulatory framework for the implementation of eCDT systems. It is assumed that the governments of the participating countries will maintain and strengthen their commitment to the regulation and supervision of the fisheries sector, enacting clear and consistent regulations that support the adoption and enforcement of these systems and coordinating at the regional level.

Private sector involvement and commitment: There will be involvement and commitment from the private sector, especially processing and exporting companies and associated unions. The growing demand for sustainable and legal seafood products in international markets is a key incentive for the private sector to adopt eCDT systems.

Participation and empowerment of artisanal fisheries organizations: Artisanal fisheries organizations play a crucial role as primary data providers. With the right support in terms of training and resources, these organizations will be willing to actively participate in eCDT implementation. There will also be clear incentives and tangible benefits derived from the implementation of the eCDT.

Technological infrastructure and internet access: The effective operation of eCDT systems depends on the availability of adequate technological infrastructure and reliable internet access, especially in remote areas where many fishing communities operate. Governments and project partners are expected to continue to invest in improving the connectivity and technological infrastructure needed to support the continuous operation of traceability systems.

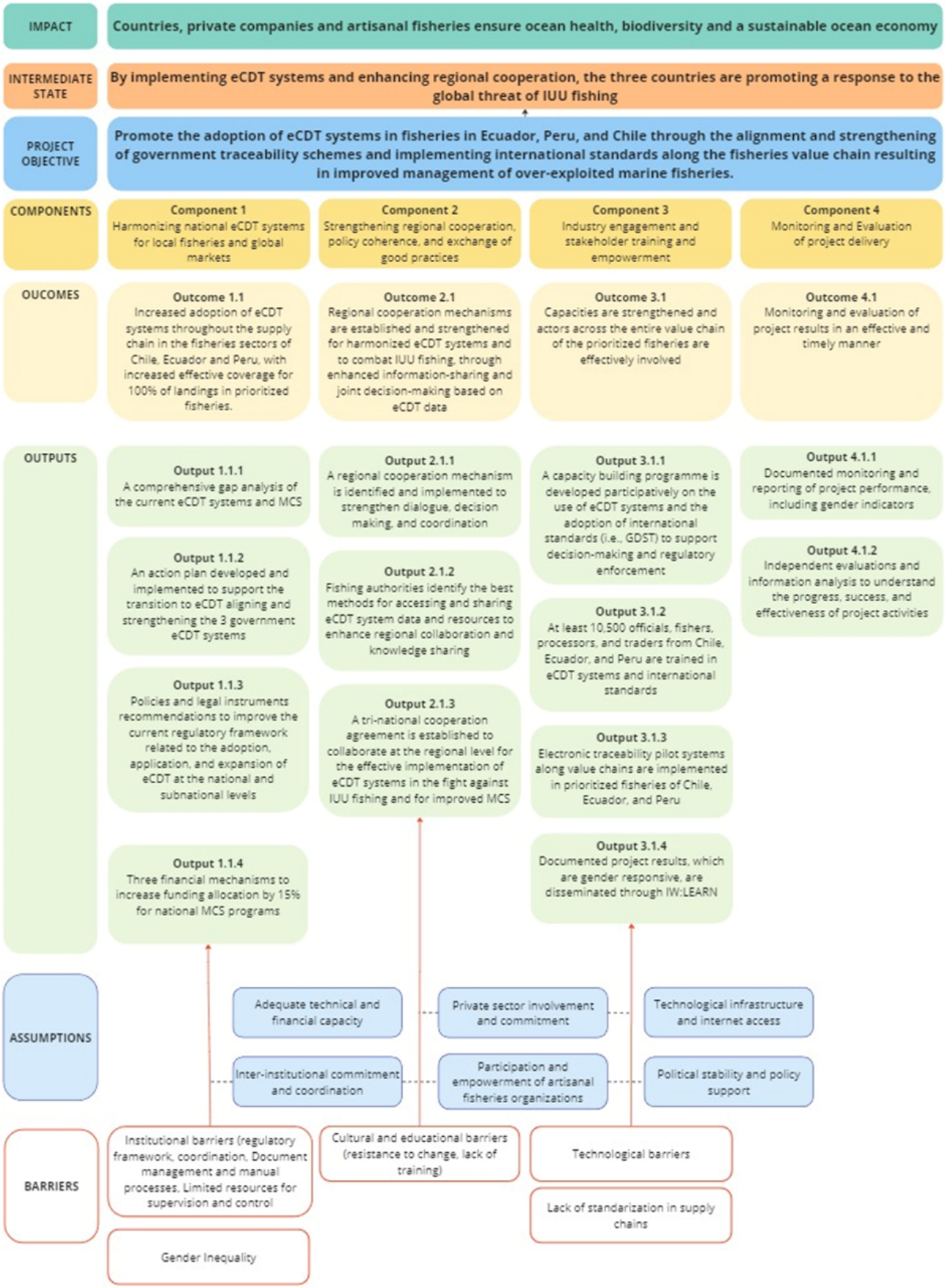
IMPACT
Countries, private companies and artisanal fisheries ensure ocean health, biodiversity and a sustainable ocean economy
INTERMEDIATE STATE
By implementing eCDT systems and enhancing regional cooperation, the three countries are promoting a response to the global threat of IUU fishing
PROJECT OBJECTIVE
Promote the adoption of eCDT systems in fisheries in Ecuador, Peru, and Chile through the alignment and strengthening of government traceability schemes and implementing international standards along the fisheries value chain resulting in improved management of over-exploited marine fisheries.
COMPONENTS
Component 1
Harmonizing national eCDT systems for local fisheries and global markets
Component 2
Strengthening regional cooperation, policy coherence, and exchange of good practices
Component 3
Industry engagement and stakeholder training and empowerment
Component 4
Monitoring and Evaluation of project delivery
OUCOMES
Outcome 1.1
Increased adoption of eCDT systems throughout the supply chain in the fisheries sectors of Chile, Ecuador and Peru, with increased effective coverage for 100% of landings in prioritized fisheries.
Outcome 2.1
Regional cooperation mechanisms are established and strengthened for harmonized eCDT systems and to combat IUU fishing, through enhanced information-sharing and joint decision-making based on eCDT data
Outcome 3.1
Capacities are strengthened and actors across the entire value chain of the prioritized fisheries are effectively involved
Outcome 4.1
Monitoring and evaluation of project results in an effective and timely manner
OUTPUTS
Output 1.1.1
A comprehensive gap analysis of the current eCDT systems and MCS
Output 1.1.2
An action plan developed and implemented to support the transition to eCDT aligning and strengthening the 3 government eCDT systems
Output 1.1.3
Policies and legal instruments recommendations to improve the current regulatory framework related to the adoption, application, and expansion of eCDT at the national and subnational levels
Output 1.1.4
Three financial mechanisms to increase funding allocation by 15% for national MCS programs
Output 2.1.1
A regional cooperation mechanism is identified and implemented to strengthen dialogue, decision making, and coordination
Output 2.1.2
Fishing authorities identify the best methods for accessing and sharing eCDT system data and resources to enhance regional collaboration and knowledge sharing
Output 2.1.3
A tri-national cooperation agreement is established to collaborate at the regional level for the effective implementation of eCDT systems in the fight against IUU fishing and for improved MCS
Output 3.1.1
A capacity building programme is developed participatively on the use of eCDT systems and the adoption of international standards (i.e., GDST) to support decision-making and regulatory enforcement
Output 3.1.2
At least 10,500 officials, fishers, processors, and traders from Chile, Ecuador, and Peru are trained in eCDT systems and international standards
Output 3.1.3
Electronic traceability pilot systems along value chains are implemented in prioritized fisheries of Chile, Ecuador, and Peru
Output 3.1.4
Documented project results, which are gender responsive, are disseminated through IW:LEARN
Output 4.1.1
Documented monitoring and reporting of project performance, including gender indicators
Output 4.1.2
Independent evaluations and information analysis to understand the progress, success, and effectiveness of project activities
ASSUMPTIONS
Adequate technical and financial capacity
Private sector involvement and commitment
Technological infrastructure and internet access
Inter-institutional commitment and coordination
Participation and empowerment of artisanal fisheries organizations
Political stability and policy support
BARRIERS
Institutional barriers (regulatory framework, coordination, Document management and manual processes, Limited resources for supervision and control
Cultural and educational barriers (resistance to change, lack of training)
Technological barriers
Lack of standarization in supply chains
Gender Inequality

Figure 2. Theory of change of the project

Project components

Component 1: Promoting and harmonizing national eCDT systems for local fisheries and global markets

This component focuses on advancing eCDTs and strengthening government capacities around them (addressing barriers a. and e.). It will also contribute to increasing the transparency and efficiency of government practices by reviewing and improving regulatory frameworks in Chile, Ecuador, and Peru. It aims to address the urgent need to improve traceability across the seafood value chain in the three countries.

Outcome 1.1: Increased adoption of eCDT systems throughout the supply chain in the fisheries sectors of Chile, Ecuador and Peru, with increased effective coverage for 100% of landings in prioritized fisheries.

