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IMPLEMENTATION COMPLETION AND RESULTS REPORT  
(IDA-D0390, IDA-D0400, TF-19089, TF-A3532, TF-A3533, TF-A3530)

on

GRANTS

IN THE AMOUNT OF SDR8.6 MILLION (US\$12.0 MILLION EQUIVALENT) AND SDR7.1 MILLION  
(US\$10.0 MILLION EQUIVALENT), RESPECTIVELY, TO THE ISLAMIC REPUBLIC OF MAURITANIA  
AND THE REPUBLIC OF GUINEA

and

GLOBAL ENVIRONMENT FACILITY GRANTS

IN THE AMOUNT OF US\$7 MILLION, US\$5 MILLION, US\$4 MILLION, AND US\$1 MILLION,  
RESPECTIVELY, TO THE ISLAMIC REPUBLIC OF MAURITANIA, THE REPUBLIC OF GUINEA,  
THE REPUBLIC OF SIERRA LEONE AND THE REPUBLIC OF LIBERIA

for the

FIRST PHASE OF THE WEST AFRICA REGIONAL FISHERIES PROGRAM

October 31, 2022

Environment, Natural Resources & The Blue Economy Global Practice  
Africa Western and Central Region

## CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2015)

Currency Unit = Special Drawing Rights

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SDR 0.709 = US\$ 1

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US\$ 1.409 = SDR 1

(Exchange Rate Effective February 28, 2022)

Currency Unit = Special Drawing Rights

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SDR 0.72 = US\$ 1

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US\$ 1.39 = SDR 1

## FISCAL YEAR

Guinea: January 1 - December 31

Liberia: July 1 – June 30

Mauritania: January 1 - December 31

Sierra Leone: January 1 - December 31

Regional Vice President: Ousmane Diagana

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## ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
APL	Adaptable Programmatic Loan
BGEEE	Guinean Office of Environmental studies and evaluations ( <i>Bureau guinéen d'Etudes et évaluation environnementales</i> )
BAP	Biodiversity Action Plan
BP	Bank Procedure
CMA	Community Management Association
CNSP	National Fisheries Surveillance Center ( <i>Centre National de Surveillance des Pêches</i> )
COVID-19	Coronavirus Disease 2019
CPF	Country Partnership Framework
CPS	Country Partnership Strategy
CSRP	Sub Regional Fisheries Commission ( <i>Commission Sous-Regionale des Pêches</i> )
DCE	Environmental Control Department (Mauritania) ( <i>Direction du Contrôle Environnemental</i> )
DLI	Disbursement-Linked Indicator
ECOWAS	Economic Community of West African States
EEZ	Exclusive Economic Zone
EHS	Environment, Health and Safety
EPASL	Environmental Protection Agency (Sierra Leone)
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
E&S	Environmental and Social
FITI	Fisheries Transparency Initiative
GBV	Gender-based Violence
GCM	Mauritanian Coast Guard ( <i>Garde Côtes Mauritanienne</i> )
GEF	Global Environment Facility
GM	Grievance Mechanism
ICR	Implementation Completion and Results
IDA	International Development Association
IMROP	Mauritanian Institute for Oceanographic Research and Fisheries ( <i>Institut Mauritanien De Recherches Océanographiques et de Pêches</i> )
IP	Implementation Progress
IUU	Illegal, Unreported, and Unregulated
M&E	Monitoring and Evaluation
MCS	Monitoring, control, and surveillance
MEEF	Ministry of Environment, Water Resources and Forests (Guinea) ( <i>Ministère de l'Environnement, des Eaux et Forêts</i> )
MFMR	Ministry of Fisheries and Marine Resources (Sierra Leone)
MPAEM	Ministry of Fisheries, Aquaculture and Maritime Economy (Guinea) ( <i>Ministère de la Pêche, de l'Aquaculture et de l'Économie Maritime</i> )

MPEM	Ministry of Fisheries and Maritime Economy (Mauritania) ( <i>Ministère des Pêches et de l'Économie Maritime</i> )
MPN	Nouakchott Fish Market ( <i>Marché aux Poissons de Nouakchott</i> )
MRU	Mauritanian ouguiya
NaFAA	National Fisheries and Aquaculture Authority (Liberia)
NGO	Non-governmental Organization
OP	Operational Policy
PAA	<i>Advanced Artisanal Fishery (Pêche Artisanale Avancée)</i>
PAP	Project Affected Persons
PBC	Performance-based contract
PDO	Project Development Objective
PIU	Project Implementation Unit
PMU	Project Management Unit
PP	Procurement Plan
PPSD	Project Procurement Strategy for Development
RAP	Resettlement Actions Plan
RCU	Regional Coordination Unit
RPF	Resettlement Policy Framework
SEP	Stakeholder Engagement Plan
SOP	Series of Projects
STEP	Systematic Tracking of Exchanges in Procurement
TAC	Total Allowable Catch
TURF	Territorial Use Right Fisheries
UNOPS	United Nations Office for Project Services
VMS	Vessel monitoring system
WARFP	West Africa Regional Fisheries Program

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**DATA SHEET**

**BASIC INFORMATION**

**Product Information**

Project ID	Project Name
P126773	West Africa Region Fisheries Program AF Guinea, Sierra Leone & Liberia
Country	Financing Instrument
Western and Central Africa	Investment Project Financing
Original EA Category	Revised EA Category
Partial Assessment (B)	Partial Assessment (B)

**Related Projects**

Relationship	Project	Approval	Product Line
Supplement	P131327-West Africa - Mauritania Fish. APL	16-Mar-2015	Global Environment Project

**Organizations**

Borrower	Implementing Agency
Islamic Republic of Mauritania, Republic of Guinea, Republic of Liberia, Republic of Sierra Leone	Ministry of Agriculture (Liberia), Ministry of Fisheries and Marine Resources (Sierra Leone), Ministry of Fisheries and Maritime Economy (Mauritania), Ministry of Fisheries, Aquaculture, and Maritime Economy (Guinea)

**Project Development Objective (PDO)**

Original PDO

The development objective of this first phase of the West Africa Regional Fisheries Program SOP-C (formerly APL-C) is to strengthen governance and management of targeted fisheries and improve handling of landed catch at selected sites.

**FINANCING**

	Original Amount (US\$)	Revised Amount (US\$)	Actual Disbursed (US\$)
<b>World Bank Financing</b>			
P126773 IDA-D0400	10,000,000	10,000,000	9,864,026
P126773 IDA-D0390	12,000,000	12,000,000	10,995,663
P131327 TF-19089	7,000,000	7,000,000	5,871,041
P131327 TF-A3532	1,000,000	1,000,000	1,000,000
P131327 TF-A3533	4,000,000	4,000,000	3,998,746
P131327 TF-A3530	5,000,000	5,000,000	4,892,950
<b>Total</b>	<b>39,000,000</b>	<b>39,000,000</b>	<b>36,622,426</b>
<b>Non-World Bank Financing</b>			
Borrower/Recipient	1,050,000	0	0
<b>Total</b>	<b>1,050,000</b>	<b>0</b>	<b>0</b>
<b>Total Project Cost</b>	<b>40,050,000</b>	<b>39,000,000</b>	<b>36,622,426</b>

**KEY DATES**

Project	Approval	Effectiveness	MTR Review	Original Closing	Actual Closing
P126773	16-Mar-2015	24-Jun-2015	20-Mar-2018	15-Dec-2020	28-Feb-2022



**RESTRUCTURING AND/OR ADDITIONAL FINANCING**

Date(s)	Amount Disbursed (US\$M)	Key Revisions
28-Feb-2018	5.85	Change in Results Framework Change in Components and Cost Change in Loan Closing Date(s) Change in Disbursements Arrangements
30-Apr-2019	9.37	Change in Results Framework Change in Components and Cost Reallocation between Disbursement Categories Change in Disbursements Arrangements Other Change(s)
11-Jul-2020	16.36	Change in Results Framework Change in Components and Cost Change in Loan Closing Date(s) Reallocation between Disbursement Categories Change in Procurement Change in Implementation Schedule
28-Aug-2020	16.76	Change in Loan Closing Date(s)
06-Dec-2021	20.49	Change in Results Framework Change in Loan Closing Date(s)

**KEY RATINGS**

Outcome	Bank Performance	M&E Quality
Moderately Satisfactory	Moderately Satisfactory	Substantial

**RATINGS OF PROJECT PERFORMANCE IN ISRs**

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US\$M)
01	28-Jun-2015	Satisfactory	Satisfactory	1.25
02	23-Dec-2015	Satisfactory	Satisfactory	2.18
03	14-Jun-2016	Satisfactory	Satisfactory	3.13
04	16-Dec-2016	Satisfactory	Satisfactory	4.00
05	20-Jun-2017	Satisfactory	Moderately Satisfactory	5.32



06	28-Dec-2017	Moderately Satisfactory	Moderately Satisfactory	6.33
07	29-Jun-2018	Moderately Satisfactory	Moderately Satisfactory	7.63
08	21-Dec-2018	Moderately Satisfactory	Moderately Unsatisfactory	9.05
09	28-Jun-2019	Moderately Satisfactory	Moderately Satisfactory	10.08
10	27-Nov-2019	Moderately Satisfactory	Moderately Satisfactory	12.82
11	28-Jan-2020	Moderately Satisfactory	Moderately Satisfactory	14.50
12	31-Jul-2020	Moderately Satisfactory	Moderately Satisfactory	17.22
13	25-Feb-2021	Moderately Satisfactory	Moderately Satisfactory	18.62
14	01-Sep-2021	Moderately Satisfactory	Moderately Satisfactory	20.79
15	12-Oct-2022	Moderately Satisfactory	Moderately Satisfactory	21.93

## SECTORS AND THEMES

### Sectors

Major Sector/Sector (%)

**Agriculture, Fishing and Forestry 100**

Fisheries 42

Public Administration - Agriculture, Fishing & Forestry 58

### Themes

Major Theme/ Theme (Level 2)/ Theme (Level 3) (%)

**Private Sector Development 16**

Jobs 16

Job Creation 16

**Public Sector Management 19**

Public Administration 19

Transparency, Accountability and Good Governance 19



<b>Urban and Rural Development</b>	<b>44</b>
Urban Development	16
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Rural Non-farm Income Generation	12
Rural Infrastructure and service delivery	16
<b>Environment and Natural Resource Management</b>	<b>20</b>
Environmental policies and institutions	20

### ADM STAFF

Role	At Approval	At ICR
Regional Vice President:	Makhtar Diop	Ousmane Diagana
Country Director:	Colin Bruce	Boutheina Guermazi
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## I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

### A. CONTEXT AT APPRAISAL

1. The West Africa Regional Fisheries Program (WARFP) was designed as a multiphase Adaptable Programmatic Loan (APL, later changed to Series of Projects, SOP). This Implementation Completion and Results Report (ICR) covers a WARFP Phase I investment in Guinea and Mauritania (numbered SOP-C1) as well as an Additional Financing (AF) for Liberia and Sierra Leone that was intended as a bridge funding in preparation for their WARFP Phase II participation under SOP-A2 (see Figure 1 below). WARFP Phase II got canceled at an advanced stage of preparation in 2019 due to changes in regional priorities on the Banks' side (see in particular Section III.B.(b)).

#### Context

2. **Ocean waters off the coast of West Africa offer some of the richest fishing grounds in the world, but most of the commercially important fish stocks were already fully exploited or overexploited.** A combination of westward winds over the Sahara depositing nutrients into the Atlantic and a deep-sea upwelling creates unique conditions enabling abundant fish populations. At appraisal, more than 1.6 million tons of fish were legally captured in West African waters each year, with an estimated wholesale value of US\$2.5 billion. The sector provided direct and indirect employment to over 3.2 million people. In addition, fisheries were a core source of proteins and essential micro-nutrients for populations in West Africa, which are heavily dependent on fish as their main source of protein intake (up to 60 percent in some of the West Africa countries). Yet, despite the economic, social, and environmental importance of West Africa's marine fish resources, they were unsustainably exploited, preventing them to make a greater and durable contribution to economic growth, poverty alleviation, and food security.

3. **Weak fisheries governance and management were contributing to overfishing, illegal fishing, dissipation of resource rent, and depletion of fish resources.** The fisheries sector in West Africa was characterized by three key challenges: (i) the low capacity of countries to sustainably manage the marine fish resources and prevent their overexploitation, (ii) the inability to prevent IUU fishing, and (iii) the failure to add value locally to caught fish in part due to foreign and offshore legal harvesting of the resources, which yielded only a fraction of their value to local economies. Inadequate management arrangements were unable to control the ecological, economic, and social practices needed to sustain the fisheries sector. At the root of weak fisheries governance was the de-facto open access regime of the fisheries sector and the lack of cooperation between coastal States.

4. **In 2009, the World Bank approved a multi-country, multi-phase series of projects (SOP) as part of the West Africa Regional Fisheries Program (WARFP).** The need for a regional program emerged from a recognition that many of the important fish stocks of West Africa were shared between coastal states, as was the problem of illegal fishing. The overarching regional objective of the WARFP is to sustainably increase the overall wealth generated and captured by West African countries through better management of marine fisheries. The WARFP approach involves: (i) strengthening governance and management of the countries' fisheries; (ii) reducing illegal, unreported, and unregulated (IUU) fishing; and (iii) increasing the net value generated by fish resources and the proportion of that value captured by the countries. In each country, the first phase would focus more on objectives (i) and (ii), while



the third objective would be pursued in later phases. The overall WARFP programmatic approach, theory of change, and geographical area is presented in Annex 7 and 8.

5. **Mauritania and Guinea were the 7th and the 8th country, respectively, to join the WARFP program and their participation was essential to achieving the broader regional objectives (Figure 1).** Implementation began in 2010 with Cabo Verde, Liberia, Senegal, and Sierra Leone as the first group of countries in the Program (SOP-A) <sup>1</sup>. Subsequently, Guinea-Bissau and Ghana joined the Program in 2011 and 2012, respectively (SOP-B). Given the absence of physical borders in the oceanscape, the premise of the WARFP was that efforts to improve fisheries governance and management in one country might not bear fruit if neighboring countries did not participate equally.

Figure 1: The Programmatic Approach of the West Africa Regional Fisheries Program



6. **This project (SOP-C1) was approved on March 16, 2015, and covered initially Guinea and Mauritania as well as the Sub-Regional Fisheries Commission (Commission Sous-Regionale des Pêches, CSRP),** which housed the Regional Coordination Unit (RCU) and received a financial allocation of about five percent of each country's financing through subsidiary agreements. Additional Financing (AF) of US\$10 million was approved on January 5, 2017, adding Liberia and Sierra Leone to the project, acting as a bridge to Phase II for these two countries since they had been participating in WARFP Phase I SOP-A1 and were preparing their participation in SOP-A2.

*Rationale for World Bank involvement and higher-level objectives*

7. **The World Bank was in a strong position to support Mauritania and Guinea in strengthening the governance and management of the fisheries sector.** First, the World Bank recognized the importance of fisheries as a key contributor to food and nutrition security, to social protection as an important safety net, and to job creation for

<sup>1</sup> P106063 and related projects and additional financing under P124844, P108941, P124242, and P159912.



the rural and coastal populations in West Africa, which are among the poorest and most vulnerable. Second, it had considerable global experience in the sector and deep on-going engagement in the region, such as the operation in coastal natural resources management in the Guinea Coastal Marine and Biodiversity Management Project, which was just closing at the time. This allowed the World Bank to bring locally-adapted best practices to the project and replicate the transformative results achieved under the first WARFP investments (see Box 1).

*Box 1: Early Results of the West Africa Regional Fisheries Program*

The WARFP program yielded transformative results under SOP-A1. In Liberia, the incidence of illegal fishing (occurrence of serious infractions as a share of total infractions) was reduced by 83 percent, and a number of fraudulent licenses were discovered worth more than the annual revenues collected from official licenses, revealing a pattern of fraud. In Liberia and Sierra Leone, the exclusion of trawlers from the 6-mile inner zone opened the space for fishing communities, and coastal communities were visibly wealthier as a result of securing their access rights. As a result of improved governance in Sierra Leone's fisheries administration, official public revenues from the fisheries sector quadrupled in five years, from US\$0.9 million in 2008 to US\$3.8 million in 2013. With the introduction of community-led fisheries management in Senegal, some communities reported an increase revenue. Almost all participating countries reached a 100 percent registration rate for the artisanal fleet. Cabo Verde piloted an incentive-based registration system, which became a best practice approach in West Africa.

8. **The Project was closely aligned with the Country Partnership Strategies (CPSs) of both Mauritania and Guinea.** Under the Mauritanian CPS for FY2014-16, the first pillar highlighted the role of the fisheries sector in accelerating growth and maintaining macroeconomic momentum. Transitioning towards inclusive green growth in Mauritania also focused on fisheries as one of the key sectors to drive sustainable economic growth. In the Guinean CPS for FY2014-17, the fisheries sector formed part of the fourth pillar to fight poverty and malnutrition. Fisheries was also highlighted as a sector that was underperforming largely due to illegal and unreported fishing activity.

9. **Marine resources were an important component of the Global Environment Facility (GEF) work program and the project aligned well with GEF's vision in this area.** As stated in the GEF 5 Focal Areas Strategy (2012), "GEF serves a unique role in building trust and confidence between States for catalyzing collective management of these large marine systems while providing benefit to environment, food production, economic development, community health, and regional stability." As one of the child projects under the Strategic Partnership for Sustainable Fisheries Management in the Large Marine Ecosystems in Africa, the project supported the overall objective to assist in the development, adoption, and implementation of governance reforms supporting environmentally, economically, and socially sustainable marine fisheries in the large marine ecosystems of Africa.

10. **The Project supported a number of regional strategies.** First, it supported the World Bank Africa Regional Strategy (2011) in the areas of competitiveness and employment and vulnerability and resilience by sustainably increasing the competitiveness of the Mauritanian and Guinean fishing industries, strengthening the enabling environment for private investment, and contributing to regional food security. Second, the Project supported the Regional Integration Assistance Strategy, adopted in 2008 and updated in 2011, which noted the need for improved management of shared natural resources, such as fish stocks. Third, the project was fully aligned with the objectives stated in the Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa endorsed in May 2014 by the African Union as it sought to promote sustainable fisheries management and activities focused on improving economic benefits. Finally, as its participating countries were also members of the CSRP, the project supported the



2011-2015 Strategic Action Plan of the CSRP, which called for strengthened fish resource management among the member countries and increased monitoring, control, and surveillance (MCS) activities to reduce IUU fishing.

### Theory of Change (Results Chain)

11. **The Project's theory of change mirrored that of Phase 1 for the overall WARFP (Annex 8).** For the purpose of this ICR, the team prepared the theory of change (ToC) based on the project description in the PAD and developed the illustration below in Figure 2. The program-level Theory of Change is included in Annex 8. The project was based on the premise that coastal countries of West Africa were endowed with valuable and shared natural resources in the form of marine fish stocks, but that the economic and social returns were far below their potential due to overexploitation, including by foreign fleets, and to low economic return from catch. The project proposed to address these issues by making fisheries increasingly productive over time and by enabling their contribution to growth, shared prosperity, and poverty reduction, while supporting a culture of cooperation between coastal States. This required a transition to better management of fisheries resources, regional collaboration to sustainably increase the wealth from one of its largest shared forms of natural capital and linking of small-scale operators to extended value chains.

12. **The project combined a focus on the harvest and post-harvest sectors.** Activities focused on harvest sector aimed to reduce pressure on marine fish resources within the exclusive economic zone (EEZ) of each country by introducing (governance and management) and enforcing (monitoring, control, and surveillance) equitable resource use. Equitable allocation of secure fishing rights would ensure the inclusion of existing users and protect the interests of vulnerable populations in the fishing industry, in particular smaller players in the artisanal segment (i.e., community-based management). The second pillar focused on the post-harvest sector and sought to reduce waste and improve quality of landed catch by delivering investments in physical infrastructure and support services to facilitate proper handling, in line in particular with health and sanitation standards. Combined, this would improve the socio-economic benefits and distributional outcomes of the fisheries sector and support long-term transformative contributions to poverty alleviation and promotion of shared prosperity.

13. **Project structure:** Components 1 and 2 together aimed to reduce the pressure on fish resources by introducing (Component 1) and enforcing (Component 2) rules of resource use and management. Component 3 targeted the post-harvest subsector by investing in platform infrastructure and support services. Since investments in the post-harvest subsector in the fisheries industry often influence behavior in the harvest subsector, the project aimed at coordinating interventions in the two subsectors from a broader perspective to ensure that increased market value do not underpin increased fishing effort. Finally, as these countries and other WARFP countries are connected through shared fish resources and regional labor and seafood markets, activities in one country can have regional impacts. Accordingly, Component 4 would monitor national activities and coordinate at the regional level. Data and information collected through activities in Components 1-3 would be consolidated and shared domestically and regionally in Component 4 to help reduce IUU fishing and support recovery of fish stocks to sustainable levels.

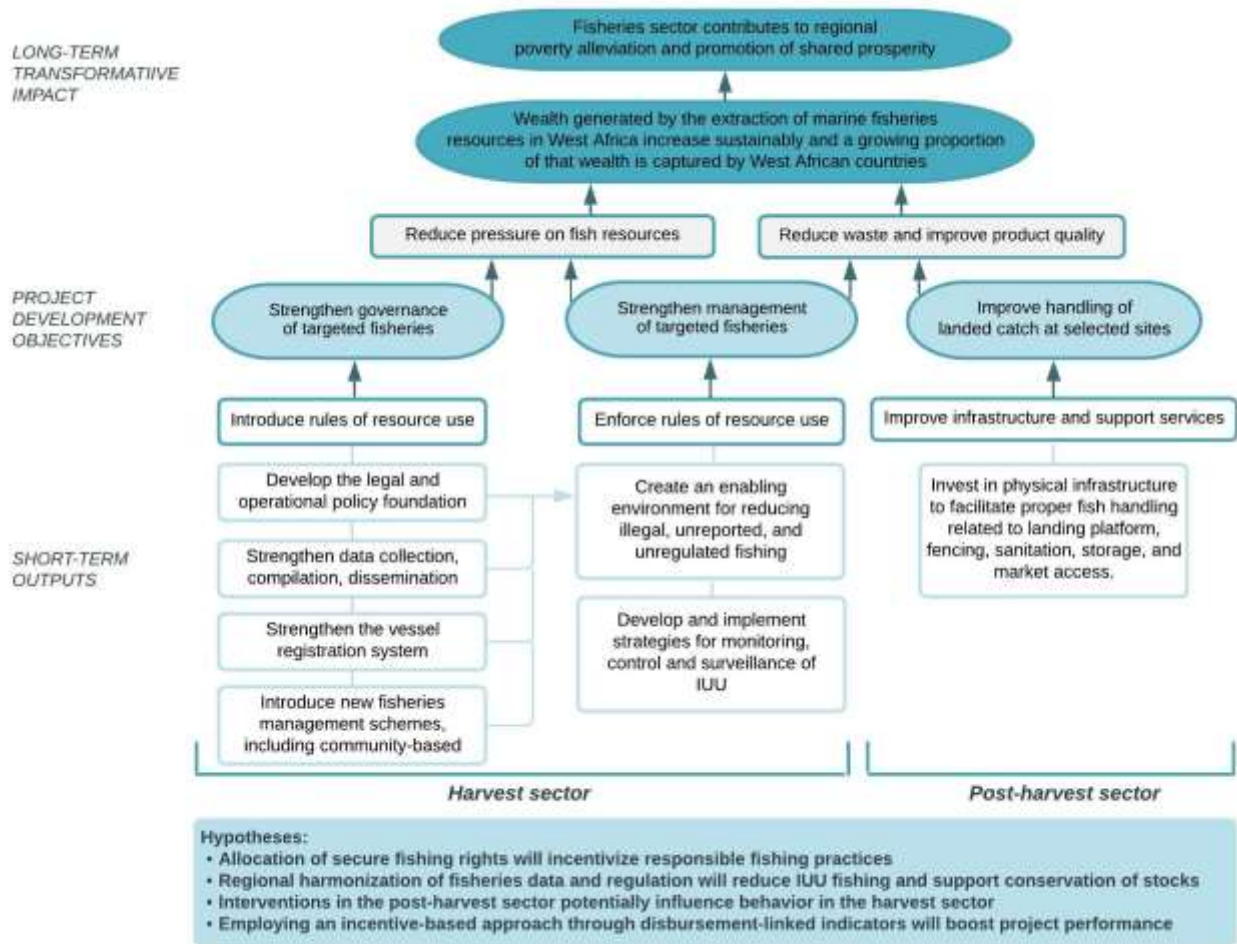
14. **The project employed an incentive-based approach to reward performance in order to encourage managing for results, especially in good governance and transparency.** Using a Disbursement-Linked Indicator (DLI) mechanism, some disbursements would be linked to selected performance indicators on fisheries management and transparency. In conjunction with a "training-for-results" approach, beneficiary institutions would receive





incentives under the Eligible Expenditure Program, comprised of operating costs and short-term training for key civil servants, if they achieved the DLI targets.

Figure 2: Theory of Change







### Project Development Objectives (PDOs)

15. **The PDO was to strengthen the governance and management of targeted fisheries and improve the handling of landed catch at selected sites.**

16. The Global Environmental Objective of the WARFP SOP-C1 was the same as the PDO: to strengthen the governance and management of targeted fisheries and improve the handling of landed catch at selected sites.

17. Targeted fisheries included demersal, including cephalopods, and small pelagic fisheries by artisanal and industrial operators in the EEZ of each country. For a schematic overview see Table 2 in Section I.B. below.

### Key Expected Outcomes and Outcome Indicators

18. **The compounded PDO had three expected development outcomes and six related key outcome indicators:**

*(i) to strengthen the governance of targeted fisheries*

- Share of fisheries management data published regularly and made publicly accessible;
- Allocation of secure fishing rights in the small-scale segment in a participatory, transparent, and scientific manner;

*(ii) to strengthen the management of targeted fisheries*

- Number of fishing vessels operating in the exclusive economic zones should not exceed the ceiling established for each fleet segment;
- Share of fishing vessels inspected by the national fisheries surveillance agency for compliance with national regulations;

*(iii) to improve the handling of landed catch at selected sites*

- Share of marketable volume of fish landed at selected fish landing sites; and
- Direct project beneficiaries (of which female).

19. **Direct project beneficiaries** were estimated at 445,000 people working on the ground such as artisanal fishers, industrial fishers, processing plant workers (often women), and sellers of fish and fish products (often women), of which 201,900 were women. Other project beneficiaries included those who work at the institutional or political level, such as the client country institutions (i.e., ministries or departments of fisheries), regional organizations, technical agencies, and members of the NGO community.

20. **At the WARFP program level, three outcome indicators were defined for the program as whole, comprising multiple countries and additional phases, some of which are ongoing, and others still being planned.**

- *Environmental Indicator:* At least seven overexploited fish stocks show signs of recovery, as measured by an increase in total landings per unit of fishing capacity;
- *Economic Indicator:* Increase in annual net economic benefits to each participating country from targeted fisheries; and



- *Social Indicator:* Effective operation of management committees for community co-management and Territorial Use Right Fisheries (TURF) established in targeted fishing communities (%).

### **Components**

21. The project was structured around three components, which broadly correlated to the three parts of the PDO, as well as a fourth component for coordination, monitoring and evaluation (M&E) and project management. Under the three technical components, each country and the CSRP were to focus on a specific set of activities, which were tailored to context and needs. The four components of the project were:

#### **Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries**

*Appraisal costs:* US\$2.47 million IDA in GN; US\$1.00 million IDA and US\$6.93 million GEF in MR.

*AF appraisal costs (GEF only):* US\$1.6 million in GN; US\$0.2 million in LR; US\$1.5 million in SL.

*Actual costs:* US\$3 million in GN; US\$0.2 million in LR; US\$6.5 million in MR; US\$1.56 million in SL.

22. Component 1 aimed to: (i) develop legal and operational policy and strengthen institutional capacity; (ii) strengthen vessel registration systems for effective control of fishing capacity; (iii) introduce new fisheries management schemes in targeted fisheries, segments, or communities to align fishing capacity and effort with sustainable catch levels, pursued in parallel with development and implementation of fisheries management plans; and (iv) strengthen the system of fisheries-related data collection, management, and dissemination in a transparent manner.

#### **Component 2: Reducing Illegal, Unreported, and Unregulated (IUU) Fishing**

*Appraisal costs:* US\$3.02 million IDA in GN.

*AF appraisal costs (GEF only):* US\$0.4 million in GN; US\$1.22 million in SL.

*Actual costs:* US\$2 million in GN; US\$1.23 million in SL.

23. Component 2 sought to reduce IUU fishing activities by: (i) strengthening fisheries monitoring, control and surveillance systems; and (ii) providing legal assistance for aligning national fisheries legislation with international standards, in particular the United Nations Convention on the Law of the Sea (UNCLOS) and its implementing arrangements.

#### **Component 3: Increasing Contribution of the Fish Resources to the Local Economy**

*Appraisal costs:* US\$2.24 million IDA in GN; US\$6.87 million IDA and US\$0.07 million GEF in MR.

*AF appraisal costs (GEF only):* US\$2.6 million in GN; US\$0.6 million in LR; US\$0.83 million in SL.

*Actual costs:* US\$5.4 million in GN; US\$0.6 million in LR; US\$7.37 million in MR; US\$0.68 million in SL.

24. Component 3 aimed to improve physical infrastructure at selected sites for better handling of landed fish and reduction of post-harvest losses.

#### **Component 4: Project Management, Monitoring and Evaluation, and Regional Coordination**

*Appraisal costs:* US\$2.27 million IDA in GN; US\$4.13 million IDA in MR

*AF appraisal costs (GEF only):* US\$0.4 million in GN; US\$0.2 million in LR; US\$0.45 million in SL.



Actual costs: US\$3.1 million in GN; US\$0.2 million in LR; US\$3.59 million in MR; US\$0.53 million in SL.

25. Component 4 supported national implementation of the project and regional coordination activities to be carried out by the CSRP.

## B. SIGNIFICANT CHANGES DURING IMPLEMENTATION

### Revised PDOs and Outcome Targets

26. The project development objectives were not revised and expected project outcomes remained unchanged.

### Revised PDO Indicators

27. Two outcome indicators were revised in the Level II restructuring approved on April 30, 2019 (following Mid-Term Review), as shown in Table 1. A full overview of changes to the Results Framework at the PDO level is included in Annex 1.B and revised indicators and target values are given in Annex 1.A. Below is a summary of the key changes.

28. **Target values were revised on three separate occasions.**

- On January 5, 2017 (AF): Target values by country were added to PDO indicator 2 (GN, LI, and SL) and 4 (SL).
- On April 30, 2019: For Guinea, the target value for PDO indicator 3 was revised to include a new category of advanced coastal boats (*Pêche Artisanale Avancée*, or PAA). Target values for PDO indicator 6 were adjusted to reflect only those beneficiaries that could be directly tracked and verified, as the original indicator included co-beneficiary livelihoods throughout the value chain.
- On July 11, 2020: For Sierra Leone, a target value was introduced for PDO indicator 1, while PDO indicator 2 was dropped.

Table 1: Revised PDO Indicators

	Original indicator	Revised indicator	Rationale
<b>PDO Indicator 2:</b>	Allocation of secure fishing rights in the small-scale segment in a participatory, transparent, and scientific manner	<b>MR only:</b> Individual quotas in octopus are distributed to all the fleet segments in a participatory, transparent, and scientific manner	Revised for Mauritania as part of the ongoing fisheries reform to prepare fish management plans according to species instead of segment. Focus changed to all segments in octopus fisheries (not only small-scale segment, artisanal) and therefore did not imply a reduction in project scope.
<b>PDO Indicator 5:</b>	Share of marketable volume of fish landed at selected fish landing sites (%)	<b>GN and MR:</b> Volume of processing capacity according to improved hygiene conditions ( <b>Metric ton</b> )	Revised to measure changes in marketable volume instead of loss ratio as the original indicator lacked baseline data and was not practically implementable.



### Revised Components

29. **The four project component titles were not revised during implementation, however several activities were dropped, added, or revised** through the management-approved Level II restructurings and additional financing mentioned above. Revisions made to component activities can be summarized as:

30. **MR:** a refocus of priority targeting in view of the ongoing reform process in which the government sought to have fewer but more encompassing fishery management plans, leading to (i) a change in the targeting of fisheries management to focus on octopus fisheries only but for all segments and not only the small-scale segment, and (ii) a consolidation of infrastructure investments in the Nouakchott Fish Market because the remaining time and resources were limited (*April 2019*). The changes did not entail a significant reallocation of funds between components.

31. **GN:** an adjustment to the realities on the ground due to (i) the on-going canoe registration in the artisanal segment, which prevented the introduction of secure fishing rights in terms of licensing within the timeframe of the project, (ii) progress on monitoring and control of IUU in the industrial segment achieved without project support, and (iii) a new Client's need to rehabilitate the community access road towards the fishing village in Koukoude (*April 2019*):

- Component 1 was reduced by US\$0.77 million (19 percent) as activities to introduce secure fishing rights in the artisanal segment were dropped and PDO indicator 3 revised.
- Component 2 was reduced by US\$1.52 million (44 percent) as activities related to the acquisition of a patrol vessel were dropped.
- Component 3 was increased by US\$1.66 million (34 percent) to construct an access road.

32. **SL:** a realignment of activities as (i) facilitation of MCS cooperation agreements with neighboring countries could not be completed due to cancellation of a regional follow-on project, and (ii) a lack of capacity in the coastal Community Management Associations (CMAs), which had been established under Phase I of the WARFP to manage local fishing rights, meant that securing access rights in the artisanal segment could not be completed during the timeframe of the project and that micro-grants to develop community activities to assist in livelihood transfers were replaced with various investments to improve better handling of landed catch and reduce post-harvest loss (*July 2020*):

- Component 3 was reduced by US\$0.15 million (18 percent) as activities to expand the piloting of fishing rights allocation by CMAs were dropped along with PDO Indicator 2.

### Other Changes

33. **Additional GEF financing in the amount of US\$10 million was approved on January 5, 2017, and added Liberia and Sierra Leone to the Project.** The AF planned to finance additional and scaled-up interventions in Guinea, Liberia, and Sierra Leone as part of WARFP Phase I (GN) and in preparation for WARFP Phase II (LR and SL). The PDO remained unchanged, while some PDO target indicators were adjusted to reflect additional expected outcomes (see Annex 1.B.). No civil works were planned under the AF. The AF's closing date was set to March 1, 2021. AF activities can be summarized as:



- *In Guinea*, the US\$5 million grant would be used to deepen institutional (national, regional, communal) and legal reforms, build local fishing communities physical and human capacity to manage and monitor assigned fisheries areas and local businesses, and further invest in surveillance capacities
- *In Liberia*, the US\$1 million grant would advance existing management efforts for targeted fisheries, further build up the CMA model, and strengthen local monitoring and surveillance.
- *In Sierra Leone*, the US\$4 million grant would support community-led fisheries management, regulatory and institutional reform, and improved fisheries monitoring.
- *At the regional level*, the AF would enhance the coordination between the WARFP countries and support the utilization of IW-LEARN as a platform for sharing results and knowledge (through subsidiary agreements between Guinea, Liberia, and Sierra Leone with the CSRP).