One important result of this project will be generating the technical and technological conditions to effectively implement eCDT systems. As such, it aims to improve the existing infrastructure of eCDT systems and ensure its compatibility with international standards. It also provides education and capacity building programs to equip government agencies with the knowledge and skills necessary for efficiently managing eCDT for fisheries control and monitoring.

Output 1.1.1: A comprehensive gap analysis of the current eCDT systems and MCS coverage completed including recommendations for the region to improve the fisheries supply chain.

As an essential precursor to the development of other activities, each country will carry out a gap analysis to identify opportunities for improvement in relation to the current eCDT systems. This analysis, which will incorporate gender-sensitive elements, includes the identification of regulatory gaps (including policy incoherence) that may hinder effective monitoring, as well as the comprehensive assessment of the current MCS systems, the current state of the technological infrastructure to determine its suitability for the implementation of eCDT systems, and the identification of potential technological constraints that need to be addressed. Additionally, this evaluation will provide recommendations on improving eCDT systems for enhanced monitoring mechanisms, decision-making and compliance measures.

This analysis, completed by Q4Y1, will then serve as an input for the action plan in Output 1.1.2.

Output 1.1.2. An action plan developed and implemented to support the transition to eCDT harmonizing and strengthening the 3 government eCDT systems so that they are interoperable and use international best practices and standards, covering 100% of the total catch volume of the prioritized fisheries[1] by the project.

With the results of 1.1.1, an action plan will be designed with participation of all the actors involved throughout the chain, especially elevating the role of women in the fishing sector. In Q1Y2, each country will begin implementing the action plan for strengthening eCDT systems and improving MCS, including the adoption of GDST standards to ensure that the region's traceability systems are in line with international best practices. The actions to be implemented will consider transitioning from paper records to digital documentation and procedures, establishing central databases to consolidate and manage fisheries-related data, publishing relevant fisheries data on government transparency portals to improve accountability and

public oversight, designing training programs to educate stakeholders on digital tools, and establishing standardized digital protocols and formats to guide Output 1.1.3. In close consultation with the relevant government agencies of each country, the action plan will consider how to ensure and improve the use of eCDT information for enforcement and prevention of IUU fishing.

Output 1.1.3. Policies and legal instruments recommendations to improve the current regulatory framework related to the adoption, application, and expansion of eCDT at the national and subnational levels are designed and proposed to national and subnational governments.

Building on the gap analysis in Output 1.1.1 and the action plan in Output 1.1.2, this output will strengthen the regulatory framework and the capacities of the agencies in charge of enforcement and compliance with those regulations, at both the national level in Q4Y2 of the project and subsequently at the subnational level. These participatory processes will continue to involve all actors in the sector to promote their approval and subsequent implementation. These recommendations will include specific measures to ensure that data generated by eCDT systems are utilized for law enforcement, with a focus on combating IUU fishing and empowering national and subnational authorities to take effective actions to prevent illegal fishing.

Output 1.1.4 Three financial mechanisms to increase funding allocation by 15% for national MCS programs of priority fisheries.

The lack of budget for government programs is one of the main barriers identified. To address that, financial mechanisms will be designed in Q3Y4 to fund the strengthening of MCS programs in each country and ensure their continuity over time. These mechanisms will be designed in conjunction with the government agencies in charge of fisheries MCS and will have a special focus on the prioritized fisheries of the countries.

The financial needs of MCS activities will be assessed. Operating and capital costs, such as personnel, investments in technology, training programs, among others, will be included. Key areas where additional funding is required to improve the effectiveness of MCS programs will be identified. Various potential sources of funding will be explored, such as government budgets, international grants, donor organizations, and public-private partnerships for investment costs or CAPEX and for operating costs or OPEX.

Component 2: Strengthening regional cooperation, policy coherence, and exchange of good practices

This component seeks to enable the cooperating countries to deploy regional collaboration efforts and share best practices in fisheries management, to generate a framework where control and enforcement bodies can work together with other actors to address all activities related to IUU fishing on the Pacific coastline (addressing barrier b.). This component also includes standardizing data collection. During the PPG, part of the gender action plan development will consider how to ensure gender is adequately addressed throughout this component.

Outcome 2.1. Regional cooperation mechanisms are established and strengthened to harmonize eCDT systems and combat IUU fishing through enhanced information-sharing and joint decision-making based on eCDT data.

There are currently several international spaces in which representatives of these three countries usually interact, such as the IATTC (RFMO mainly focused on tuna management) and the SPRFMO (RFMO mainly focused on the management of jack mackerel and giant squid), as well as APEC and CPPS. These platforms provide an excellent opportunity to collaborate on joint issues, promote joint work focused on combating IUU fishing, and standardize the use of eCDT systems.

Output 2.1.1. A regional cooperation mechanism is identified and implemented to strengthen dialogue, decision making, and coordination among the three countries.

By Q1Y3, the project will identify different existing specialized fora with at least one international cooperation mechanism and will promote dialogue between the representatives of the attending countries, to discuss specific issues and opportunities for cooperation in data collection, management, enforcement against IUU fishing, and other issues of common interest.

Output 2.1.2. Based on stakeholders including fishing authorities' preferences and assessed best methods, a suitable approach for **accessing and sharing eCDT system data is developed** to enhance regional collaboration and knowledge sharing.Government stakeholders and other key actors are consulted to identify the most effective ways to access and share resources, technical and policy reports, as well as eCDT system data. Based on these consultations, the most appropriate solution is developed, whether it be a digital portal or another mechanism, to strengthen regional collaboration and foster intra-regional knowledge sharing, by Q3Y2.

Output 2.1.3: A tri-national cooperation agreement is established at the regional level for the effective implementation of eCDT systems in the fight against IUU fishing and to improve MCS.

This output seeks to formalize, by Q3Y4, cooperation mechanisms from Output 2.1.1 through an official agreement to join efforts to effectively implement eCDT systems in the fight against IUU fishing and improve MCS mechanisms in the region. This agreement is expected to include tracing of the three countries' fishery products, both industrial and artisanal, from their origin to the end consumer. This will allow countries to position themselves as leaders in responsible fishing practices at the global level in international forums, spaces and/or agreements.

Component 3: Industry engagement and stakeholder training and empowerment

This cross-cutting component (addressing barriers c. and d.) will work with and actively engage stakeholders in the sector, foster collaboration and engagement of all parties, and provide the necessary training to ensure the effective adoption of eCDT systems. A key player will be the private sector, which includes, as seen in section A, cooperatives or associations that bring together several key processing and exporting companies (such as PMA, CAPECAL, Tunacons, Conservation Mahi-Mahi), as well as U.S. seafood buyers (retailers, foodservice, and others).

Outcome 3.1. Capacities are strengthened with involvement of actors from the entire fisheries value chain of the prioritized fisheries.

This outcome involves the value chain actors in the implementation of eCDT systems pilots in at least 10 prioritized fisheries in Chile, Peru, and Ecuador. These pilot tests will serve as models of replicability and scalability at the national level in each country and will identify lessons learned applicable to other fish value chains.

Output 3.1.1. A capacity-building programme is developed participatively on the use of eCDT systems and the adoption of international standards (i.e., GDST) for key actors in prioritized fisheries.

This output aims to strengthen the capacities of the actors in the value chain for the promotion and adoption of eCDT systems and the GDST standard for seafood traceability. A capacity development plan will be designed by Q2Y2 of the project, focused on the actors in the value chains of the prioritized fisheries and especially on ways to facilitate the greater participation of women. WWF US will leverage its international market engagement with major seafood buyers and feed producers, as well as its role as a formal partner of the GDST, to create incentives for adoption of the systems. Targeted market engagement strategies will be designed during PPG, which will involve catalyzing market demand from major US and other international buyers for prioritized, in-country suppliers to transition towards GDST-aligned digital and interoperable traceability.

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Output 3.1.2 At least 10,500 officials, fishers, processors, and traders from Chile, Ecuador, and Peru (with at least 50% women participating) trained in eCDT systems and international standards (i.e., GDST).

Once the design of the training and capacity building activities is completed, at least 10,500 participants will be trained in Chile, Ecuador, and Peru by the Q4Y4 of the project. This will be a gender balanced training with 50% male and 50% female participation (workshops will be held exclusively for women, focused on topics of interest related to the project and specifically tailored to their needs and will be aimed at public officials, fishers (including artisanal fishers), processors, and traders, with the aim of strengthening their capacities to implement, adopt, and comply with eCDT systems and international standards (including US, EU, and Japanese anti-IUU fishing import requirements). WWF US will continue to engage with GDST and other partners to leverage technical materials and other educational resources to support training activities where available, and engage downstream international buyers to encourage participants to implement and use their enhanced capacity).

Output 3.1.3. Electronic traceability pilot systems along value chains are implemented in prioritized fisheries of Chile, Ecuador, and Peru.

Pilot tests will begin to implement eCDT systems and evaluate their operation, identify possible failures, and guarantee interoperability under GDST standards. By Q4Y4, at least 10 fisheries prioritized by the project will have implemented these systems for at least 2 years.

The implementation of the pilots will include a thorough analysis of the results and lessons learned, including the assessment of socio-economic benefits in the medium term and at the end of the implementation.

Output 3.1.4. Documented project results, which are gender responsive,disseminated through the project platform and IW:LEARN.

Through an effective communication strategy, all documented project results (i.e., reports, training, seminars, meeting minutes) will be disseminated transparently through the project platform and IW:LEARN (https://iwlearn.net/) starting from Q4Y1 of the project.

Component 4: Monitoring and evaluation

The project will define a methodology that allows for proper monitoring of project progress and confirms the value it can bring to the health of fish stocks. Evaluation methods will be shared and fully explained to stakeholders.

Outcome 4.1: Monitoring and evaluation of project results in an effective and timely manner.

A robust, gender sensitive monitoring and evaluation (M&E) process will allow for the collection of relevant data which, in turn, will validate the progress of the project and whether indicators are being met. All these results will be shared and discussed with stakeholders, including fisheries and environmental authorities, private companies, both women and men, and academia.

Output 4.1.1: Documented monitoring and reporting of project performance, including gender indicators.

The project will constantly monitor and evaluate progress, performance indicators, and other benchmarks that can validate the path the project is taking and how effectiveness is or is not being achieved. The project's monitoring and evaluation plans will incorporate the GEF Guidance on Gender.

Output 4.1.2: Independent evaluations and information analysis to understand the progress, success, and effectiveness of project activities.

A third party will objectively and independently evaluate the results achieved in the project.

Incremental Cost Reasoning

The implementation of eCDTs can significantly reduce overfishing rates by improving traceability and transparency throughout the fisheries value chain. By providing real-time data on catch volumes, vessel locations, and fishing practices, eCDTs enable governments to monitor and enforce fisheries regulations more effectively. Chile, Ecuador and Peru have made progress in their legislation and public eCDT systems, as well as some private companies and the civil society have begun to develop platforms and different eCDT technologies (see Appendix 1). Those standalone platforms and eCDT systems are not always interoperable making sound management of the fisheries and over exploited stocks an issue. The GEF funds will help ensure that countries harmonize their eCDT systems and that these can be scaled up at a regional level. This will strengthen the regional relationship of the governments of Chile, Ecuador, and Peru that have recognized the potential of eCDTs to enhance their fisheries management efforts. Such systems harmonization and regional platform or any other sharing system will give them a proper interlocutor on the international market. Indeed, the project will enable a collaborative exchange of good practices to implement international standards for eCDT systems, reducing duplication of efforts, and promoting regional harmonization.

Chile, Ecuador and Peru also have different monitoring, control and surveillance tools and strategies (see appendix 1) mirroring their different capacity levels for monitoring, control and surveillance. Peru and Chile, for example, have many monitoring, control and surveillance tools at their disposal, while the monitoring, control and surveillance capacity in Ecuador is less developed. The implementation of monitoring, control and surveillance activities and law enforcement can be costly, especially on the high seas. Therefore, promoting cooperation between these countries will strengthen the differentiated capacities of each country for monitoring, control, surveillance and law enforcement purposes (Cremers et al. 2020).

The project will contribute to the development of a regional monitoring, control and surveillance strategy, an integrated monitoring, control and surveillance data framework or a single platform where countries can share best practices, exchange data and build trust between law enforcement and compliance agents.

GEF funds will contribute to the creation of three financial mechanisms (output 1.1.4) to increase funding allocation to strength MCS programs in each country and ensure their continuity over time. The financial needs of MCS activities will be assessed, as well as the best options for potential sources of funding (e.g., international grants, donor organizations, and public-private partnerships for investment costs or CAPEX and for operating costs or OPEX)

The countries have also identified a critical need for increased support for the private sector. Training and testing eCDT systems in pilot areas and prioritized fisheries is essential to ensure that these technologies are adopted and used effectively. By working closely with fishing companies, processors, and exporters, governments can provide the necessary technical assistance and guidance to facilitate the successful implementation of eCDT systems.

The collaboration between Chile, Ecuador, and Peru on eCDT systems serves as a model for other countries seeking to improve the sustainability of their fisheries. By combining government leadership, international cooperation, and private sector engagement, it is possible to harness the power of technology to protect marine ecosystems and ensure a sustainable future for fisheries resources. Without the GEF increment, the current business as usual scenario will prevail. Countries will continue managing their fisheries in a fragmented and unsustainable way and will remain prone to IUU fishing facing difficulties in accessing

international markets concerned about sustainability and legality. This can represent a significant loss of economic income and trade opportunities.

Overall project governance

A preliminary governance and internal communication structure for the project is presented in Figure 3. It will be further detailed during the PPG phase.

UNEP, as GEF Agency, will be responsible for the overall oversight of the project to ensure its consistency with GEF and UNEP policies and procedures, and will provide guidance on linkages with other UNEP and GEF-funded projects and activities. WWF will be the main EA for the project. In accordance with UNEP agreements and guidelines, the EA will coordinate the implementation of the project by providing overall technical management and managing the funds provided to the project by UNEP on behalf of the GEF, in a manner consistent with its financial reporting requirements. The EA will coordinate with other organizations and co-implementing partners of the project based on their experience and added value in some prioritized activities.

The project Steering Committee (PSC) will provide general directions to the project. It will be composed of the national government focal points, the Executing Agency (EA) WWF and the Implementing Agency (IA) UNEP and the Project Coordination Unit (PCU). WWF and the PCU will act as the Secretariat of the PSC.

The Project Steering Committee (PSC) will meet twice a year (in person and via teleconference) to review and monitor progress in project implementation, provide strategic and policy guidance, and review and approve annual work plans and budgets. The PSC will approve the annual operational plans and budgets, technical and financial reports, and assist in overseeing the projects. If necessary, the PSC may establish advisory groups for any identified needs, e.g., a Private Sector Advisory Committee consisting of buyers (importers) and suppliers (processing plants/exporters). WWF will chair the first steering committee. The first PSC will review and approve the PSC ToRs and rules and procedures and, will confirm membership.

An inter-institutional coordination group with UNEP, WWF and the regional Project Coordination Unit (PCU) will meet monthly to attend to project management matters, review risks and agree on the required remedial measures.

The regional Project Coordination Unit (PCU) whose location will be decided at PPG stage will be responsible for day-to-day coordination of the project, management of all activities, financial planning and budgeting, monitoring and evaluation, safeguards, and monitoring of contracts and regional activities (components 2 and 4). The person responsible for gender mainstreaming in the project and the implementation of a gender action plan will also be part of the PCU. The PCU will act as the secretariat of the PSC.

The national activities (components 1, 2, and 3) will be coordinated by three National Project Coordination Units (NCUs) that will act as an interface between the PCU and national partners, liaising as appropriate with civil society organizations, the private sector, and local communities.

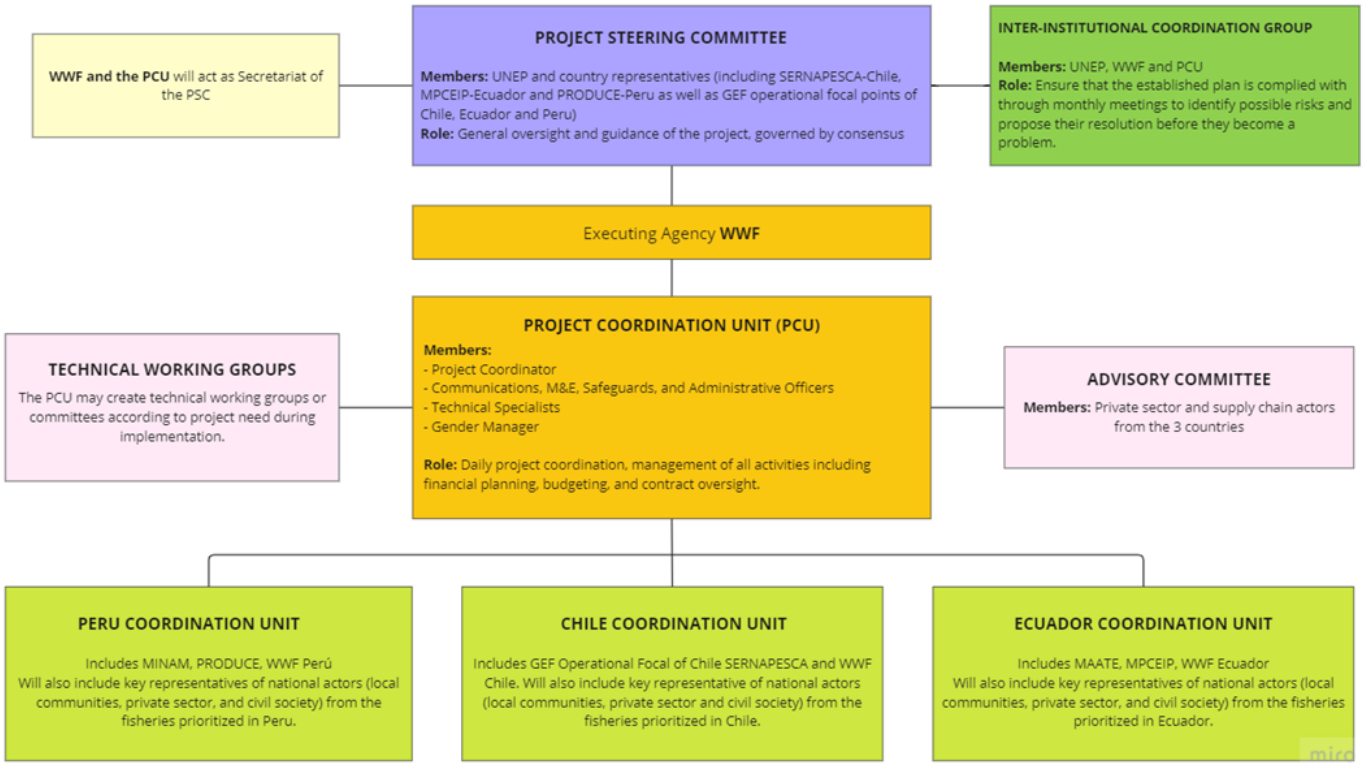

Figure 3. General governance structure

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[1] Fisheries preliminarily prioritized by Ecuador: tuna, mahi-mahi, swordfish, titi shrimp. Peru: giant squid, mahi-mahi, hake, and five species of sharks. Chile: anchovy, common sardine, huiro algae