34. **The Project was since restructured five times and the project closing date extended 14 months:** (i) to extend the closing date for Liberia due to a significant delay in implementation caused by elections and a government transition (Level-2 restructuring on February 28, 2018 - the GEF Grant to Liberia closed on March 1, 2019); (ii) following the mid-term review to address reforms on fisheries management to prepare plans by fisheries instead of by segment (MR) and to adjust component activities and cost to actual implementation progress (GN) and revise the results framework (MR and GN) (Level-2 restructuring on April 30, 2019); (iii) to address the impact of COVID-19 in Sierra Leone in the first extension of the project closing date and to realign activities and the results framework with actual progress in regional collaboration and CMAs capacity (Level-2 restructuring on July 11, 2020 followed shortly thereafter by a corrective action Level-2 restructuring approved on August 28, 2020 to address category allocation only); and (iv) a 12-months no-cost closing date extension for Guinea and Mauritania to mitigate the impacts of the COVID-19 pandemic on implementation rate (Level-2 restructuring on August 28, 2020). Following the Summer 2020 restructurings, IDA and GEF legal agreements for Guinea, Mauritania, and Sierra Leone all had December 31, 2021, as the closing date. The final restructuring (v) was approved for a two-month no-cost extension of the closing date for SL and MR only (Level-2 restructuring on December 6, 2021).

35. **Changes to targeted fisheries, segments, and sites were made during implementation in view of government priorities and realities on the ground.** Table 2 below, prepared by the ICR team, shows the planned and targeted fisheries, segments, and sites where project activities were implemented in each country.



Table 2: Targeted Fisheries, Segments, and Sites by Country (overview prepared by the ICR team)

Targeting	Guinea		Liberia		Mauritania		Sierra Leone	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
<b>Fisheries</b>								
Small pelagic fish	x	x						
Demersal fish	x							
Cephalopods	x**				x	x		
Crustaceans	x**	x		x	x	x		
<b>Segments (national level)</b>								
Industrial	x	x			x	x	x	x
Coastal*		x			x	x		
Artisanal	x	x	x	x	x	x	x	x
<b>Sites (community level)</b>								
Investments	Koukoude	Bongolon, Koukoude	n/a***	-	Nouakchott Fish Market, Tanit, PK 93, PK 144, and N'Diogo	Nouakchott Fish Market	n/a***	Konakreede (from first SOP1 project)
Community management	Koukoude	Bongolon, Koukoude, Matakang	Robertsport	Robertsport	PK 93, PK 144 and N'Diogo	-	Existing CMAs established under first SOP-A project	Existing CMAs + six new CMAs

\* Coastal segment is semi-industrial with advanced (motorized) artisanal boats

\*\* Fisheries management plans only

\*\*\* No planned investments under the AF.

### Rationale for Changes and Their Implication on the Original Theory of Change

36. **Rationale for the AF:** The rationale for providing additional GEF financing was to deliver further targeted support for the fisheries sector in view of achievements made thus far under the WARFP and in response to the impact of the 2014 Ebola outbreak on fishing communities, local livelihoods, and food security in Liberia and Sierra Leone.

37. **Allocation of secured fishing rights in the small-scale segment was too ambitious.** The planned implementation of secured fishing rights in the artisanal segment did not materialize in any of the countries. The traditional open-access fisheries scheme coupled with long standing traditional practices of fishers' migration in response to the migratory patterns of commercial fish species weighed too heavy in trying to tip the scale towards capacity control of the small-scale segment.

38. **The COVID-19 health crisis impacted project activities and caused implementation delay, primarily related to infrastructure and civil work under Component 3.** COVID restrictions on domestic travel and gatherings and on international travel and shipping had a profound impact on infrastructure work. The pandemic delayed the schedule of national and international contractors at construction sites, disrupted value chains for material and equipment, postponed or limited community engagement, and slowed down the mobilization of international experts. This mostly impacted the finalization of infrastructure investments at the landing site of Koukoude in Guinea, the installation of a wastewater treatment plant at the fish market in Nouakchott in Mauritania, and the construction of the fish landing site and of fish smoking ovens at Konakreede in Sierra Leone.

39. **The management-approved changes to project financing, indicators, components, and closing date did not substantially impact the theory of change, nor did they call for a split evaluation of project outcomes.** The AF and



revisions to the PDO indicators generally expanded the scope of the project (i.e., expanding an indicator's coverage to include new participating countries or increasing ambition), while changes to component activities adjusted the implementation to the client's needs and priorities.

## II. OUTCOME

### A. RELEVANCE OF PDOs

**Rating: High**

#### Assessment of Relevance of PDOs and Rating

40. **At the global level**, the project's objective is reflected in the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (2022) and the UN General Assembly Sustainable Development Goal (SDG) 14 to "conserve and sustainably use the oceans, seas and marine resources for sustainable development".

41. **At the regional level**, the project is aligned with, and supportive of, (i) the Abidjan Convention and its regional approach to meeting transboundary marine environmental challenges; (ii) the Policy Framework and Reform Strategy for Fisheries and Aquaculture in West and Central Africa that was endorsed by the Conference of African Ministers of Fisheries and Aquaculture (CAMFA) in April 2014; and (iii) the African Union's June 2014 Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods.

42. **Nationally**, the project is aligned with Guinea's FY18-23 CPF, Pillar Three, which is focused on boosting agricultural productivity and economic growth, including fisheries, through climate-smart practices, improving access to markets and the business environment of market towns, and promoting economic diversification. In Liberia, the project's objectives are reflected in the FY19-24 CPF, which seeks to enhance fishery value chains to increase productivity and output in the fishery sector (Pillar 1, Objective 2). Mauritania's FY18-23 CPF is especially focused on increasing the local share of production value in the fisheries sector (Objective 1.1). The objectives of the project overlap with those of the CPF through structural change for post-harvest handling, increased land-based value-addition, and a well-managed distribution chain. Finally, the project is closely aligned with Sierra Leone's newly approved CPF FY21-26, in particular Objective 1.1 focused on increasing revenue from fish resources and Objective 3.2 aimed at boosting productivity in the fisheries sector to diversify the economy.

43. **The project is aligned with the World Bank's priorities for the region.** This is articulated in (i) the strategic framework "Western & Central Africa Region Priorities 2021-2025" of creating opportunities for growth and poverty reduction by boosting agricultural productivity and value chains; (ii) the World Bank's strategic vision of the Blue Economy Development Framework, which recognizes the significant potential of marine and freshwater ecosystems' contribution to achieving the SDGs and delivering smart, sustainable and inclusive growth globally; (iii) the updated (2020) Africa Regional Integration and Cooperation Strategy for the FY2023 period, on the need for management of shared natural resources; and (iv) the 2020 Next Generation Africa Climate Business Plan's agenda focused on ecosystem stability, climate change, and building resilient livelihoods in the context of the fisheries sector, among other sectors.





## B. ACHIEVEMENT OF PDOs (EFFICACY)

**Rating: Substantial**

### Assessment of Achievement of Each Objective/Outcome

44. Project achievements are assessed against the PDO and organized around each of the results chains presented in the ToC. It is important to emphasize that outcomes are assessed only for the current project, but also that achievements must be understood in the context of the overall WARFP programmatic approach: Guinea and Mauritania were first-time participants in the program under SOP-C1, while Liberia and Sierra Leone were preparing for their participation in Phase II SOP-A2 (following Phase I under SOP A1). The assessment of achievements is supported by evidence presented in Annex 1. This includes the Results Framework (Annex 1.A.), an overview of original, revised, and achieved PDO Indicators (Annex 1.B.), Key Outputs by Component (Annex 1.C.), and an Assessment of Results by country (Annex 1.D.).

#### I. Strengthened governance of targeted fisheries

45. The project strengthened governance of targeted fisheries in each of the countries by advancing measures that (i) developed the legal and operational policy foundation; (ii) supported data collection, analysis, and dissemination; (iii) strengthened the vessel registration system; and (iv) introduced new management schemes. In parallel, regional sensitization and training of journalists across Africa helped build consensus on the need for fisheries reform.

46. **New and updated strategic fisheries policy frameworks are laying the foundation for better governance of targeted fisheries.** In each of the countries, the project supported the development of improved fisheries management frameworks informed by scientific data and based on principles of sustainable productivity and economic viability.

47. *In Guinea, the fisheries governance framework has improved significantly.* A new Fisheries Strategy and Investment Plan was validated in July 2022, complemented by institutional reform of the Ministry of Fisheries, Aquaculture, and Maritime Economy (MPAEM). The MPAEM now supports the development and evaluation of annual fisheries management plans based on scientific advice and on supervision by equipped MPAEM departments at both central and decentralized levels. Specific to Guinea, the principles of community-based management of local fisheries are now institutionalized through dedicated regulation adopted in 2020, thereby providing the legal basis for the co-management plans developed by the fishing communities of Koukoudé and Bongolon, and for those to be developed by other coastal communities in the future.

48. *In Mauritania, a new and ambitious strategic direction for fisheries management has been adopted.* The Strategy for Sustainable Management and Integrated Development of Fisheries and the Maritime Economy introduced ambitious reforms on fisheries management, moving from a capacity-centered approach (i.e., number of fishing vessels) to a focus on sustainable catch limits (i.e., quotas). The project finalized and evaluated the implementation of the 2015-2019 sector strategy and supported the preparation of the updated 2020-2024 sector strategy. Annual research campaigns for fish stock assessments are carried out, based on which the annual Total Allowable Catch (TAC) has been defined every year since 2016. For the offshore and coastal segments, the TAC is distributed by individual





quotas, while for the artisanal segment the sub-quota is collective. Furthermore, the development of management plans for two economically valuable fisheries, octopus and meagre, were adopted in 2018 and 2020, respectively. This is complemented by strengthened capacity at Ministry of Fisheries and Maritime Economy (MPEM) through institutional reorganization, training of personnel, and better IT systems, which have improved the daily operation of the ministry.

49. *In Liberia, targeted support has improved key elements of the institutional arrangements governing fisheries.* Amendments to the legal text of the National Fisheries and Aquaculture Act enabled an institutional reform process, which established the National Fishery and Aquaculture Authority as an autonomous agency with a dedicated budget and authority to design the fisheries management framework. Furthermore, the project supported a shrimp fishery stock assessment and the development of a related management plan, which has yet to be approved.

50. *In Sierra Leone, the first-ever national fisheries management plan was approved.* The Fisheries Management Plan 2020-2025 is the first national 5-year plan to introduce conservation and management measures in the industrial fleet segment to restore fish stocks and sustainably utilize the resources for wealth creation at all levels. The complementary National Fisheries Inspection Plan 2020-2025 was also supported by the project. Furthermore, the capacity of the Ministry of Fisheries and Marine Resources (MFMR) to collect, analyze, and share data as well as inform effective management of fisheries resources has been strengthened by relocating the Data Collection and Processing Unit to the Fisheries and Marine Training Institute and supplying it with advanced equipment.

51. *At the regional level, a new Strategic Plan 2019-23 for CSRP articulates a vision for regional dialogue, cooperation, and harmonization.* The process of preparing the plan supported consensus-building among national actors brought together to agree on a shared path ahead. The CSRP provided critical support to the countries in their effort to reform national fisheries policies, regulatory and institutional frameworks by mobilizing high-level expertise and facilitating knowledge exchange through the organization of study tours among WARFP countries, such as visits to Senegal from Liberia and Sierra Leone participants to learn more on CMA co-management.

52. **Improved data collection, analysis, and dissemination is contributing to better governance of fisheries resources and transparency in the sector.** In each of the countries, significant progress has been made in different aspects of fisheries data management.

53. *Research and stock assessment campaigns are informing fisheries management plans, including annual TAC limits in targeted segments.* In Guinea and Mauritania, annual stock assessment campaigns have been carried out since 2016 and 2017, respectively, providing the basis for fisheries management plans of targeted species. This was achieved through financial and technical assistance to the national research institutes and renovation of the oceanographic research vessels (MR), which enabled six demersal resource assessment campaigns in Guinea, and 10-12 annual research campaigns monitoring the abundance of octopus, among other key fisheries resources, in Mauritania. The resulting stock assessments constitute the scientific basis for the preparation of annual fisheries management plans (as outlined above). In Sierra Leone, the project supported a comprehensive research and stock assessment, which provided scientific insight for the preparation of the first national fisheries management plan.

54. *National fisheries information systems have been strengthened in alignment with the Regional Dashboard, hosted by CSRP, laying the foundation for increased harmonization and transparency of statistical information on*



*fisheries resources*. The project, through support for the Regional Dashboard, which was developed under SOP-A1 and extended to Guinea and Mauritania under this project, succeeded in creating an enabling environment for better integration and transparency of fisheries data. Managed and hosted by the CSRP, the participatory approach embraced in developing and deploying the dashboard in-country has been instrumental in advancing official commitment to sharing fisheries data across countries and with the public. In Guinea and Mauritania, fisheries management data on key variables related to fleet size, license and permits, fishing effort and catch, and surveillance activities and infractions is regularly collected and published on the websites of the respective ministries and shared with the CSRP for integration into the Regional Dashboard. In the process, Mauritania has emerged as a leader on transparency in fisheries data with two reports submitted to the Fisheries Transparency Initiative (FiTI) and disclosed for 2018 and 2019/2020 combined (due to COVID-19). Guinea is considering applying to the FiTI in the near future. In Sierra Leone, changing the mindset on public disclosure of fisheries data has been slower. Even though regional alignment of indicators began under SOP-A1, challenges remain in terms of publicly releasing collected data, with data released for fewer indicators and less frequently (**PDO Indicator 1 achieved for GN and MR, but not for SL**).

55. **Vessel registration campaigns in both the industrial, coastal, and artisanal fleet segments have progressed significantly.** In Guinea and Mauritania, the project supported national campaigns to register vessels operating in the EEZ (in Liberia and Sierra Leone, vessel registration of both the small- and industrial-scale fleet was fully completed at the end of SOP-A1). Guinea finalized two campaigns that resulted in the registration of more than 80 percent of the artisanal fleet (registration of the industrial fleet segment was covered by the GoG separately). It also led to the classification of a new coastal segment consisting of motorized canoes, the PAA segment, and which was also fully registered. At closing, sustainable financing for fishing surveillance system (such as Vessel Monitoring Systems, VMSs) is provided through fishing permits, which are granted to duly registered canoes, and controls are carried out regularly on the landing sites. Mauritania carried out a two-phased campaign beginning with a census and followed by a marking campaign. In the industrial fleet segment, this resulted in the registration of 100 percent of fishing vessels, up from 60 percent at project start, facilitating the introduction of fishing quotas (see below). In the artisanal fleet segment, 43 percent of canoes were registered as a result of the campaign. The low involvement of fishing communities (reluctant to immobilize canoes, even for two-three days) and inconducive embarkation tenure (owners of canoes live in other locations, sometimes abroad, and do not operate them) hampered the registration process, which has all but stalled at project closing. Finally, the RCU at CSRP provided support to sustain linkages to the regional fishing vessel register established under SOP-A1 by organizing data entry workshops to participating countries.

56. **New management schemes, such as quotas and community-managed associations, are improving governance of fisheries resources in targeted segments and sites.** Improvements to the legal frameworks, data collection, and vessel registration have allowed for the partial introduction of secure fishing rights in targeted fisheries. In Guinea, community-based fishery co-management have been introduced successfully in Koukoude and Bongolon through (i) the legal establishment of Community-Managed Associations (CMAs); (ii) the development of Fisheries Co-Management Plans, which were fully operational at closing; and (iii) the delimitation of co-management areas, within which the community implements key measures relating to the management of fishing effort, such as controlling the number of vessels, area closure, biological rest, and fishing gear. In a testament to the success of the CMA pilot, other coastal communities are showing interest in adopting a similar approach. In Mauritania, individual non-transferable fishing quotas were introduced for the first time for octopus fisheries in the industrial and coastal segments. The



quotas are allocated annually in a scientific and participatory manner, where the allocation is based on the percentage distribution of the TAC and consulted with operators in both segments. In the artisanal segment, secure fishing rights through specialized individual licenses could not be accomplished due to the incomplete registration of canoes. In Liberia, the preparation of a fishery co-management plan for the Robertsport CMA, established under SOP-A1, could not be completed, and therefore the open access situation in the artisanal segment has not changed (**PDO Indicator 2 achieved for GN, partly achieved for MR, and not achieved for LR**). In Sierra Leone, an additional six communities organized into CMAs during project implementation, bringing the total number of CMAs in Sierra Leone to 37. Yet, progress on allocating secure fishing rights to CMAs stalled, and as such the operational capacity among CMAs remain low at project closing (and PDO indicator #2 was dropped for SL). However, closed season was introduced for the first time in April 2019 as a management measure aimed at reducing fishing pressure and allow for fish stocks to rebuild. The measure, part of the new national fisheries management plan, is continuing post-project closure.

## II. Strengthened management of targeted fisheries

57. The project strengthened management of targeted segments in each of the countries by creating an enabling environment for reducing IUU fishing and by implementing strategies for MCS in the industrial, coastal, and artisanal segments, respectively. An enabling environment for reducing IUU, as illustrated in the ToC, is supported by an appropriate national legal and regulatory framework, transparency in data collection and management, an updated registry of vessels and boats, regular control and surveillance (more frequent patrols and inspection but also updated information technology and data interpretation approaches), and new and participatory fisheries management schemes to encourage compliance with agreed measures. Combined, this allows for better MCS of fisheries in each segment. As such, there is significant overlap between improved governance and improved management, and many of the achievements outlined above indirectly foster compliance among operators in the different segments.

**58. In the industrial and coastal segments, management of targeted fisheries has been strengthened in each country with the installation of technological equipment and operational support for surveillance activities.**

59. *A 24/7 satellite-based vessel monitoring system (VMS) to track the movement of larger vessels was implemented in Guinea, helping to reduce illegal fishing activities.* The VMS was designed to deliver accurate, regular positions of vessels. Installed on all coastal and industrial vessels in Guinea, it uses satellite technologies to tracks the location, speed, and direction of all fishing vessels with the system installed. This allows monitors to detect illegal behavior, i.e., if a vessel is fishing in marine protected areas or if a vessel has met up with another vessel to potentially transfer catch at-sea. Based on this, the system alerts and informs further enforcement actions. A funding mechanism based on fishing licenses has been established to sustain the VMS through a direct allocation. Stakeholders consulted as part of the client Project Completion Report have indicated the usefulness of the VMS in combating IUU fishing. Based on VMS compiled data, Guinea has initiated analyzes of the concentration of boats over time to identify the main fishing areas and other patterns of fishing boats to increase the efficiency of surveillance activities.

60. *Electronic reporting systems deliver real-time monitoring of fishing activity in the offshore and coastal segments in Mauritania, which helps to reduce unreported catch.* In Mauritania, where partner agencies have supported VMS implementation, the use of on-board electronic logbooks were introduced as the next step in MCS of the industrial and coastal segments. Beginning in 2017, the project installed logbook software and transmission beacons on 265 national fishing vessels and equipped the coast guards with monitoring tools. The project also supported training of



fishing skippers and MCS staff to the use of this new reporting system. This has led to near real-time control of catch obtained in the industrial and coastal segments, especially against management plans, permits, and allowed quantities.

61. *The Scientific Observer program in Sierra Leone reached 100 percent of the industrial fleet segment.* Based on a functioning VMS installed under SOP-A1, a total of 60 observers were trained for on-board deployment to undertake MCS activities, reaching the entire industrial fleet segment. However, even though the project provided operational support, there was a lack of regular reporting, which impeded the effectiveness of the program. At closing, there is also a lack of financial commitment to sustain the program going forward. When fully functioning, the observer program will support the reduction of unreported activities.

62. As a result, in part due to project activities, the impact of above measures can be observed in how the number of fishing vessels operating in the EEZs do not exceed the ceiling established based on sustainable levels of harvest and associated fishing capacity **(PDO indicator 3 achieved in Guinea, Mauritania (except for the coastal segment), and Sierra Leone).**

63. *Surveillance of the industrial segment has improved significantly in Guinea but underperformed in Sierra Leone.* In Guinea, capacity for surveillance patrols have significantly strengthened. Through support for the implementation of regular patrols and renovation of inshore patrol boats, the rate of fishing vessels inspected at least once in a year by the national surveillance agencies has risen in Guinea from 25 percent at the start of the project to 85 percent in 2020 according to surveillance reports from the National Fisheries Surveillance Center (CNSP). However, the offshore CNSP patrol vessel is aging and the sustainability of surveillance at sea in offshore areas depends either on investment in new patrol vessels (activity 2.2.b dropped), or on the establishment of strategic partnerships between administrations for joint surveillance. In Sierra Leone, enforcement in the industrial segment underperformed due to lack of planning and execution of surveillance patrols. The patrol vessel for offshore surveillance was out of operations for much of the project period due to damage and lack of staffing. As a result, the share of industrial fishing vessels inspected for compliance have fluctuated from year to year at levels far below the target of inspecting 70 percent of the fleet. This is being addressed in the operational plan for the Joint Monitoring Committee as part of the first National Fisheries Inspection Plan 2020-2025 **(PDO indicator 4 achieved in Guinea, but not achieved in Sierra Leone).**

64. **In the artisanal segment, certain management aspects have improved while fisheries, as a whole, remain open access throughout the region.**

65. Management of the artisanal fishing capacity is being addressed in a two-pronged approach: First, at the community-level where fishing communities exist and, through CMAs, undertake participatory MCS to enforce compliance within demarcated co-management areas (GN). Second, at the segment-level, where national agencies conduct MCS to the extent feasible based on the availability of an artisanal fleet registry (GN and MR).

66. *Community-led MCS has gained viability in Guinea but lacks legal regulation in Sierra Leone.* Support for CMAs in Guinea to undertake MCS based on the delimitation of local fishing areas, participatory monitoring, and definition of biological rest period have proven effective (see Box 2). In Sierra Leone, where capacity among CMAs is lower due to the lack of an institutionalized management framework, project support for six inshore patrol vessels enabled



community-led MCS with some regularity while operating costs were available. Without legally demarcated fishing areas, however, community-led MCS activities cannot gain operational sustainability in Sierra Leone.

*Box 2: Community Fisheries Management in Guinea has Gained Viability*

**The project successfully initiated the community fisheries management approach in Guinea.** The bottom-up approach consisted of strengthening the organizational and management capacities of artisanal fishing communities. First, the project delivered physical infrastructures investments in the artisanal landing site and improved processing facilities in Koukoudé. Second, the structuring of local organizations, CMAs, made it possible both to facilitate the negotiation of infrastructure co-management agreements with the authorities and to initiate community-based resource management activities with the delimitation of local fishing areas, participatory monitoring, and definition of biological rest period. The success of this approach at the local level has encouraged the administration to recognize the existing co-management areas and to regulate the concept of co-management at the national level.

67. *Management of artisanal fisheries remains challenging, but improvements allow for some degree of MCS of the small-scale fleet.* Due to the incomplete registration of canoes in both Guinea and Mauritania, capacity control of the small-scale segment through management of fishing authorizations is not yet a reality. However, in Mauritania monthly monitoring of the landings of the active fleet and landing sampling at all authorized landing sites are used to estimate annual catch in the small-scale segment and to define capacity limits in annual management plans. In addition, support to the Coast Guard through provision of modern technologies to better surveil the artisanal fleet at decentralized control posts holds the potential to improve capacity control over time. In Guinea, operational support for the CNSP have led to a great increased in surveillance patrols in the coastal area from 276 patrols in 2018 to 674 patrols in 2020. Combined, these efforts allow for some degree of MCS of the artisanal fleet segment.

### III. Improved handling of landed catch at selected sites

68. The project improved handling of landed catch in Guinea, Liberia, and Mauritania by investing in physical infrastructure improvements at targeted landing sites and/or by supporting daily operations in the post-harvest sector.

69. *In Guinea, the entire artisanal fisheries value chain has been significantly enhanced in the fishing communities of Koukoude and Bongolon.* First, investments in a new, fully equipped, and functional landing site with improved sanitary conditions coupled with the installation of new and efficient smoking ovens have increased the quality of smoked seafood products while providing a safer working environment for women exposed to smoke, who fill 95 percent of jobs in fish processing, and their children, in a new daycare environment. The acceptability of new smoking technique was supported by the organization of a visit of GN women processors to Liberia where utilization of new ovens is widespread. Second, investments in connecting the communities physically and digitally to fish markets has enhanced local livelihoods: The construction of an access road to connect the communities to the main road is allowing for the sale of fish products at local markets nearby, while a new internet center enables local fish merchants to be informed of prices and demand in Conakry. Third, infrastructure maintenance is financially supported through user fees for the services provided, enabled by infrastructure co-management agreements implemented in a participatory manner. The investments have greatly increased the processing capacity at the landing site under improved hygiene



standards (**PDO indicator 5 achieved in Guinea**). A total of 7,778 people directly benefit from the investments undertaken in Koukoude and Bongolon, or 15 percent of all project beneficiaries.

70. *In Liberia, the capacity at Robertsport landing cluster has been strengthened.* Equipped with proper ice machine, cold storage, weighing scales, and energy-efficient smoking ovens, the Robertsport landing cluster became fully functional under this project and operational budget support ensured daily management of the site. However, a CMA site management plan could not be completed as planned, in part due to weak support from National Fisheries and Aquaculture Authority (NaFAA), without which operational and financial management of the site lacks sustainability. The improved smoking ovens serve as a demonstration site of best practice for the region. A team from Guinea visited on study tour and subsequently improved the implementation design for installing ovens in Koukoude and Bongolon. The RF for LR did not include an indicator on expected beneficiaries.

71. *In Mauritania, the physical rehabilitation of the Nouakchott Fish Market resulted in improvements of first sale infrastructure and created attractive conditions for private sector investments.* The project financed investments to secure the perimeter, to extend and modernize the electricity network, and to improve sanitary conditions, especially for women, which together have led to (i) a doubling of revenue for the Marché aux Poissons de Nouakchott (MPN) management; (ii) new private sector investors attracted by reduced production costs, improved facilities, and better working conditions; and (iii) new employment opportunities in post-harvest support services, which have steadily increased since 2016. Combined, this has raised the processing capacity under improved hygiene standards (**PDO indicator 5 achieved in Mauritania**). The project also included a wastewater treatment plant (under testing) to reinforce the positive changes achieved and extend the benefits to the southern part of the market, which holds great potential for further development. At project closing, direct beneficiaries include 12,500 workers (incl. 7,600 full-time), who work on the site on a daily basis. According to consulted beneficiaries, project investments have resulted in local value-added and an increase in the contribution of fish resources to the local economy.

72. *In Sierra Leone, progress towards finalizing the cluster of landing sites at Konakridee stalled, but post-project implementation arrangements with a partner donor agency enabled the completion of construction works.* Plans for the cluster of landing sites at Konakridee began under SOP-A1 (2010) and received additional funds in the first AF for Sierra Leone (2011). Still incomplete, funds approved for the second AF delivered as part of this project was reallocated in 2020 to finalize the physical investments needed, including cool chain facilities, smoking ovens, water supply, and sanitary facilities. COVID-19 related restrictions caused the preparation of the Environmental and Social Impact Assessment (ESIA) to be delayed and meant that planned works could not be timely completed. A solution was found in which the United Nations Office for Project Services (UNOPS) have received 100 percent of allocated funds and agreed to implement the investments. At the time of writing this ICR report in October 2022 construction is nearly complete, and it is expected that the activities will contribute to post-harvest loss reduction and enable fishers to sell their products at higher prices.

73. **Beneficiaries: Project activities reached over 100,000 direct beneficiaries in Guinea and Mauritania (Table 3).** Among those are the roughly 20,000 people, whose livelihoods have benefited from on-the-ground investments in the post-harvest sector, and include landers and scrapers, women working in fish processing, drying and smoke facilities, and sellers, fish carriers, market resellers, and salt producers, among others. In the harvest sector, an additional 75,000 fishers have benefited from improved governance and management of fisheries resources. This includes: (i) 32,000





fishers and owners with registered boats in the artisanal segment in Guinea, (ii) 25,000 fishers and 1,200 shipowners in the industrial segment in Mauritania, and (iii) 15,000 canoe-operators and owners in the artisanal segment in Mauritania. Finally, more than 12,000 mostly women benefited from alternative income-generating activities in Guinea, as further explained in Section II.E., while training and capacity building in fishing professions reached 5,000 beneficiaries. A breakdown of beneficiaries is included in the RF in Annex 1 (**PDO Indicator 6 achieved in Guinea and Mauritania**). The RF for LR and SL did not include indicators on expected beneficiaries.

*Table 3: Project Beneficiaries*

	Total (%)	Men (#)	Women (#)	Women (%)
Guinea	52,304	36,613	15,691	30%
Mauritania	55,150	51,841	3,309	6%
<b>Total</b>	<b>107,454</b>	<b>88,454</b>	<b>19,000</b>	<b>18%</b>

### Justification of Overall Efficacy Rating

74. **Overall project efficacy is rated Substantial.** This is justified by the attainment or near attainment of all three parts of the PDO. First, the project successfully strengthened governance of targeted fisheries as evidenced by (i) the pivot towards a legal and regulatory foundation based on scientific data and sustainable harvest levels; (ii) enhanced transparency in the sector across the region through regularly collecting and publishing key data variables; (iii) strengthened vessel registration systems in Guinea and Mauritania, where a viable financing mechanisms are in place to maintain the system for the industrial segment (GN and MR) and the artisanal segment (GN); and (iv) secure fishing rights introduced in targeted fisheries through quotas (MR) and community-managed associations (GN). Second, the project strengthened management of the industrial fleet segment through installation of technological equipment and support for surveillance operations, which has improved MCS and compliance, and empowered local artisanal fishing communities to better manage their shared resource in a participatory way through CMAs. Third, the project improved handling of landed catch at Koukoude (GN), at Robertsport (LR), at MPN (MR), and at Konakridee (SL) as evidenced by the increased processing capacity from infrastructure investments, which have improved the sanitary conditions to the benefit of both local fishermen and workers, often women, in the post-harvest sector. Shortcomings related mainly to the artisanal segment: (i) in Mauritania, the registration of canoes could not be completed nor could individual fishing licenses be introduced to the artisanal fleet segment; (ii) in Liberia, a management plan for the Robertsport CMA could not be completed; and (iii) in Sierra Leone progress towards institutionalization of CMA-led fisheries stalled. While most PDO indicators have been fully achieved, project achievements fell short of a few targets. Given the ambitious nature of the project, the challenging regional and country context, and the impact of the global pandemic, the ICR leans into a substantial efficacy rating in recognition of the attainment or near attainment of all three parts of the PDO.



## C. EFFICIENCY

**Rating: Modest**

### Assessment of Efficiency and Rating

75. **The project was expected to generate multiple benefits.** At the impact level, higher order benefits to accrue over time included: (i) increased profitability of the fisheries sector and higher economic returns from the seafood value chain; (ii) poverty reduction in coastal fishing communities; (iii) increased food security and food safety; and (iv) improved marine ecosystem health. While many of the benefits cannot be assessed for their financial and economic impact due to lack of detailed data, cost estimates, and counterfactuals, the value can sometimes be approximated to give an indication of their monetary benefit.

76. **The efficient use of project funds is evident from the public revenues generated through MCS activities (financial capital).** Project activities under Component 1 and 2 to create an enabling environment for reducing IUU fishing and implementing strategies for improved MCS have contributed to public revenues through for instance: (i) fishing licenses, (ii) fines levied for illegal fishing activities, and (iii) revenues associated with successful reduction of illegal fishing, such as through partnership agreements.

- In Guinea, fees from fishing amounted to nearly US\$10 million in 2018 compared to about US\$5 million in 2016. This doubling of fees, according to the Borrower's Project Completion Report, is due to several factors including the increase in boardings, the arrival of tuna boats in the national fishery, and a greater transparency in fisheries management, i.e., publication of data on the MPAEM website. Nearly 75 percent of these fees relate to fishing licenses and permits alone. This compares favorably with an overall project investment of US\$5 million in component 1 and 2 combined.
- In Sierra Leone, the project provided operational support for MCS activities to fight IUU fishing for a total of US\$1.23 million (Component 2) out of total investment of US\$4 million. In comparison, revenues collected increased 25 percent, from Leones 74 billion in 2017 (ca. US\$8 million) to 100.5 billion in 2019 (ca. US\$11 million). COVID-related restriction and economic slowdown however, had then impacted this positive dynamic.
- In Mauritania, project investments have helped secure a continuation of the EU Sustainable Fisheries Partnership Agreement through proper MCS and renovation of the MNP landing site. This agreement, concluded on July 10, 2015, is renewed on a yearly basis, and authorizes access to the Mauritanian EEZ for around a hundred vessels from eleven EU Member States to fish for shrimp, demersal fish, tuna, and small pelagic fish within the limit of 287,050 tonnes per year. In addition to the fees paid by shipowners, the EU provides a financial contribution of EUR61 million per year, including EUR57 million for access to waters and EUR4 million to support local fishing communities in Mauritania and improve fisheries governance. From this perspective, project financing for governance reform, infrastructure improvements, and improved monitoring through electronic logbooks, among other activities, earn a return manyfold the initial investment.

77. **In addition to the financial capital generated in terms of public revenues the project has also created other less tangible benefits.** These include productive capital flowing from infrastructure improvements and the growing private sector investments at MPN and improved livelihoods at Koukoude, as well as social and knowledge capital in





terms of improved processes, and strengthened capacity at regional, national, and local levels. Over time and with sustained effort, this will build the countries shared natural capital in terms of recovery of fish resources.

78. **At appraisal, an economic and financial analysis of octopus fisheries in Mauritania and demersal fisheries in Guinea was conducted to estimate the direct quantifiable benefits of project activities mainly related to Component 1.** Using a bioeconomic model to simulate the increase in catch levels arising from lower effort and higher abundance, the analysis estimated that cumulative net revenue from first-sale during the initial five years of project life would return US\$201 million in Mauritania and US\$23.3 million in Guinea. At closing, the ICR team reviewed the sector assumptions underlying the analysis and found that the basic premises of the analysis have not been sufficiently met to allow for a meaningful ex-post economic analysis. Without careful analysis of the causal direction in the dynamic interaction between fishing effort, harvest, and stock size it would be premature to economically assess how project activities affected catch and revenue levels without first proving that those have improved as a result of abundance and not as a result of overexploitation (see Annex 4).

79. **Implementation delays and issues at the level of project coordination affected project efficiency and outcomes.** The implementation context was challenging, especially in the final two years of implementation. Characterized by high staff turn-over both locally and in the World Bank team, and a lack of engagement by some PIUs, project coordination issues related to safeguards, procurement, and financial management arose (see Section IV.B). While this is not uncommon for the sector in a regional context, it did create inefficiencies at the level of project coordination, delayed implementation progress, and affected the finalization of infrastructure investments in Mauritania and Sierra Leone, among other activities. Furthermore, administrative hurdles impeded efficiency of the DLI-mechanism intended to incentivize timely implementation. The 14-month extension of the project closing date was necessary to progress on planned activities and fully disburse project funds. The extension did not incur any cost overruns and resulted in net efficiency gains.