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

Strong linkages and synergies with the below listed projects will be analyzed and secured during PPG. The interaction and coordination with other relevant GEF and non-GEF financed initiatives will be done through the project coordination unit, information sharing and joint activities and events. Appendix 1 shows different public, private and WWF strategies advancing eCDT Systems in the three countries.

The proposed traceability project builds on previous efforts to promote sustainable fisheries and combat IUU fishing in the region. In particular, the project builds on the success of previous GEF projects between Peru, Chile and Ecuador (Humboldt I[1]11, Humboldt 2[2]12, and IFC[3]13). These projects demonstrated the effectiveness of collaboration between government, civil society, and private sector actors in promoting sustainable fishing practices and identified eCDT as key tools that need to be strengthened to achieve sustainable fisheries and combat IUU fishing. Additionally, the GEF 8 ETP project led by CI and executed by Fundación Pacifico supports the enhancement of regional governance frameworks and financial sustainability, which aligns with the objectives of the proposed traceability project by ensuring the long-term viability of monitoring, control, and surveillance (MCS) systems critical for enforcing sustainable practices in fisheries management.

The PACA project, which is being implemented in 7 countries, aims to improve transboundary marine governance of the Large Marine Ecosystem of the Central American Coastal Pacific, seeking to set up regional governance and joint management through the development of tools for mutual understanding and collaborative agreements. Within the project framework, practical learning will be promoted through the execution of pilot projects dedicated to sport fishing, marine spatial planning and cetacean conservation. The project is being implemented by WWF Guatemala. The fact that WWF is part of Enduring Earth, and that it is the implementing agency of the PACA project, will facilitate the exchange of information and the coordination of actions through the organization of conferences and alignment meetings that will be held throughout the project lifetime.

The Strategic Action Programme (SAP) of the Large Marine Ecosystem of the Humboldt Current (HCLME) recognizes as a high priority the establishment of traceability systems, the improvement of states' data collection capacity, and the improvement of infrastructures and technology to optimize MCS systems.

The following is a preliminary list of the main non-GEF projects and initiatives with which the project will seek relationships to strengthen short- and long-term results. During PPG, linkages and complementary activities will be assessed. The project will seek to identify complementary projects that are focused on improving enforcement, to ensure coherence and identify synergies to support the information-improved enforcement part of our theory of change.

Por La Pesca (For Fisheries)[4]14: This project, launched in 2022, aims to support the artisanal fishing sector and promote sustainable fishing practices in Ecuador and Peru. It is a public-private partnership involving the

Walton Family Foundation and USAID, with an initial funding of $5.7 million from USAID. The project focuses on empowering and formalizing artisanal fishing organizations that target species like flying jumbo squid, mahi-mahi, tuna, and octopus.

Japanese government support for Ecuador[5][15]: The Government of Japan is contributing with 500 million yen (3.34 million dollars) to Ecuador to combat illegal fishing. This support is given within the efforts that Ecuador has made to improve the control of illegal, unreported and unregulated (IUU) fishing and to get the European Union (EU) to withdraw the 'yellow card' that it imposed in 2019, for not having the necessary control elements.

Habla Tiburon[6][16]: The Charles Darwin Foundation and the World Wildlife Fund, WWF-Ecuador, have launched project in 2023, that aims to strengthen fisheries governance, promote responsible fishing practices, and thus drive the conservation of sharks and rays in Ecuadorian waters.

Oceana[7][17]: Oceana's mission is to protect and restore the oceans. With local offices in Chile and Peru, Oceana is dedicated to leading strategic, directed campaigns that achieve measurable outcomes for the oceans. Oceana leverages law, science, grassroots activism, advocacy, and strategic communications to win policy change around the world.

Global Fishing Watch[8][18]: Its purpose is to create and publicly share knowledge about human activity at sea to enable fair and sustainable use of the ocean. They use cutting-edge technology to turn big data into actionable information. They have collaboration agreements with Ecuador (since December 2020), Peru (since October 2017), and Chile (since May 2019) to publish data on their fishing vessels on the Global Fishing Watch map, seek fisheries transparency and to combat illegal fishing, *inter alia*.

UNODC's Global Maritime Crime Program: UNODC'S GMCP has a partnership with WWF Ecuador "to leverage fisheries science and targeted sector information to enable more capacity to counteract illegal fishing activities"

Other initiatives: During PPG, other initiatives that are carried out in the region will be contacted to see possible synergies: Redes Sostenibilidad Pesquera, Pro Delphinus, Environmental Defense Fund (EDF), Future of Fish, Sustainable Fisheries Partnership (SFP), The Nature Conservancy Peru, WWF – Peru y WildAid.

[1]Towards the ecosystem management of the large marine ecosystem of the Humboldt Current (GEF - 4), a project implemented in Chile and Peru
[2]Catalysing Implementation of a Strategic Action Programme for the Sustainable Management of Shared Living Marine Resources in the Humboldt Current System (HCS) (GEF - 6) project executed in Chile and Peru.
[3]Coastal Fisheries Initiative (PROGRAM) (GEF - 6) project implemented in Ecuador, Peru, Indonesia, Cape Verde, Senegal, and Ivory Coast.
[4] https://www-2021.usaid.gov/peru/news-information/press-releases/united-states-launches-public-private-partnership-peru-and
[5] https://www.expreso.ec/actualidad/economia/japon-aportara-3-4-millones-dolares-ecuador-combatir-pesca-ilegal-179675.html
[6] https://www.darwinfoundation.org/en/news/all-news-stories/the-charles-darwin-foundation-and-wwf-launch-project-habla-tiburon-to-promote-the-conservation-of-sharks-and-rays-and-empower-fishing-communities-in-mainland-and-insular-ecuador/
[7] https://oceana.org/about/
[8] https://globalfishingwatch.org/

Core Indicators

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
3			

Type/name of the third-party certification

Peru: mahi-mahi

Ecuador: mahi-mahi and bigeye tuna

Chile: blue mussels (Mytilus chilensis)

Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE

Indicator 5.3 Marine OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 7 Shared water ecosystems under new or improved cooperative management

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Shared water Ecosystem	Humbolt Current			
Count	1	0	0	0

Indicator 7.1 Level of Transboundary Diagonostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministeral Committees (IMC; scale 1 to 4; See Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Humbolt Current	1			

Indicator 7.4 Level of engagement in IWLEARN throgh participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Humbolt Current	1			

Indicator 8 Globally over-exploited fisheries moved to more sustainable levels

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
2,200,000.00			

Fishery Details

Fisheries preliminarily prioritized by Ecuador: tuna, mahi-mahi, swordfish, titi shrimp. Peru: giant squid, mahi-mahi, hake, and five species of sharks. Chile: anchovy, common sardine, huiro algae.

This tentative prioritization has been based on compromised biomass, declining catch trends, excessive catch ceilings, high percentages of unreported catches, and government interest in and importance of these species in the international market, for 10 years. Sea Around US databases reveal that, on average, 10% of catches in these fisheries go unreported. In some fisheries, such as shark fisheries, this underreporting can reach up to 40%, which is equivalent to approximately 200,000 tons per year.

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	2,163			
Male	8,562			
Total	**10,725**	**0**	0	**0**

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

Indicator 5.1: (Fisheries under third-party certification incorporating biodiversity considerations = 3 fisheries). Through Component 1 of our project, at least three specific fisheries are expected to make tangible progress towards time-bound, comprehensive fishery improvement project (FIP) work plans and/or achieve Marine Stewardship Council (MSC) certification: mahi-mahi in Peru, mahi-mahi and bigeye tuna in Ecuador, and blue mussels (Mytilus chilensis) in Chile. Electronic Catch Documentation and

Traceability (eCDT) systems, which record information on by-catch of endangered, threatened, and protected species (ETPs), contribute substantially to MSC Principle 2, related to mitigating the impacts of the fishery on biodiversity and the ecosystem.

Fisheries must be carefully managed so that other species and habitats within the ecosystem remain healthy. Along these lines, the project would provide information that would allow estimating the bycatch of ETP species per unit of effort, and the amount of abandoned, lost, and discarded fishing gear (ALDFG) to design mitigation measures for this problem.

Indicator 7: The project will help implement the Humbolt Current SAP. It will contribute to policy reform in the fisheries sector (7.3 = 2),. It will also connect to IWLEARN (7.4 =1)

Indicator 8: (Overexploited marine fisheries globally have moved to more sustainable levels = 220,000 tons per year). Component 1 will contribute to improved sustainability levels of at least 220,000 tons, as the average reported catch of the species tentatively prioritized in the project in the last 10 years. This tentative prioritization has been based on compromised biomass, declining catch trends, excessive catch ceilings, high percentages of unreported catches, and government interest in and importance of these species in the international market. Sea Around US databases reveal that, on average, 10% of catches in these fisheries go unreported. In some fisheries, such as shark fisheries, this underreporting can reach up to 40%, which is equivalent to approximately 220,000 tons per year. The shark species of the Sphyrnidae and Alopias families are also considered to be included in CITES Appendix No. 2, which provides an additional tool to support fisheries management and ensure that the exploitation of sharks does not endanger their survival.

Indicator 11:(People benefiting from GEF-financed investments disaggregated by sex = 10,725 in total, where 2,163 are women and 8,562 are men). This calculation is based on the participation of key actors in the priority fisheries of the three countries involved, reflecting the inclusive approach of Component 3 of the project, which includes the public sector, government, fishing companies, workers in production chains, fishers, and local communities.

To calculate this number, the following groups have been considered:

- Fishing vessels and shipowners: There are approximately 7,000 vessels and 4,000 shipowners dedicated to the capture of priority species. The project plans to train 80% of shipowners (3,200 people, of which 1,600 will be women and 1,600 men). In addition, at least one crew member per vessel will be trained, totaling 300 women and 6,700 men, which gives a total of 10,200 people in this group.
- Public officials: This includes 300 officials with responsibilities in fishing areas, distributed equally between 150 women and 150 men (100 per country in the three countries involved).
- Workers in private companies: There are an estimated 225 workers in 45 companies in the fishing sector, with a distribution of 113 women and 112 men (averaging 5 employees per company).
- Exclusive Workshops for Women: Considering that almost 80% of the 10,725 beneficiaries are men, and in order to balance the proportion of men and women at 50%, training workshops will be held exclusively for women. At least 10 workshops will be held per country, with a minimum of 100 women participating in each one.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	High	Assessment: Although the project activities focus on strengthening and implementing eCDT systems, and their implementation may not be greatly affected by climate variability, an

		increase in ocean temperature could affect targeted fish stocks. Sudden temperature rises and acidification can lead to changes in marine species and habitats. Deviations in ocean currents and warming waters are altering the distribution of fish stocks and the structure of ecosystems. Mitigation measure: It is important that the eCDT systems record all the information on catches and landings of the fishing sector and have an effective MCS. If climate variability affects the populations of the species prioritized by the project, timely and information-based measures could be taken to reduce fishing pressure on certain affected species.
Environmental and Social	Moderate	Assessment: There is a moderate risk of social resistance from some actors in the fisheries sector who may see the implementation of eCDTs as a threat to their current practices. They may object to new obligations, especially if they entail sanctions. In addition, the fisheries sector, historically dominated by men, can present cultural and structural barriers that limit women's participation, perpetuating inequalities and reducing the effectiveness of the project. Mitigation measure: The project will include consultation processes with stakeholders to involve them in the design of the project, highlighting the benefits of eCDT systems to ensure that their use is not only an obligation, but also an advantage. In addition, active policies will be implemented to guarantee the participation and representation of women, establishing quotas and promoting an inclusive environment through training on gender equality. These measures will seek to ensure that all actors see the value of the system and that women can fully participate in the project's activities.
Political and Governance	High	Assessment: Political instability in the countries of the region and the high turnover of officials can affect the continuity and effectiveness of the project. In addition, regulatory frameworks may lack legitimacy or be inconsistent, making it difficult to implement and comply with traceability systems. Mitigation measure: To mitigate the risks of political instability and rotation of officials, the project will work with authorities at all levels, establishing institutional arrangements and agreements to ensure formal commitments that transcend political changes. It will focus on working with middle managers and career officials (where turnover is lower compared to appointed positions) to strengthen capacity through training and empowerment, ensuring that they understand and support the objectives of the project.
INNOVATION		
Institutional and Policy	Moderate	Assessment: eCDTs represent an innovative change that can transform the paradigm of the fishing sector. However, this requires both government and private sector actors to be adequately trained to meet new market demands and regulations. Moderate risk could arise with external stakeholders, such as artisanal fishers, who have their own priorities and a subsistence economy, which could hinder their active participation in the project. Mitigation measures: To mitigate the main risk, the project will identify attractive incentives to engage external actors, especially artisanal fishers, ensuring that they perceive clear and direct benefits from their participation, such as economic incentives or access to new markets. More broadly, the project will

		focus on empowering key stakeholders, ensuring that they understand and adapt to new technologies and regulations progressively.
Technological	Moderate	Assessment: The technical design of the eCDT implementation project could face challenges related to technological complexity, lack of interoperability between existing systems and adaptation to local contexts, especially in remote fishing communities. These challenges, along with concerns about data confidentiality and security, could limit the implementation and impact of the project. Mitigation measures: The project will prioritize a modular and adaptable design of the eCDT systems, allowing progressive implementation and integration with existing platforms, following global standards such as the GDST. Pilot tests will be carried out in various local contexts to ensure the adequacy and scalability of the technologies. In addition, robust data security measures will be implemented, guaranteeing access only to authorized persons, and processing and confidentiality policies will be developed in line with national regulatory frameworks. Ongoing technical support and best practice manuals will also be provided for end users.
Financial and Business Model	Moderate	Assessment: There is a risk of macroeconomic fluctuations in the region, such as inflation, currency devaluation, or economic downturns, which could affect the availability of financial resources, and the ability of institutions and actors involved to invest in the implementation of eCDT systems. In addition, the implementation of these systems in the fisheries sector can represent significant costs associated with software, hardware, human capacity building, and monitoring, control, and surveillance (MCV), necessary for their effective operation. Mitigation measures: To mitigate this risk, the project will seek to diversify sources of financing, including international funds, public-private partnerships, and climate finance mechanisms that ensure financial sustainability regardless of macroeconomic fluctuations. A specific financing scheme will be developed to cover the costs associated with the implementation of eCDT systems, identifying opportunities for collaboration and partnership with the private sector and civil society. Likewise, the alignment of the project with national economic development and sustainability strategies will be encouraged, ensuring its long-term relevance. Financial planning will be flexible, allowing for rapid adjustments in response to changes in the macroeconomic environment.
EXECUTION		
Capacity	Low	Assessment: The three countries have strong experience in the execution of GEF projects. The same applies to WWF which is well experienced in project execution and working to combat illegal, unreported and unregulated fishing. Mitigation measures: Nonetheless, the project design will include measures for (i) capacity development measures to support the government institutions, the district municipalities and the private sector, (ii) knowledge and information sharing, (iii) intersectoral collaboration and (iv) public – private constructive dialogue.

Fiduciary	Low	Assessment: Although fiduciary risks can always exist in the administration of funds, the project partners have extensive experience, knowledge, and expertise in the management of similar projects. This experience has enabled them to consistently meet strict auditing requirements and ensure that resources are handled efficiently and responsibly. Mitigation Measure: To mitigate any potential fiduciary risks, the project will follow the practices established by the partners, which have proven effective in previous projects. This includes implementing rigorous financial controls, regular audits, and accountability procedures to ensure transparency and compliance with fiduciary policies.
Stakeholder	Low	Assessment: There is a risk that inadequate participation of stakeholders, such as fishers, local communities, NGOs, and the private sector, will limit the acceptance and effectiveness of the project. A lack of communication or alignment of interests can lead to resistance to change or lack of support. Mitigation measure: To mitigate this risk, a comprehensive engagement and communication plan will be developed that ensures the inclusion of all stakeholders from the outset. This plan will facilitate consultations and co-design processes, integrating the concerns and priorities of the various groups in the development of the project. It is also proposed to establish clear and regular communication channels to foster dialogue, allowing stakeholders to feel part of the project and promoting its acceptance and long-term sustainability.

Other		

Overall Risk Rating	Moderate	The overall rating is moderate given the contextual risk including Environment and Social risks and the innovative character of the project which however has the potential to transform the paradigm of the fishing sector. A detailed mitigation plan will be prepared during the PPG.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

This project has been designed in accordance with the GEF-8 programming instructions for International Waters and Biodiversity:

- *International waters:* By adopting eCDT systems, the project improves access to critical data that facilitates science-based prioritization, which is critical for formulating and implementing sustainable regional policies. In addition, the project addresses illegal fishing by improving the monitoring and control of fishing activities, ensuring that catches are made legally and responsibly.

Through inter-ministerial and regional coordination, the project seeks effective collaboration between participating countries, harmonizing policies and joint approaches to promote the sustainability of fisheries and the conservation of marine ecosystems in the region.