80. **A comparison of actual expenditures to appraisal estimates by component** shows that the project disbursed 124 percent of the originally allocated amount and 92 percent of total allocated funds, including the AF. The latter is explained by currency fluctuations of the SDR against the US dollar. The project was able to achieve most of its targets, and disbursement by components were generally in line with revised amounts. Overall, this implies a fairly efficient employment of project funds towards achieving intended outcomes.

81. **In summary, efficiency is rated modest.** While there are immediate financial returns from activities related to increased MCS, reduction of IUU fishing, partnership agreements, and improvements in post-harvest infrastructure, the lack of evidence of improving sector fundamentals along with implementation inefficiencies caused by factors both internal and external to the project, means that the project performed below expectation in the operation's sector.

#### D. JUSTIFICATION OF OVERALL OUTCOME RATING

82. **Overall project outcome is rated Moderately Satisfactory.** This is justified by: (a) project development objectives that remain highly relevant at project closing; (b) a substantial attainment of project development objectives; and (c) a modest level of efficiency.



## E. OTHER OUTCOMES AND IMPACTS

### Gender

83. **Owing to the importance of the traditional participation of West African women in fish processing and to the gender gaps observed in the fisheries sectors, project investments in value chain activities are likely to impact women significantly more than men.** While not explicitly framed as such, post-harvest investments under Component 3 would eventually benefit females working in the sector. This includes improvements in the physical environment with increased security and better sanitary conditions at fish landing sites, such as in Mauritania where 6 percent of beneficiaries were women (Table 3). Fishmongers at the Nouakchott fish market site (all female) received training and material (cooling boxes) to improve fish handling conditions in line with improved health and sanitary practices. In Guinea, where thirty percent of beneficiaries were women, it also includes the installation of fish smoking ovens, which affords women better economic opportunities in the sector while protecting their health and relates to alternative livelihood program for women-led projects with investments in plastic recycling, saponification and dyeing, fish farming, beekeeping, and the development of fuelwood plantations for the sustainable supply of smoking facilities. Especially during the period of reduced fishing activity due to COVID-19, income-generating activities were particularly appreciated as means to strengthen the economic resiliency of local communities. While the original project was prepared before the gender-tag was introduced, the project was designed with women in mind and tracked project beneficiaries by sex.

#### *Box 3: Electronic Fishing Logbooks*

Until recently, catch and effort declarations from offshore and coastal vessels were submitted to the competent authorities in paper logbooks. These fishing logs could take some time to reach the competent administration when the vessels remained at sea for several weeks and required a lot of data entry work on computer media. The logbook in paper format could also facilitate false declarations. Thanks to the support of the project, which financed the equipment and software adaptations, Mauritania switched to an electronic reporting system in 2020. Since that date, all national and foreign coastal and offshore vessels are required to submit their catch and effort declarations daily to the compliance competent authorities, i.e., Coast Guards (Garde Côtes Mauritanienes or GCM) with copy to the Mauritanian Institute of Oceanographic Research and Fisheries (Institut Mauritanien de Recherches Océanographiques et de Pêche, IMROP), by satellite communication. The information logged in the electronic fishing logbook covers, among other data points, the quantities caught by species, transshipments, dates and fishing zones, characteristics of the vessels, and fishing gear and methods used. This reform makes it possible to monitor in near real time and at a lower cost the catches of vessels while reducing the risk of fraud, and therefore ensure adequate conditions for the close monitoring of the uptake of fishing quotas introduced for the first time in Mauritania during the reform of the management system supported by the WARFP in 2016. Currently, Mauritania is still a pioneer among African countries in the use of an electronic reporting system.



### **Institutional Strengthening**

84. **Institutional strengthening was at the heart of the project and as such many of the achievements are already covered in the efficacy above.** Yet it is worth reiterating that the project laid the building blocks for long-term institutional development of the countries capacity to manage fisheries resources in a sustainable manner. As evident in the ToC, this requires a comprehensive approach to strengthening governance and management of the resources through legal and operational instruments, transparency in data and reporting, co-management, MCS, etc. It entails the development of strategic priorities and costing of planned investments, the reorganization and equipping of ministries and public agencies, and building the engagement of stakeholders at all levels for effective coordination. One example deserves special mention as the introduction of new technology has been a game changer in strengthening the institutions charged with ensuring compliance in Mauritania: the installation of electronic fishing logbooks onboard industrial and coastal fishing vessels have greatly improved monitoring of catch in near real-time (see Box 3).

### **Mobilizing Private Sector Financing**

N/A

### **Poverty Reduction and Shared Prosperity**

85. **The project design specifically targeted artisanal fishermen and women working in the post-harvest sector to enable the fisheries sector to contribute to food security, poverty alleviation, and promotion of shared prosperity.** In Guinea, the outbreak of Ebola and subsequent border closure had increased the urgency for the country to become more food independent; a need which only grew stronger during the global COVID-19 pandemic. As such, the project actively contributed to the initial recovery phase from the Ebola crisis and through alternative income-generating activities also helped build economic resilience in local communities during the global pandemic when fishing activity was lower. CMAs have also proved to be an important instrument for enhancing cohesion within fishing communities (with shared responsibility to manage fish resources and new landing site and related facilities) and for providing basic social services for CMA members (new daycare). Going forward, the main challenge will be for the CMAs to define access modalities for artisanal fishermen outside the community (i.e., migrants). In Mauritania, artisanal and coastal fishing as well as basic post-harvest processing play an important role in terms of employment. Policies adopted by the Mauritanian government have favored the development of this segment, which also contributes to the creation of local value-added. Improved MCS of the industrial segment has provided better opportunities for the small-scale segment. However, in some cases this has also led to opportunistic behavior by some artisanal fishermen and overfishing of already vulnerable stock.

### **Other Unintended Outcomes and Impacts**

86. **Introducing access management policies has unintended consequences for the un-managed segments.** Economic theory and the experience around the globe suggest that, under an open-access fishery regime, fishers continue to enter the industry until the profits from fishing or resource rents are completely dissipated. The PAD recognized this much by underscoring the importance of simultaneously managing all segments and of careful sequencing of activities. Experience from Senegal under SOP-A1 shows that the introduction of a management policy for the industrial segment provided an immediate expansion opportunity for the unmanaged artisanal segment. This



is also proving to be the case in Mauritania where regular exceedance of allowable catch by the small-scale segment has followed the growing capacity control of the industrial and coastal fleet segment. However, under the circumstances, in an operating environment characterized by low capacity, poverty and conflict, and a global pandemic, such unintended outcomes from policy interventions may be unavoidable in the short- to medium-term.

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

#### A. KEY FACTORS DURING PREPARATION

87. **The project design benefited from the solid diagnostic and preparation of the WARFP program and lessons learned from neighboring SOP countries.** The WARFP approach was based on a comprehensive range of background studies and a considerable number of consultations to understand institutional gaps and constraints as well as local and regional priorities in informing the project design. As the first World Bank project to support fisheries surveillance activities, the WARFP innovated a new comprehensive approach to fisheries governance and management by directly addressing the need to reduce IUU fishing. The design of components enjoyed strong internal and operational logic with appropriate scope, timing, and sequencing of planned activities. Key lessons considered in the preparation of SOP-C1 included (i) the need to simplify the RF; (ii) the need to incentivize effective project management for improved governance and transparency; and (iii) the need to mobilize expertise to appropriately and adequately support fisheries governance reform processes.

88. **The RF at project preparation was aligned with operational objectives and leaned on lessons learned from previous WARFP SOPs.** Indicators used in previous WARFP SOPs had been either too complex or too ambitious considering the circumstances and required major restructuring. This was taken into account by simplifying the RF and ensuring that the outcome indicators were well targeted, avoiding being neither output-driven nor accountable for developments in fish stocks and local value added as both are strongly impacted by external factors. Every indicator was both generic to the project and tailored to the context of each country and the definition of the methodology specific to country circumstances (see Annex 1 where specifics on every indicator is presented in the RF).

89. **To motivate performance and encourage managing for results, especially in good governance and transparency, a modality with disbursement-linked indicators was designed - with mixed results.** Under the DLI-modality, key indicators on data disclosure and vessel registration and surveillance were linked to disbursements from a dedicated purse to reward selected participating beneficiaries with reimbursement of operating costs and short-term training for deserving civil servants when target values were achieved at the end of each year of implementation. It was expected that the incentive structure would keep implementation progress at pace, which would be essential to ensure proper sequencing of activities and to manage all segments and discourage opportunistic behavior (see also Section II.E.).

90. **However, the DLI modality needed early restructuring** as constraints in the Financing Agreements required third-party audit reports to be accompanied by a detailed review of expenditures incurred under the Eligible Expenditure Program (EEP). This caused a long delay in clearing the first-year disbursement for which the technical achievements were approved by the World Bank. Replaced by a simpler Performance-Based Contract (PBC)



mechanism after two years of implementation, the incentive structure was eventually appreciated by beneficiaries. Importantly, the mechanism boosted achievements at the level of the results framework and provided an opportunity to audit M&E achievements on a yearly basis, adding rigor to the overall assessment of project outcomes (See Section IV.A.). However, the incentive-based modality was not sufficient to overcome vested interests and important economic issues in the Mauritanian octopus industry to manage the artisanal segment, which remains open-access at project closing.

91. **Institutional capacity for implementation and fiduciary management among key stakeholders was low**, according to the operational risk assessment at appraisal. An assessment of procurement capacity of the implementing agencies in both Guinea and Mauritania showed that neither had any experience with IDA procurement procedures. A set of recommended mitigation measures were elaborated (see PAD), though in hindsight, and in view of countries nascent experience and low capacities in the sector, even further support may have been dedicated to support the PIU. The project tasked the RCU with supporting the PMUs through training workshops and direct support and with keeping a roster of qualified experts available to support in-country capacity needs.

92. **At the time of project approval, project readiness was advanced and operational risks to safeguards, procurement, and FM were all adequately mitigated.** All legal covenants and requirements for effectiveness were met. Effectiveness was declared three months after Board approval.

## B. KEY FACTORS DURING IMPLEMENTATION

### *(a) Factors subject to the control government and/or implementing entities*

93. **In general, fisheries governance reform enjoyed continued high-level commitment from all governments in the region.** In Guinea, early and strong commitment from the top leadership in the ministry was a major risk mitigating factor, especially in view of the generally unstable political environment. The government in Mauritania has shown commitment to fisheries governance reform despite high ministerial turn over. Sierra Leone has shown growing commitment to reversing the detrimental impacts of industrial fishing on the environment, even if that commitment did not transpire to the project-level (see below). In Liberia, the government is sustaining the momentum through a follow-on Phase II Liberia Sustainable Management of Fisheries Project of US\$40 million, which was approved in September 2021.

94. **Coordination and engagement at the project level in each country varied widely.** In Guinea, a high level of support from most concerned stakeholders carried the project to a successful closure. Even then, engagement of some local beneficiaries proved challenging. Activities related to the introduction of segment-wide secure fishing rights in small-scale fisheries had to be dropped due to a lack of ownership among artisanal fishermen because they had been introduced too early in the process of setting up CMA in Guinea. Furthermore, a lack of rigor was noted regarding the technical and contractual monitoring of studies financed by the project. This was resolved by recommending proper validation procedures and improving the contractual provisions to include consultation of beneficiaries and stakeholders.



95. **In Mauritania, institutional coordination and engagement was aided by the signing of Memorandum of Understanding (MoU).** The MoU outlined in detail the responsibilities and duties of key stakeholders and became an organizing principle for stakeholder partnerships. Based on the expression of needs for cooperation they allowed for operational adjustments to changing conditions on the ground. Meanwhile, the biggest challenge related to nurturing engagement among artisanal fishermen on the ground, eventually became an obstacle to realizing capacity control in the small-scale segment.

96. **In Sierra Leone, implementation was increasingly challenged as project-level engagement waned.** Several factors contributed to this. First, the context surrounding Sierra Leone's previous participation in the WARFP as a SOP-A1 country cast a shadow of lack of trust on the collaboration between key stakeholders and the World Bank. Second, the cancellation of a regional follow-on project disrupted the foundation for a number of activities, which were planned to be continued under Phase II of the WARFP (see also sub-section (b) below). Furthermore, cumbersome decision-making processes at the MFMR and the attention by MFMR to other priorities impacted project oversight and delayed communication between the PMU and World Bank team significantly. Finally, a lack of incentives for government staff resulted in poor performance on the ground and a delay in the phasing-in of public finances to replace budget support for surveillance operations. Formal communication by World Bank management sought to advance implementation, but it was insufficient to rekindle engagement in the final phase of the project.

97. **Clear articulation of organizational priorities allowed the project to stay relevant throughout implementation.** As conditions on the ground changed, project teams in each country were able to adjust the focus and scope of activities based on dialogue with key stakeholders. In Guinea, donor financing for registration of the industrial segment prompted the government to prioritize the registration of the artisanal segment by this project. In Mauritania, where ongoing fisheries reform to prepare fish management plans according to species instead of segment, the project focus changed to target octopus fisheries only, while the scope grew to include all segments. Similarly, the focus of physical investments changed as some activities were dropped and allowed for gap-filling existing needs, such as the need for an access road to and from the Koukoude artisanal fisheries community in Guinea, and a long outstanding demand for fitting the landing site in Konakridee in Sierra Leone and the Robertsport landing site in Liberia.

98. **Capacity control of the small-scale segment was too ambitious.** For various reasons, none of the countries were able to implement segment-wide capacity control of the artisanal fleet. Among the impeding factors were a lack of local engagement due to misaligned incentives (MR), incomplete registration of canoes (GN and MR), and a lack of political will (SL). This means that the segment remains open access today and in many cases is the main culprit in terms of overfishing as evidenced by the regular exceedance of allowable catch by the small-scale segment in MR. Capacity control of the small-scale segment is the next challenge for implementation of fisheries governance reform (see Section V).

99. **Given the country context, and in view of the countries general lack of experience with project management, issues related to compliance with procurement, financial management, and safeguards arose throughout implementation.** All issues were resolved in line with World Bank procedures and are covered in further details partly in Annex 9 and partly in the other respective sections.





*(b) Factors subject to the control of the World Bank*

100. **The World Bank team provided proactive supervision with close attention to implementation issues.** Even for a large regional project with four participating countries, turnover of Task Team Leadership was fairly high with a total of eight co-TTLs. However, the team retained a strong focus on the realities on the ground and embraced an adaptive approach tailored to the needs and priorities of each country, arising from the strategies of the fishing sector and the national economy. Leading up to the mid-term review in March 2018, candid reporting of implementation issues showed that the Project was experiencing slow implementation progress, low disbursement levels, poor project coordination, weak financial management, and lengthy procurement procedures. The World Bank team acted with resolve to refocus the scope of activities, i.e., in Mauritania to focus solely on octopus and in Guinea to focus on the artisanal sector, draw up a series of priority actions, and restructure the RF and adjust the targets. Combined, these measures helped strengthen project efficiency and were highlighted in the project completion reports prepared by the clients as points of appreciation.

101. **The project team maintained candid reporting of implementation issues, but the project could have benefited from more realism in supervision ratings.** Capturing the different development trajectories in each country in a single rating is challenging but playing to the base could have opened opportunities for course-correction, which may have been missed in sustaining MS ratings for both DO and IP for most of the implementation period. This is especially true for Sierra Leone, where relations between the Client and the World Bank became increasingly strained.

102. **Cancellation of the WARFP programmatic approach (and of the new SOP-A2 regional project under preparation) was challenging for the World Bank's engagement in the sector.** The original Board-approved WARFP (SOP-A1) included three programmatic phases. In an effort to consolidate regional programs in the Africa region, World Bank management decided to drop the next phase of the WARFP (SOP-A2), then at appraisal stage. The disappointment was most pronounced in Liberia and Sierra Leone and affected collaboration between the PCUs and World Bank team. The decision also had a negative impact on the regional momentum and the role of the RCU in steering regional dialogue and harmonization, and it put at risk the gains and achievements realized so far under Phase I in countries without a follow-on operation.<sup>2,1</sup> The decision was also challenging for many development partners who considered the World Bank as a leader in the sector. Going forward, the challenge will be to regain momentum while maintaining a regional outlook. Given the transboundary nature of the resource, regional collaboration, such as the regional dashboard, remains a cornerstone for conservation and management of shared stocks for the benefit of all and for project outcomes.

103. **Transition arrangements were adequate for infrastructure investments but lacked for parts of project activities that provided operational support.** In Mauritania, the completion of the wastewater treatment plant is now under the motivated responsibility of the MPN. In Sierra Leone, all funds for the finalization of the Konakrdee landing site have been transferred to a partner (UNOPS). As the construction phase is coming to an end at the time of writing this ICR, the World Bank team is following up with the Government to advance the certificate of completion and commission of works. But for project activities related to budget and operational support, such as

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<sup>2</sup> National follow-on projects have been approved in Cabo Verde, Liberia, and Senegal. Guinea has made a request for a new project.



surveillance patrols in Sierra Leone, there is lack of transition arrangements to local financial and operational resources, putting those activities at high risk of disruption.

*(c) Factors outside the control of government and/or implementing entities*

104. **The COVID-19 pandemic caused implementation delay and the need for an extension of the project closing date.** The global COVID-19 pandemic was declared less than 12 months before the original project closing date. Given the impact of restrictions since March 2020, project implementation slowed down while some key investments were on hold. The governments of Guinea, Mauritania, and Sierra Leone requested an extension of the project closing date to allow for the completion of Project activities.

105. **Political turmoil caused late implementation delay in Guinea.** A coup d'état began on September 5, 2021, following widespread protests due to constitutional changes related to term limits. As these events coincided with the closing of the project, completion of certain activities was impacted. This specifically concerned the development of the new 2023-27 Guinean fisheries and aquaculture strategy and a related investment plan (US\$150M). The World Bank team acted proactively in securing additional funding from the PROBLUE trust fund to finalize and follow-up on such key activities even after project closing. The plan was validated in July 2022.

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

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

#### M&E Design

106. **The theory of change, which mimicked that of Phase 1 for the overall WARFP program, was sound with a high degree of internal logic.** Links between planned short-term outputs, intermediate and development outcomes, and expected long-term transformational impacts were clear. The high level of complementarity with the overall WARFP logical framework ensures that project outcomes can be used in a programmatic assessment of the WARFP portfolio and achievement of objectives (see Annex 8).

107. **The RF at project preparation was adequate in tracking progress towards the PDO.** The outcome indicators were well targeted, avoiding being neither output-driven nor accountable for overall sector developments. Each of the original six outcome indicators corresponded to a part of the PDO statement and all, but one, were specific, measurable, achievable, relevant, and time-bound (SMART). PDO indicator #5 relating to post-harvest loss was revised, due to lack of baseline data and capacity to practically implement weighting of landed catch and sales. Following revision, the indicator measured changes in processing capacity resulting from physical investments at targeted landing sites. In doing so, the project was no longer able to assess how the investments may have reduced waste, but instead assesses the added smoking (GN) and freezing (MR) capacity stemming from investments. While the outcome indicators reflected well the three parts of the PDO, intermediate indicators in the original results framework were missing some elements needed to fully measure the progress of the components, such as alternative livelihoods activities in Guinea (and later in Sierra Leone), stocks assessments, and some regional activities to be carried out by the CSRP.





108. **M&E implementation arrangements at preparation were comprehensive and central to the project design.** An assessment of M&E capacity in Guinea and Mauritania at the time of appraisal showed that the Governments' capacity to lead and carry out monitoring activities was generally weak due to insufficient experience and inadequate administrative infrastructure, relating to: (i) lack of validation of field-level data, (ii) incomplete datasets and inconsistent reporting, and (iii) under-utilization of data in decision-making and policy formulation. These weaknesses were directly addressed in the design of the M&E and the overall project by strengthening the capacity for collecting, analyzing, and publishing fisheries data.

109. **The role of the RCU was central to coordinating in-country M&E activities** with the respective fisheries ministries, providing technical backstopping and applying the data quality assurance mechanism already in place for other WARFP countries, in addition to undertaking data collection on its own and encouraging cross-country learning.

### **M&E Implementation**

110. **M&E was rated Moderately Satisfactory through project implementation and carried out regularly with support from the RCU.** The project design underpinned M&E as activities related to data collection and information management fed directly into the RF. Countries submitted semi-annual and annual reports, which were aggregated into consolidated project-level progress reports. The quality and timeliness of countries' reports and the reports compiled by the RCU were overall satisfactory in light of the weaknesses mentioned above.

111. **At the time of the AF, the RF was revised to add a few outcome targets for Guinea, Liberia, and Sierra Leone.** Outcome targets were limited to PDO indicator 2 for LR and to PDO indicators 2 and 4 for SL, while Guinea also added a target for PDO indicator 2. In July 2020, Sierra Leone added a target for PDO indicator 1, while at closing, the PMU also reported on PDO indicator 3.

112. **An additional layer of audit occurred in terms of annual verification reports for Performance-Based Contracts.** Data collected by countries was reviewed by third-party Independent Verifiers, provided by the RCU, as the basis for disbursements linked to performance. The verification process specifically concerned PDO indicators 1 and 3 at the outcome level, and intermediate indicators 1.1, 1.2, 1.7, and 2.1 at the component level. The reports offer an additional layer of transparency and validation of the M&E data collected to track implementation progress towards development objectives.

### **M&E Utilization**

113. **Data obtained through monitoring and evaluation was routinely used to inform project management and course-correct implementation.** Tracking progress towards key outcome indicators were the driving force for revising the indicators, adjusting targets, and extending the closing date. The M&E framework clearly identified the main implementation challenges, such as reaching the artisanal fleet segment in connection with vessel registration or completing investments at landing sites, providing evidence-based learning that will help strengthen the design of future projects.

114. **More broadly, project-level M&E helped strengthen national capacity for M&E and inform political decision-making.** For example, activities related to MCS, such as the on-board installation of VMS and the use of electronic logbooks in the industrial segment, were essential to M&E reporting requirements, while also feeding



into national monitoring systems and decision-making about fisheries surveillance needs. New transparency standards introduced through the project had positive effects, especially in Guinea and Mauritania, where vessel registries, data collected through MCS activities, and sector revenues were published in the press and online, practices that were once unthinkable. These acts of transparency and good governance have been framed and their achievements audited within the framework of the PBC mechanism coordinated by the RCU. As such, strong synergies between the project design and M&E arrangements went beyond informing project management to enhancing national and regional monitoring and reporting systems.

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

115. **The overall quality of the M&E system is rated Substantial.** The strong complementarity between the overall WARFP approach and the project design both underpinned the M&E framework and permitted a proper assessment of the results chain and the attainment of project outcomes. Furthermore, M&E was actively utilized as a project management tool and has helped strengthen national and regional capacity for M&E. However, there were moderate shortcomings in the M&E system's design primarily related to the restructuring of PDO indicator #5, the limited integration of additional country targets at the time of the AF, and the generally weak capacity of the implementing agencies.

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

116. **At appraisal, the project was classified as category B in the Environmental classification of the World Bank.** Overall, investments aimed at improving fisheries management and developing the artisanal fisheries had moderate environmental and social risks and no significant or irreversible impacts. At appraisal, four environmental safeguard policies were triggered: (i) OP/BP 4.01 Environmental Assessment; (ii) OP/BP 4.04 Natural Habitats; (iii) OP/BP 4.11 Physical Cultural Resources; and (iv) OP/BP 4.12 Involuntary Resettlement. In addition, OP 10.00, paragraph 12 related to Project in Situations of Urgent Need of Assistance or Capacity Constraints applied to Guinea.

117. **Overall, throughout the implementation, the project complied with the triggered safeguard policies, and activities were aligned with environmental and social (E&S) best practices.** On safeguards issues, the project was consistently rated Satisfactory. Safeguard documents were prepared by national consultants recruited by the client and were duly disclosed. Environmental and Social Management Frameworks (ESMFs) were developed to assess E&S risks and identify safeguard measures throughout implementation. Resettlement Policy Frameworks (RPFs) and related Resettlement Action Plans (RAPs) were also developed in compliance with World Bank policies and in accordance with respective countries' regulations, including for project-related screening procedures. Furthermore, although activities funded under the project did not affect critical natural habitats, E&S assessments were prepared and measures to protect, maintain, and rehabilitate natural habitats were reflected in the ESMFs and the Environmental and Social Impact Assessment (ESIAs), in accordance with OP/BP 4.01 (Environmental Assessment). Although investments did not affect critical physical cultural resources, E&S assessments were developed and measures to protect, maintain, and rehabilitate these resources have been reflected in the ESMFs and ESIAs, in accordance with OP/BP 4.01 (Environmental Assessment). In addition, OP 10.00, paragraph 12 related to Projects in Situations of Urgent Need of Assistance or Capacity Constraints applied to Guinea. In each country, at least one E&S safeguard specialist was appointed in the PMU team. In each country, collaboration was established between the PMU and the national environmental protection agency.



118. **Overall, the project remained in compliance with fiduciary requirements throughout implementation.** Over the lifetime of the project, both financial management and procurement were rated Moderately Satisfactory. Financial inconsistencies arose in each country related to quality and timeliness of financial reporting. Each issue was corrected and resolved with support from the World Bank team. External audit reports and audited financial statements were generally received on time and in accordance with established World Bank procedures. External auditors did not highlight any important shortcomings. There were no outstanding FM issues at project closing. At the project-level, procurement was rated MS due to the execution of the majority of planned contracts. In some countries, significant delays were observed, and issues related to coordination arose at different points during implementation. To address the issues, the World Bank provided additional support to in-country procurement teams to improve capacity and monitoring.

119. **Annex 9 includes a full review of safeguards and fiduciary compliance by country.**

## C. BANK PERFORMANCE

**Rating: Moderately Satisfactory**

### Quality at Entry

120. **The project benefited from satisfactory quality at entry.** The project was based on a solid diagnostic of the development challenges and priorities for the region, and it was closely aligned with the World Bank's engagement strategy with the region and the countries as well as its global agenda to promote the blue economy. The project design leaned on the programmatic WARFP, and carefully incorporated lessons learned from neighboring countries. The PDO and RF were ambitious at the right level; focused on incremental improvements in transparency and compliance of targeted fisheries, segments, and sites rather than on taking responsibility for the overall development of the sector. M&E arrangements were both comprehensive and tailored to the circumstances of each country while underpinning the central project design, and provisions for safeguards and fiduciary management were adequate at the design stage and specifically addressed the weaknesses in the appraisal assessments. A couple of aspects of the project design would have benefited from higher quality at entry. First, the implementation arrangements for the performance-based management approach proved to be too complex for effective incentivization from the outset of project activities (see also Section V). Second, PDO indicator 5 measuring reduced waste of landed catch lacked baseline data and specificity. Both aspects required restructuring to enable effective implementation towards intended project outcomes, though it should be noted that the original theory of change was internally logical and did not change because of the restructurings.

### Quality of Supervision

121. **The World Bank team provided adequate supervision and employed a nimble management approach based on expressed client needs and strategic priorities.** The World Bank team supported the implementation of project activities in supervision missions carried out at varying frequency in each country over the nearly 7-year implementation period, which partly reflects the stalling of activities caused by the global pandemic. Following the mid-term review, the team proactively addressed implementation issues and realigned activities and targets to the realities on the ground by refocusing targeted fisheries, segments, and sites and restructuring the RF. According to



client ICRs and beneficiary surveys, the project was carried out in such a way as to always be based on the needs of the countries, arising from the strategies of the fishing sector and the national economy. The adaptive management approach enhanced project efficiency and helped lead the project to a near attainment of all three parts of the PDO.

122. **The World Bank's decision to abandon the programmatic approach was undoubtedly a disappointment to the countries and in some instances undercut planned activities.** In Sierra Leone, the decision further strained client-World Bank relations and hampered the supervision effort. In response to dwindling project-level engagement, the World Bank team coordinated closely with donor partners to ensure progress of project activities, i.e., with UNOPS to complete the investments at Konakridee landing site.

123. **The team ensured adequate transition arrangements for completion of physical investments, while some activities whose operational costs were supported by the project, particularly in Sierra Leone, did not properly phase-in public financing to cover budget needs post-closing.** In Guinea, a proactive move by the team to maintain the momentum on fisheries post-project led to securing PROBLUE funding in 2020 to follow-up with key activities and sustain project outcomes. In Liberia, a follow-on project is under preparation to build on project achievements from Phase I.

124. The team, whose leadership transitioned once for all four countries, maintained candid communication lines with World Bank management, but the project may have benefited from more realism in supervision ratings. The team provided adequate assistance on safeguards, financial management, and procurement, and provided timely support to address compliance issues as they arose.

#### Justification of Overall Rating of Bank Performance

125. **Overall Bank performance is rated Moderately Satisfactory.** This is justified by the satisfactory quality at entry with minor shortcomings to the design of the incentive-based mechanism and the results framework, and to the moderately satisfactory quality of supervision with moderate shortcomings in World Bank commitment and in realism of supervision ratings.

#### D. RISK TO DEVELOPMENT OUTCOME

126. **The risk assessment is based on the four countries' ability to sustain project-supported outcomes as well as the CSRP's ability to maintain its regional support,** bearing in mind the following considerations: (i) the project was designed as a first in a series of regional projects meant to put in place building blocks for further investments (see Figure 1); (ii) going forward each country will proceed on their own path and at their own pace as the programmatic approach has been abandoned; and (iii) the co-dependence of coastal countries on a successful reform process, whereby one country's success is partly dependent on its neighbors' success given the transboundary nature of the resource. The strongest element for sustaining project outcomes relates to governments' increased capacity for fisheries management and governance due to the adoption of new or revised legal and regulatory instruments and the preparation and adoption of fisheries management plans, which together form an important cornerstone of the sector's governance in the future. However, financial and political factors threaten the short and long-term sustainability of a number of project outcomes.



127. **Development outcomes most at risk are those requiring high levels of financing, capacity, and commitment.** Sustaining project achievements in reducing IUU fishing, in community-based fisheries co-management, and in physical post-harvest investments, all require high levels of financing, capacity, and commitment to ensure that they continue and are maintained beyond the project's lifetime. In most cases, such resources are insufficiently available.

- Improvements in vessel registration and licensing systems will become useful management tools only if governments invest sufficient resources in updating and enforcing them.
- For CMAs without legally established territorial rights, continued efforts need to be made to empower communities to manage well-defined areas and fisheries, with substantial support from the state, and for CMAs with demarcated territorial rights, communities require continued and long-term enhancement of their members' skills and sense of ownership.
- Fisheries monitoring centers and surveillance operations require continued presence of trained staff, funding for equipment repair and maintenance, including high fuel costs, and, most importantly, strong government commitment to ensure enforcement of rules.
- Ongoing data collection and annual research campaigns require large investments, which are often delivered by donor agencies. Only if governments are committed to allocating trained staff and resources for research surveys and data collection and entry will national information systems strengthened during project implementation continue to be useful for both national and regional purposes.
- Realized and planned infrastructure investments in Mauritania, Guinea, and Sierra Leone can be operational in the long term if management systems are able to guarantee operation and maintenance of the facilities through use of revenues, as well as access to markets so they can generate tangible results to communities.

128. **Abandoning the programmatic approach could jeopardize progress made in regional collaboration as the concerted effort to manage a shared natural resource in a transboundary context is weakened.** The continuity of regional activities going forward is conditioned on the allocation of dedicated resources independent of project-support. Without regional funding, every country must raise needed financial resources on their own, which puts countries with lower capacity at risk of not being able to attract scarce international donor funds. It also puts at risk the sustainability of regional achievements, such as the regional dashboard, which will require continued funding and designated staff at CSRP to update information shared by the countries. Various EU-funded initiatives are currently supporting this, but a transition to more permanent funding should be considered.

129. **Political instability is a high-risk factor throughout the region.** The region is particularly vulnerable to political instability and unrest. Recent events in Guinea highlight the risk that political fragility pose to the sustainable implementation of newly approved fisheries plans and policies. Changing governments and power vacuums often precipitate unappointed positions, lack of budget funding, and frequent replacement of personnel, among other issues, all of which can significantly impact the project and the sustainability of outcomes. Elsewhere, political demonstrations met with repression can turn into violent clashes, such as it did most recently in Sierra Leone this year, and which at best may delay implementation and at worst may lead to previously agreed priorities being abandoned entirely.



## V. LESSONS AND RECOMMENDATIONS

130. **Fisheries management reforms have a medium to long-term horizon and as such, the project was too ambitious in some instances, notably on controlling capacity and access in the small-scale segment.** Improving management in artisanal fisheries requires engaging with multiple, more or less organized stakeholders, and tackling behaviors that are deeply engrained in tradition and related to the basic livelihood of, often, the poorest segment of the population. The project could introduce some fisheries management principles in the artisanal segment, including in a few pilot communities, but more time is needed to build a broad consensus on effective fisheries management in the artisanal segment, demonstrate results, and develop viable models. The decision to abandon a regional successor to the project is putting this positive momentum at risk in those countries without a national follow-on project.

131. **Establishing strong CMAs is essential for any long-term progress in the artisanal segment.** CMA is an effective mechanism for reducing fishing effort in the artisanal segment that requires substantial time and know-how to succeed. CMAs with legal access rights are an effective mechanism for introducing new harvesting rules, local surveillance, stock enhancement measures and local site monitoring, which together help recover fish stocks and sustain fisheries productivity in managed fishing areas. Community-led fisheries management is also an important instrument for enhancing communities' internal cohesion, however the allocation of fishing zones to communities could result in conflicts between communities that are granted and those that are not granted with such access (such as migrant artisanal fishers and other newcomers). For CMAs to be successful they must be built from the bottom-up and require considerable time and effort to evolve, raise awareness, and build the capacities of local actors. To gain acceptance and bring results, it is important to work with CMA to (i) define realistic targets and commit to a long-term process; (ii) align national regulatory frameworks with community management plans (if developed independent of the State) so they can be applied and recognized by national authorities; and (iii) accompany the implementation of local fisheries management plan with promotion of, and support for, alternative livelihoods for fishers, fishmongers, and fish processors in a way that supports cohesion and economic development within the community, therefore expanding local fisheries management plans to local fisheries management and economic development plans. Going forward, for those CMAs established or strengthened through the Project, next steps will include defining access modalities for artisanal fishermen outside the community (i.e., migrants) and improving coordination among various CMAs sharing resources (as is the case in another WARFP follow-up operation in Senegal).

132. **Advances in transparency of information and fisheries management provides an authorizing environment for further partnerships for the countries.** Transparency of information and fisheries management is an important theme in the project, with several results indicators requiring regular public disclosing of information and sharing with the regional dashboard at CSRP level. This laid the base for a more transparent and informed dialogue on fisheries management and performance. It also prepared the ground for accession to the FiTI in Mauritania in particular, having created a culture for transparency and prepared the information base since many FiTI indicators are similar to that of the dashboard and the RF. Going forward, it is important to explore other international transparency initiatives that can both push countries to become more transparent but also provide concrete services to countries.