- *Biodiversity:* The project proposes to implement an eCDT system and is prioritizing fisheries such as sharks, which are included in CITES. It is expected to improve the traceability of these vulnerable species to protect them and ensure compliance with international standards, promoting their conservation and ensuring their crucial role in the balance of marine ecosystems.

The project also contributes to countries' compliance with 4 very important multilateral agreements, such as the CDB, SDGs, NDCs, and CITES:

1. **Kunming Montreal Global Framework Convention for Biodiversity (CBD):**

This project contributes to the fulfillment of 8 goals of the CBD:

Targets	Project Linkage
Target 4 (Halt extinction)	The project is prioritizing the traceability of sensitive species such as sharks, which are essential for the balance of the marine ecosystem.
Target 5 (Sustainable use)	eCDT systems help ensure that fishing activities are legal and sustainable, reducing overexploitation and illegal trade.
Target 9 (Benefit people)	Sustainable management of fisheries ensures that coastal communities and artisanal fishers' benefit.
Target 10 (Sustainability in fisheries)	Traceability helps ensure the legality of catches and promotes the use of sustainable fishing practices.
Target 14 (Biodiversity in decision-making)	Using traceability and value chain data, biodiversity is integrated into fisheries policies, formulating more effective regulations.
Target 21 (Knowledge)	eCDT systems facilitate access to critical data that informs fisheries management, improving decision-making and transparency. This ensures that knowledge is available to all relevant actors, supporting equitable and evidence-based governance.
Target 22 (Participation)	The equitable participation of local and indigenous communities in fisheries management is ensured, respecting their rights and traditional knowledge.
Target 23 (Gender equality)	The project fosters women's leadership and participation in sustainable fisheries management. This promotes gender equality and enriches the decision-making process with diverse and equitable perspectives.

2. **Sustainable Development Goals:**

This project will support the efforts of Ecuador, Peru, and Chile to achieve Goal 14 of the Sustainable Development Goals (SDGs): 'Conserve and sustainably use the oceans, seas and marine resources', specifically 14.4 on IUU fishing. The implementation of the eCDT systems would provide a detailed record of fishing activities, facilitating the identification of potential IUU fishing practices, thus allowing effective monitoring and mitigation by authorities. Likewise, eCDT systems improve the accuracy, speed and accessibility of critical data for fisheries management and decision-making and the development of scientific research.

The project also contributes to SDG Goal 16 : 'Promote just, peaceful and inclusive societies', specifically in 16.5 on reducing corruption. In the fishing sector, informality is a serious problem, where actors do not have all the licenses to be able to carry out the activity. This creates a high risk of corruption when the actors are inspected or have to request a catch / origin certificate. In these situations, bribes to government officials may be offered and accepted to avoid being sanctioned or having the fish confiscated. This risk is

higher because the vast majority of the fisheries sector uses paper-based systems, and databases are not digitized or interconnected. The project seeks to digitize databases, administrative procedures, licenses, and promote interoperability between the systems of the different government institutions, thus combating corruption risks.

3. **Nationally Determined Contributions (NDCs)**

The project also contributes to the Nationally Determined Contributions (NDCs) of the countries involved, supporting overall sustainable management and climate change adaptation initiatives in the fisheries sector. For example, Peru has the following NDCs related to the project: i) implementation of a traceability system for anchovy, aimed at ensuring sustainable practices from capture to consumption, and ii) strengthening the surveillance and regulation of artisanal fishing practices to conserve hydrobiological resources. The project supports both NDCs by providing, through eCDT systems, the key tools to monitor and ensure legality and sustainability in fisheries, improving resource management and promoting environmental conservation in the Peruvian fisheries sector.

4. **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**

CITES includes sharks in its Appendix II, which allows their international trade to be regulated to ensure their sustainability. The project has tentatively prioritized 5 shark species in Peru, contributing significantly to compliance with CITES regulations and supporting shark conservation by monitoring and verifying that their trade comes from sustainable and legal sources.

National and regional priorities

The project is in line with the national priorities of Chile, Peru, and Ecuador in terms of sustainable fisheries management, conservation of marine biodiversity, and responsible production of seafood. The project is also in line with the regional priorities of the South Pacific and the objectives of regional fisheries management organizations and arrangements. Although there are no identified policies that directly contradict the project's expected results, the project recognizes the need for policy coherence and alignment. The project will work with government authorities and relevant policymakers to ensure that the project's objectives are aligned with existing policies. If any policy adjustments are required, the project will facilitate the discussions and advocacy needed to ensure harmonization.

The General Fisheries Law of **Peru**, approved by Legislative Decree No. 25977 in 1992, establishes the regulatory framework for fishing activity in the country, promoting the rational and sustainable use of hydrobiological resources. The law underscores the need to implement fisheries management measures along with monitoring, control, and surveillance actions to ensure the sustainability of fisheries. In this context, the proposed project aligns with these objectives by introducing eCDT systems. These allow for more efficient and transparent monitoring, optimizing regulatory compliance and strengthening control mechanisms, which contributes to reducing illegal, unreported and unregulated (IUU) fishing. Since October 2017, Peru has implemented the FAO-promoted Agreement on Port State Measures (PSMA) to prevent, deter and eliminate IUU fishing. This international agreement allows Peru to align with global regulations and improve its tools to restrict access to national ports for vessels involved in illegal fishing activities. The project reinforces this strategy by integrating advanced technologies for vessel monitoring, thereby supporting the control and sustainability of national fisheries and complying with Peru's international commitments in the fight against illegal fishing.

In **Chile**, the General Law on Fisheries and Aquaculture (Law No. 18,892 of 1991) establishes a comprehensive regulatory framework for the conservation and sustainable use of hydrobiological resources, promoting a precautionary and ecosystem approach in fisheries regulation. The National Action Plan to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IUU-PAN), implemented by Exempt Decree No. 267 in 2005, reinforces this regulation by addressing illegal fishing and promoting more effective fisheries management. The proposed project aligns with these regulatory frameworks by introducing advanced electronic traceability systems, which optimize the monitoring and control of fishing activities. This not only facilitates the accurate collection of data for decision-making,

but also strengthens the fight against IUU fishing. In addition, the project supports the goals of the National Biodiversity Strategy 2017-2030, contributing to the conservation and sustainable use of marine biodiversity, and complements the Plan for the Recovery, Conservation and Management of Aquatic Species (PRECOP) through responsible practices and technologies that seek to protect vulnerable species.

Ecuador's Fisheries and Fisheries Development Law (Official Gazette Supplement 389, 2020) establishes a comprehensive regulatory framework to promote the sustainable development of aquaculture and fisheries activities, from extraction to commercialization, with a focus on the conservation and responsible use of hydrobiological resources. Article 35 of the law requires that the National Aquaculture Animal Health Plan and the National Sanitary Control Plan include surveillance, registration and traceability protocols throughout the production chain, while Article 36 specifies the need for transparent mechanisms to guarantee the traceability and legality of products. In addition, the National Action Plan to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IUU-NAP), based on paragraph 25 of the International IUU Action Plan, addresses illegal fishing through four fundamental pillars: strengthening sanctions, improving the Monitoring, Control and Surveillance (MCS) system, national coordination against IUU fishing and cooperation with competent international organizations. The proposed project advances these objectives through the implementation of eCDT systems that optimize monitoring and control in all phases of the production chain. By aligning with the promotion and harmonization of national systems, the project improves transparency and regulatory compliance. In addition, by strengthening regional cooperation and the exchange of good practices, it promotes effective collaboration to address common challenges. Finally, by training the industry and stakeholders, the project ensures that all actors in the sector are prepared to meet sustainability and traceability standards, thus contributing to the sustainable and responsible management of marine resources in Ecuador.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities:

Civil Society Organizations: Yes

Private Sector: Yes

Provide a brief summary and list of names and dates of consultations

To develop the PIF, key stakeholders were identified and engaged in various meetings, both nationally and regionally (Appendix 2 lists all meetings held and the participants' names). These discussions facilitated a collaborative approach to project design.

A Trinational Meeting involving Chile, Peru, and Ecuador (January 29, 2024) focused on regional coordination and sustainability challenges in fisheries. The countries agreed on the importance of information sharing, promoting small-scale aquaculture to combat illegal fishing, and leveraging tri-national collaboration, technology, and artificial intelligence to address fisheries issues.

In Peru, government agencies (Ministry of Environment and Ministry of Production), social organizations (The Nature Conservancy Peru, ASPAQA), and the private sector (COINREFRI, Mai Shi Group, Oceano Seafood, Fernandez SAC, Seafrost, Mar Frío) participated in numerous meetings. Additionally, a government workshop (February 1, 2024) focused on Peru's digital fisheries revolution and its potential contribution to a regional traceability and electronic systems project. Different stakeholders participated to identify the main issues of the sector and prioritize the pilot fisheries for the project, considering their state of exploitation and their social impact.

In Chile, several meetings with SERNAPESCA, Subpesca, Indespa, and the Ministry of Environment helped define the project's scope, prioritize species, geographical areas, and stakeholders. A workshop with the private sector was organized together with SERNAPESCA (January 4, 2024) and it generated interest in the project, while a civil society workshop (February 14, 2024) identified synergies with existing initiatives (TNC/FoF/EDF/CIAPE Foundation/Monterey Bay Aquarium).