133. **Performance-based management linked to disbursements can provide meaningful incentives to encourage swift and effective implementation, but their application must be appropriately designed and programmed.** DLIs and PBCs were key to engaging various departments and entities of the ministries in charge of fisheries in the implementation of the technical assistance component of the project in Guinea and Mauritania, but the effectiveness of these mechanisms was hampered by complex implementation arrangements. This included (i) sophisticated processes related to indicator definition, measurement, success metrics, and allocation of proceeds, which made it difficult for the PIUs to understand and monitor; (ii) contracting of the technical auditors (Independent Verifiers) by the RCU to manage conflict of interest, which required a high level of coordination between the RCU and the two PIUs; (iii) backloading of technical audits for years 3, 4, and 5, for cost reasons, leaving limited time and wiggle room for the Recipients to use the funds and to apply corrective measures to improve performance; (iv) the pre-defined program of eligible activities, which left little possibility for adjustments; and (v) a requirement of a specific (RCU-contracted) financial audit, which was not necessary as the regular annual audit of financial statement did capture the use of funds. For future projects, performance-based mechanisms should be based on simpler rules, allow for flexibility as new needs may emerge during implementation, and be primarily frontloaded to earlier years of the project lifecycle.





ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: To strengthen the governance of targeted fisheries

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO1: Share of fisheries management data published regularly and made publicly accessible - GN	Percentage	0.00	83.00	83.00	83.00
		23-Feb-2015	15-Dec-2020	31-Dec-2021	31-Dec-2021

Comments (achievements against targets):

Target achieved. The indicator was designed as a measure of governance improvement with respect to transparency. It was based on six locally adapted variables and defined as the share of that data made publicly accessible on a regular basis with a target value of 5 variables (equal to 83 percent). In Guinea, the six variables were: (i) list of valid vessel licenses in industrial segment (monthly), (ii) list of artisanal fishing boats (annually), (iii) list of infractions in industrial segment (monthly), (iv) fees from licenses (every trimester), (v) fees collected under fishing agreements (annually), and (vi) fees from infractions (annually). At project closing, five variables are regularly published on MPAEM’s website: www.peches.gov.gn. Only variable (v) on fees collected on fishing agreements is not fulfilled because no fisheries agreement has entered into force. The result is verified in the 2020 PBC Audit Report, which finds that data for the five variables are reliable and regularly available.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
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PDO1: Share of fisheries management data published regularly and made publicly accessible - MR	Percentage	0.00	83.00	83.00	100.00
		23-Feb-2015	15-Dec-2020	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target 120% achieved.** The indicator was designed as a measure of governance improvement with respect to transparency. It was based on six locally adapted variables and defined as the share of that data made publicly accessible on a regular basis with a target value of 5 variables (equal to 83 percent). In Mauritania, the six variables were: (i) list of valid fishing licenses from all segments (monthly), (ii) list of infractions in artisanal and coastal segments (annually), (iii) list of infractions in industrial segment (monthly), (iv) fees from licenses (every trimester) (v) fees collected under fishing agreements (annually), (vi) fees from infractions (annually). At project closing, all six variables are published on a regular interval and made accessible to the public on the MFME website ([www.peches.gov.mr](http://www.peches.gov.mr)). It may be noted that the interval differs slightly for three of the indicators compared to the initially envisioned schedule: for (i) and (iii) the interval is biannual instead of monthly, and for (iv) the interval is biannual instead of trimestral. These results are verified by the ICR team on the MPEM website and in the PBC Audit Report.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO1: Share of fisheries management data published regularly and made publicly accessible - SL	Percentage	0.00	100.00	100.00	75.00
		11-Jul-2020	01-Mar-2021	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target 33% achieved.** The indicator was designed as a measure of governance improvement with respect to transparency. The indicator was not introduced at the time of the AF, but a target of 100 percent was added in the July 2020 restructuring without further specification of the variables. According to the Borrower ICR, Sierra Leone has cumulatively disclosed 75 percent of data on key variables. At the MFMR website, lists of licensed vessels (the latest from September 2021) and a list of revenue from royalties, licenses, fees, and fines (the latest from 2018) is publicly available. However, data on the five variables is not regularly published.



Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO2: Allocation of secure fishing rights in the small-scale segment in a participatory, transparent, and scientific manner - GN	Number	0.00 23-Feb-2015	3.00 15-Dec-2020	3.00 31-Dec-2021	7.00 31-Dec-2021
<p><b>Comments (achievements against targets):</b>            At the time of the AF, a target was added for Guinea relating to operational co-management of territorial fishing rights in the small-scale segment. A target value of 3 was established based on a point system: one point for the legal establishment of a community association, one point for the adoption of a co-management plan, and one point for the implementation of key measures of the plan relating to the management of fishing effort such as the number of vessels, area closure, biological rest, and fishing gear. At appraisal, the community of Koukoudé had been identified as a potential site, but at the AF the community of Bongolon and Matakang were included as target sites. With three co-management sites targeted by the project, the maximum score is 9. At closing, local Fisheries Co-management Associations (ALC) have been set up in each of the three sites. Fisheries co-management plans have been developed and are operational in Koukoudé and Bongolon. The delimitation of co-management areas was successfully carried out in Koukoudé and Bongolon. The co-management plans were adopted and validated by the communities and by a National Order A/2020/3540/MPAEM/CAB/SGG of December 31, 2020, which provides the legal basis for the co-management plans. Other coastal communities are showing interest in the CMA approach.</p>					

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO2: Allocation of secure fishing rights in the small-scale segment in a participatory, transparent, and scientific	Number	0.00 05-Jan-2017	1.00 01-Mar-2018	1.00 01-Mar-2019	0.00 01-Mar-2019



manner - LR

**Comments (achievements against targets):**

**Target not achieved.** The original indicator was developed for MR (see below). At the time of the AF, a target of 1 was added for Liberia relating to the preparation of a management plan for the Robertsport CMA. At project closing, there is no fishery management plan in place for the Robertsport CMA, and the open access situation in the artisanal segment has not changed. As per the latest AM for LR, the number of canoes and fishermen were reported to be increasing.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO2: Individual quotas in octopus are distributed to all segments in a participatory, transparent, and scientific manner - MR	Number	0.00 23-Feb-2015	3.00 15-Dec-2020	3.00 28-Feb-2022	0.00 28-Feb-2022

**Comments (achievements against targets):**

**Target not achieved.** The original PDO indicator 2 was defined as “Allocation of secure fishing rights in the small-scale segment in a participatory, transparent, and scientific manner”. Secure fishing rights in the artisanal and coastal segments were defined in terms of specialized individual licenses (as the small-scale segment are not subject to individual quotas). The indicator was restructured in April 2019 and merged with Intermediate Indicator “Individual quotas in the octopus fishery are allocated in the industrial segments in a participatory, transparent, and scientific manner”. The new PDO indicator 2 narrowed the fisheries focus to octopus only but broadened the scope to all segments. The target value of 3 remained the same, based on a point system for each qualifier: participatory allocation, transparent allocation, and scientific allocation. The project introduced individual non-transferable fishing quotas for octopus fisheries in the industrial and coastal segments based on the percentage distribution of the TAC. The quotas in these two segments are allocated based on scientific advice, in which the quotas do not exceed the TAC based on data on octopus habitat and population growth rates. The quotas are also allocated in a participatory manner, as the allocation was consulted with operators in those two segments. However, in terms of



transparency, the publication of the criteria and data based on which quotas are being allocated is still lacking. In the artisanal segment, secure fishing rights through specialized individual licenses could not be accomplished due to the incomplete registration of all canoes in the small-scale segment.

**Objective/Outcome:** To strengthen the management of targeted fisheries

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO3: Number of fishing vessels operating in the exclusive economic zones should not exceed the ceiling established for each segment - GN	Yes/No	No 23-Feb-2015	Yes 15-Dec-2020	Yes 31-Dec-2021	Yes 31-Dec-2021

**Comments (achievements against targets):**

**Target achieved.** The indicator was designed as a proxy measure of fishing capacity. The target ceiling was set individually for each country based on the estimated capacity at appraisal. In Guinea, the ceiling values established were: (i) 10,000 canoes in the artisanal segment and (ii) 85 vessels in the industrial segment (equal to the number of licenses). A target for the coastal segment was added in April 2019 (level II restructuring) to account for the growing number of advanced artisanal canoes equipped with an engine (Pêche Artisanale Avancée, PAA). The ceiling for the PAA segment was set at 150 boats. Outcome in the artisanal segment is assessed based on the number of registered vessels in year 5. At closing, a total of 8,862 artisanal canoes are operating in the EEZ of which 7,011 are registered and 1,851 are non-registerable dugout canoes. The number of registered advanced artisanal canoes (PAA) is 70. Outcome in the industrial segment is inferred from the number of fishing licenses in annual equivalence. In 2021, there were 62 national and foreign industrial vessels, excluding tuna vessels, operating in the EEZ of which 4 vessels were fishing shrimp, 7 pelagic vessels, 47 demersal vessels, 3 vessels fishing cephalopods, and 1 vessel fishing gastropods.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO3: Number of fishing	Yes/No	No	Yes	Yes	No



vessels operating in the exclusive economic zones should not exceed the ceiling established for each segment - MR		23-Feb-2015	15-Dec-2020	28-Feb-2022	28-Feb-2022
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**Comments (achievements against targets):**

**Target not achieved.** The indicator was designed as a proxy measure of fishing capacity. The target ceiling was set individually for each country based on the capacity at approval. In Mauritania, the ceiling values established were: (i) 7,661 canoes in the artisanal segment, (ii) 261 boats in the coastal segment, and (iii) 245 vessels in the industrial segment (equal to the number of licenses). Outcome in the artisanal and coastal segment is assessed based on the number of registered boats and to include the unknown dormant capacity (canoes and boats inactive for 30 days or more). According to the December 2019 IMROP survey, the canoe fleet consisted of 4,014 active canoes and 3,430 inactive canoes for a total of 7,444 canoes. Meanwhile, the Framework Survey Report of July 2020 counted 5,253 active canoes and 2,317 inactive for a total of 7,570 canoes. In either case, the number of canoes operating in the EEZ is under the ceiling established. In the coastal segment, there were 257 actives and 130 inactive boats according to the December 2019 IMROP survey, while the Framework Survey Report of July 2020 counted 233 active canoes and 200 inactive. In either case, the total number of boats operating in the EEZ is above the ceiling established. Outcome in the industrial segment is inferred from the number of fishing licenses in annual equivalence, i.e., 245 licenses issued in 2020 and equal to the ceiling established. In conclusion, in two out of three segments does the number of vessels operating in the EEZ not exceed the ceiling.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO3: Number of licensed fishing vessels operating in the exclusive economic zones should not exceed the ceiling established for each segment - SL	Yes/No	No 05-Jan-2017	Yes 01-Mar-2021	Yes 28-Feb-2022	Yes 28-Feb-2022

**Comments (achievements against targets):**



**Achieved.** The original indicator was developed for GN and MR as a proxy measure of fishing capacity. No target was added for Sierra Leone, but the indicator was tracked and included in the Project Completion Report prepared by the country. In Sierra Leone, the baseline in 2017 was 114 fishing vessels in the industrial segment. According to the latest list of licensed vessels from September 2021 published at Ministry’s website, a total of 92 vessels were operating in the EEZ of which 78 were fishing vessels, 11 supply vessels, and 3 carriers.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO4: Share of fishing vessels inspected by the national fisheries surveillance agency for compliance with national regulations - GN	Percentage	25.00	80.00	80.00	85.00
		23-Feb-2015	15-Dec-2020	31-Dec-2021	31-Dec-2021

**Comments (achievements against targets):**

**Target 106% achieved.** This indicator measures the fisheries control effort through inspection and control of industrial fishing vessels operating in Guinea's EEZ (IR indicator 2.3 was added for the artisanal segment). The target was set to inspect 80 percent of all industrial fishing vessels, national and foreign, by i) inspection at sea during patrols by MCS services to check mesh size, health status, regulated species, other fishing activities; and (ii) spot inspection at port. Pre-licensing inspection is not included as 100 percent of industrial vessels are inspected prior to licensing. The outcome is assessed cumulatively over time without counting the same vessels inspected multiple times. According to the Centre National de Surveillance et de Protection de la Pêche, the national supervisory agency, 85 percent of industrial vessels were inspected in 2020.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO4: Share of fishing vessels	Percentage	35.00	70.00	70.00	40.00



inspected by the national fisheries surveillance authority for compliance with national regulations - SL		05-Jan-2017	01-Mar-2021	28-Feb-2022	28-Feb-2022
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**Comments (achievements against targets):**

**Target 57% achieved.** This indicator was originally defined for Guinea and measures the fisheries control effort through inspection and control of industrial fishing vessels operating in the EEZ. In the AF, a target for Sierra Leone was set 70 percent of all industrial fishing vessels, national and foreign, inspected at sea during patrols. Pre-licensing inspection is not included as 100 percent of industrial vessels are inspected prior to licensing. The outcomes would be assessed cumulatively over time, without counting same vessels inspected multiple times. The project supported the acquisition of two patrol vessel, commissioned in May 2021. The vessels undertook 7 days of surveillance in March 2021 and again in May 2021 and inspected a total 16 vessels at sea by August 2021. Given that 40 fishing vessels were operating in the EEZ by August 2021 (excluding tuna vessels), the share of inspected fishing vessels is 40 percent. In previous years, the inspection rate was 35 percent in 2017 and 45 percent in 2019.

**Objective/Outcome:** To improve the handling of landed catch at selected sites

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO5: Volume of processing capacity according to improved hygiene conditions - GN	Metric ton	0.00	70.00	30.00	58.00
		23-Feb-2015	15-Dec-2020	15-Dec-2020	31-Dec-2021

**Comments (achievements against targets):**

**Original target 143% achieved and revised target 193% achieved.** The original indicator measured post-harvest loss calculated as the ratio of marketable fish to the total landed volume at selected fish landing sites. In Guinea, focus was on the Koukoudé fishing community as a recipient of investments to improve physical infrastructure at the landing site. The target included fish marketable for all consumption with a target value of 70 percent of all landed fish. The outcome ratio would be calculated in equivalent weight at the landing site (start point) and at the auction hall (end point). The indicator was revised in April 2019 to track changes in marketable volumes as measured by the total actual volume of processing capacity in accordance with improved



hygiene conditions. The revised target with a value of 30 metric tons was not clearly defined. However, it may be understood as a daily value of 30 tons of smoking capacity, which is the main type of processing taken place at Koukouké. The latest monitoring data from February 2021 shows that in 2020 a total of 20,635 tonnes of fish were landed in Koukouké, of which 15,087 tonnes were smoked in the facilities installed as part of the project. Assuming a 5-day work week for 52 weeks a year (260 days), the achievement is equal to a daily capacity of 58 tonnes being processed according to improved hygiene conditions. Overall, it deserves mention that the investments to equip and modernize the entire Koukouké landing site have allowed for 100 percent of catch landed to be handled under greatly improved sanitary and health and safety conditions.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO5: Volume of processing capacity according to improved hygiene conditions - MR	Metric ton	0.00	90.00	30.00	30.00
		23-Feb-2015	15-Dec-2020	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target achieved.** The original indicator measured post-harvest loss calculated as the share of marketable fish divided by the total landed volume at selected fish landing sites. In Mauritania, focus was on the Nouackchott Fish Market as a recipient of investments in physical infrastructure to improve handling of landed catch. The target was limited to fish intended for direct human consumption with a target value of 90 percent of all landed fish in that category that should be marketable. The outcome ratio would be calculated in equivalent weight at the landing site (start point) and at the auction hall (end point). The indicator was revised in April 2019 to measure changes in marketable volumes as measured by the total actual volume of processing capacity in accordance with improved hygiene conditions. The revised target with a value of 30 metric tons was not clearly defined. However, it may be understood as a daily value of 30 tons of freezing capacity, which is the main type of processing taking place in MPN. According to the latest monitoring report from 2020, the total storage capacity of the Nouackchott Fish Market and the nearby PK28 fish market is 5,856 tonnes with a daily freezing capacity of 302 tonnes – a measure, which has tripled in the past five years during project implementation. All landed catch is benefitting from the physical investments and improved hygiene standards delivered under the supervision of the national competent authority (ONISPA).

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO6: Direct project	Number	0.00	190,000.00	32,000.00	52,304.00





beneficiaries - GN		23-Feb-2015	15-Dec-2020	31-Dec-2021	31-Dec-2021
Female Beneficiaries - GN	Percentage	0.00	66.00	9.00	30.00
		23-Feb-2015	15-Dec-2020	15-Dec-2020	31-Dec-2021

**Comments (achievements against targets):**

**Original target 28% achieved and revised target 163% achieved.** The indicator relates to all parts of the PDO. In Guinea, the original target was set at 190,000 beneficiaries, of which 125,000 were women, equal to 66 percent. It was estimated that fisheries in Guinea support an additional six livelihoods in the value chain. Project beneficiaries included 50,000 in the industrial segment and 140,000 in the artisanal segment, of which 41,600 were artisanal fishermen. The indicator was revised in April 2019 to include only the direct beneficiaries that the PIU could trace and verify, and the target adjusted to 32,000 beneficiaries, of which 9 percent would be women. The revised target included beneficiaries at the administration level, at co-management sites (fishermen, processors, wholesalers, etc.), and of registered boats (owners and fishermen). At closing, direct beneficiaries counted 52,304: 2,135 artisanal fishermen; 984 workers in the smoke facility; 640 workers in the dryer facility; 456 fishmongers; 32,000 fishermen and owners with registered boats; 12,526 beneficiaries of the alternative incomes-generating program; 500 workers at the fitted landing site; 3,000 users of the paved access road; and 63 representatives of local authorities. Women accounted for 30 percent as they were the primary beneficiaries working in the smoke and dryer facilities, as fishmongers, and as beneficiaries of the program of income-generating activities.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
PDO6: Direct project beneficiaries - MR	Number	0.00	255,000.00	50,000.00	54,904.00
		23-Feb-2015	15-Dec-2020	28-Feb-2022	28-Feb-2022
Female beneficiaries - MR	Percentage	0.00	30.00	30.00	6.00
		23-Feb-2015	15-Dec-2020	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**



**Original target 22% achieved and revised target 110% achieved.** The indicator relates to all parts of the PDO. In Mauritania, the original target was set at 255,000 beneficiaries, of which 30 percent were women. It was estimated that fisheries in Mauritania support an additional five livelihoods in the value chain. The indicator was revised in April 2019 to include only the potential direct beneficiaries that the PIU could trace and verify, and that were directly involved in or dependent on fishing, such as: (i) artisanal fishermen, industrial fishermen, workers in processing plants (often women), people who market fish and fish products in retail (mostly women), and (ii) stakeholders in the promotion of the sector, in particular country officials, international organizations, technical agencies and members of national non-governmental organizations (NGOs). Direct beneficiaries were estimated at 50,000 people with 30 percent being women. At closing, the project had directly benefitted 54,904 persons in Mauritania, of which 50 percent were fishermen. Women accounted for 6 percent of project beneficiaries, most of whom work as fishmongers and market resellers. See below Mauritania: Assessment of Results.

## A.2 Intermediate Results Indicators

**Component:** Component 1: Strengthening Good Governance and Sustainable Management of Fisheries

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.1 Reliable fisheries management data regularly available - GN	Number	0.00 23-Feb-2015	5.00 15-Dec-2020	5.00 31-Dec-2021	5.00 31-Dec-2021

**Comments (achievements against targets):**

**Target achieved.** The indicator measures the availability, regularity, and reliability of fisheries data. The target was defined for each country as a list of variables: In Guinea, the same six variables as in PDO indicator 1 were used as a base with a target of 5 of those variables regularly available. At project closing, five variables are regularly published on MPAEM’s website: [www.peches.gov.gn](http://www.peches.gov.gn), see PDO indicator 1 for details. The result is verified in the 2020 PBC Audit Report, which finds that data for the five variables are reliable and regularly available.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
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1.1 Reliable fisheries management data regularly available - MR	Number	5.00	13.00	13.00	13.00
		23-Feb-2015	15-Dec-2020	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target achieved.** The indicator was defined as availability, regularity, and reliability of fisheries data. The target was defined for each country as a list of variables: In Mauritania, a total of 13 variables would be tracked, including the six variables from PDO indicator 1 plus seven additional variables: (i) estimate of octopus catch potential in the EEZ (metric ton estimate) (annual), (ii) fishing effort, in thousands of hours of industrial fleets (by category of vessels) (annual), (iii) volume in tons of fish production (pelagic, demersal cephalopods and crustaceans) (annual), (iv) FOB value of frozen fish exports in thousands of US dollars (current prices), by segment (artisanal and coastal) (annual), (v) FOB price of octopus exports in US dollars per ton (monthly), (vi) value of public and private investments made in the fisheries sector (in US dollars) (annual), and (vii) number of shipyard approved by the State serving fisheries units (annual). At closing, all 13 indicators are regularly monitored and published, and available online at the MPEM’s website. The result is verified in the 2020 PBC Audit Report.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.1 Reliable fisheries management data regularly available - SL	Number	0.00	4.00	4.00	4.00
		05-Jan-2017	01-Mar-2021	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target achieved.** The indicator measures the availability, regularity, and reliability of fisheries data. In the AF, a target of 4 was introduced for Sierra Leone. Outcome would be assessed for the industrial segment based on on-board observer reports and for the artisanal segment based on landing data. Based on the latest available data from the ministry’s website, 4 out of 5 data points are publicly available as of September 2021, including: (i) list of valid licensed fishing vessels (industrial and decked semi-industrial; (iii) fees from licenses, (iv) list of licensed industrial fishing vessels with VMS and or AIS; (v) list of licensed industrial fishing vessels with observers, publicly accessible in Ministry of Fisheries. A list of infractions in the artisanal sector is not available. The data is published with some regularity, though not as frequently as intended. Link: [www.mfmr.gov.sl](http://www.mfmr.gov.sl).



Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.2 Share of fishing vessels registered - GN	Percentage	0.00	100.00	100.00	84.00
		23-Feb-2015	15-Dec-2020	31-Dec-2021	31-Dec-2021

**Comments (achievements against targets):**

**Target 84% achieved.** The indicator was defined as a measure of the country's preparedness for controlling fishing effort in each segment (PDO indicator 3), and involved completing the registration process for all vessels, including the dormant capacity in the fleet. At appraisal, the industrial fleet segment was already fully registered, whereas the artisanal fleet segment was unregistered. Outcome is assessed by the number of registered vessels divided by the number of vessels surveyed. An NGO independently conducted a field census in October 2020 and calculated that 84 percent of artisanal fishing vessels were registered. For verification, the ICR team calculated the share based on available figures and confirms the overall achievement. According to the 2020 PBC Audit Report, a census of the artisanal fleet was carried out for 2017 and found that the active fleet counted 7,538 artisanal fishing vessels of which 5,664 were artisanal canoes and 1,874 were dugout canoes (non-registerable). The registration program for artisanal fishing (excluding dugout canoes) started in 2018 and the first list of boats was published in February 2019. By project closing, the active artisanal fleet operating in the EEZ numbered 8,862 artisanal fishing vessels of which 7,011 were registered. Against the 2017 census, it may be assessed that 93 percent of all artisanal fishing vessels and 124 percent of artisanal canoes had been registered at closing. Against the active fleet operating in the EEZ at closing, it may be assessed that 79 percent of all artisanal fishing vessels and 100 percent of artisanal canoes had been registered at closing.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.2 Share of fishing vessels registered - MR	Percentage	0.00	100.00	100.00	66.00
		23-Feb-2015	15-Dec-2020	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**



**Target 66% achieved.** The indicator was defined as a measure of the country's preparedness for controlling fishing effort in each segment (PDO indicator 3), and involved completing the registration process for all vessels, including the dormant capacity in the fleet. This would be assessed by the number of registered vessels divided by the number of vessels identified in census. At appraisal, the industrial fleet was fully registered, the coastal was 60 percent registered, while none of the canoes in the artisanal fleet were registered. The target value was set at 90 percent of vessels in the coastal and artisanal segments to be registered. At closing, and according to the DMM, which keeps track of the registration of the country's fishing fleet, the entire industrial and coastal fleets are registered and included in the quota system. The campaign to properly register and mark canoes in the artisanal fleet were able to reach 43 percent of canoes identified in the census. The result is verified in the PBC Audit Report.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.3 Proposal for institutional and functional reform submitted to Cabinet by Ministry of Fisheries - MR	Yes/No	No 01-Jul-2014	Yes 15-Dec-2020	Yes 28-Feb-2022	Yes 28-Feb-2022

**Comments (achievements against targets):**

**Target achieved.** The indicator was defined as the actual submission of a letter to the Cabinet with a proposal for institutional and functional reform attached. Such a proposal was submitted in early 2015 to the National Assembly and implemented in law in July 2015.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.4 Revised appropriate regulations integrating (i) access management and (ii) secure fishing rights submitted	Yes/No	No 23-Feb-2015	Yes 15-Dec-2020	Yes 28-Feb-2022	Yes 28-Feb-2022



to Cabinet by Ministry of Fisheries - MR

**Comments (achievements against targets):**

**Target achieved.** The indicator was defined as a review of a letter submitted to Cabinet with a proposal for revised regulations attached. A review of the letter suggests that the reforms proposed include sustainable funding of a number of fisheries management functions, separation of control and regulation functions, separation of policy formulation functions from policy implementation and alignment of human resources with fisheries management functions in the institutions concerned, and the regulations in force governing access by zone corresponding to fishing units. The fishing code has been drawn up as well as its implementing texts (decree No. 2015-159 implementing law No. 017-2015 of July 29 on the fishing code).

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.4 Revised appropriate regulations integrating (i) access management and (ii) secure fishing rights submitted to Cabinet by Ministry of Fisheries - SL	Yes/No	No 05-Jan-2017	Yes 01-Mar-2021	Yes 28-Feb-2022	Yes 28-Feb-2022

**Comments (achievements against targets):**

**Original target not achieved and revised target achieved.** The original indicator was defined for MR. At the AF, a target was added for Sierra Leone. In July 2020, the indicator was revised to “Submission of Revised Fisheries Act and fisheries regulations to cabinet by MFMR”. The project supported the preparation and submission of the Fisheries and Aquaculture Act of 2018, Fisheries and Aquaculture Regulations of 2019, FAO Ports States measures, and National Plan of Action for IUU fishing. However, the artisanal segment remains open access and allocation of secure fishing rights have not been given to CMAs.



Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.5 Fisheries management plans developed - GN	Number	0.00 23-Feb-2015	1.00 15-Dec-2020	1.00 31-Dec-2021	1.00 31-Dec-2021
<p><b>Comments (achievements against targets):</b>  <b>Target achieved.</b> The indicator was defined as a fisheries management plan adopted by order or decree. At closing, the 2021 Fisheries Development and Management Plan has been developed and approved, but the plan could not be validated during the last quarter of 2021 due to the political situation. By securing funding from the PROBLUE trust fund, the strategy and the investment plan is expected to be validated by July 2022.</p>					
Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.5 Fisheries management plans developed - LR	Number	0.00 05-Jan-2017	1.00 01-Mar-2018	1.00 01-Mar-2019	0.00 01-Mar-2019
<p><b>Comments (achievements against targets):</b>  <b>Target not achieved.</b> The original indicator was developed for GN and MR. At the time of the AF, a target value of 1 was added for LR and was defined as the approval of a fisheries management plan for industrial trawl fishery, demersal, and artisanal fisheries, including annual sustainable harvest levels (or TAC). The project delivered a draft national shrimp fishery management plan based on a shrimp fishery stock assessment. At project closing, the draft management plan had been shared, but not approved.</p>					
Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion



1.5 Fisheries management plans developed - MR	Number	0.00	3.00	1.00	2.00
		23-Feb-2015	15-Dec-2020	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target 200% achieved.** The indicator was defined as the number of fisheries management plans developed. A cumulatively target value of 3 management plans adopted by decree was established, focused on a revised octopus plan, a shrimp plan, and the fisheries management plan for the artisanal and coastal segment. The indicator was revised in April 2019 as focused changed to octopus fisheries. The target value was reduced to from 3 to 1, focusing on a revised octopus plan only. The octopus plan was updated and adopted in November 2018. In addition, a croaker plan was validated by the CCNADP in February 2020 and the decree signed by the legislation on August 17, 2020.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.5 Fisheries management plans developed - SL	Number	0.00	2.00	2.00	2.00
		05-Jan-2017	01-Mar-2021	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target achieved.** The indicator was defined as the number of fisheries management plans developed. A cumulatively target value of 2 approved management plans was adopted for SL in the AF focused on shrimp fishery and demersal fishery. The 2020-2025 Fisheries Management Plan was approved on May 28, 2021, and specifically covered scrimp and demersal fisheries.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
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1.6 Fisheries management data incorporated in the regional dashboard - GN	Number	0.00 23-Feb-2015	5.00 15-Dec-2020	5.00 31-Dec-2021	5.00 31-Dec-2021
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**Comments (achievements against targets):**

**Target achieved.** The indicator was defined based on the same six variables as in PDO indicator 1 with a target of 5 variables integrated into the regional dashboard maintained by the CSRP. According to the MPAEM, all of Guinea's fisheries management variables are incorporated into the regional dashboard. The ICR team was not able to access dashboard during the drafting of this report.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.6 Fisheries management data incorporated in the regional dashboard - MR	Number	0.00 23-Feb-2015	9.00 15-Dec-2020	9.00 28-Feb-2022	7.00 28-Feb-2022

**Comments (achievements against targets):**

**Target 89% achieved (based on a target of 8 given the general lack of aquaculture and inland fisheries in Mauritania).** The indicator was defined as the incorporation of national data into the regional dashboard maintained by CSRP. A target value of 9 themes to be incorporated into the dashboard were defined based on the six variable in PDO indicator 1 plus the (i) number of vessels registered by segments (artisanal and coastal) (annual), (ii) quantity of total fish production (pelagic, demersal, cephalopods and crustaceans) in ton (annually), (iii) value of exports of fish of all species (in thousands of UM in current prices) (annual), (iv) contribution of the fisheries sector to government revenue: fiscal revenue from fishing sector (current prices, million UM) compared to the total state fiscal revenue (annual), and (v) number of people employed in the fishing industry by segment (artisanal, coastal and industrial) (annual). At project closing, data shared to the dashboard includes 7 of 9 themes with some aggregation of data: Theme 2 on production and effort, Theme 3 on surveillance and protection, Theme 4 on exports, Theme 5 on national consumption, Theme 6 on employment, Theme 7 on economic benefit by species, and Theme 8 on good governance. Topic 1 on vessels and licenses has not yet been completed, while data for Theme 9 on aquaculture and inland



fisheries is not available due to a general lack of aquaculture in Mauritania. The ICR team attempted to verify the integration of the data variables but was unable to access the website of the dashboard.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.7 Annual total allowable catch (TAC) in the octopus fishery is distributed in percentage to artisanal, coastal, and industrial segments in a participatory, transparent, and scientific manner - MR	Number	0.00	3.00	3.00	1.00
		01-Jul-2014	15-Dec-2020	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target 33% achieved.** The indicator was defined in relation to the distribution of the annual total catch that can be taken sustainably without depleting the renewal potential of the octopus stock. A target value of 3 was established based on a point system for each qualifier to be fulfilled in each segment: participatory allocation, transparent allocation, and scientific allocation. The outcome would be assessed based on observation of the process leading to the distribution of the shares of TAC in the octopus fishery. The PBC Audit Report, completed by independent third-party verifiers, who conducted a mission in December 2020, concludes that the distribution of the TAC to each segment operating in octopus fishery is done in a participatory manner, but is not sufficiently transparent or scientific, as the artisanal segment remains uncontrolled.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
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1.8 Monitoring, evaluation, and surveillance reports of project activity implementation by an organization are regularly published - GN	Yes/No	No 23-Jan-2015	Yes 15-Dec-2020	Yes 31-Dec-2021	No 31-Dec-2021
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**Comments (achievements against targets):**

**Target not achieved.** The indicator was originally defined for MR as the publication by a selected organization of an M&E report of project activities. The report would review the engagement of artisanal fishermen and women in the consultation process of fisheries management. At project closing, no such report was produced for Guinea.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.8 Monitoring, evaluation, and surveillance reports of project activity implementation by an organization are regularly published - MR	Yes/No	No 01-Jul-2014	Yes 15-Dec-2020	Yes 28-Feb-2022	Yes 28-Feb-2022

**Comments (achievements against targets):**

**Target achieved.** The indicator was defined as the publication by a selected organization of an M&E report of project activities. The report would review the engagement of artisanal fishermen and women in the consultation process of fisheries management. The PIU confirms that a report on the observations by project partners was transmitted.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.8 Monitoring, evaluation, and	Yes/No	No	Yes	Yes	Yes



surveillance reports of project activity implementation by an organization are regularly published - SL		05-Jan-2017	01-Mar-2021	28-Feb-2022	28-Feb-2022
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**Comments (achievements against targets):**  
**Target achieved.** The indicator was originally defined for MR as the publication by a selected organization of an M&E report of project activities. The report would review the engagement of artisanal fishermen and women in the consultation process of fisheries management. The SL Project Completion Report confirms that reports on the observations by project partners were transmitted, such as through community surveillance reports, patrols reports, and through the Scientific Observer Report.

**Component:** Component 2: Reducing Illegal, Unreported, and Unregulated (IUU) Fishing

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.1 Satellite-based surveillance system for industrial fishing vessels by the national fisheries surveillance agency is functional - GN	Hours	8.00 23-Feb-2015	24.00 15-Dec-2020	24.00 31-Dec-2021	24.00 31-Dec-2021

**Comments (achievements against targets):**  
**Target achieved.** The indicator was defined as the annual average of hours per day in which the satellite-based surveillance system for the industrial segment was functioning at the National Centre for Surveillance and Protection of Fisheries. The target was non-stop surveillance 24 hours a day, which would be measured as count of total number of total hours of surveillance in a year divided by 365. At closing, the VMS is operational and functional on average 24 hours a day. The result is verified in the 2020 PBC Audit Report.



Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.1 Licensed industrial fishing vessels installed with functional VMS and observers on board - SL	Percentage	10.00 05-Jan-2017	20.00 01-Mar-2021	100.00 28-Feb-2022	100.00 28-Feb-2022

**Comments (achievements against targets):**

**Target achieved.** The original indicator “Satellite-based surveillance system for industrial fishing vessels by the national fisheries surveillance agency is functional” was revised in July 2020 to “Licensed industrial fishing vessels installed with functional VMS and observers on board”. The target was revised from hours/day to percentage. According to the latest MCS report listed on the Ministry’s website from September 2021, 100 percent of the industrial fleet segment is equipped with the VMS and carries on-board observers. This achievement excludes tuna vessels, which account for roughly half of the fleet (38 out of 78 fishing vessels).

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.2 Surveillance patrol of industrial fishing vessels (number of days per year) - GN	Days	80.00 23-Feb-2015	200.00 15-Dec-2020	200.00 31-Dec-2021	122.00 31-Dec-2021

**Comments (achievements against targets):**

**Target 61% achieved.** The indicator was defined as the number of days per year where surveillance patrols (monitoring and control) were carried out for the industrial segment. In 2020, supported by the project the National Fisheries Surveillance Center (CNSP) carried out surveillance patrols in the mid-shore and offshore area for 64 days out of the year. Due to technical issues with the offshore patrol vessel the number of patrol days were reduced. Previously in 2018, the CNSP had conducted 123 days of patrol, and in 2019 that number had increased to 180 days. At closing, the patrol vessel Vedette Moussaya had



been repaired and was carrying out surveillance missions again. Due to the technical issues encountered in 2020, the achievement is recorded as the annual average days of surveillance patrol  $(123+180+64)/3$ .

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.2 Surveillance patrol of industrial fishing boats (number of days per year) - SL	Number	80.00	240.00	240.00	14.00
		05-Jan-2017	01-Mar-2021	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target 6% achieved.** The indicator was defined as the number of days per year where surveillance patrols (monitoring and control) were carried out for the industrial segment. The SIK patrol vessel remained inoperable for much of the project period in part due to damage to the vessel propellers and in part due to a failure to appoint vessel officers and crew. In 2021, the SIK vessel completed seven days of surveillance in March and again in May, for a total of 14 days of surveillance of the industrial fleet. In previous years, the SIK undertook 21 days of surveillance in 2020 (according to the SL Project Completion Report), and 25 days of surveillance in 2019.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.3 Surveillance patrol of artisanal fishing boats (number of days per year) - GN	Number	0.00	96.00	96.00	184.00
		23-Feb-2015	15-Dec-2020	31-Dec-2021	31-Dec-2021

**Comments (achievements against targets):**



**Target 192% achieved.** The indicator was defined as the number of days per year where surveillance patrols (monitoring and control) were carried out for the artisanal segment. A target was set for 96 days of surveillance patrol per year. In 2021, supported by the project the National Fisheries Surveillance Center (CNSP) carried out surveillance patrols in the coastal area for 184 days out of the year. Previous years, the CNSP had carried out 674 patrols in 2020, 516 patrols in 2019, and 276 patrols in 2018. The number recorded for 2021 is likely a reflection of overall lower fishing activity due to the pandemic.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.4 Sustainable JMC operation plan is developed - SL	Yes/No	No 05-Jan-2017	Yes 01-Mar-2021	Yes 28-Feb-2022	Yes 28-Feb-2022

**Comments (achievements against targets):**

**Target achieved.** The indicator was defined as the existence of a JMC Operational Plan. The project supported the preparation of an operational plan for the Joint Monitoring Committee (JMC). The finalized National Fisheries Inspection Plan 2020-2025 was approved in tandem with the Fisheries Management Plan 2020-2025 and jointly published to MFMR's website in May 2021. A budget proposed under the plan is under discussion by sector agencies as of project closing.

**Component:** Component 3: Increasing Contribution of Fish Resources to the Local Economy

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
3.1 Integrated fish handling sites built - GN	Number	0.00 23-Feb-2015	1.00 15-Dec-2020	1.00 31-Dec-2021	1.00 31-Dec-2021

**Comments (achievements against targets):**



**Original and revised target 100% achieved.** The original indicator was “Integrated fish handling sites built”, where operational was defined as (i) ice is available and accessible, (ii) water and electricity are available, (iii) waste is properly managed, (iv) user fees are collected in a transparent manner, and (v) a landing dock is functional. The indicator was revised in April 2019 to “Integrated fish handling sites built” given that the new Koukoudé site was still in the development stage and was only expected to become operational after project closure. The project provided a modern equipped landing site and smoke facility, updated infrastructure to facilitate the sale of products, including a paved access road and an internet access center, as well as support services, such as a day care. The Koukoudé artisanal landing site and smoking facility was inaugurated in May 2021, thereby achieving both the original and revised indicator.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
3.1 Integrated fish handling sites operational - LR	Number	0.00 05-Jan-2017	1.00 01-Mar-2018	1.00 01-Mar-2019	1.00 01-Mar-2019

**Comments (achievements against targets):**

**Target achieved.** The original indicator was developed for GN and MR. At the time of the AF, a target value of 1 was added for LR in which “operational” was defined as the availability and accessibility of ice. At project closing, one integrated fish handling site has been constructed and dedicated in Fanti Town, part of the Robertsport landing cluster. This was achieved by equipping the landing site with proper flake ice machine, chill store, fish and ice boxes. A temporary site management team under the maintenance of the Robertsport CMA has also been put in place.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
3.1 Integrated fish handling sites built - MR	Number	0.00 23-Feb-2015	1.00 15-Dec-2020	1.00 28-Feb-2022	0.00 28-Feb-2022





**Comments (achievements against targets):**

**Original target 67% achieved and revised target 50% achieved.** The original indicator was “Integrated fish handling sites operational”, where operational was defined as (i) ice is available and accessible, (ii) water and electricity are available, (iii) waste is properly managed, (iv) wastewater is treated, (v) user fees are collected in a transparent manner, and (vi) site security is ensured. The indicator was revised in April 2019 to “Integrated fish handling sites built” given that the expansion of the Nouakchott fish market in Mauritania was still in the development stage and was only expected to become operational after project closure. At project closing, investments under Phase I relating to security, lighting, and sanitary improvements have been completed, while investments under Phase II relating to the installation of a wastewater treatment plant are at an advanced stage and still ongoing under the supervision of the MPN. Thus, against the revised indicator, the project achieved 50 percent of the target (phase I complete, Phase II still under construction). Against the original target, the project achieved 4 out of the 6 operational conditions (67 percent) by improving access to ice, water, and electricity, increasing the collection and disclosure of user fees, and securing the site with fencing and lighting.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
3.2 Improved smoke ovens - SL	Number	0.00	15.00	15.00	0.00
		11-Jul-2020	31-Dec-2021	28-Feb-2022	28-Feb-2022

**Comments (achievements against targets):**

**Target not achieved.** The indicator was introduced in July 2020. As the micro-grant scheme initially planned for an alternative livelihoods program was cancelled, the GoSL requested that the funds be redirected to finalize investments in improved post-harvest handling of fish at the Konakridee landing cluster, which had started under WARFP SOP-A1. The target was to install 15 improved smoke ovens in Konakridee, Tombo, Goderich, Yeliboya, and Sulima. At project closing, the ESIA had been finalized and UNOPS had received funds to begin implementing the civil work, which had been delayed due to COVID-19.



**Component:** Component 4: Project Management, Monitoring and Evaluation, and Regional Coordination

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
4.1 Participating in IW meetings - GN	Number	0.00 05-Jan-2017	1.00 01-Mar-2021		1.00 31-Dec-2021

**Comments (achievements against targets):**

**Target achieved.** The indicator was introduced as part of the AF. The project supported the participation of three representatives from Guinea in the 9th GEF Biennial International Waters Conference, which took place November 5-8, 2018, in Marrakesh, Morocco.

Link: <https://www.iwlearn.net/events/conferences/iwc9-2018/iwc9-participant-list>

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
4.1 Participation in IW meetings - LR	Number	0.00 05-Jan-2017	1.00 01-Mar-2018	1.00 01-Mar-2019	1.00 01-Mar-2019

**Comments (achievements against targets):**

**Target achieved.** The indicator was introduced as part of the AF. The project supported the participation of a representative from the Liberia National Fisheries and Aquaculture Authority (NaFAA) in the 9th GEF Biennial International Waters Conference, which took place November 5-8, 2018, in Marrakesh, Morocco.

Link: <https://www.iwlearn.net/events/conferences/iwc9-2018/iwc9-participant-list>



Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
4.1 Participating in IW meetings - SL	Number	0.00 05-Jan-2017	1.00 01-Mar-2021		1.00 28-Feb-2022

**Comments (achievements against targets):**

**Target achieved.** The indicator was introduced as part of the AF. The project supported the participation of a representative from the Ministry of Fisheries and Marine Resources in the 9th GEF Biennial International Waters Conference, which took place November 5-8, 2018, in Marrakesh, Morocco.

Link: <https://www.iwlearn.net/events/conferences/iwc9-2018/iwc9-participant-list>

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
4.2 Fisheries Performance Indicators annually collected - GN	Yes/No	No 05-Jan-2017	Yes 01-Mar-2021	Yes 31-Dec-2021	Yes 31-Dec-2021

**Comments (achievements against targets):**

**Target achieved.** The indicator was introduced as part of the AF. According to the latest AM and ISR, this indicator was achieved.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
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4.2 Fisheries Performance Indicators annually collected - LR	Yes/No	No 05-Jan-2017	Yes 01-Mar-2018	Yes 01-Mar-2019	Yes 01-Mar-2019
<p><b>Comments (achievements against targets):</b>  <b>Target achieved.</b> The indicator was introduced as part of the AF. A set of FPIs was completed for Liberia for 2017. At project closing, a community development specialist was working to complete another set of FPIs for 2018. FPIs include, among other data points, the percentage of small-scale fishing vessels in targeted fisheries that are registered, number of communities that are allocated fishing rights; and local site conditions (environmental conditions, in-shore hygiene, water quality and possible climate change assessments).</p>					

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
4.2 Fisheries Performance Indicators annual collected - SL	Yes/No	No 05-Jan-2017	Yes 01-Mar-2021	Yes 28-Feb-2022	No 28-Feb-2022
<p><b>Comments (achievements against targets):</b>  <b>Target not achieved.</b> The indicator was introduced as part of the AF. According to the Project Completion Report, this indicator was not achieved.</p>					



B. OVERVIEW OF PDO INDICATORS - Original, Revised, and Achieved PDO Indicators

		Original PAD March 16, 2015			Additional Financing PAD January 5, 2017		Restructuring April 2019 (GN and MR) and July 2020 (SL)		Actual value achieved February 28, 2022		Notes	
#	PDO Indicators	Unit	Baseline	Target	AF PDO Indicators	Revised target	Revised PDO Indicators	Revised target	Achieved target			
PDO 1	1	Share of fisheries management data published regularly and made publicly accessible	%	GN: 0	GN: 83				GN: 83	SL target added in July 2020 restructuring		
				MR: 0	MR: 83				MR: 83			
				SL: 0				SL: 100	SL: 75			
PDO 1	2	Allocation of secure fishing rights in the small-scale segment in a participatory, transparent, and scientific manner	#	MR: 0	MR: 3			MR: Individual quotas in octopus are distributed to all the segments in a participatory, transparent, and scientific manner	MR: 3	MR: 0	Revised to focus on all segments in octopus fisheries only.	
						GN: 3				GN: 7		Targets added for GN, LI, and SL in AF. Indicator dropped for SL due to limited capacity at the community level.
						LI: 1				LI: 0		
PDO 2	3	Number of fishing vessels operating in the exclusive economic zones should not exceed the ceiling established for each segment	Y/N	GN: No	GN: Yes Artisanal: 10,000 Industrial: 85				PPA: 150	GN: Yes Artisanal: 8,862 PAA: 70 Industrial: 62	GN target for Advanced Artisanal Fisheries segment added in April 2019 restructuring (Pêche Artisanal Avancé, PAA). Achieved values do not include dormant capacity.	
				MR: No	MR: Yes Artisanal: 7,661 Coastal: 261 Industrial: 245					MR: No Artisanal: 7,570 Coastal: 433 Industrial: 245	Achieved values include dormant capacity.	
				SL: 114						SL: Yes Industrial: 78	No official target for SL was added in project documents, but the indicator was tracked by the PMU against the 2017 baseline of 114 industrial fishing vessels.	
PDO 2	4	Share of fishing vessels inspected by the national fisheries surveillance agency for compliance with national regulations	%	GN: 25	GN: 80					GN: 85		
				SL: 35			SL: 70			SL: 40	SL target added in AF.	
PDO 3	5	Share of marketable volume of fish landed at selected fish landing sites	Ratio / Tons	GN: 0/0	GN: 70			Volume of processing capacity according to improved hygiene conditions (Metric ton)	GN: 30	GN: 58	Revised to measure changes in marketable volume instead of loss ratio.	
				MR: 0/0	MR: 90				MR: 30	MR: 30		
PDO 3	6	Direct project beneficiaries (of which female)	#	GN: 0	GN: 190,000 (66%)				GN: 32,000 (9%)	GN: 52,304 (30%)	Revised to cover only verifiable direct beneficiaries, as the original targets included additional co-beneficiaries along the economic value chain (6 people in GN and 5 people in MR).	
				MR: 0	MR: 255,000 (30%)				MR: 50,000 (30%)	MR: 55,150 (6%)		



**C. OVERVIEW OF OUTPUTS BY COMPONENT**

*Table 4: Guinea Planned, Revised, and Realized Outputs by Component*

Original activities (PAD + FAs)	AF activities (AF PAD + Amended FA)	Restructured activities (April 2019)	Realized activities in Guinea
<b>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</b>			
US\$2.47 million	US\$1.6 million	↓ US\$0.77 million (19% change)	Actual: US\$3.03 million
<b>Subcomponent 1.1: Developing the legal and operational policy framework and strengthening the institutional capacity</b>			
(a) carry out relevant scientific research and activities to inform operational planning and management policies, in particular stock assessment campaigns to measure abundance of fish resource	(Same as new Activity 1.5)		
<b>Sub-component 1.2: Control of fishing capacity</b>			
(a) strengthen registration systems for vessels and boats in all segments			The project supported the drafting and signing of an Order on the registration of canoes in Guinea. Two campaigns resulted in registration of more than 80% of the canoe fleet, a sustainable financing mechanism for registration with fishing permits is currently being implemented. The government completed registration of industrial vessels with its own financing and requested that the project focus only on registration of artisanal boats of small-scale fisheries.
(b) introduce access management through tight control overfishing capacity at the current levels through a combination of measures such as fishing permits and licenses		<i>Dropped:</i> This activity could not be achieved within the timeframe of the project due to incomplete, but on-going, canoe registration and lack of ownership of the registration process among artisanal fishermen.	
<b>Sub-component 1.3: Introduce new fisheries management schemes (in target fisheries, segments, or communities to align fishing capacity and effort to sustainable catch levels)</b>			
(a) prepare fisheries management plans for target species (demersal fish,	(Same as new Activity 1.6)	<i>Revised and combined:</i> (a) improve existing fisheries management plans. Improvement of	Fisheries Strategy and Investment Plan has been developed and approved. It was



small pelagic fish, crustaceans, and cephalopods)		the existing management plan, and regulation of the new segment (PAA), was a higher priority for Guinea than preparing and implementing a detailed management plan by fishery.	validated in July 2022. The strategy could not be implemented during the last quarter of 2021 due to the political situation.
(b) implement fisheries management plans, inter alia:	(Same as new Activity 1.6)		
(i) strengthen fishing rights for targeted fisheries in the industrial segment to establish a quota system to allocate rights to resources in terms of allowable fishing effort;		<i>Dropped:</i> The government completed registration of industrial vessels with its own financing, and improved monitoring of fishing capacity in the industry segment without the support of the project.	
(ii) introduce secure fishing rights in the artisanal segment in terms of fishing licenses; and		<i>Dropped:</i> This activity could not be achieved within the timeframe of the project due to incomplete, but on-going, canoe registration and lack of ownership of the registration process among artisanal fishermen.	
(iii) introduce a pilot community co-management process combined with territorial use rights fisheries (TURF) in selected fishing communities			Local Fisheries Co-management Associations (CMA) were legally established in Koukoude and Bongolon.
<b>Sub-component 1.4: Strengthen the system of fisheries-related data collection, management, and dissemination</b>			
(a) strengthen data collection and management system			Financed the CNSHB marine fisheries survey and data collection system. Conducted the framework survey on the census of the canoe fleet on the entire Guinean coast. Carried out the framework survey on the maritime fishing sector.
(b) improve transparency on fisheries management information			Developed a roadmap for an official application of Guinea to the FiTi
(c) facilitate public communication about project objectives and progress			Facilitated public communication
	<b>Activity 1.1 Improve the national legal and regulatory framework</b>		
	(a) prepare and introduce community-led fisheries management initiatives		Support to the drafting and signing of an Order on the co-management of fisheries in Guinea.



	(b) revise the legal structure to introduce community-led fisheries management		(i) a diagnostic study on the revision of the Maritime Fisheries Code of 2015, (ii) revision of the 2015 Maritime Fisheries Code and drafting of implementing texts, (iii) all the decrees to operationalize the 2015 fisheries code have been developed and signed.
	(c) disseminate results nationwide		Support for the establishment of a MPAEM communication strategy and the acquisition of communication equipment.
<b>Activity 1.2. Implement institutional reform of the ministry responsible for the fisheries sector and of supporting institutions</b>			
	(a) finance a fisheries economist and a community-led management specialist to strengthen the fisheries management from national to community level		Study of the economic contribution of the fisheries sector to the national economy; strengthening the ship registration system and setting up ship and boat registers; support the development of multiannual fisheries management and development plans
	(b) support implementation of the institutional reform process in line with the fishery codes		Acquisition of 36 motorcycles and accessories for the MPAEM and 7 motorcycles for the CNSHB survey system for the collection of fishing and socio-economic data on the coast Guinea, the creation of a MPAEM website and the publication of all information on the sector accessible to the general public.
<b>Activity 1.3. Harmonize fisheries policies and regulatory frameworks at the regional level and mobilization of high-level expertise</b>			
	(a) harmonization of license fees, (b) provision of reliable data from Guinea to CSRP's regional dashboard, (c) support negotiations for foreign fishing agreements, (d) provision of technical assistance to negotiate fisheries, (e) harmonize policies and regulations agreement, (f) implement the Port State Measure Agreement, and (g) develop community fisheries management guide.		Implemented by CSRP.





	<b>Activity 1.4. Coordinate participatory implementation of the strategic vision of the Program</b>		
	(a) regular stakeholder consultation and awareness raising for and by fishers' organizations		
	(b) capacity development of the Ministry of Fisheries, Aquaculture and Maritime Economy to implement sustainable fisheries management plan		Capacity building of MPAEM staff through training of more than 50 managers occupying key positions.
	(c) production of reports every semester on the progress of community fisheries management by civil society organizations		Progress reports produced.
	<b>Activity 1.5. Carry out relevant scientific research and activities, in particular stock assessment campaigns</b>		
	(a) research units for training, data collection, and analysis, and development of fisheries management plans		Conduct of 6 demersal resource assessment campaigns in 2016, 2017, 2018, 2019 and 2020. The results (estimated biomass, exploitable potential, average sizes, and spatio-temporal distribution of resources) constitute the basic data for the annual Fisheries Management and Development Plan
	(b) strengthen system to monitor and capture time series catch data through a scientific observer program		No activities.
	<b>Activity 1.6. Introduce new fisheries management schemes in target fisheries, segments, or communities</b>		
	(a) prepare fisheries management plans for target species groups, including definition of aggregate fishing effort levels allowable on the basis of scientific recommendations	<i>Dropped</i>	



	(b) implement the fisheries management plans, which also describe the methods of controlling access to the resources and quantity of harvest	<i>Dropped</i>	
<b>Component 2: Reducing Illegal, Unreported, and Unregulated (IUU) Fishing (GN and SL)</b>			
<b>US\$3.02 million</b>	<b>US\$0.4 million</b>	<b>↓ US\$1.52 million (44% change)</b>	<b>Actual: US\$2.00 million</b>
<b><i>Sub-component 2.1: Enabling environment for reducing IUU</i></b>			
(a) strengthen relevant legal and institutional framework and practices to pursue vessels in the act of illegal fishing			Operationalized Vessel monitoring system. The CNSP has established a functional 24/7 electronic monitoring system for industrial vessels with the VMS.
(b) implement appropriate financing mechanisms for efficient surveillance of fisheries			A funding mechanism based on fishing licenses has been established to sustain the monitoring.
<b><i>Activity 2.1 Facilitate MCS cooperation agreements with neighboring countries</i></b>			
	(a) develop dashboard process for shared information on industrial fishing vessels, licensing, and related activities		
	(b) regional training for MCS staff		
<b><i>Sub-component 2.2: Developing and implementing surveillance strategies</i></b>			
(a) develop and implement an integrated approach and coordination of fisheries MCS along the value chain			
(b) acquisition of surveillance material and related services		<i>Dropped: Insufficient allocation of funds (US\$2.5 million) and replaced by the construction of an access road under Component 3.1.</i>	



(c) develop and disseminate good operating practices for surveillance and control			Support for the National Confederation of Fishermen of Guinea (CONAPEG) through the provision of 3 training canoes, the financing of awareness campaigns on the monofilament, and on the risks associated with the accidental fishing of emblematic species (turtles, manatees, dolphins, whales)
<b>Activity 2.2: Conduct participatory MCS activities</b>			
	(a) support the operating cost for surveillance and licensing activities		The project supported the implementation of regular surveillance patrols. However, the patrol vessel is aging and the sustainability of surveillance at sea depends either on investment in new patrol vessels, or on the establishment of strategic partnerships between administrations for joint surveillance.
	(b) help establish the observer program and ensure its functioning		A training workshop was carried out.
<b>Activity 2.3: Enhancing the effectiveness of fisheries surveillance and strengthening the management of violations</b>			
	(a) continue legal support for management of violations and prosecution		
<b>Component 3: Increasing Contribution of the Fish Resources to the Local Economy</b>			
<b>US\$2.24 million</b>	<b>US\$2.6 million</b>	<b>↑ US\$1.66 million (34% change)</b>	<b>Actual: US\$5,36 million</b>
<b>Sub-component 3.1: Improvement of infrastructure and handling of fish</b>			
(a) expand or improve fish landing site and market facilities to serve artisanal fishers supplying the domestic market		<i>Revised:</i> Construction of a 4 km two-lane access road linking Koukoudé and Koundindé	Lot 1: Landing site and internet center. Lot 2: Construction of a smoking center and rehabilitation of an existing smoking center. Lot 3: Access road.



(i) landing platform with access ramps; (ii) basic platform on which private sector may investment in fish processing plant or unit, warehouse to store and repair equipment, and cold room; (iii) administrative offices; (iv) sanitation works; (v) auction hall; (vi) first aid room; and (vii) latrines.			
<b>Activity 3.1: Develop, adopt, and implement fisheries management plans</b>			
(a) facilitate study tours to advanced sites of community fisheries management			Support for a south-south exchange between women's associations in Guinea and Sierra Leone
(b) support development and adaptation of the management plans			Local management plans implemented, including the demarcation of co-management areas for MCS activities.
(c) support implementation and monitoring of the management plans with local communities and user groups, including cost-effective environmental information gathering and environmental education		<i>Dropped</i>	
(d) support capacity building of CMAs			CMA's capacity strengthened and fully equipped for operations.
(e) seek the possibility of expanding the community science program			No activities
<b>Activity 3.2: Livelihood Transfer Grants</b>			
(a) micro-grants to develop community activities to assist in livelihood transfers and improvements		<i>Revised: Reduced scope and budget (number of target communities reduced from 3 to 2)</i>	Activities include plastic recycling, saponification and dyeing, fish farming, the development of fuelwood plantations for the sustainable supply of smoking facilities and beekeeping.



*Table 5: Liberia Planned and Realized Outputs by Component*

AF activities (AF PAD + FA)	Realized activities in Liberia
<b>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</b>	
US\$0.2 million	Actual: US\$0.2 million
<b>Activity 1.1: Improve the national legal and regulatory framework</b>	
(a) support consultant services to help with the completion of consultations on policy and regulatory framework, incorporation of any agreed amendments, and submission to the legislature	Fisheries Act prepared under first SOP-A1 project was reviewed and prepared for submission. The first amendment was approved on October 9, 2017. Assistance provided to complete fisheries regulations to the 2019 Act. The second amendment was approved in November 2019.
(b) support media and publicity campaigns to support the implementation of strategy and dissemination of fisheries and aquaculture policy, capacity building, and awareness workshops	Flyers and stickers on selected themes and project outcomes were produced and distributed in fishing communities around Monrovia and other parts of the country and displayed on some vehicles and motorbikes in local communities, including Robertsport. A billboard creating awareness on various IUU methods and practices was also supported. Production of drama and jingles were delayed.
<b>Activity 1.2: Implement institutional reform of the ministry responsible for the fisheries sector and of supporting institutions</b>	
(a) support the Bureau of National Fisheries (BNF) in preparing a transition and implementation plan for the institutional reform process in line with the fishery policy decisions	Supported the capacity building and institutional reform process by transiting from Bureau of National Fisheries (BNF) to National Fisheries and Aquaculture Authority (NaFAA).
(b) assist the BNF to prepare and package mini projects and prepare information and documentation for a donors' conference	
<b>Activity 1.3. Harmonize fisheries policies and regulatory frameworks at the regional level and mobilization of high-level expertise</b>	
n/a	
<b>Activity 1.4. Coordinate participatory implementation of the strategic vision of the Program</b>	
n/a	
<b>Activity 1.5. Carry out relevant scientific research and activities, in particular stock assessment campaigns</b>	
n/a	
<b>Activity 1.6. Introduce new fisheries management schemes in target fisheries, segments, or communities</b>	
(a) prepare a management plan for the Robertsport CMA	No activities.
<b>Component 3: Increasing Contribution of the Fish Resources to the Local Economy</b>	
US\$0.6 million	Actual: US\$0.6 million
<b>Activity 3.1. Expand the piloting of fishing rights allocation by CMA</b>	



(a) develop a lessons learned study for Robertsport CMA	An expansion of the pilot program, which meant to add outrigger engines to improve safety and introduce more selective fishing methods, did not materialize because of lack of capacity on the ground.
(b) help develop a next stage plan.	
<b>Activity 3.2. Develop, adopt, and implement fisheries management plans</b>	
(a) prepare a site management plan for the Robertsport landing site	Support for capacity building of the Robertsport CMA.
(b) Robertsport net exchange program	Assorted netting material including, nets, ropes, cocks, etc. were purchased and delivered to Robertsport, but the exchange program did not materialize due to lack of agreement on how to implement it.
<b>Activity 3.3. Strengthen the capacity of local communities to implement and monitor fisheries management plans</b>	
(a) finance management and operations for Robertsport landing site so it will start operating properly	Budget support to operationalize the Robertsport fishery landing cluster on a daily basis. Equipped the landing site with proper ice machine, chill store, fish, and ice boxes, weighing scales, trolleys and bins, and improved smoking ovens so that it can serve as a demonstration landing site for the rest of the country.
(b) support technical assistance on fish trade and enterprise development studies for Mesurado	No activities.
(c) support to project implementation and compliance with operational policies	No activities.
<b>Activity 3.4. Develop community projects for cost effective environmental information gathering and environmental education</b>	
(a) provide support, training, and supplies to the community science program and support environmental monitoring	Community science program no longer operational. Support provided to NaFAA staff activities in data collection, provision of tablets and cell phones for data collection, training programmes, database software trial at pilot scale.



*Table 6: Mauritania Planned, Revised, and Realized Outputs by Component*

Original activities (PAD + FA)	Restructured activities (April 2019)	Realized activities
<b>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</b>		
US\$7.93 million	↓ US\$0.07 million (1% change)	Actual: US\$6.5 million
<b>Subcomponent 1.1: Developing the legal and operational policy framework and strengthening the institutional capacity</b>		
(a) review relevant national legal and regulatory frameworks governing rights and responsibilities of individuals and entities operating in the fisheries sector		Finalization and evaluation of the implementation of the previous sector strategy (2015-19), Law No. 2015`017 of 29/07/15 on the Code of Maritime Fisheries. Preparation of the new strategy for the management and sustainable and integrated development of maritime fisheries for the period 2020-2024 (as part of post-project support).
(b) CSRP-led monitoring of initial activities to ensure harmonization of fisheries policies and regulatory frameworks at a regional level		Implemented by CSRP.
(c) carry out institutional reforms of the Ministry of Fisheries and Aquaculture and other relevant institutions and ensure separation of roles and adequacy between human resources and fisheries management functions	Activity revised to include institutional reform at the National Office of Sanitary Inspection of Fishery and Aquaculture Products (ONISPA)	Completion of the new organizational framework of the MPEM. Strengthening of the capacities of various structures of the department, particularly in terms of information systems, training, and acquisition of equipment. Stronger information management capacities at ONISPA.
(d) coordinate across diverse stakeholders for effective implementation of the strategic vision of the program		Support to the consultation and coordination between actors in the sector, i.e., National Advisory Council for the Planning and Development of Fisheries (CCNADP), Technical Committee for Statistics (CTS), and the Mauritanian Institute for Oceanographic Research and Fisheries (Institut Mauritanien De Recherches Océanographiques Et De Pêches (IMROP) Working Group.
(e) support to scientific research activities that inform operational planning and management policies, in particular stock assessment campaigns to measure abundance of fish resource		Renovation of the oceanographic research ship of the Marine Research Institute and acquisition of fishing and scientific equipment. Support to carry out 10 to 12 monthly research campaigns and technical assistance for the assessment of octopus forecast, mapping of fishing zones for artisanal and coastal fishing, etc.
<b>Sub-component 1.2: Control of fishing capacity</b>		



(a) strengthen registration systems for vessels and boats in all segments		Support for the modernization of a central register of fishing vessels. Development of a computerized vessel management application. Preparation of the texts necessary for the adaptation of the regulatory framework of approvals of shipyards for artisanal and coastal fishing. Clean-up of the registration file and the launch of canoe census and marking campaign. The project completed the registration of 43 percent of the boats counted in the census.
(b) introduce access management through tight control over-fishing capacity at the current levels through a combination of measures such as fishing permits and licenses, and transparent and open policies on boats replacement and repair prepared with large consultation and participation of fisher's communities		No activities due to incomplete registration of boats in the artisanal segment and lack of ownership of the concept among artisanal fishermen, most of whom are migrant workers (while the canoe owners tend to be Mauritanian).
<b>Sub-component 1.3: Introduce new fisheries management schemes (in target fisheries, segments, or sites)</b>		
(a) finalize and adopt the fisheries management plans for the octopus fishery (final revision) and for the shrimp fishery	Focus narrowed to octopus fishery only given	Preparation of management plans for two economically valuable fisheries, octopus and meagre. At closing the plans have been finalized, but not yet adopted.
(b) support to the implementation of the fisheries management plan for the octopus fishery, where the support focuses on activities related to introducing total allowable catch (TAC), allocating individual non-transferable quotas in the industrial segment, and allocating specialized fishing licenses in the artisanal and coastal segment of the octopus fishery		Financing of IMROP seasonal campaigns for the provisional assessment of catch potential and the adaptation of zoning for artisanal and coastal fishing. Individual non-transferable quotas have been introduced for octopus fisheries in the industrial and coastal segments based on TAC. Licensing in the artisanal segment is pending the completion of canoe registration.
(c) implement measures to regulate access to fish resources in the artisanal and coastal segment as envisaged in the managing plan for the segment		Strengthened monitoring of catches through implementation of an electronic reporting system in the industrial and coastal segment, installing devices on national and foreign vessels and equipping the coast guards. Capacity control in the artisanal segments could not be realized given the limited progress in canoe registration.
<b>Sub-component 1.4: Strengthen the system of fisheries-related data collection, management, and dissemination</b>		
(a) establish and operationalize an economic and social observatory for the fisheries sector		The "Economic and Social Observatory of Fisheries (OESP)" was established by ministerial decree in April 2018. Annual statistical reports for 2017, 2018, 2019 and 2020 published and posted on MPPEM's website with information on 7 of the 9 themes shared to the Regional Dashboard





(b) strengthen the integration of the fisheries sector into the Extractive Industries Transparency Initiative		Two reports have been submitted to the Fisheries Transparency Initiative (FiTI) and disclosed, for 2018 and for 2019/20 combined (due to COVID-19).
<b>Component 3: Increasing Contribution of the Fish Resources to the Local Economy</b>		
<b>US\$6.94 million</b>	<b>↑ US\$0.15 million (2% change)</b>	<b>Actual: US\$7.37 million</b>
<b>Sub-component 3.1: Improvement of infrastructure and handling of fish</b>		
Rehabilitation of the Nouakchott Fish Market: (a) carry out land acquisition, (b) fence the entire perimeter, (c) construct access roads and sanitation works, including a wastewater treatment plant, (d) construct warehouses and administrative buildings		Lot 1: security, lighting, and sanitary improvements completed. Renovation of the 1,575m long perimeter wall and 4 control posts), improved sanitary conditions with 7 toilets and shower blocks, including 3 for women, modernization of electricity network with 5 transformer stations, 3,500 m of low-voltage distribution network, and 150+ luminaries for outdoor lighting.
		Lot 2: construction of wastewater treatment plant and sea outlet not fully completed. Civil work completed, incl. water supply and sanitation network for the wastewater treatment plant (7,500 m and 150 connections for supply; 10,600 m and 105 connections for wastewater) and for the 1,500 m sea outlet. The equipment for the wastewater treatment plant could not be installed and tested before project closing.
<b>Sub-component 3.2: Planning of fish landing management and building capacity for proper fish handling</b>		
(a) develop management plans and land use plans for three landing sites (Tanit PK93m, PK '14, and N'Diago)	<i>Dropped:</i> Focus changed to Nouakchott Fish Market	
(b) install terminals, stakes, or corner posts to demarcate the boundaries of the same landing sites		



**Table 7: Sierra Leone Planned, Revised, and Realized Outputs by Component**

AF activities (AF PAD + FA)	Restructured activities (July 2020)	Realized activities in Sierra Leone
<b>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</b>		
US\$1.5 million	↑ US\$0.06 million (4% change)	Actual: US\$1.56 million
<b>Activity 1.1: Improve the national legal and regulatory framework</b>		
(a) ensure separation of functions, in particular planning function (preparation of fisheries management plans), and regular fisheries management and enforcement functions		Fish Management Plan 2020-2025 prepared, consulted, and approved on May 28, 2021. The project supported the preparation and submission of the Fisheries and Aquaculture Act of 2018, Fisheries and Aquaculture Regulations of 2019, FAO Ports States measures, and National Plan of Action for IUU fishing.
(b) sustainable financing of regular fisheries management functions		Fisheries management functions have been financed through WARFP then GEF for 12 years, there have been multiple agreements by Ministry of Finance to provide operating costs but no funds yet available to MFMR or JMC
(c) allocation of fishing rights to CMA, including the ability to limit the number of fishing licenses provided within the CMA areas and a clear surveillance role		Not realized.
(d) transparency of fisheries management data through regular publication of relevant fisheries management information, including list of licenses, list of infraction, fees collected from licenses, and fees paid from infractions		Some publishing of license lists on MFMR website, but many months are irregular and overdue.
(e) support finalization of the Fisheries and Aquaculture Bill		Fisheries and Aquaculture Act was completed in 2018, Fisheries regulations and penalties were completed in 2019 with project support.
<b>Activity 1.2: Implement institutional reform of the ministry responsible for the fisheries sector and of supporting institutions</b>		
(a) update the 2013 Management and Functional Review (MFR) of the MFMR to incorporate recent changes, agree on the components of a new institutional structure, and define its establishment and operating costs		Reform of the MFMR was postponed, to be included under a larger institutional reform process.
(b) support the implementation of the Management and Functional Review (MFR), including training		No activities.
<b>Activity 1.3. Harmonize fisheries policies and regulatory frameworks at the regional level and mobilization of high-level expertise</b>		



(a) harmonize fisheries policies and regulatory framework (license fees)	<i>Dropped:</i> Due to cancellation of the proposed regional follow-on project	
(b) provide CSRP with reliable data for the regional dashboard		Not realized due to a lack of protocols for data sharing with the regional dashboard, and due to a lack of collaboration between CSRP and MFMR.
(c) negotiations for foreign fishing agreements, including Port State Measure Agreement		A first meeting between MFMR and EU towards a Fisheries Partnership agreement was held, but no progress towards removing the yellow card status of Sierra Leone with the EU.
(d) training to harmonize policies and regulations		No Activities.
<b>Activity 1.4. Coordinate participatory implementation of the strategic vision of the Program</b>		
(a) awareness raising and reporting by the SLAFU and the SLIAFU, the CMAs, and other non-governmental organizations		No activities.
(b) the consultation on Fisheries Management Plans based on scientific recommendations (annually)		The Draft Fisheries Management Plan 2020-2025 was consulted in a technical validation workshop on January 29, 2021.
<b>Activity 1.5. Carry out relevant scientific research and activities, in particular stock assessment campaigns</b>		
(a) support to the Institute of Marine Biology and Oceanography and MFMR research units for training, data collection and analysis, and developing fisheries management plans		The IMBO research study for the Scientific Observer Program has been completed and findings presented to MFMR to inform the Fisheries Management Plan and sustainable management of fisheries. MFMR have not yet ratified IMBO reports.
(b) system to monitor and capture time series catch data through a scientific observer program		Some elements in place with regular reporting and data analysis happening, but there are no reports yet to verify that.
<b>Activity 1.6. Introduce new fisheries management schemes in target fisheries, segments, or communities</b>		
(a) implement scientific recommendations on the sustainable level of industrial fishing effort and other fisheries management measures		A first Fisheries Management Plan 2020-2025 was completed for the industrial sector and published on MFMR website in 2021. Link: <a href="https://www.mfmr.gov.sl/2021/05/28/fisheries-and-management-plan/">https://www.mfmr.gov.sl/2021/05/28/fisheries-and-management-plan/</a>
(b) implement the Fisheries Management Plan with an adjustment of the fishing capacity in the industrial sector (annually)		Fishing capacity has been adjusted by COVID-19 issues and some vessels are reported to have ceased fishing due to license fee costs and penalty liabilities.
(c) management of the artisanal registry (entry/exit modality)		Complications with responsibility by counties for data collection and reporting systems to MFMR not reliable. As of the latest available reporting, there were a total 12,655 canoes registered (July 2020)



(d) incentives for fishermen to register (insurance, safety at sea)		No activities.
<b>Component 2: Reducing Illegal, Unreported, and Unregulated (IUU) Fishing (GN and SL)</b>		
<b>US\$1.22 million</b>	<b>↑ US\$0.01 million (1% change)</b>	<b>Actual: US\$1.23 million</b>
<b>Activity 2.1 Facilitate MCS cooperation agreements with neighboring countries</b>		
(a) develop dashboard process for shared information on industrial fishing vessels, licensing, and related activities	<i>Dropped</i> : Due to cancellation of the proposed regional follow-on project. Regional integration of information sharing will not be achieved.	
(b) upgradation of vessels monitoring and communications systems	<i>Dropped</i>	
(b) regional training for MCS staff	<i>Dropped</i>	
<b>Activity 2.2: Conduct participatory MCS activities</b>		
(a) fund operating costs for patrol operations, including pilot of drones		Operating costs for patrol vessel partially used but failure to appoint vessel officers and crew kept vessel without operations for most of the project period. According to latest revenue statement for 2018, the GoSL collected over USD9 million compared to less than 8 million in 2017.
(b) support the operating cost for CMA surveillance and licensing activities		Project support for operations completed. No sustainable financing in place at closing.
(c) help establish the scientific observer program and ensure its functioning		Scientific Observer program functioned during project period, but lack of reporting and limited data.
<b>Activity 2.3: Enhancing the effectiveness of fisheries surveillance and strengthening the management of violations</b>		
(a) continue legal support for management of violations and prosecution		No activities. Legal support by project turned down by Attorney General office.
<b>Activity 2.4. Develop and implement surveillance strategies</b>		
(a) ensure that the JMC is fully operational		On the industrial side, the SIK patrol boat was used for 52 patrol days in 2019 with five infractions identified. JMC has had partial operations with Vessel Monitoring System (VMS), which is now self-financing through levy on industrial vessels.
(b) develop a JMC operation plan for the future		National Fisheries Inspection Plan 2020-2025 was finalized. Funding of budget proposal is being discussed with sector agencies at project closing.