In Ecuador, meetings with the Ministry of Aquaculture and Fisheries and the Ministry of Environment explored the project's scope, objectives, and expected outcomes.

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
UNEP	GET	Regional	International Waters	International Waters: IW-1	Grant	8,000,000.00	760,000.00	8,760,000.00
Total GEF Resources ($)						**8,000,000.00**	**760,000.00**	**8,760,000.00**

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount ($)

200000

PPG Agency Fee ($)

19000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG($)	Agency Fee($)	Total PPG Funding($)
UNEP	GET	Regional	International Waters	International Waters: IW-1	Grant	200,000.00	19,000.00	219,000.00
Total PPG Amount ($)						**200,000.00**	**19,000.00**	**219,000.00**

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/	Focal Area	Sources of Funds	Total($)

		Regional/ Global			
Total GEF Resources					**0.00**

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
IW-1-2	GET	8,000,000.00	80079269
Total Project Cost		**8,000,000.00**	**80,079,269.00**

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Donor Agency	USAID, “Habla Tiburón” Project in Ecuador	Grant	Investment mobilized	11900000
Recipient Country Government	Ecuadorian Government	Public Investment	Investment mobilized	9606846
Donor Agency	Government of Japan - Ecuador	Grant	Investment mobilized	3400000
Private Sector	Walmart and Fishery Improvement Project (FIP) project - Chile	Grant	Investment mobilized	181605
Recipient Country Government	Chilean Government	Public Investment	Investment mobilized	4414687
Donor Agency	USAID and Walton, Project “Por La Pesca” in Peru and Ecuador	Grant	Investment mobilized	8000000
Donor Agency	USAID IUU Project in Peru and Ecuador	Grant	Investment mobilized	4000000
Donor Agency	Walton's commitment to IUU policy and expansion of the Seafood Import Surveillance Program	Grant	Investment mobilized	960130
Recipient Country Government	Peruvian Government	Public Investment	Investment mobilized	10341189

Recipient Country Government	Ecuadorian Government	In-kind	Recurrent expenditures	50000
Donor Agency	WWF US-Global Maritime Crime Program (GMCP)/UNODC	Grant	Investment mobilized	600000
Recipient Country Government	Chilean Government	In-kind	Recurrent expenditures	1650812
Recipient Country Government	Peruvian Government	In-kind	Recurrent expenditures	24000
Private Sector	Peruvian private companies and exporters (Mai Shi Group S.A.C, Coinrefri SRL, Oceano Seafood, Fernandez S.A.C., Seafrost, Mar Frío, CENCOSUD)	Other	Investment mobilized	2500000
Private Sector	Chilean private sector partners	Other	Investment mobilized	9000000
Private Sector	Ecuadorian private sector partners (Tunacons Foundation: Nirsa, Eurofish, Tri Marine, Servigrup, Jaldran, Manacripex, Marbelize, Pacific Tuna, TunaQuick); Conservation Mahi Mahi (Frigolab San Mateo, Propemar, Freshfish Ecuador, Docapes); FIP Swordfish, Transmarina, Propemar)	Other	Investment mobilized	7800000
Private Sector	Importing companies that contribute to the FIP participating in Peru, Chile and Ecuador	In-kind	Recurrent expenditures	800000
Private Sector	WWF US private sector partners implementing traceability systems	Other	Investment mobilized	50000
Private Sector	WWF US private sector grant partners supporting eCDT (covering WWF US in-kind contribution)	In-kind	Recurrent expenditures	4500000
GEF Agency	UNEP	In-kind	Recurrent expenditures	300000
Total Co-financing				**80,079,269.00**

Describe how any "Investment Mobilized" was identified

Investment mobilized was identified by each participating government using the GEF co-financing guidelines (https://www.thegef.org/documents/co-financing). All countries (Peru, Ecuador, and Chile) strategically identified and collected their co-financing support for the project implementation period and in line with the project results and outputs.

The co-financing comes mainly from ongoing initiatives, projects, studies, and public investments related to MCS of fisheries, with a view to complementing the GEF's investment and addressing specific eCDT needs as the countries seek to modernize and improve their existing eCDT following international standards and regional guidelines. The governments will contribute with

projects that strengthen supervision, such as the use of electronic monitoring systems, the use of electronic logs, the use of on-board cameras, data capture, improvements in internal traceability systems to improve interoperability and transparency of information, among others (components 1 and 3). Governments will support user capacity building for the systems through training, in addition to the strengthening of management and coordination between national and regional fisheries institutions to support issues related to IUU fishing (components 1 and 3). The co-financing proposed by each participating country was reviewed during bilateral meetings with the executing agencies to ensure alignment with the project objective and ensure compliance with the GEF's policies and guidelines.

The Walton Family Foundation is currently supporting WWF to convince the U.S. government to expand import controls to additional species and strengthen current traceability requirements for new and existing species (e.g., tuna and mahi-mahi). Once this rule goes into effect, it will have implications for export fisheries from Peru, Ecuador, and Chile, key countries that export to the United States. The Walton project contributes to the overall objectives of this project and, although not directly related to the proposed activities, will generate incentives for governments to implement Component 1’s improvements to MCS and eCDT in order to meet the requirements of the U.S. market.

USAID's mobilized investments include approved projects in Peru and Ecuador ("Por la Pesca" and "Habla Tiburón") that are proposed as co-financing, as these projects seek to improve fisheries policies in Peru and Ecuador's priority fisheries and promote research and information sharing for more coordinated fisheries management (Component 1 and 3). In addition, both projects seek to empower actors in the supply chain, promote sustainable fishing practices, and leverage demand for seafood from formal and responsible fishing to encourage better practices, thus combating IUU fishing. This supports government agencies to improve transparency and data sharing and promotes transparent governance along the seafood supply chain (component 2).

The project under development by Fishery Improvement Project (FIP) and WWF for USAID, "IUU in DWF in Peru and Ecuador Project" has also been partially considered as co-financing. This project is complementary and highly synergistic, as it seeks to improve fish traceability as one of its main strategies to address IUU fishing in distant-water fisheries (Components 1 and 2). Similarly, the UNODC Global Maritime Crime Program (GMCP) project involves a series of training activities aimed at government officials to complement IUU fishing control efforts.

The investments mobilized by the private sector in Peru, Chile and Ecuador, although at this stage considered as estimates, will focus specifically on Component 3. Private sector actors will work on the interoperability of their own systems under GDST standards and improvements in their production chains to achieve more efficient and transparent traceability. Thus, through these new tools, they will be able to compete in different international markets, and at the same time account for the sustainability of their activities.

During PPG, the project will seek to partner with specific private sector actors from US/global markets and Chilean, Peruvian, and Ecuadorian fishers, processors, and traders. The goal will be to identify investments they are currently making or plan to make in their supply chains in the three countries with respect to supply chain traceability and transparency, and increase/mobilize those investments to support the project’s goals. Depending on the size of the company and the traceability systems implemented (developed in-house, commercial off-the-shelf systems, etc.) these investments could range from thousands to millions of dollars. For expected, indicative co-financing purposes, we have used a current WWF collaboration with two international buyers of marine ingredients from Chile indicates that investments mobilized could be in the range of $10,000 - $50,000 per company. Once specific downstream companies are identified, the project will pursue official letters of endorsement from these targeted companies, although this may not be feasible for every company and the project will coordinate with GEF for ensuring accountability for these amounts.

Private sector partners – including private philanthropic partners – are also expected to provide around $4,500,000 to WWF in related project grants and recurrent expenditures contributing to the project’s goals (including PMC). This is estimated based on historical levels of funding and a current $1,500,000 grant from a private sector partner foundation for related work in Chile and Ecuador (which, while not part of the co-financing total per GEF co-financing policy, is covering the recurrent expenditures of project preparation). Because these are future projects, the exact partners cannot be named at PIF stage, but the project will pursue official letters of endorsement for the eventual projects.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