<b><i>Pilot fishing net exchange program in communities of the Sherbro River Estuary</i></b>		
(a) procure legal nets and exchange for illegal monofilament nets, channel nets, and small mesh sized nets		Nets procured to continue a pilot operation carried out in Bonthe district that began under the first project of WARFP SOP-A1. As of closing, there is still no reporting yet available to verify effectiveness or assess compliance with project advice on methods of allocation.
(b) small patrol vessels to support enforcement		Six inshore patrol vessels procured and distributed to CMAs.
(c) operation of the patrol crafts will be supervised by the JMC but operated by the CMA and fisheries outstation officers		Inshore patrolling with some regularity while operating costs were available. No reporting yet available.
(d) enhance use of mobile tablets for landing data collection at artisanal landing sites and providing access to minimum power sources, mainly for charging of small devices		Tablets distributed, some data collection in progress, reports and analysis needed to verify progress.
<b>Component 3: Increasing Contribution of the Fish Resources to the Local Economy</b>		
<b>US\$0.83 million</b>	<b>↓ US\$0.15 million (18% change)</b>	<b>Actual: US\$0.68 million</b>
<b><i>Activity 3.1: Expand the piloting of fishing rights allocation by CMA</i></b>		
(a) support the operationalization of the existing CMAs by supporting the operating cost of implementation of the CMA bylaws, dissemination and enforcement of the bylaws, and adoption of CMA management plans.		No activities.
<b><i>Activity 3.2: Develop, adopt, and implement fisheries management plans</i></b>		
(a) prepare and adopt CMA fisheries management plan		No activities.
(b) implementation of fisheries management plan, including net replacement program		No activities.
(c) expand the piloting of fishing rights allocation by CMA	<i>Dropped:</i> Based on assessment of limited capacity of the coastal CMAs created for the management of fishing rights.	
<b><i>Activity 3.3. Strengthening capacity of local communities to implement and monitor fisheries management plans</i></b>		
(a) expanding the community science program by developing local volunteers in fishing communities; financing the training of CMAs/professional organizations in Safety of Life at Sea and coordination		



(b) establishment of artisanal fisheries data collection system through CMAs supported by MFMR in fishing communities		No activities.
<b>Activity 3.2: Livelihood Transfer Grants</b>		
(a) micro-grants to develop community activities to assist in livelihood transfers and improvements	<i>Dropped:</i> limited time to set up the micro-grant scheme and undertake the sensitization work.	
	(a) activities to reduce post-harvest loss and enable fishers to sell their products at higher prices: (i) construction of fish landing site, cool chain facilities to reduce post-harvest loss and increase value-addition; (ii) improved smoking ovens, water supply and sanitation facilities to improve health and livelihoods for women, hygiene and sanitation standard to provide for food safety; (iii) digitalization of statistics systems to improve management efficiency and reduce data collection cost; (iv) the purchasing of small patrol vessels to strengthen monitoring, control, and surveillance at the local community level where the capacity tends to be weak and local volunteers are needed; (v) net exchange for fishing communities in the Sherbro River Estuary to reduce illegal fishing and protect critical fishing ground; and (vi) installation of solar powered charging systems to help charge the data collection cellphones	Planning, design, and MOU for implementation of civil works for fish handling site at Konakridee was finalized. UNOPS has received funds to start construction. Six inshore patrol vessels purchased for CMAs, operating costs for first patrols, nets purchased and distributed.



*Table 8: CSRP Planned, Revised, and Realized Outputs by Component*

AF activities (AF PAD + FA)	Restructured activities	Realized activities by CSRP
<b>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</b>		
<b>Activity 1.3: Developing the legal and operational policy framework and strengthening the institutional capacity</b>		
(a) CSRP-led monitoring of initial activities to ensure harmonization of fisheries policies and regulatory frameworks at a regional level, support to negotiations for foreign fishing agreements, and recruitment and coordination of Independent Verifiers		A new Strategic Plan 2019-23 for CSRP articulates a vision for regional dialogue, cooperation, and harmonization.
<b>Component 4: Project Management, Monitoring and Evaluation, and Regional Coordination</b>		
<b>Activity 4.2: Support to the CSRP Regional Coordination Unit</b>		
(a) access to an independent Panel of Experts to provide guidance in the implementation of MSC activities under Component 2		The RCU provided access to a roster of independent experts to assist in the implementation of project activities.
(b) sustain linkages to the regional fishing vessel register and dashboard maintained by CSRP under the program		Sustained support for the organization of data entry workshops on vessels and MCS operations in Guinea, Mauritania, Sierra Leone, and other participating countries. Sustained the development of the Regional Dashboard on fisheries management to improve availability and transparency of information. The Dashboard is hosted online at <a href="http://dashboard-csrp.org">http://dashboard-csrp.org</a> .
(c) exchange visits and study tours		Regional CSRP Coordinator participated in the 9th GEF Biennial International Waters Conference, which took place on November 5-8, 2018, in Marrakesh, Morocco. Link: <a href="https://www.iwlearn.net/events/conferences/iwc9-2018/iwc9-participant-list">https://www.iwlearn.net/events/conferences/iwc9-2018/iwc9-participant-list</a>
(d) African journalists		Workshops and side-events to regional conferences were organized to sensitize African journalists on issues related to ocean economics and sustainable fisheries.



**D. ASSESSMENT OF RESULTS BY COUNTRY**

**Guinea: Assessment of Results**

Results	Rating
<b><i>Develop the legal and operational policy foundation</i></b>	
<p><b>The fisheries management framework in Guinea has improved significantly</b> with the effective implementation of the institutional reform of the Ministry of Fisheries, Aquaculture and Maritime Economy (MPAEM), supporting the development and evaluation of annual fisheries management plans based on scientific advice and supervised by equipped MPAEM’s central and decentralized departments. The national fisheries information system has been developed supporting transparency in the sector. A canoe registration system has been established and implemented. The community-based management of fisheries has been recognized and transposed in National legislation through an implementing regulation.</p>	<b>S</b>
<p><b>The 2023-2027 Fisheries Strategy and related Investment Plan (\$150M) has been developed and approved.</b> Based on key WARFP achievements and the mobilization of additional PROBLUE funding, the new strategy and investment plan was validated in July 2022 in the presence of the prime minister and eight ministers. It will facilitate the mobilization of domestic resources and external financing for the development of the sector according to National priorities. The strategy could not be implemented during the last quarter of 2021 due to the political situation, but financing from the PROBLUE trust fund was mobilized to complete the activity for post-project support.</p>	<b>S</b>
<p><b>Institutional reform at the MPAEM has been implemented.</b> Implementation of the reform of the MPAEM follows the recommendations of the States General of Fisheries held in 2013, the promulgation of the law on maritime fisheries in 2015, and the reorganization of MPAEM in August 2018 with the creation of two new directorates National Directorate of Maritime Economy (DNEM), the National Directorate of Fisheries Development (DNAP), and the National Agency for the Promotion of Aquaculture in Guinea (ANAPAG). (See Box 4). All the decrees to operationalize the 2015 fisheries code have been developed and signed to facilitate implementation and enforcement of fisheries management rules. The ministry's organization chart has been updated and a staff capacity building program has been implemented to ensure a good understanding of the respective responsibilities and coordination of activities. More than 50 managers occupying key positions have received training, however, the renewal of staff following the Coup leads to new training needs.</p>	<b>S</b>
<p><b>Community-based management has been institutionalized with a dedicated regulation.</b> The adoption on 31 December 2020 of <i>Arrêté A/2020/3540/MPAEM/CAB/SGG</i> implements the principle of fisheries co-management enshrined in Article 19 the 2015 Fisheries Code. The <i>Arrêté</i> provides the legal basis for the co-management plans developed by the communities of Koukoudé and Bongolon. Other coastal communities are showing interest in adopting the principles of a fisheries co-management process.</p>	<b>S</b>
<p><b>Preparation of a proposal for an inter-ministerial regulatory text prohibiting the use of illegal monofilament nets and an action plan for the elimination of monofilament nets.</b> Implementation of a national campaign for the promotion of conventional nets with (i) the process of finalizing the action plan for the elimination of prohibited nets; and (ii) carrying out awareness campaigns.</p>	<b>S</b>





<i><b>Strengthen the vessel registration system and introduce new fisheries management schemes</b></i>	
<p><b>Two registration campaigns have resulted in the registration of more than 80 percent of the artisanal canoe fleet.</b> The achievement was independently positively assessed by an NGO. A sustainable financing mechanism for registration with fishing permits is currently being implemented. At closing, the MPAEM continued to grant fishing permits only to duly registered canoes, and controls were regularly carried out on the landing sites by the National Directorate of Maritime Fisheries (DNPM).</p>	<b>S</b>
<p><b>Development of community-managed fishing initiatives in Koukoudé and Bongolon.</b> Local Fisheries Co-management Associations (CMA) were established, and the members of the CMAs and technical committees benefited from capacity building, and the CMAs were fully equipped for operations. A national fisheries co-management action plan has been developed and implemented, including the demarcation of co-management areas in Koukoudé and Bongolon. Beneficiaries in the CMAs report on the impacts observed at the community-level: (i) the reduction in the use of monofilament nets, (ii) the introduction of biological rest, and (iii) improvement of surveillance of maritime territorial waters by the CNSP and artisanal fishers (participatory surveillance) to deter industrial fishing in the inshore areas exploited by artisanal vessels. See Box 2 on CMA in Guinea.</p>	<b>HS</b>
<i><b>Strengthen data collection, analysis, and dissemination</b></i>	
<p><b>Research supporting fisheries management.</b> Stock assessment campaigns have been carried out and have informed management plans, including 6 demersal resource assessment campaigns in 2016, 2017, 2018, 2019 and 2020. The results (estimated biomass, exploitable potential, average sizes, and spatio-temporal distribution of resources) constitute the scientific basis for the preparation of the annual Fisheries Management and Development Plan. However, capacities for the modernization of research methodologies with regard to stock assessment and the monitoring and evaluation of the implementation of management plans, however, remain limited. It is noted that the 2021 management plan did not include a capacity limit for the artisanal fisheries segment.</p>	<b>MS</b>
<p><b>Increased transparency in the collection and dissemination of fisheries information.</b> The Project has supported the establishment of the national fisheries information system based on the regional dashboard parameter. All data has been regularly published on the Ministry website and the Ministry has integrated the Project M&amp;E Unit into the Ministry. The Ministry is considering submitting an application to the Fisheries Transparency Initiative (FITI).</p>	<b>HS</b>
<i><b>Develop and implement surveillance strategies and reduce IUU fishing</b></i>	
<p><b>The fisheries surveillance system has been enhanced for the industrial, semi-industrial and artisanal</b> with (i) the operationalization and sustainable financing for the satellite/ VMS system able to monitor industrial and semi-industrial vessels and (ii) the regularity and efficiency of law enforcement patrols at sea and on land for artisanal and industrial fisheries compliance.</p>	<b>S</b>
<p><b>Operationalized Vessel Monitoring System.</b> The CNSP has established a functional 24/7 electronic monitoring system for industrial vessels with the VMS. The new satellite-based surveillance system initiated in May 2019 is still fully functional in 2021. A funding mechanism based on fishing licenses has been established to sustain the monitoring linked to the use of a share of taxes from fishing licenses directly allocated for the financing of the system. The CNSP has drawn up a detailed budget for the operation of the surveillance system and the maintenance needs for integration into the forthcoming Fisheries Strategy and Investment Plan. The VMS is instrumental in maintaining the</p>	<b>HS</b>



number of fishing vessels below the agreed limits and to ensure compliance with certain fisheries management measures (prohibited fishing areas, closed seasons, transshipment at sea prohibition).	
<b>Surveillance patrols have significantly strengthened.</b> The project made it possible to support the implementation of regular patrols, and the impact can be observed in the CNSP surveillance reports. The inspection rate of fishing vessels by the surveillance services are aligned with the forecasts. However, the offshore patrol vessel of CNSP is aging and the sustainability of surveillance at sea depends either on investment in new patrol vessels (activity 2.2.b dropped), or on the establishment of strategic partnerships between administrations for joint surveillance.	<b>MS</b>
<b><i>Invest in physical infrastructure to facilitate proper handling of landed catch</i></b>	
<b>The entire artisanal fisheries value chain has been significantly enhanced in the localities of Koukoudé and Bongolon</b> with (i) improved management and empowerment of communities with the development of a community-based artisanal fisheries management scheme including infrastructures, (ii) improved landing sanitary conditions with a new functional and equipped landing site, (iii) improved smoking seafood quality and working environment with new and efficient smoking facilities and (iv) enhanced access to markets with the construction of the access road. The activities of the targeted communities have also been diversified with the implementation of the income-generating activities program to strengthen their economic resilience.	<b>HS</b>
<p><b>Koukoudé integrated fish handling site was inaugurated in May 2021 and now counts as one of the most dynamic artisanal landing site in Guinea with:</b></p> <ul style="list-style-type: none"> <li>▪ a modern equipped landing site, allowing the landing of fish under greatly improved sanitary and health and safety conditions.</li> <li>▪ a modern center for smoking seafood products, the design of which was chosen by women's associations on the basis of a south-south exchange with Sierra Leone and Liberia. The facility is economical in fuelwood, more efficient in terms of smoking time and reduces worker exposure to smoke. The center also has a daycare for children, managed by the village nurse facilitating the work of women's associations.</li> <li>▪ infrastructure to facilitate the sale of products on targeted markets, including an access road linking the landing stage to the national road, and an internet center enabling local fish merchants to be informed of fish prices and demand in Conakry.</li> <li>▪ other small pieces of equipment have also been installed, including solar lighting.</li> </ul> <p>Although the works were delayed, in particular because of the restrictions linked to COVID-19, the extension year allowed for the completion of work (work completion reports).</p>	<b>HS</b>



*Picture 1: Internet center and water tower*



*Picture 2: Smoking facility*



*Picture 3: First sale market stall*



*Picture 4: Creche*



**Participative management of the infrastructures.** A community support and capacity building program has led to the development of associations for the community management of infrastructure, whose members have been trained in management and accounting. The associations are financially supported by a fee structure for the use of the services provided at the Koukoudé site. Co-management agreements have been signed between the administration. The capacity of the communities' associations to maintain the infrastructure should however be monitored over time. Evidence: Infrastructure co-management agreements

**S**

**Income-generating activities.** The income-generating activities programme has enabled the development of activities generating additional income to fishing activities, strengthening targeted communities resilience. It has been particularly useful during the period of restrictions due to COVID-19, which has reduced fishing activities. Activities developed have included plastic recycling, saponification and dyeing, fish farming, the development of fuelwood plantations for the sustainable supply of smoking facilities and beekeeping. The high level of satisfaction of communities was recorded by a survey carried out by an NGO. Evidence: IGAs reports

**HS**

**The Beneficiaries Self-Evaluation Report, completed in January 2022, rates the overall level of satisfaction among beneficiaries and partners at 4.8/5.** According to the report, the participatory approach used by the project was highly appreciated by the grassroots actors, particularly in Koukoudé where they insisted on the fact that the project and the World Bank (supervision

**S**



missions) have always listened to them and have taken into account their concerns and interests. This is how actions that were not planned at the start of the project were carried out to respond to the needs expressed by the populations (example: Internet centre, Koukoudé road). According to the beneficiaries, one of the success factors of the project is linked to the PMU, which was described as dynamic, competent and always ready to adapt to changes in the context and to take into account the concerns of the communities. and directions and services of the MPEM.

Excerpt: “A perfect alignment between the activities identified, the expected results and the objectives targeted by the project in favor of the fishing actors was noted. The construction of the infrastructures, especially the integrated landing docks (processing processing capture service and social infrastructures), is in line with the expectations of the actors. Strengthening the performance of artisanal fisheries with the Koukoudé, Bongolon, and Matakang co-management initiatives, the modernization of infrastructures for the improvement of the performance of the value chains of fishery products, as well as the diversification of the means of subsistence of the communities coastal areas make the project a valuable tool to address the interests and concerns of beneficiaries and the Guinean Government.”

*Box 4: The Fisheries Management Framework in Guinea has Improved*

Decree **D/2021/165/PRG/SGG of May 28, 2021** outlines important organizational changes, in particular: (i) the restructuring of the MPAEM and the confirmation of the creation of the Fisheries Development Department (DNAP) and of the National Maritime Economy Department (DNEM), already taken into account in Decree D/2018/176/PRG/SGG of August 16, 2018 ; (ii) confirmation of the creation of the Office for Sanitary Control of Fishery Products (ONSPA); (iii) restoration of the management autonomy of the National Fisheries Surveillance Center (CNSP) and that of the Boussoura National Fisheries Science Center (CNSHB), by setting up Board of Directors and the Scientific Council for the CNSHB; (iv) transfer of the management of fishing licenses to the National Directorate of Maritime Fisheries; (v) establishment of a mechanism to collect the data required to assess the contribution of small-scale maritime fishing to GDP; (vi) Establishment of the Advisory Board; (vii) the attachment of the National Fisheries Observatory (ONP) to the Cabinet of the Ministry of Fisheries and Aquaculture, in particular to the BSD; (viii) clarification of the mandate of the BSD (Joint Order A/2020/822/MPAEM/MFPREMA of March 16, 2020); (ix) the development and furnishing of the organic framework of ONSPA. The Decree has other particularities which can be summarized as follows: (i) The creation at cabinet level of the positions of advisers (fisheries and aquaculture, veterinarian), (ii) support services related to a Communication and Public Relations Service and of a Gender and Equity Service, (iii) the creation at the level of the national directorates of the National Directorate for the Development of Fisheries and the National Directorate of Maritime Economy, (iv) the creation at the level of Public Bodies of the National Aquaculture Development Agency (ANAG), (v) the separation of the National Directorate of Inland Fisheries from Aquaculture, (vi) The establishment of decentralized services in terms of Regional Inspectorates of Fisheries, Aquaculture and Maritime Economy, Prefectural Directorates of Fisheries, Aquaculture and Maritime Economy, Communal Directorates of Fisheries, Aquaculture and Maritime Economy of the City of Conakry) and (vii) the creation of related services such as a Motorization Center of Boussoura, Ports and Fishing Landings, Supply Center for Fishing Inputs.



**Mauritania: Assessment of Results**

Results	Rating
<b><i>Develop the legal and operational policy foundation</i></b>	
<p><b>New, ambitious strategic directions for fisheries management.</b> The Project supported the finalization and evaluation of the implementation of the previous sector strategy (2015-19) and the preparation of the new strategy for the management and sustainable and integrated development of maritime fisheries for the period 2020-2024 (as part of post Project support). The 2015-19 Strategy introduced ambitious radical reforms on fisheries management, moving from previous capacity-centered approach to a focus on sustainable catch limits (fishing quotas), with the 2020-24 Strategy being in continuation of the 2015-19 Strategy.</p>	<b>S</b>
<p><b>Strengthened capacity at MPEM and improved management of the sector.</b> Improvements to the institutional organization of MPEM, training of personnel, and better information systems has improved the daily functioning of the ministry and coordination with other sector agencies and institutions. Furthermore, the revitalization of the Technical Committee for Statistics (CTS) through regular holding of CTS meetings promoted the availability and dissemination of useful data for fisheries management needed to properly enforce the shift from capacity management to allowable catch management.</p>	<b>HS</b>
<p><b>Management plans of targeted fisheries were developed.</b> The Project funded the entire preparation of management plans for two economically valuable fisheries: octopus and meagre. The management plan for octopus fishery was officially adopted an <i>Arrêté</i> 764 of the MPEM on 18 October 2018, while the management plan for meagre fishery was officially adopted by <i>Arrêté</i> 659 of the MPEM on August 17, 2020. As a result of project support, Mauritania has two fisheries management plans in force. However, as not all implementation measures of these two plans have been enforced yet by regulatory instruments, the level of implementation of the management plans is still limited.</p>	<b>MS</b>
<b><i>Strengthen the vessel registration system and introduce new fisheries management schemes</i></b>	
<p><b>Fishing quotas were introduced for octopus fisheries in the industrial and coastal segments based on TAC.</b> At project start, all industrial vessels operating in the EEZ were registered. For the coastal fleet, only 60 percent was registered at the start of the project, but during implementation 100 percent of the fleet became registered. Fishing quotas had not been introduced yet as a fisheries management tool. As a result of project support for IMROP’s research campaigns for fish stock assessments, an annual Total Allowable Catch has been defined every year since 2017. Based on that, individual non-transferable fishing quotas are allocated annually to operators in the industrial and coastal segments in a participatory manner (according to the PBC Audit Report more is needed to ensure that the allocation is based on a solid scientific and transparent foundation). Combined with better enforcement of access rights through enhanced surveillance, Mauritania has laid the foundation for reducing pressure on octopus resources through strengthened governance and management of octopus fisheries in the two segments. However, difficulties remain to manage the catch limits imposed to the small-scale segment as a result of the weak control on the fishing capacities of this segment.</p>	<b>MS</b>
<p><b>Registration of 43 percent of canoes in the small-scale segment (Table 9).</b> The project sought to strengthen the vessel registration system of the artisanal fleet, but the outcome reflects the socio-</p>	<b>U</b>





<p>cultural challenges of controlling capacity in the artisanal segment, and the lack of engaged participation by local fishermen. The campaign was carried out in two phases. Phase I began with a census, which allowed MPEM to complete a database of all artisanal boats operating in the fishing sector. It was organized between January 2018 and February 2019 along the entire coast and resulted in a database with 9,273 registered canoes of which 4,328, or 47 percent, were newly identified. At the end of Phase I, a total of 3,290 canoes, operating mainly in the northern zone, had been properly marked. Phase 2 was launched in February 2021 to continue the marking campaign, yet despite the availability of marking teams and the necessary equipment, only an additional 667 canoes were properly marked. The incomplete registration process of canoes further hampered activities aimed at introducing individual access right through licensing and at controlling the capacity through monitoring and surveillance of their fishing effort.</p>	
<p><b>Strengthen data collection, analysis, and dissemination</b></p>	
<p><b>Stronger research capacities linked to fisheries management.</b> The Project supported the renovation of the two oceanographic research vessels (the coastal catamaran R/V Amrigue and the long-distance R/V Al Awam) of the Marine Research Institute (IMROP) and 10-12 annual research campaigns to monitor the abundance of key resources, including octopus. The Project supported participation of foreign scientist to the international scientific working group organized in early 2019 to ensure independent conclusions were drawn. The data generated has been instrumental towards improving the sustainable exploitation of fisheries resources with the establishment of concessions based on TAC, underpinned by support to the directorates of MPEM, IMROP and GCM and the development of fisheries management plans. At project closing, however, funding to continue the research campaigns and maintenance of fishing vessels have not materialized, which puts at risk the sustainability of the data-driven, science-based approach to fisheries management promoted by the project.</p>	<p><b>MS</b></p>
<p><b>The "Economic and Social Observatory of Fisheries", established by ministerial decree in April 2018, played an important role in the processing, analysis, and publication of statistical data with the aim of informing decision-makers and creating transparency in the development of sector policies.</b> The CSR provided Mauritania with expertise for the creation and implementation of an economic and social observatory of the fisheries sector and the maritime economy. Annual statistical reports for 2017, 2018, 2019 and 2020 and information and analysis bulletins for 2018, 2019 and 2020 were published and posted to MPEM’s website in a regular manner. The Annual Report of Fisheries Statistics for the year 2020 was validated by MPEM on June 25, 2021. Link to MPEM’s website: <a href="https://www.peches.gov.mr">https://www.peches.gov.mr</a></p>	<p><b>S</b></p>
<p><b>Improved transparency in fisheries data and information management.</b> The Project initiated a positive dynamic in terms of transparency of fisheries management information and was instrumental in preparing Mauritania’s candidate application for the Fisheries Transparency Initiative (FiTI), submitted on December 13, 2018. Since then, Mauritania has submitted and disclosed two reports to FiTI, for 2018 and for 2019/20 combined (due to COVID-19). The FiTI International Board has not validated Mauritania against the FiTI Standard yet but expects to begin the validation process this year with a decision by November 2022. Mauritania’s next FiTI Report, covering calendar year 2021, is due by end of December 2022. Links: <a href="https://www.fiti.global/mauritania">https://www.fiti.global/mauritania</a> and <a href="http://www.fiti-mauritanie.mr/">http://www.fiti-mauritanie.mr/</a></p>	<p><b>S</b></p>



<b><i>Develop and implement surveillance strategies and reduce IUU fishing</i></b>	
<b>Enhanced surveillance in the industrial and coastal fisheries segment.</b> The Project supported the Mauritanian Coast Guard (GCM) by implementing the electronic fishing logbook, which allows for near real-time monitoring of fishing activity in the offshore and coastal segments. Beginning in 2017, the project installed logbook software and transmission beacons on 265 national fishing vessels and equipped the coast guards with monitoring tools. The Project also supported training of fishing skippers to the use of this new reporting system. This has led to greater control of catch obtained in the industrial and coastal segments, especially against management plans, permits, and allowed quantities. In August 2020, the GoM issued an order to make the use of the electronic fishing log compulsory by fishing masters from November 1, 2020 (MPEM Order 665, dated August 24, 2020). It enables Mauritania to significantly improve its capacities for monitoring the catches of industrial and coastal fleets, which constitutes a decisive contribution with an excellent cost/effectiveness ratio for the management of fishing quotas. See Box 3 on Electronic Fishing Logbook.	<b>HS</b>
<b>Management of the artisanal fishing capacity remains challenging.</b> Due to the incomplete registration of canoes, capacity control of the small-scale segment through management of fishing authorizations is not yet a reality. However, the project supported IMROP in carrying out annual surveys of catch estimates based on monthly monitoring of the landings of the active fleet and landing sampling at all authorized landing sites. Furthermore, the project supported the GCM to better surveil the artisanal fleet through modern technologies. The acquisition of tablets to allow the decentralized control posts of the coast guard to send information relating to artisanal fishing activities to the headquarters of the GCM holds the potential to improve capacity control over time. Combined, these efforts allow for some degree of monitoring of the artisanal fleet, which informs overall management of the segment and targeted fisheries.	<b>MU</b>
<b><i>Invest in physical infrastructure to facilitate proper handling of landed catch</i></b>	
<b>Rehabilitation of the Nouakchott Fish Market (Marché aux Poissons de Nouakchott, MPN).</b> Built in 1996, the MPN needed rehabilitation to maintain logistic and sanitary standards as required for export of fisheries products to Europe, which accounted for 40 percent of fish sold in the market. The physical rehabilitation of the MPN and the introduction of first liquid waste handling facility in Mauritania, implemented in two phases (see below for results under each phase), resulted in the improvement of first sale infrastructure, hygiene, and sanitation at the fish market. It also created attractive conditions for new private sector investments and nurtured the creation of employment opportunities in the new units installed on the market site. At project closing, direct beneficiaries include 12,500 workers (incl. 7,600 full-time), who work on the site on a daily basis (Table 10). According to beneficiaries, consulted during the final evaluation for the Project Completion Report prepared by the Borrower, project investments have resulted in local value-added and an increase in the contribution of fish resources to the local economy.	<b>Overall: MS</b>
<b>Phase I: The work of the first phase included the construction of a wall to secure the market, an extension and modernization of the electricity network, public toilets for women and men, administrative buildings, and gates to control access to the market.</b> According to the MPN Statement Report of Completed Works, the investments had considerable socio-economic effects and helped the MPN to better monitor and organize post-harvest activities taking place in its area of competence.	<b>Phase I: S</b>



<p><b>I. Higher revenue for MPN management:</b> The renovation of the fence, with a 1,575-meter-long perimeter wall and 4 control posts, has made it possible to strengthen the control of incoming and outgoing traffic. This has led to a doubling of the utilization fees collected. The improved access management has enabled the MPN management company to collect royalties, taxes, and rental payments more effectively, which combined has doubled annual revenue from 3,117,830 MRU in 2018 to 6,828,029 MRU in 2021.</p> <p><b>II. Attracted new private sector investments.</b> Improvements to the overall security environment, expanded access to electricity, which has reduced production cost for the factories located on-site, and better working conditions for both women and men have provided opportunities for new private sector investments. Since 2017, five ice production units have been installed, while the number of fish product transformation facilities has increased from 17 such facilities in 2016, to 26 in 2020, and 37 facilities in 2021. In part as a result of the improvement of the business climate, MPN total revenues rose from 33.3 million MRU in 2017 to 59.5 million MRU in 2020 (<a href="http://dtf.gov.mr/images/RAPPort/FT_EPIC_2020_DTF.pdf">http://dtf.gov.mr/images/RAPPort/FT_EPIC_2020_DTF.pdf</a>). This trend is likely to be further reinforced with water and sanitation operational under Phase II.</p> <p><b>III. The creation of new employment opportunities.</b> Linked to the new private sector investments, job opportunities for fishermen, traders, laborers, and technicians have materialized. The number of full-time jobs at the MPN has steadily increased from 1,989 jobs in 2016 to 5,364 in 2019 and 7,689 in 2021. These jobs include jobs at processing units, ice units, fuel stations, shops, fishmongers (mostly operated by women), van and rickshaw operators, and other workers and service providers.</p> <p><b>IV. Better working conditions, especially for women:</b> Improved sanitary conditions (7 toilets and shower blocks, including 3 for women) and secured perimeter with fencing completed provide a better and safer work environment for women, who represent a high share of laborers in post-harvest sale and transformation of fish.</p>	
<p><b>Phase II: A wastewater treatment plant and sea outlet could not be fully completed due to COVID-19 and related restrictions</b> (impacting activity on the construction site, access to site by contractors/experts from abroad, and supply chains and international freight). All civil work was completed, incl. water supply and sanitation network. The sea water outlet was successfully installed; the first of its kind in Mauritania allowing for important transfer of technology and know-how (as the STEP for <i>Station de Traitement et d'Épuration des Eaux Usées</i>). However, the equipment for the wastewater treatment plant could not be installed and tested on time. Since project closing, installation is happening under the oversight of the Fish Market in Nouakchott. Once completed, the work of Phase II will reinforce and extend the positive effects achieved in Phase I. Especially in the southern part of the fish market, which was deserted before the implementation of the project, structural investments will extend the benefits to an even larger area through improved electricity, sanitation, and access to water.</p>	<p><b>Phase II: MU</b></p>





*Table 9: Census and Marking Campaign of Canoes in the Artisanal Segment*

EEZ Zones	Census of canoes			Marking of canoes	
	Existing registered canoes (#)	Newly identified canoes (#)	Total registered canoes (#)	Total marked canoes (#)	% marked
Zone1 (Nord)	2,661	2,107	4,768	3,889	82%
Zone 2 (Centre)	1,111	1,312	2,423	0	0%
Zone 3 (MPN)	1,009	719	1,728	68	4%
Zone 4 (Sud)	164	190	354	0	0%
<b>Total</b>	<b>4,945</b>	<b>4,328</b>	<b>9,273</b>	<b>3,957</b>	<b>43%</b>

*Table 10: Direct Beneficiaries in Mauritania*

Beneficiaries	Total	Men	Women
Fishermen	25,415	25,415	-
Shipowners	1,200	1,200	-
Fishmongers	2,768	2,226	542
Women fishmongers	193	-	193
Landers	265	265	-
Transformers	335	65	270
Market reseller	2,232	130	2,102
Shipping carrier	592	592	-
Ground carriers	150	150	-
Net mender	60	60	-
Engine repairman	30	30	-
Trap or trap manufacturer	50	50	-
Scraper	80	80	-
Fishing tackle shop	30	30	-
Classifier	30	30	-
Fish carrier	15	15	-
Salt producer	100	-	100
Beneficiary of registration (3,957 canoes with an average of 4 fishermen	15,828	15,828	
Off-site training and qualification in fishing professions	5,531	5,531	
<b>Total Beneficiaries</b>	<b>54,904</b>	<b>51,697</b>	<b>3,207</b>



**Liberia: Assessment of Results**

Results	Rating
<b>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</b>	
<p><b>Support the drafting, consultation and dissemination of the National Fishery and Aquaculture Act amendment.</b> The first amendment was approved on October 9, 2017 (<a href="http://extwprlegs1.fao.org/docs/pdf/lbr192629.pdf">http://extwprlegs1.fao.org/docs/pdf/lbr192629.pdf</a>). The National Fishery and Aquaculture Authority (NaFAA) was established as an autonomous agency under this Act. This allows NaFAA to be able to operate as an independent government agency so they can have an autonomous budget, authority to design the fisheries management framework, and own recruitment rules to attract the best talents to the sector. The second amendment was approved in November 2019 to add fishery management and development in the Act as the “2017 Act did not provide sufficient provisions for the operationalization of the fisheries and aquaculture sectors”. The 2019 Amendment helps establish an appropriate framework for the foundation of policy and the transparent, and accountable management of the fisheries and aquaculture. This was approved after the project closed in Liberia; however, the project supported the revision process. (<a href="http://extwprlegs1.fao.org/docs/pdf/lbr192628.pdf">http://extwprlegs1.fao.org/docs/pdf/lbr192628.pdf</a>).</p>	<b>S</b>
<p><b>Support the capacity building and institutional reform process</b> by transiting from Bureau of National Fisheries (BNF) to the newly created National Fishery and Aquaculture Authority (NaFAA). The project has assisted the NaFAA with strengthening institutional organization, flow of data and information, and responsibility and accountability, especially in relation to EU-cooperation.</p>	<b>S</b>
<p><b>Draft shrimp fishery management plan.</b> The project leveraged an international consultant to help conduct shrimp fishery stock assessment and management plan development. The draft was shared but did not materialize because of the delay of the international workshop, which was supposed to be organized by NaFAA.</p>	<b>MS</b>
<p><b>Support information recording, digitalization, analysis, and management by NaFAA.</b> The project has supported the information recording, digitalization, and management, particularly of the industrial trawlers’ observer reports. The project identified a potential for increasing revenue from the sector by improving its statistics system. Relying on the Vessel Monitoring System (VMS), analysis was done to provide evidence for policy recommendation by demonstrating a revenue gap. Based on this, the NaFAA has taken actions to collect payments due in the industrial fleet segment.</p>	<b>S</b>
<b>Component 3: Increasing Contribution of the Fish Resources to the Local Economy</b>	
<p><b>Support the Community-Based Fishery Management operation.</b> The project provided operational budget support to the Robertsport CMA; however, the fishery management plan was not completed as planned.</p>	<b>MS</b>
<p><b>Support the Robertsport landing cluster’s operation and function.</b> The project provided financial support to equip the landing site with proper ice machine, chill store, fish and ice boxes, trolleys, and bins etc. so it can serve as a demonstration landing site for the rest of the country. The project has also supported the installation of improved smoking ovens and it has been a great success to show the energy efficiency improvement, health risk reduction as well as product quality enhancement. A delegation from Guinea came to test the ovens' performance on fuel saving and product quality.</p>	<b>S</b>
<p><b>Support Liberia Artisanal Fishermen Association (LAFA)’s capacity and awareness raising to improve its function as an advocacy body for small scale fisheries.</b> LAFA has been more active in policy interaction in relation to fishery management, advocating improved smoking ovens and</p>	<b>S</b>



successfully advocated the withdrawal of the President’s decision to reduce the Inshore Exclusion Zone (IEZ) for industrial trawlers from 6 miles to 3 miles.	
<b>Two activities were not completed successfully.</b> First: the replacement of monofilament fishing net by more selective nets because no agreement was reached regarding how to implement it. Second: the pilot canoe modernization scheme (by adding outrigger engine to improve safety and encourage more selective fishing methods) because of lack of capacity on the ground.	-



**Sierra Leone: Assessment of results**

Results	Rating
	MS
<i><b>Develop the legal and operational policy foundation</b></i>	
<p><b>In a first for Sierra Leone, the Fisheries Management Plan 2020-2025 was approved with a 5-year strategy to restore fish stocks to sustainability.</b> The project supported the entire effort to prepare the first national 5-year plan that sets out conservation and management measures to restore fish stocks and sustainably utilize the resources for wealth creation at all levels. The Fisheries Management Plan 2020-2025 is the culmination of multiple steps leading to its approval, including the provision outlined in the Fisheries and Aquaculture Act of 2018, which provides the legal justification for the development of fisheries management plans for target fish stocks, and the completion in 2019 of fisheries regulations for the new Fisheries Act 2018, which among other measures revised penalties for non-compliance upwards.</p> <p>Link: <a href="https://www.mfmr.gov.sl/2021/05/28/fisheries-and-management-plan/">https://www.mfmr.gov.sl/2021/05/28/fisheries-and-management-plan/</a></p>	S
<p><b>National Fisheries Inspection Plan 2020-2025 was finalized.</b> The project supported the finalization of Joint Monitoring Committee operational plan. The final fishery monitoring control and surveillance plan, which identifies annual budget needs, was published to MFMR’s website in May 2021. As of project closing, the budget plan is being discussed by sector agencies.</p>	S
<p><b>Strengthened the capacity of MFMR’s Data Collection and Processing Unit, but significant delays have hampered functionality.</b> In March 2021, the project delivered significant hardware to make the Data Collection and Processing Unit the “Hub” of the Fisheries Sector. The Data Collection and Processing Unit was relocated from the MFMR main building to the Fisheries and Marine Training Institute (FMTI) at Kissy Dockyard because of a lack of space with all the new equipment. The server was installed at the institute, and the computers were networked and linked to the server. The new Hub has improved the working environment for data management and will enhance the ministry’s ability to inform effective management of fisheries resources. The extra space also allowed for social distancing during the Covid period. However, leading up to project closing there was a significant delay in commissioning the new unit because of the lack of an internet connection to become fully functional.</p>	MS
<i><b>Strengthen the vessel registration system and introduce new fisheries management schemes</b></i>	
<p><b>Closed season introduced for the first time in Sierra Leone.</b> Closed season is a management measure aimed at reducing fishing pressure to allow for fish stocks rebuild and to prevent over-fishing. For the first time in Sierra Leone history, a one month closed season for the industrial- and semi-industrial sector was implemented in April 2019 (Link: <a href="https://www.mfmr.gov.sl/wp-content/uploads/2019/09/THE-CLOSE-SEASON-PRESS-RELEASE-2019.pdf">https://www.mfmr.gov.sl/wp-content/uploads/2019/09/THE-CLOSE-SEASON-PRESS-RELEASE-2019.pdf</a>). The Vessel Monitoring System introduced under the WARFP SOP-A1 project, and operationally supported by AF, in part made this possible, as the VMS had to be turned on as the vessels arrived in port by March 31, 2019. The satellite-based VMS, installed on all vessels in the industrial fleet except tuna vessels, is essential to verify compliance. The closed season measure is continuing post-project closure, as evident in the latest news release from the MFMR. Link: <a href="https://www.mfmr.gov.sl/2022/03/29/minister-of-fisheries-declares-1st-31st-april-2022-as-closed-season/">https://www.mfmr.gov.sl/2022/03/29/minister-of-fisheries-declares-1st-31st-april-2022-as-closed-season/</a>.</p>	S



<p><b>Additional six communities organized under the CMAs, bringing the total number of CMAs in Sierra Leone to 37, but operational capacity among CMAs remains low.</b> Efforts to strengthen community management of artisanal fisheries through proper demarcation and implementation of key management measures was frustrated by the COVID-19 pandemic and by the deteriorating finances of the GoSL through multiple shocks to the economy and was not completed in the project period.</p>	<p><b>MU</b></p>
<p><b><i>Strengthen data collection, analysis, and dissemination</i></b></p>	
<p><b>Digitization of past fisheries data has increased knowledge of fish stock exploitation.</b> The project supported the transfer of all paper observer reports from 2008 until 2018 into electronic format. Ten years of digitized data was analyzed in a partnership with the University of Sierra Leone Institute of Marine Biology (IMBO) and MFMR. The trend analysis identified actual catches of fish by species and vessels type to reveal the level of overexploitation. The Industrial Fisheries Database System (IFDAS) and Artisanal Database was developed as a platform to house the data and make it publicly available. However, as of project closing the platform is not yet functional.</p>	<p><b>MS</b></p>
<p><b>IMBO Research report completed to inform the Fisheries Management Plan 2020-2025.</b> The Annual Report of the Scientific Observer Program for Fish Stock Assessment managed by the Institute of Marine Biology and Oceanography (IMBO) was completed with project support. The findings have directly informed the first-ever, newly approved Fisheries Management Plan 2020-2025.</p>	<p><b>S</b></p>
<p><b><i>Develop and implement surveillance strategies and reduce IUU fishing</i></b></p>	
<p><b>Maintained the operating costs of various MSC measures, but sustainable financing remains a challenge.</b> The project delivered six inshore patrol vessels to CMAs to undertake MSC. Inshore patrolling was undertaken with some regularity while operating costs were available, however no reporting was available to verify this or to analyze the situation at closing. The project supported the training of 60 observers for on-board deployment in the industrial fleet segment for MCS activities.</p>	<p><b>MS</b></p>
<p><b>Enforcement in the industrial segment underperformed due to lack of planning and execution of surveillance patrols.</b> The patrol vessel for off-shore surveillance was out of operations for much of the project period due to damage and lack of staffing. Furthermore, there were no overall patrol plan for vessel operations by JMC to make use of intelligence from VMS and on-board observers. The effect was a general lack of enforcement of the rules of resources use in the industrial fleet segment. The newly approved National Fisheries Inspection Plan 2020-2025 from May 2021 addresses the issue of a lack of an overall plan to ensure proper enforcement of the industrial segment in the future.</p>	<p><b>U</b></p>
<p><b><i>Invest in physical infrastructure to facilitate proper handling of landed catch</i></b></p>	
<p><b>Progress towards finalizing the cluster of landing sites at Konakridee stalled, but post-project implementation arrangements with a partner donor agency enabled the completion of construction works.</b> Plans for the cluster of landing sites at Konakridee began under SOP-A1 (2009) and received additional funds in the first AF for Sierra Leone (2011). Still incomplete, funds approved for the second AF delivered as part of this project was reallocated in 2020 to finalize the physical investments needed, including cool chain facilities, smoking ovens, water supply, and sanitary facilities. COVID-19 related restrictions caused the preparation of the Environmental and Social Impact Assessment (ESIA) to be delayed and meant that planned works could not be timely</p>	<p><b>MU</b></p>



<p>completed. A solution was found in which the United Nations Office for Project Services (UNOPS) have received 100 percent of allocated funds and agreed to implement the investments. At the time of writing this ICR report in October 2022 construction is nearly complete, and it is expected that the activities will contribute to post-harvest loss reduction and enable fishers to sell their products at higher prices.</p>	
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Sub-Regional Fisheries Committee: Assessment of Results

Results	Rating
<i>Develop the legal and operational policy foundation</i>	
<p><b>Harmonization of fisheries policies and regulatory frameworks at a regional level.</b> The Project, through the RCU, supported the CSRP in developing in new <i>Strategic Plan 2019-23</i>. The Plan articulates a vision for regional dialogue, cooperation, and harmonization around several directions including the fight against IUU fishing, concerted management of shared stocks (small pelagics), improvement to the conditions for artisanal fishing in the subregion and the livelihoods of fishing communities, strengthening of mechanisms for transparency, consistency of national policies and harmonization of fisheries legislation, and the production and capitalization of knowledge. However, as a donor-funded organization, the CSRP is dependent on continued financing to implement the strategy.</p>	<b>MS</b>
<p><b>Mobilization of high-level expertise to support the national reform process of fisheries policies, regulatory and institutional frameworks.</b> The RCU supported the countries in their national reform process by providing access to targeted expertise and international best practices. For example, when the RCU supported Mauritania in the implementation of Component 1 it mobilized management expertise to provide (i) technical and operational coordination of the implementation of the activities to support institutions in charge of carrying out the activities, and (2) advisory support to the Ministry on issues related to fisheries governance and the preparation of the terms of reference of Component 1. It also included study tours among WARFP participating countries for knowledge and experience sharing, such as visits to Senegal from Liberia and Sierra Leone participants, to learn more about fisheries co-management. Combined, this contributed to the harmonization of fisheries governance and management at the regional level.</p>	<b>S</b>
<i>Strengthen data collection, analysis, and dissemination</i>	
<p><b>Regional Dashboard on Fisheries management to improve availability and transparency of information.</b> The Dashboard, managed and hosted by CSRP, is an online database with quantitative information on fisheries management, which was developed and completed as part of SOP-A1 and extended to Guinea and Mauritania under this project. The data points, which are consistent with the emerging transparency standards such as the Fisheries Transparency Initiative (FITI), include fleet size, license and permits attributions, fishing effort and catch, surveillance activities, and socio-economic background. It was developed through a participative process, including design, provision of equipment, and training in all participating countries. At project closing, regular and sustained provision of data by countries remains a challenge. According to the CSRP Project Completion Report the Dashboard is operational, however the site is password protected and not accessible to the public (Link: <a href="http://dashboard-csrp.org/">http://dashboard-csrp.org/</a>). Overall, the participatory process and its in-country deployment have contributed to greater information transparency in the region. Information previously considered too sensitive for public disclosure, such as listing of licenses and amount of fines, are now published regularly online on the Ministries' websites.</p>	<b>S</b>
<p><b>African journalists sensitized on issues related to ocean economics and sustainable fisheries to improve the quality of reporting and build public awareness.</b> The project built on previous efforts under SOP-A1, which facilitated the setting up of a network of journalist in Africa. In a large-scale, self-standing workshop and as side events to other regional conferences, the project has assisted African journalists in producing fact-based reporting on fisheries issues with the expectation that</p>	<b>S</b>



<p>accurate reporting will build the awareness needed to create an enabling environment for the reforms that governments have engaged in, and to help secure the sustainable productivity of the fishery resource. The events were:</p> <ul style="list-style-type: none"> <li>▪ A large-scale workshop on <i>African Journalists for Sustainable Fisheries</i> was organized in Nairobi, Kenya on February 29 - March 4, 2016, and attended by more than 130 participants</li> <li>▪ A “Journalists’ Briefing” prior to the TICAD VI: <i>Embracing Blue Economy for Africa’s Accelerated Development</i> organized on August 25, 2016, in Nairobi, Kenya</li> <li>▪ A “Journalists Workshop” side-event at the <i>Towards COP 22: African Ministerial Conference on Ocean Economies and Climate Change</i> organized on August 29 – September 3, 2016, in the Republic of Mauritius</li> </ul>	
<b><i>Develop and implement surveillance strategies and reduce IUU fishing</i></b>	
<p>In addition to the <i>Strategic Plan 2019-23</i> (and its action centered on fighting IUU fishing) mentioned above, the Project, through the RCU, supported the CSRP in developing a new Protocol/Memorandum of Understanding (MoU) on Monitoring, Control, and Surveillance. This Protocol/MoU reflects the concerns of the CSRP Member States regarding fisheries monitoring. It defines and clarifies several provisions on fisheries surveillance contained in international conventions. At the same time, it harmonizes the procedures for intervention and reaction to the threat of IUU fishing, including a visible and accountable organization (sub-regional SCS Coordinator, National Authority, Focal Point and others) and legally recognized monitoring instruments (sub-regional register of fishing vessels, observers with sub-regional competence, sub-regional VMS, IUU vessel list, and others) to facilitate the flow of information and to make fisheries Monitoring, Control and Surveillance activities more effective. The Protocol/MoU is tabled for discussion at the next meeting of CSRP delegates.</p>	<b>MS</b>





**ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION**

**A. TASK TEAM MEMBERS**

<b>Name</b>	<b>Role</b>
<b>Preparation</b>	
Berengere P. C. Prince, Mimako Kobayashi	Task Team Leaders
Moustapha Ould El Bechir	Procurement Specialist
Celestin Adjalou Niamien	Financial Management Specialist
Salimata D. Follea	Team Member
Nevena Ilieva	Team Member
Leoncie Niyonahabonye	Team Member
Salamata Bal	Social Specialist
Peter Kristensen	Team Member
Bella Diallo	Team Member
Aurore Simbananiye	Team Member
Edith Ruguru Mwenda	Counsel
Racky Dia Camara	Team Member
Aissatou Diallo	Team Member
Batouly Dieng	Team Member
Ruxandra Costache	Counsel
El Hadramy Oubeid	Team Member
Carolina Giovannelli	Team Member
Alexandre Hugo Laure	Team Member



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Timothy Bouley	Team Member
Brahim Sall	Team Member
Melissa C. Landesz	Social Specialist
Fatou Fall Samba	Team Member
Victor Bundi Mosoti	Counsel
Anders Jensen	Team Member
Alpha Mamoudou Bah	Team Member
Safiatou Lamarana Diallo	Team Member
Boury Ndiaye	Team Member
<b>Supervision/ICR</b>	
Philippe Ambrosi, Neeta Hooda, Fisseha Tessema Abissa	Task Team Leaders
Brahim Hamed, Alpha Mamoudou Bah, Innocent Kamugisha	Procurement Specialists
Angelo Donou	Financial Management Specialist
Murielle Laurette Irina Edon Babatounde	Financial Management Specialist
Sydney Augustus Olorunfe Godwin	Financial Management Specialist
Tahirou Kalam	Financial Management Specialist
Fatou Fall Samba	Financial Management Specialist
Mountaga Ndiaye	Procurement Team
Gloria Malia Mahama	Team Member
Faly Diallo	Team Member
Ahmed Fall	Environmental Specialist
Sophie Martine Olivia Wernert	Counsel
Aissatou Seck	Counsel
Mame Safietou Djamil Gueye	Social Specialist
Sarata Kaba	Team Member
Cheikh Hamallah Diagana	Social Specialist

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Sarra Saleck	Procurement Team
Sachiko Kondo	Team Member
Berengere P. C. Prince	Team Member
Idriss Deffry	Team Member
Anders Jensen	Team Member
Lesya Verheijen	Team Member
Maimouna Toure	Team Member
Batouly Dieng	Team Member
Racky Dia Camara	Team Member
Windpouire Josephine Lydie Sankara	Team Member
Aurore Simbananiye	Team Member
Jayne Angela Kwengwere	Team Member
Yahya Ould Aly Jean	Team Member
Margaret Png	Counsel
Alexandra C. Sperling	Counsel
Sanne Agnete Tikjøb	ICR Author

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**B. STAFF TIME AND COST**

Stage of Project Cycle	Staff Time and Cost	
	No. of staff weeks	US\$ (including travel and consultant costs)
<b>Preparation</b>		
FY12	2.175	10,893.43
FY13	5.850	53,889.04
FY14	3.418	50,087.42
FY15	43.100	256,782.94
FY16	26.527	132,901.49
FY17	0	5,243.33
FY18	0	77,025.00
<b>Total</b>	<b>81.07</b>	<b>586,822.65</b>
<b>Supervision/ICR</b>		
FY15	11.186	41,744.78
FY16	49.928	420,057.53
FY17	70.535	451,483.72
FY18	46.185	241,115.37
FY19	40.712	232,851.52
FY20	41.341	219,628.52
FY21	31.430	180,030.56
FY22	20.654	139,158.92
FY23	2.750	11,855.30
<b>Total</b>	<b>314.72</b>	<b>1,937,926.22</b>



**ANNEX 3. PROJECT COST BY COMPONENT**

*Table 11: Project Cost by Component*

Components	Amount at Approval (US\$M)	Additional Financing (US\$M)	Revised Amount (US\$M)	Actual at Project Closing (US\$M)	Percentage of Approval (%)
Strengthening Good Governance and Sustainable Management of the Fisheries	10.40	3.30	12.86	11,29	109%
Reducing Illegal, Unreported and Unregulated Fishing	3.02	1.62	3.12	3,23	107%
Increasing Contribution of the Fish Resources to the Local Economy	9.18	4.03	15.02	14,01	153%
Project Management, Monitoring and Evaluation, and Regional Coordination	6.40	1.05	8.00	7,40	116%
<b>Total</b>	<b>29.00</b>	<b>10.00</b>	<b>39.00</b>	<b>35,93</b>	<b>124%</b>

*Table 12: Percentage Disbursed as a Share of Approved Amount, by Country*

Components	Guinea (%)	Liberia* (%)	Mauritania (%)	Sierra Leone* (%)
Strengthening Good Governance and Sustainable Management of the Fisheries	123%	100%	82%	104%
Reducing Illegal, Unreported and Unregulated Fishing	66%	-	-	101%
Increasing Contribution of the Fish Resources to the Local Economy	239%	100%	106%	82%
Project Management, Monitoring and Evaluation, and Regional Coordination	136%	100%	87%	118%
<b>Total</b>	<b>135%</b>	<b>100%</b>	<b>92%</b>	<b>100%</b>

\* Appraisal estimates were used in lieu of actual disbursements by component.



**ANNEX 4. EFFICIENCY ANALYSIS**

1. **The project expected to generate multiple benefits.** At the impact level, higher order benefits to accrue over time included: (i) increased profitability of the fisheries sector and higher economic returns from the seafood value chain; (ii) poverty reduction in coastal fishing communities; (iii) increased food security and food safety; and (iv) improved marine ecosystem health.

2. **Table 13 Table 13 presents an overview by component of expected benefits at appraisal and of realized – or expected realized - benefits at closing.** At appraisal, a list of expected benefits by component was prepared, including both monetary benefits and non-monetary benefits, such as food security, food safety, ecosystem health, etc. Because many activities were simultaneously implemented and have overlapping relationships, benefits cannot be isolated as a function of each activity but can be considered with respect to their overall outcome. At closing, several of the expected benefits have materialized while others have not. Some expected benefits would require further evaluation to assess if they have materialized. This is indicated in the table with items in black and grey, respectively.

*Table 13: Expected and Realized Program Benefits by Component*

Component	Benefit
Component 1: Good governance and sustainable management of the fisheries  <i>and</i>  Component 2: Reduction of IUU fishing	<ul style="list-style-type: none"> <li>● Improved management capacity and efficiency of the public agency responsible for the fisheries sector</li> <li>● Increased stakeholder self-governance and incentives for rational management</li> <li>● Strengthened social cohesion within fishing communities and among stakeholder groups</li> <li>● Increased availability and quality of fisheries-related statistics</li> <li>● Increased government revenue from fisheries licenses/permits and through improved fiscal channels</li> <li>● Increased legal catch</li> <li>● Improved catch per unit effort through reduced excess fishing effort and illegal effort</li> <li>● Improved technical efficiency and lower fishing costs</li> <li>● Rebuilt overfished stocks and increased harvests</li> <li>● Improved wildlife habitats, biodiversity, and overall marine ecosystem health</li> </ul>
Component 3: Increasing the contribution of the fish resources to the local economy	<ul style="list-style-type: none"> <li>● Reduced losses from fish spoilage</li> <li>● Increased profits and rents throughout value chain</li> <li>● Improved access to foreign markets due to improved sanitary conditions during processing and cold storage</li> <li>● Improved prices per unit weight of landed catch due to improved quality and greater market access</li> <li>● Additional income (value added) and employment from processing, export and related activities arising from enhanced enabling environment</li> </ul>
Component 4: Coordination, monitoring and evaluation and project management	<ul style="list-style-type: none"> <li>● Increased coordination of fisheries management, surveillance, monitoring, and sector development activities</li> <li>● Increased community-level monitoring of local environmental conditions</li> </ul>



### *Economic Analysis*

3. **At appraisal, an economic and financial analysis of the project was conducted to estimate the direct quantifiable benefits of project activities mainly related to Component 1.** In both Guinea and Mauritania, different scenarios of fishing efforts were developed based on expected situations with and without project interventions, where the project is assumed to reduce the fishing effort relative to the levels without project. Bioeconomic models were used to relate the assumed fishing effort levels to the expected levels of fish population and catch. At the same time, expected lower fishing effort levels due to project interventions would imply lower fishing costs (reduction estimated based on available information). The simulated increase in catch levels were then used to calculate expected fishing revenue, from which, combined with estimated reduction in fishing cost, the expected net revenue from fishing was estimated. The exercise was applied to the octopus fishery in Mauritania and to the aggregate fishery of all species in Guinea. With a discount rate at 20 percent, the analysis returned cumulative net revenue during the initial 5 years of US\$201 million in Mauritania<sup>3</sup> and US\$23.3 million in Guinea. The economic impact of the project in potential annual sustainable rents was estimated to generate US\$296 million for Mauritania's octopus fishery and over US\$180 million for Guinea's marine fisheries.

4. At project closing, the ICR team undertook a review of the octopus sector to consider how the key assumptions employed in the economic analysis at appraisal have developed. The analysis is summarized below.

5. A similar exercise was not conducted for Guinea. Evaluating the impact of the project on the aggregate fishery of all species is not proportional to the activities financed by the project, of which 40 percent of funds was expended on infrastructure improvements at the community-level in Koukoude. Moreover, the basic premise of the economic benefit related to changing the status of the de facto open access regime of the fisheries through well-defined tenure and user rights has not been met at the segment-level. A socio-economic analysis was not completed at project closing to assess the impacts at the community level.

### *Octopus Fisheries in Mauritania*

6. **Ex-post, a review of the key impact assumptions employed in the economic analysis at appraisal show that they have yet to be fulfilled.** The bioeconomic model used in the PAD to estimate the economic benefit of the project is based on a set of assumptions about the expected interactions between fishing effort, harvest, and stock size. Table 14 presents a side-by-side comparison of the assumptions used in the economic analysis at appraisal and the actual development of those same parameters at closing. Below is a discussion of each parameter based on a review of sector trends in octopus fisheries statistics compiled by the ICR team from available sources (IMROP, DARE, OESP and FAO).<sup>4</sup>

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<sup>3</sup> The analysis at appraisal had a few limitations, as recognized in the PAD: First, the baseline scenario without the project assumed a constant fishing effort leading to staple production levels throughout the analysis horizon. This was in contrast with the situation at the time of appraisal, where a growing effort was raising production levels in an unsustainable manner. Second, the bioeconomic model used in the analysis assumed equilibrium of the octopus population, which was at odds with the status of overexploitation in the octopus fisheries. The assumptions led to overestimation of the catch levels achieved through effort reduction, and hence also to related overestimated revenue increases and cost reductions.

<sup>4</sup> IMROP Framework Survey 2019 and 2020; Annual reports from the Economic and Social Observatory 2017 to 2020; Report of the FAO/CECAF Working Group on the Assessment of Demersal Resources – Subgroup North Nouakchott 2020; and the Final PBC Audit Report. References included in Annex 6.

*Table 14: Assumptions and Realized Parameters*

<b>Octopus catch</b>	<b>Scenario: Small</b>	<b>Scenario: Large</b>	<b>Actual (latest data)</b>
	<i>(tonnes)</i>	<i>(tonnes)</i>	<i>(tonnes)</i>
Baseline (2012)	26 658	26 658	26 658
At project start (2016)			29 270
At project closing	33 003	33 003	35 400
At 10 year forecast (2026)	33 003	36 307	

<b>Fleet size (industrial + coastal)</b>	<b>Assumption</b>	<b>Actual (latest data)</b>
		<i>(number of vessels)</i>
Baseline (2012)		130
At project start (2016)	Quotas lead to a reduction in the	94
At project closing	number of vessels in operation	161

<b>Fishing effort (# of fishing days)</b>	<b>Scenario: Small</b>	<b>Scenario: Large</b>	<b>Actual (latest data)</b>
	<i>(index)</i>	<i>(index)</i>	<i>(index)</i>
At project start (2012 baseline)	100	100	100
At project closing	75	65	114
At 10 year forecast (2026)	75	49	

<b>Catch per unit effort (CPUE)</b>	<b>Assumption</b>	<b>Actual (latest data)</b>
		<i>(kg/day)</i>
Baseline (2012)	CPUE will increase over	600 - 1 100
At project closing	baseline level	300 - 600

<b>Abundance</b>	<b>Assumption</b>	<b>Actual (latest data)</b>
At project start (2012 baseline)		
At project closing	Octopus stock will recover and increase abundance	Abundance has dropped since 2018 to less than 78% of 2021 target

- **Catch levels**

*Assumption:* Total catch was expected to increase as a result of replenished stock.

*Actual:* Total Allowable Catch (TAC) from 2017 to 2020 shows a steady level with an upward adjustment of 30 percent in 2019. Actual catch data shows that the combined total catch for all segments and species is below the TAC limit. However, looking only at octopus catch, the data shows that annual octopus catch is above the TAC limit every year. The octopus represents on average more than 80 percent of the total landings of cephalopods. A closer look by segment of total cephalopods catch shows that the industrial segment is fishing within TAC defined for that segment, while the artisanal segment is fishing at levels above the TAC (Table 15).





Table 15: TAC and Catch, by Year and Segment

YEAR	2016	2017	2018	2019	2020	2021 (Q1)
<b>Total Allowable Catch (tonnes)</b>	<b>1 758 230</b>	<b>1 758 230</b>	<b>1 874 633</b>	<b>1 874 633</b>	<b>1 874 633</b>	<b>1 874 633</b>
TAC Cephalopods (tonnes)		32 230	32 230	42 700	42 700	42 700
PH			24 076	33 430	33 430	
PC			1 065	640	640	
PA			7 090	8 630	8 630	
<b>TAC Octopus (tonnes)</b>		<b>25 000</b>	<b>25 000</b>	<b>32 700</b>	<b>32 700</b>	<b>32 700</b>
<b>Catch (Total) thousand tonnes</b>	<b>1 103 550</b>	<b>1 082 823</b>	<b>1 262 525</b>	<b>1 238 862</b>	<b>1 272 866</b>	
Catch (Total) by industrial and coastal fleet	617 833	843 542	997 624	1 067 664	956 519	
Catch (Total) by artisanal fleet	485 717	239 281	264 900	171 198	316 347	
<b>Catch (Cephalopods) thousand tonnes</b>	<b>36 592</b>	<b>44 027</b>	<b>38 000</b>	<b>52 813</b>	<b>44 256</b>	
Catch (Cephalopods) by industrial and coastal fleet (tonnes)	13 592	16 027	12 969	20 286	17 316	
Catch (Cephalopods) by artisanal fleet (tonnes)	23 000	28 000	25 031	32 528	26 940	
<b>Catch (Octopus) (tonnes)</b>	<b>29 270</b>	<b>35 200</b>	<b>30 400</b>	<b>42 250</b>	<b>35 400</b>	

▪ **Fleet**

*Assumption:* A reduction in the number of vessels due to the introduction of secure fishing rights.

*Actual:* The cephalopod fleet has grown from 2015 to 2018. The industrial fleet segment, where quotas have been introduced, grew 66 percent from 86 vessels in 2015 to 143 vessels in 2018. A coastal segment has also entered octopus fisheries, which in 2018 had 18 vessels operating. A census of the artisanal fleet segment was carried out in 2018 and counted a total of 9,273 canoes, up from 7,000 in 2012 (Table 16).

Table 16: Cephalopod fleet, by segment (FAO, 2020)

Cephalopod fleet	2012	2013	2014	2015	2016	2017	2018
Foreign	30						
Industrial (national)	100	103	84	86	88	117	143
Coastal					6	9	18
Artisanal (total fleet)	7 000						9 273

▪ **Effort**

*Assumption:* A sharp drop in the number of fishing days, as proxy for effort, of 25 percent within four years.

*Actual:* The fishing effort in the industrial fleet segment has increased by 3,000 days a year. The project baseline shows an average of 22,000 fishing days a year in the industrial fleet segment. At closing, this number has increased to 25,000 fishing days a year, including the effort of glaciers recorded at around 5,000 fishing days, and the effort of freezers, which in 2018 recorded 20,000 fishing days following an overall upward trend over the past two decades. The artisanal fishing effort was multiplied by a factor of 10 over the past two decades: from 72,000 fishing days in 1999 with an overall upward trend observed until 2018 when it reached 687,000 outings. With a fleet of 9,273 canoes that is equal to an individual effort of 74 fishing days per canoe.

▪ **Catch per unit effort (CPUE)**

*Assumption:* CPUE will increase due to reduced fleet, lower effort, and recovered stock

*Actual:* CPUE has dropped 50 percent between 2012 (project baseline) and 2018 (latest available data). 2012



marks the year that the Spanish cephalopod fleet exited Mauritanian waters. However, national vessels are practically similar to the Spanish fleet with a 286 gross registered tonnage on average in 2018. In recent year (2016-2018) CPUE has generally fluctuated within a stabilized range. For the offshore fleet, CPUE fluctuates within the range of 300 to 600 kg/fishing day, while for artisanal fishing, the CPUEs vary in the range of 25 to 65 kg/trip.

▪ **Abundance**

*Assumption:* Abundance will increase as expressed through higher CPUE.

*Actual:* Between 2016 and 2018, a gradual drop was observed in the abundance of octopus in Mauritanian waters. Table 17 shows that the current biomass is almost at the same level as the target biomass B0.1, while the fishing effort of the last year exceeds that corresponding to B0.1 by 20 percent.

Table 17: Indicators for the State of Octopus vulgaris (Cap Blanc Stock)

Stock/abundance indices	$B_{cur}/B_{0.1}$	$B_{cur}/B_{MSY}$	$F_{cur}/F_{0.1}$	$F_{cur}/F_{MSY}$	$F_{cur}/F_{SYcur}$
Cap Blanc stock/average annual indices from R/V <i>Al Awam</i>	89%	98%	120%	108%	105%

**B<sub>cur</sub>/B<sub>0.1</sub>:** Ratio between the estimated biomass for the last year and the biomass corresponding to F0.1.

**B<sub>cur</sub>/B<sub>MSY</sub>:** Ratio between the estimated biomass for the last year and the biomass coefficient corresponding to FMSY.