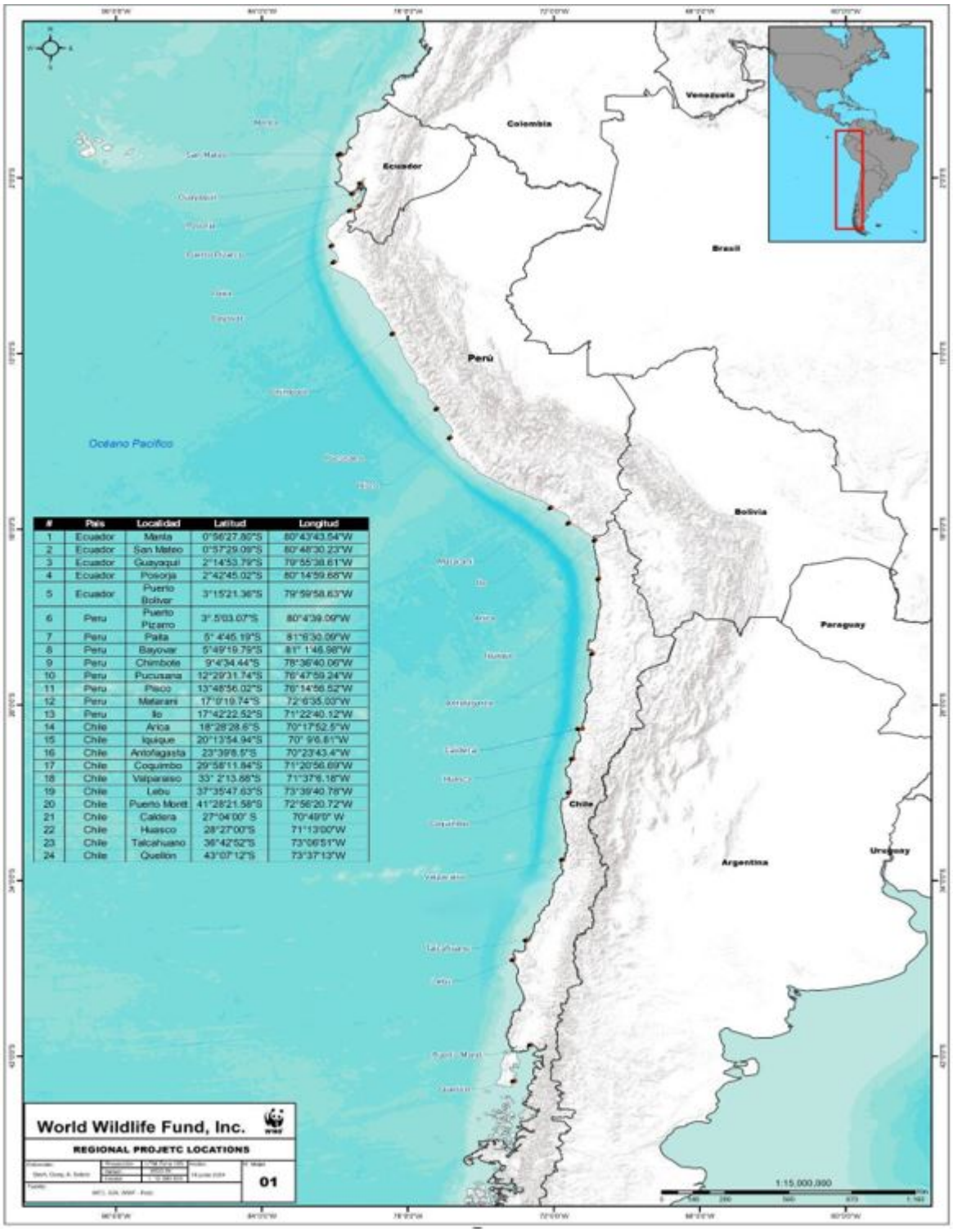
GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Ersin Esin	9/11/2024	Isabelle Vanderbeck	12027254201	isabelle.vanderbeck@un.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Edgar Heredia Salazar	Vice Minister of Environment	Ministry of Environment, Water and Ecological Transition – Ecuador	8/6/2024
Miguel Ernesto Stutzin Schottlander	Head, Office of International Affairs	Ministry of Environment - Chile	8/21/2024
Mauricio Gonzales Del Rosario	Head of the General Office of Cooperation and International Affairs	Ministry of Environment – Peru	9/5/2024

ANNEX C: PROJECT LOCATION

Please provide geo-referenced information and map where the project interventions will take place



#	País	Localidad	Latitud	Longitud
1	Ecuador	Manta	0°56'27.80"S	80°43'43.54"W
2	Ecuador	San Mateo	0°57'29.09"S	80°48'30.23"W
3	Ecuador	Guayaquil	2°14'53.79"S	79°55'38.61"W
4	Ecuador	Posorja	2°42'45.02"S	80°14'59.68"W
5	Ecuador	Puerto Bolivar	3°15'21.36"S	79°59'58.63"W
6	Peru	Puerto Pizarro	3°.5'03.07"S	80°4'39.09"W
7	Peru	Paita	5° 4'45.19"S	81°6'30.09"W
8	Peru	Bayovar	5°49'19.75"S	81° 1'46.98"W
9	Peru	Chimbote	9°4'34.44"S	78°36'40.06"W
10	Peru	Pucusana	12°29'31.74"S	76°47'59.24"W
11	Peru	Pisco	13°48'56.02"S	76°14'56.52"W
12	Peru	Matarani	17°0'19.74"S	72°6'35.03"W
13	Peru	Ilo	17°42'22.52"S	71°22'40.12"W
14	Chile	Arica	18°28'28.6"S	70°17'52.5"W
15	Chile	Iquique	20°13'54.94"S	70° 9'6.81"W
16	Chile	Antofagasta	23°39'8.5"S	70°23'43.4"W
17	Chile	Coquimbo	29°58'11.84"S	71°20'56.69"W
18	Chile	Valparaiso	33° 2'13.88"S	71°37'6.18"W
19	Chile	Lebu	37°35'47.63"S	73°39'40.78"W
20	Chile	Puerto Montt	41°28'21.58"S	72°56'20.72"W
21	Chile	Caldera	27°04'00" S	70°49'0" W
22	Chile	Huasco	28°27'00"S	71°13'00"W
23	Chile	Talcahuano	36°42'52"S	73°06'51"W
24	Chile	Quellon	43°07'12"S	73°37'13"W

#	Country	Locations	Latitude	Longitude
1	Ecuador	Manta	0°56'27.80'S	80°43'43.54'W
2	Ecuador	San Mateo	0°57'29.09'S	80°48'30.23'W
3	Ecuador	Guayaquil	2°14'53.79'S	79°55'38.61'W
4	Ecuador	Posorja	2°42'45.02'S	80°14'59.68'W
5	Ecuador	Puerto Bolivar	3°15'21.36'S	79°59'58.63'W
6	Peru	Puerto Pizarro	3.5´03.07° S	80° 4´39.09° W
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17	Chile	Caldera	27°04´00" S	70°49´00" W
18	Chile	Huasco	28°27´00" S	71°13´00" W
19	Chile	Coquimbo	29°58'11.84'S	71°20'56.69'W
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23	Chile	Puerto Montt	41°28'21.58'S	72°56'20.72'W
24	Chile	Quellón	43°07´12" S	73°37´13" W

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

Traceability - Appendix 3 SRIF

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
No Contribution 0	Significant Objective 1	Principal Objective 2	No Contribution 0

ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
Influencing models			
	Transform policy and regulatory environments		
	Strengthen institutional capacity and decision-making		
	Convene multi-stakeholder alliances		
	Demonstrate innovative approaches		
	Deploy innovative financial instruments		
Stakeholders			
	Indigenous Peoples		
	Private Sector		
		Capital providers	
		Financial intermediaries and market facilitators	
		Large corporations	
		SMEs	

		Individuals/Entrepreneurs	
		Non-Grant Pilot	
		Project Reflow	
	Beneficiaries		
	Local Communities		
	Civil Society		
		Community Based Organization	
		Non-Governmental Organization	
		Academia	
		Trade Unions and Workers Unions	
	Type of Engagement		
		Information Dissemination	
		Partnership	
		Consultation	
		Participation	
	Communications		
		Awareness Raising	
		Education	
		Public Campaigns	
		Behavior Change	
Capacity, Knowledge and Research			
	Enabling Activities		
	Capacity Development		
	Knowledge Generation and Exchange		
	Targeted Research		
	Learning		
		Theory of Change	
		Adaptive Management	
		Indicators to Measure Change	
	Innovation		
	Knowledge and Learning		
		Knowledge Management	
		Innovation	
		Capacity Development	
		Learning	
	Stakeholder Engagement Plan		
Gender Equality			
	Gender Mainstreaming		
		Beneficiaries	
		Women groups	
		Sex-disaggregated indicators	
		Gender-sensitive indicators	
	Gender results areas		
		Access and control over natural resources	
		Participation and leadership	
		Access to benefits and services	
		Capacity development	
		Awareness raising	
		Knowledge generation	
Focal Areas/Theme			
	Biodiversity		
		Mainstreaming	
			Fisheries
	International Waters		
		Ship	
		Coastal	
		Freshwater	
			Aquifer
			River Basin
			Lake Basin
		Learning	
		Fisheries	
		Persistent toxic substances	
		SIDS : Small Island Dev States	
		Targeted Research	
		Pollution	
			Persistent toxic substances

			Plastics
			Nutrient pollution from all sectors except wastewater
			Nutrient pollution from Wastewater
		Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
		Strategic Action Plan Implementation	
		Areas Beyond National Jurisdiction	
		Large Marine Ecosystems	
		Private Sector	
		Aquaculture	
		Marine Protected Area	
		Biomes	
			Mangrove
			Coral Reefs
			Seagrasses
			Polar Ecosystems
			Constructed Wetlands
		Fisheries	
	Climate Change		
		Climate Change Adaptation	
			Climate Finance
			Least Developed Countries
			Small Island Developing States
			Disaster Risk Management
			Sea-level rise
			Climate Resilience
			Climate information
			Ecosystem-based Adaptation
			Adaptation Tech Transfer
			National Adaptation Programme of Action
			National Adaptation Plan
			Mainstreaming Adaptation
			Private Sector
			Innovation
			Complementarity
			Community-based Adaptation
			Livelihoods