**F<sub>cur</sub>/F<sub>0.1</sub>:** Ratio between the observed fishing mortality coefficient during the last year of the series and F0.1.

**F<sub>cur</sub>/F<sub>MSY</sub>:** Ratio between the observed fishing mortality coefficient during the last year of the series and the coefficient giving maximum long-term sustainable yield.

**F<sub>cur</sub>/F<sub>SYcur</sub>:** Ratio between the observed fishing mortality coefficient during the last year of the series and the coefficient that would give a sustainable yield at current biomass levels.

Furthermore, the average individual weight of octopus has declined. Scientific surveys, all seasons combined, shows a declining trend from the average catch weight in 2012 of 1,104 grams per octopus. During the last years, the average catch weight observed in the trawling surveys is between 600 and 800 grams between 2016 and 2018 (FAO 2020). The minimum allowed individual weight of landed octopus is 500 grams.

7. **Projections for the period 2018-2021 point to a worsening trend.** The Fishery Committee for the Eastern Central Atlantic (CECAF) Working Group on the Assessment of Demersal Resources made two projections for the period 2018-2021.

- *In Scenario 1*, the fishing effort is maintained at the 2018 level (Status quo). This scenario leads to a slight and slow decline in sustainable catches, which gradually moves away from the maximum sustainable catch (MSY). Abundance drops significantly over a three-year projection (by 2021).
- *In Scenario 2*, catches are reduced by 10 percent. This scenario leads to a stabilization of sustainable catches almost at the same level as the MSY. However, abundance decreases slightly to 78 percent of the target level in 2021.

8. The latest observations by CECAF in their report from 2020 indicates that substantial increases in fishing mortality have been reported for Mauritanian fisheries since 2017; with catches in artisanal fisheries increasing exponentially (FAO, 2020). This points to an overall sector development in line with Scenario 1 and is in line with the



review of fisheries statistics undertaken by the ICR team.

9. **At project closing, octopus fisheries remain overexploited.** Since 2016, a number of trends can be observed. Showing signs of improvement, these trends include (i) a 30 percent increase in the TAC, and (ii) the industrial segment fishing within the TAC limit. Other trends point to worsening conditions, including: (i) an increase in the effort of the artisanal segment, (ii) octopus catch levels above TAC in the artisanal segment, (iii) substantial increases in fishing mortality with catches in artisanal fisheries increasing exponentially, (iv) a gradual drop in the abundance of octopus in Mauritanian waters, and (v) a decrease in the average individual weight of landed octopus.

10. **An ex-post economic analysis is premature at project closing.** Progress towards fulfillment of environmental assumptions is a pre-requisite for undertaking an ex-post economic analysis. Without careful analysis of the causal direction in the dynamic interaction between fishing effort, harvest, and stock size, the merit for undertaking an ex-post analysis is removed. It would be misleading to economically assess how project activities affected catch and export levels without first considering if those same parameters have improved as a result of abundance or overexploitation. While the data shows that the project has improved governance and management of the industrial segment, there is a lack of control of the artisanal segment. As envisioned in the WARFP programmatic approach, it will take longer for fish stocks to show signs of recovery and for an increase in total landings per unit of fishing capacity to be observed.

### **Incremental Cost Analysis**

11. At appraisal, an incremental cost analysis for GEF funds was conducted for Mauritania. The analysis assumed a baseline scenario with a cost of US\$31.75 million, consisting of: US\$12 million IDA inclusive of project components, regional coordination, and supporting activities. Co-financing<sup>5</sup> included US\$16.7 million from KfW Development Bank and US\$2million from German cooperation (GIZ) for Component 2 and US\$1 million from GOM as in-kind support. With GEF incremental support of US\$7 million, contributing to the focal area for international waters (IW-5), the expected ratio of total co-financing to GEF financing was 4.5:1. Additional parallel co-financing was envisioned in terms of preparation for a US\$7 million investment by the European Investment Bank and expressed interest from the French Development Agency (AFD) to provide financing for the MPN (Component 3) – See Table 18.

12. At the time of the additional financing,<sup>6</sup> GEF provided incremental funds of US\$5 million for Guinea's existing US\$10 million project financed by IDA and government in-kind support of US\$0.5 million, contributing to the focal area for international waters (IW-6). The expected ratio of total co-financing to GEF financing was 2.1:1 with no planned parallel financing.

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<sup>5</sup> The term *co-financing* is used here in relation to the GEF incremental analysis and does not imply signed co-financing agreements except for the in-kind support agreed with the governments of Guinea and Mauritania.

<sup>6</sup> A programmatic incremental analysis of GEF financing for Liberia and Sierra Leone could not be completed at the time of writing this ICR.



Table 18: Incremental cost analysis

Funding source	Mauritania (2015)		Guinea (2017)	
	Original amount (expected at appraisal)	Actual amount (disbursed at completion)	Original amount (expected at appraisal)	Actual amount (disbursed at completion)
<b>GEF</b>				
- IW	7.0	7.0	5.0	5.0
<b>Total GEF</b>	<b>7.0</b>	<b>7.0</b>	<b>5.0</b>	<b>5.0</b>
<b>Co-financing</b>				
- IDA	12.0	12.0	10.0	10.0
- KfW	16.7	10.0		
- GIZ	2.0	2.0		
- GOM	1.0	0.6		
- GOG			0.5	0.5
<b>Total co-financing</b>	<b>31.7</b>	<b>24.6</b>	<b>10.5</b>	<b>10.5</b>
<b>Ratio</b>	<b>4.5</b>	<b>3.2</b>	<b>2.1</b>	<b>2.1</b>
<b>Other parallel financing</b>				
- European Investment Bank	7.0	0.0		
- French Development Agency	5.0	0.0		
<b>Total parallel financing</b>	<b>12.0</b>	<b>0.0</b>		

13. The analysis at appraisal suggested that without GEF support, implementation of the baseline scenario investment project would generate national benefits, some of which would extend across the region. However, in the absence of GEF assistance for SOP-C1, the project would lack nearly all of Component 1 in Mauritania, as it did for Guinea, considerably diminishing the overall aims of the WARFP program – both in the country and regionally – given the interconnection of West African coastal waters. With incremental GEF support, the envisaged scope of activities in Subcomponent 1.1 was much broader in Mauritania than in Guinea. More precisely, four of the five planned sets of activities under Subcomponent 1.1 would only be possible in Mauritania, whereas in Guinea, only the first set of activities were possible from project start. This changed at the time of the AF, when incremental funding from GEF was extended to Guinea as well to complete the full set of activities proposed under Subcomponent 1.1 (Table 19).

14. At the end of the project, the disbursed GEF grants amounted to US\$7 million in Mauritania and US\$5 million in Guinea, corresponding to 100 percent of the estimated GEF cost at appraisal of both the original and AF project.<sup>7</sup> These funds leveraged direct co-financing of about US\$23 million, from IDA, KfW, GIZ, and in-kind government support. The actual ratio of direct co-financing to GEF funds is 3.2:1 for Mauritania and 2.1:1 for Guinea, which is overall in the same range as what was expected at appraisal. Through its focus on improving governance of shared marine resources, the

<sup>7</sup> Note: Disbursement figures in Annex 3 appear lower due to a 10 percent exchange rate difference. The project was fully disbursed at closing.



project contributed to the focal areas of *International Waters* through several realized benefits, as outlined in Table 19.

Table 19: Incremental benefits contributing to the International Waters focal area

Component	US\$ M	Expected benefits	Realized benefits
<i>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</i>			
MR - Baseline	2.00	<ul style="list-style-type: none"> <li>Development of comprehensive legal operational policy and strengthening of institutional capacity to enable better management of fisheries</li> </ul>	<ul style="list-style-type: none"> <li>Developed comprehensive legal operational policy. Prepared new strategy for the management and sustainable and integrated development of maritime fisheries for the period 2020-2024. Strengthened institutional capacity of MPEM through better information management systems and coordination with other sector agencies.</li> </ul>
MR – GEF Alternative	8.93	<ul style="list-style-type: none"> <li>Development of comprehensive legal operational policy and strengthening of institutional capacity to enable better management of fisheries</li> <li>Strengthened vessel registration systems so that capacity can be monitored.</li> <li>Developed fisheries management plans, enabling healthier and more sustainable fishing stocks</li> <li>Developed systems for fisheries related data collection and communication</li> <li>Coordination across diverse stakeholders for effective implementation of the strategic vision</li> </ul>	<ul style="list-style-type: none"> <li>Modernized the central register of fishing vessels and developed a computerized vessel management application. Registered 100 per cent of the industrial and coastal fleet, and 43 per cent of the artisanal fleet.</li> <li>Supported the transition to developing fisheries management plans by species, instead of segment. Developed management plans for two economically valuable fisheries: octopus and meagre.</li> <li>Developed systems for fisheries-related data collection and communication: Renovated IMROP’s oceanographic research vessels to support for research and assessment campaigns. Established the Economic and Social Observatory of Fisheries to process, analyze, and publish statistical data, leading to improved transparency and regional integration and harmonization of data.</li> <li>Support for consultation processes between key actors in the sector, such as CTS, IMROP, National Advisory Council for the Planning and Development of Fisheries. Support for CSRP to build regional collaboration for more effective management of a transboundary resource.</li> </ul>
GN - Baseline	2.47	<ul style="list-style-type: none"> <li>Development of some legal and operational policy and strengthening institutional capacity to enable better management of fisheries</li> </ul>	<ul style="list-style-type: none"> <li>The fisheries management framework in Guinea has improved significantly with the 2027 Fisheries Strategy and related Investment Plan (\$150M) developed and approved.</li> </ul>
GN - GEF Alternative	4.07	<ul style="list-style-type: none"> <li>Improving the national legal and regulatory framework governing rights</li> </ul>	<ul style="list-style-type: none"> <li>Institutional reform of the Ministry of Fisheries, Aquaculture and Maritime Economy</li> </ul>



		<p>and responsibilities of individuals ent and communities operating in the fisheries sector</p> <ul style="list-style-type: none"> <li>▪ Implementation of the institutio reform of the ministry responsible fo fisheries sector and of other support institutions</li> <li>▪ Contribution to the harmonizati of fisheries policies and regulatory frameworks at the regional level and mobilization of high-level expertise to support the national reform process</li> <li>▪ Concertation, coordination, and participation of diverse stakeholders effective implementation of the strat vision</li> </ul>	<p>(MPAEM) has been implemented, supporting development and evaluation of annual fisher management plans based on scientific advice supervised by equipped MPAEM’s central an decentralized departments.</p> <ul style="list-style-type: none"> <li>▪ Community-based management of fishe has been recognized and transposed in natio legislation through an implementing regulati assigning legal governing rights to communit organized in CMAs.</li> <li>▪ The national fisheries information syste has been developed supporting transparency the sector and regional integration and harmonization of data.</li> </ul>
<i>Component 2: Reducing Illegal, Unreported, and Unregulated Fishing</i>			
GN - Baseline	3.02	<ul style="list-style-type: none"> <li>▪ Enabling environment for reduc IUU fishing</li> <li>▪ Fisheries MCS systems</li> </ul>	(Results reported elsewhere in the report)
GN - GEF Alternative	3.24	<ul style="list-style-type: none"> <li>▪ Develop and support implementation of agreements regard combating IUU with neighboring countries</li> <li>▪ Regional integration of surveilla</li> </ul>	<ul style="list-style-type: none"> <li>▪ Through support for the CSRP, develop new Protocol/Memorandum of Understandin (MoU) on Monitoring, Control, and Surveillan The Protocol/MoU defines and clarifies sever provisions on fisheries surveillance contained international conventions and harmonizes th procedures for intervention and reaction to t threat of IUU fishing. The Protocol/MoU is ta for discussion at the next meeting of CSRP delegates, including Guinea.</li> <li>▪ The Protocol/MoU, once enacted, will facilitate the flow of information among neighboring states to make fisheries Monitor Control and Surveillance activities more effec</li> </ul>
<i>Component 3: Increasing Contribution of the Fish Resources to the Local Economy</i>			
MR - Baseline	8.17	<ul style="list-style-type: none"> <li>▪ Improvement of Fish Market of Nouakchott</li> </ul>	(Results reported elsewhere in the report)
MR - GEF Alternative	8.24	<ul style="list-style-type: none"> <li>▪ Stakeholders, women and civil society organizations are duly represented and associated in the decision-making process</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consultations with key stakeholder grou including women and civil society organizati were held in relation to the improvements planned at the MNP.</li> </ul>
GN - Baseline	2.24	<ul style="list-style-type: none"> <li>▪ Improvement of infrastructure a handling of fish landing</li> <li>▪ Piloting of fishing rights allocati</li> </ul>	(Results reported elsewhere in the report)



GN - GEF Alternative	4.84	<ul style="list-style-type: none"><li>▪ Expanding and scaling up pilotir fishing access</li><li>▪ Developing improving and adop community fisheries management plans and implementin and monitoring them with local communities and user groups</li><li>▪ Developing of community proje for cost-effective environmental information gathering and environm education</li></ul>	<ul style="list-style-type: none"><li>▪ Community-based fisheries managemer was scaled-up and extended to Bongolon and Matakang through development of CMA management plans, and through demarcatio co-management areas in Bongolon.</li><li>▪ Implementation is monitored and mana by local communities. User groups outside of CMA must also be consulted to prevent conf of access rights.</li><li>▪ Local monitoring reports were develop and shared on a regular basis as part of the project.</li></ul>
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## **ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS**

1. The ICR report was shared with client countries and the CSRP following the Quality Enhancement Review meeting to afford the PMUs and the RCU a chance to comment and make corrections on the draft report.

2. The team received written feedback from the CSRP. Text-edits have been incorporated into the final report, while additional comments on the critical role of the RCU are summarized below. In an effort to keep the ICR report focused on project outcomes, the contributions of the RCU as an intermediary agency are not fully reflected throughout the report. Therefore, the points below deserve to be highlighted and are further integrated into the report where relevant.

- The role of RCU in coordination and monitoring of reporting on the results framework and in support of countries was highly appreciated by the PMUs and the World Bank.
- Results Framework: The RCU, despite the critical situation caused by the closure of the borders due to Covid-19, mobilized the appropriate expertise and facilitated the preparation of environmental and social safeguard documents and created frameworks for carrying out these studies.
- PBR mechanism: In the context of the use of results-based indicators, the RCU provided extensive support to the countries in finalizing the mechanism's operating plan. Workshops were held with the countries and resulted in the establishment of a mechanism that was well understood and mastered by the countries by project start. The RCU also conducted pre-audit missions to prepare for technical audits of results by experts mobilized by the RCU.
- Capacity building and supervision of PMUs: The RCU accompanied the countries in the implementation of the project and the Bank in its supervision and review of activities. The RCU participated in all the preparation sessions of the annual action plans, budgets and procurement plans of Guinea and Mauritania and followed them up very closely. The PMUs were supported in all their complex activities under the project. For example, the RCU was instrumental in the supervision of procurement activities in Mauritania, which was challenged by the reform of the Public Procurement Code, especially with respect to the MPN and IMROP.
- The RCU, in accordance with its mandate, also coordinated and financed the training of all country PMU managers. In the area of contracting and financial management, the RCU's supervision and, above all, the various workshops and missions organized by the RCU have created a strong network of specialists who have been able to meet the project's challenges. In Sierra Leone, the RCU was asked to conduct a support and diagnostic mission to the fiduciary unit at the Ministry of Finance and to propose solutions to improve performance in the fiduciary management of project activities.
- The RCU also facilitated the use of the Nouadhibou academic platform by other countries through training agreements whose negotiation and signature were coordinated and facilitated by the RCU.





**ANNEX 6. SUPPORTING DOCUMENTS**

<b>Key World Bank Project Documents</b>	<b>Date</b>	<b>Report / Grant No.</b>
Project Appraisal Document	February 23, 2015	PAD261
Project Paper – Additional Financing	December 16, 2016	108384-AFR
Restructuring	February 28, 2018	RES30821
Restructuring	April 30, 2019	RES33474
Restructuring	July 11, 2020	RES37973
Restructuring	August 28, 2020	RES43221
Restructuring	December 6, 2021	RES49190
ISR # 3-14	2016-2021	

<b>World Bank Country Strategy Documents</b>	<b>Date</b>	<b>Report / Grant No.</b>
<b><i>at appraisal</i></b>		
Guinea Country Partnership Strategy	FY 14 - FY17	76230-GN
Liberia Country Partnership Strategy	FY13 - FY17	74618-LR
Mauritania Country Partnership Strategy	FY14-FY16	75030-MR
Sierra Leone Country Assistance Strategy	FY10 - FY13	52297-SL
<b><i>at completion</i></b>		
Guinea Country Partnership Framework	FY18 - FY23	125899-GN
Liberia Country Partnership Framework	FY19 - FY24	130753-LR
Mauritania Country Partnership Framework	FY18 - FY23	125012-MR
Sierra Leone Country Partnership Framework	FY21 - FY26	148025-SL

<b>Guinea</b>	<b>Date</b>	<b>Report / Grant No. / Link</b>
Grant Agreement	April 14, 2015	IDA-D040GN
Grant Agreement - Additional Financing	February 24, 2017	TF0A3530
Amendment to Grant Agreement	May 22, 2019	IDA-D040GN
Mid-Term Review	October 14-19, 2018	
Aide Memoires (8 in total)	2016-2021	
Project Completion Report	February, 2022	
Beneficiaries Self-Evaluation Report	January, 2022	
Final PBC Audit Report	December, 2021	
Fisheries Co-Management Order issued by MPAEM	2020	A/2020/3540/MPAEM/CAB/SGG



Participatory Fisheries Monitoring Order issued by MPAEM (draft)	2021	
Koukoudé Works Management Committees	2021	
Media: Artisanal fishing infrastructure in Koukoudé shipyards	February, 2020	<a href="https://youtu.be/kNPklepyotg">https://youtu.be/kNPklepyotg</a>
Article: Plusieurs infrastructures inaugurées à Boffa (Koukoudé)	May 22, 2021	<a href="https://www.guinee7.com/guinee-peche-plusieurs-infrastructures-inaugurees-dans-la-localite-a-boffa/">https://www.guinee7.com/guinee-peche-plusieurs-infrastructures-inaugurees-dans-la-localite-a-boffa/</a>
Article: Koukoudé (Boffa) - la Banque Mondiale remet des infrastructures de développement artisanal au Ministère de la Pêche	May 22, 2021	<a href="https://mediaguinee.org/koukoude-boffa-la-banque-mondiale-remet-des-infrastructures-de-developpement-artisanal-au-ministere-de-la-peche/">https://mediaguinee.org/koukoude-boffa-la-banque-mondiale-remet-des-infrastructures-de-developpement-artisanal-au-ministere-de-la-peche/</a>
WB Blog: Integrated Fisheries Management for Coastal Communities' Resilience in Guinea		<a href="https://www.worldbank.org/en/results/2020/11/10/integrated-fisheries-management-for-coastal-communities-resilience-in-guinea">https://www.worldbank.org/en/results/2020/11/10/integrated-fisheries-management-for-coastal-communities-resilience-in-guinea</a>
Article: Fisheries and maritime economy: towards the development of a new fisheries strategy in the medium term	May 18, 2022	<a href="https://ledjely.com/2022/05/18/peche-et-economie-maritime-vers-lelaboration-dune-nouvelle-strategique-halieutique-en-moyen-terme/">https://ledjely.com/2022/05/18/peche-et-economie-maritime-vers-lelaboration-dune-nouvelle-strategique-halieutique-en-moyen-terme/</a>
Article: Fisheries: Launch of a workshop to validate the medium-term strategic plan for fisheries 2023-2027	July 27, 2022	<a href="https://www.guinee360.com/27/07/2022/peche-lancement-dun-atelier-de-validation-du-plan-strategique-halieutique-a-moyen-terme-2023-2027/">https://www.guinee360.com/27/07/2022/peche-lancement-dun-atelier-de-validation-du-plan-strategique-halieutique-a-moyen-terme-2023-2027/</a>

<b>Liberia</b>	<b>Date</b>	<b>Report / Grant No.</b>
Grant Agreement	February 8, 2017	TF0A3532
Mid-Term Review	October 10-12, 2018	
Amendment of Fishery Law in 2017	October 9, 2017	
Amendment of Fishery Law in 2019	November 26, 2019	

<b>Mauritania</b>	<b>Date</b>	<b>Report / Grant No. / Link</b>
Grant Agreement	April 17, 2015	IDA-D039MR, TF19089
Amendment to Grant Agreement	May 23, 2019	IDA-D039MR
Mid-Term Review	October 8-13, 2018	



Aide Memoires (11 in total including safeguards and technical missions)	2016-2021	
Decree 0118/2018/MPEM to establish the Economic and Social Observatory	March 6, 2018	<a href="http://extwprlegs1.fao.org/docs/pdf/mau193252.pdf">http://extwprlegs1.fao.org/docs/pdf/mau193252.pdf</a>
Project Completion Report	December, 2021	
Final PBC Audit Report	December, 2021	
Report from Mauritania to the Fisheries Transparency Initiative (2019-2020)	March 22, 2022	
MNP Statement Report of Works Completed	February 28, 2022	
News article on the MNP	February 16, 2022	
IMROP Framework Survey 2019	December, 2019	
IMROP Framework Survey 2020	September, 2020	
Annual reports from the Economic and Social Observatory 2017 - 2020	2017-2020	
Report of the FAO/CECAF Working Group on the Assessment of Demersal Resources – Subgroup North Nouakchott	2020	<a href="https://doi.org/10.4060/cb1539b">doi.org/10.4060/cb1539b</a>

<b>Sierra Leone</b>	<b>Date</b>	<b>Report / Grant No.</b>
Grant Agreement	February 8, 2017	TF0A3533
Mid-Term Review	October 5-9, 2018	
Aide Memoires (3 in total)	2019-2020	
Project Completion Report	March, 2021	

<b>Sub-Regional Fisheries Committee</b>	<b>Date</b>	<b>Report / Grant No.</b>
Project Agreement (under Guinea)	April 14, 2015	IDA-D040GN
Project Agreement (under Mauritania)	April 17, 2015	IDA-D039MR, TF19089
Project Agreement (under Sierra Leone)	February 8, 2017	TF0A3533
Project Agreement (under Guinea)	February 24, 2017	TF0A3530
Annual Reports	2015-2020	
Project Completion Report		
Regional Dashboard Implementation Report		
Strategic Plan for the CSRP 2019-2023	October, 2018	AFO285R04C
African Journalists Workshop in Mauritius	August, 2016	
African Journalists Workshop in Mauritius	September, 2016	



ANNEX 7. WARFP Area of Intervention

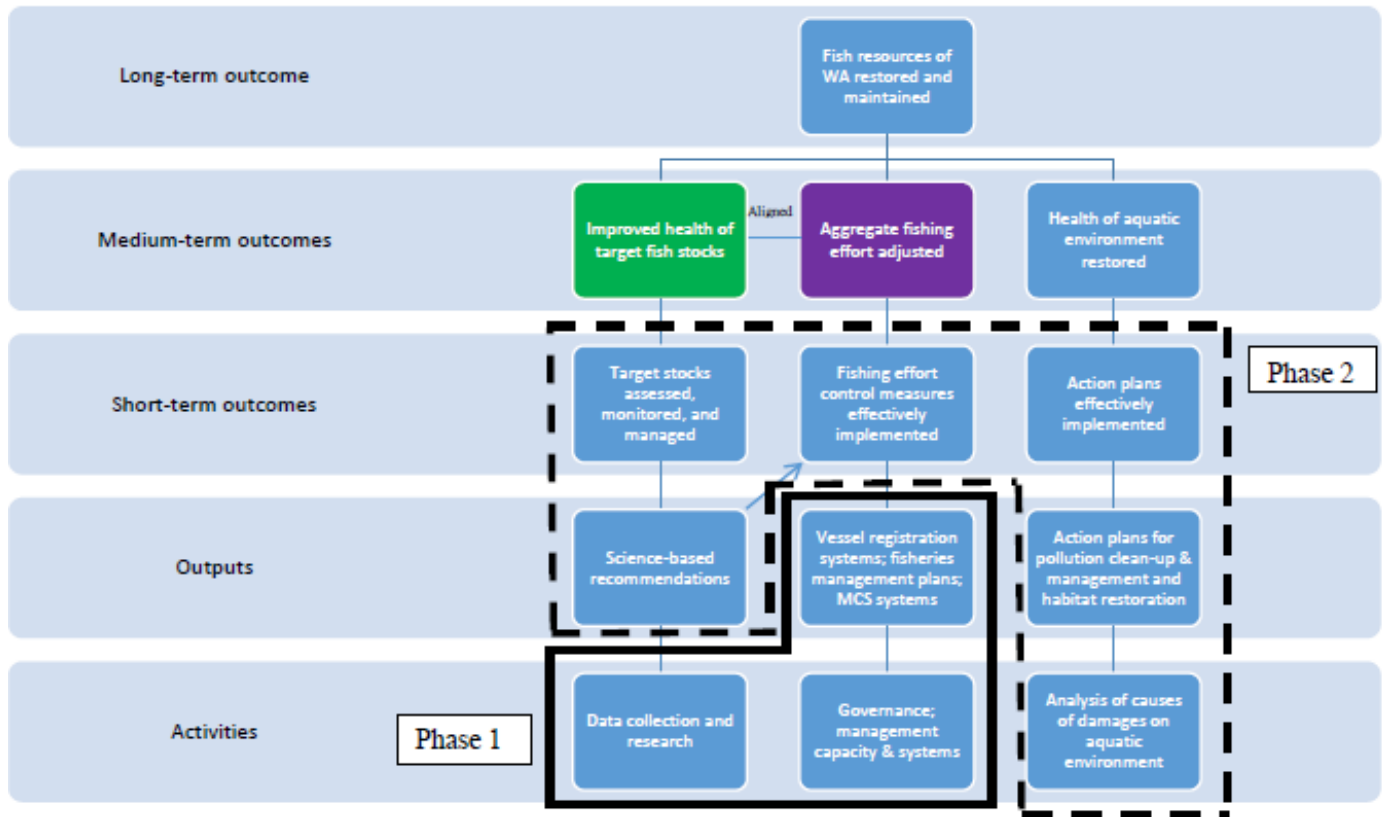




ANNEX 8. WARFP Theory of Change

1. Figure 3 illustrates how the first and second phase projects fit into the overall WARFP program to support countries maintain or increase priority fish stocks and the benefits that they can provide to West Africa. The WARFP program-level theory of change consists of: (i) a program-level objective, (ii) a set of short-term, medium-term, and long-term outcomes, and (iii) a set of “outcomes chain” diagrams that relate types of activities and outputs and the evolution of expected outcomes in the short, medium, and long terms for each of the long-term outcomes.

Figure 3: WARFP Theory of Change at the Program Level



Long-Term Outcomes:

- Resources of priority fisheries in West Africa restored and maintained
- Net benefits of priority fisheries increased and sustained
- Increased proportion of net benefits retained within West Africa
- Increased household incomes from priority fisheries in West African coastal communities
- Food and nutritional security of consumers in West Africa is improved due to better access to quality seafood

Medium-Term Outcomes:

- Current levels of fishing effort for coastal communities prioritized in policy and decision-making processes for priority fisheries, and traditional access secured



- Aggregate fishing effort controlled and adjusted in priority fisheries to sustain or enhance stocks and increase benefits
- Development policy coordinated between fishing and post-harvest segments of the industry
- Post-harvest losses reduced (on board/on shore) and product quality improved
- Net benefits to West African states generated from priority fisheries not declining
- Marine and coastal environment and habitats monitored

**Short-Term Outcomes:**

- Rules established to reduce or cap aggregate fishing capacity in priority fisheries, based on targets for fish size and stock size
- Small-scale fisher access secured in the rules for priority fisheries
- Illegal fishing reduced in priority fisheries
- Development strategy coordinated for consistency between fishing and post-harvest segments of the industry
- Improved conditions for reducing post-harvest losses and increasing product quality
- Essential habitats/ecosystem constraints identified in priority fisheries



## ANNEX 9. Compliance Review by Country

1. Section IV.B. Environmental, Social, and Fiduciary Compliance is supported by an in-depth review of social and environmental safeguards and statements provided by World Bank staff team members of fiduciary compliance in each country.

### GUINEA

**2. Investment covered the expansion or improvement of the fish landing site and market facilities to serve artisanal fishers in the Koukoudé village.** In compliance with safeguards, an ESMF was prepared and disclosed in February 2015. An RPF (2015), a RAP (2019), and an ESIA (2019) were developed and disclosed to assess the environmental risks and negative impacts of the activities on the environment and on the local population's assets and livelihoods, and specific mitigating measures were identified. An ESIA was conducted in 2019 for the improvement and asphaltting of an access road (about 4 km) connecting the two villages of Khoundindé and Koukoudé. A Memorandum of Understanding was signed by the Project Management Unit (PMU) and the Guinean Office of Environmental Studies and Evaluations (BGEEE) of the Ministry of the Environment, Water and Forests (MEEF) to strengthen the capacities of the Office. An environmental specialist and a social/VBG specialist were recruited by the project and integrated into the PMU.

**3. The implementation of environmental and social measures was highly satisfactory.** Measures successfully contributed to mitigating unavoidable adverse social and economic impacts of works and providing to people affected by the project (PAPs) timely compensations for loss of assets at relocation. A total of 134 PAPs were identified (mainly made up of fishermen, fishmongers, fish smoking operators, stall owners, etc.) and fully compensated for loss of assets or of temporary access to their assets and assisted for their relocation. PAPs included both those who had commercial activities (sale of fish products and other goods) and professional activities (fish smoking) within the site and those whose properties (houses, wells, fruit trees, etc.) were located inside the site and/or along the access road. PAPs had no formal rights to lands or assets but had a claim on what was considered a Maritime Public Field (owned by the state). In full compliance with WB policies and national regulations, PAPs received compensations at replacement cost, and other assistance. Initially, however (until the 2020 restructuring), compensation procedures were not entirely satisfactory due to slow disbursement of state funds.

**4. A Grievance Mechanism (GM) was developed and operational.** Local Mediation Committees (LMCs) were established at the level of the two districts and, a total of 30 complaints related to compensations were satisfactorily enregistered and fully resolved either by the project or by contractors, and, among these complaints, 7 complaints were considered unsubstantiated by LMCs. Adequate sensitization initiatives on gender and sexual harassment were organized by the project and no cases of gender-based violence (GBV) were recorded during project implementation. The construction of the fish landing site and the access road had some not entirely predicted impacts (increase in the number of vehicles and of activities along the access road and around the bus station), but adequate security measures were put in place (including general traffic regulations and road panels). Regular monitoring of environmental compliance and of the implementation of environment, health and safety (EHS) measures of by construction companies was jointly conducted by the PMU and the BGEEE, and no major non-compliance was recorded. Regular consultations were held with key national stakeholders, such as the National Confederation of Fisheries Professionals, the National Union of Artisanal Fishers, and the Regional Federation of Fish-culture and Forestry, as well as the BGEEE. Finally, more than 80





economically vulnerable people (mostly women) benefitted from several income-generating activities (IGAs), which contributed to improving their livelihoods and living standards. Activities concerned soap-making and dyeing, fish farming, development of fuelwood plantations for the sustainable supply of smoking facilities and beekeeping. Particularly relevant were the activities aimed at supporting plastic recycling. New fish smoking techniques (use of ovens) contributed to reducing female workers' exposure to smoke (which was a major cause of respiratory diseases and eyes irritations for both women and children). The high level of satisfaction of communities was recorded by a survey carried out by an independent consultant. Specific training was delivered to PMU staff (on safeguards) and to members of the Work Management Committee (on communication, bookkeeping, etc.). Finally, in compliance with OP/BP 4.04 Natural Habitats, community-based organizations monitored coastal marine resources and formulated a number of recommendations, including the prohibition of the use of small mesh fishing gear (10 to 20 mesh), and limitation of the number of canoes targeting small pelagic fish.

- ***Fiduciary Compliance***

**5. Financial management was satisfactory, and no significant shortcomings were noted.** The PIU maintains acceptable FM arrangements during the project. Issues and financial inconsistencies in the quality of financial reporting were noted in the project's first year, corrected by the second year, and during the project implementation. The external audit reports and the audited financial statements were received on time during the project, and the external auditors did not highlight important shortcomings.

**6. Procurement performance was satisfactory.** The project's contracting processes were conducted in an overall satisfactory manner. The Procurement Plan (PPM) and STEP system were regularly updated and detailed planning for the implementation of the latest activities exists.

**MAURITANIA**

- ***Safeguards Compliance***

**7. For the investment related to the rehabilitation of Nouakchott Fish Market, the project complied with the triggered operational policies and prepared the safeguard instruments.** An initial ESIA, which covered the development and upgrading works of the Fish Market, was disclosed in November 2014. Another ESIA was conducted in June 2019 to assess the environmental impacts of treated wastewater discharged into the sea and to identify risks mitigation measures (such as, during the construction period, road signs and fencing of construction sites to avoid traffic accidents and, at the end of work, post-rehabilitation of the altered environment). The RAP, which was prepared in December 2014 and revised in 2017, helped in the identification of all the stakeholders, including, at local level, artisanal and industrial fishers, workers in processing plants (often women), local retailers (mostly women), and dockers, and set up resettlement and compensation procedures for PAPs and grievance management mechanisms (it was estimated that every day about 12,500 persons worked in the market, including about 7,600 full-time). An environmental and social safeguard specialist was recruited by the project and integrated into the PMU. A national NGO provided technical assistance on issue related to social safeguards and VBG.





**8. The implementation of environmental and social measures was satisfactory.** It included two separate packages:

- Work on the first package (Security, lighting, and sanitary improvements) was successfully completed in compliance with environmental and social best practices, including the renovation of the fence (8km perimeter wall and 4 control posts). Improved sanitary conditions (7 toilets and shower blocks, including 3 for women) contributed to reducing the spread of many diseases such as diarrhea, and provided a safer work environment for those working in the site (this was particularly important for women, who represent a high share of market users and laborers in post-harvest sale and transformation of fish). Modernization of the electricity network contributed not only to providing opportunities for new companies (e.g., ice plants, fish transformation units), but also to controlling incoming / outgoing traffic and preventing road accidents, improving overall security (for night activities), and preventing and reducing gender-based violence.
- Work for the second package (Wastewater treatment plant and sea outlet), which aimed to help create a healthy environment in the market, was particularly affected by the impact of COVID-19 and related restrictions as well as by the 2020 floods. However, civil work was completed on time, including a water supply and a sanitation network, for the wastewater treatment plant basins, and for the 1,500 m sea outlet. Most construction works requiring the mobilization of heavy equipment and temporary land acquisition, as well as implied restrictions of market users' access to some fishing sites for a short period of time, as well as loss of shelters and enclosures.

**9. Overall, compensations were provided to 75 people (including one vulnerable person), whose properties (mainly such as enclosure walls and hangars) had been affected by the 3.5 km asphalted road.** Support was provided to 500 vulnerable female fishmongers, including the organization of adequate training programs and the granting of isothermal boxes (for storing fish). Informal surveys recorded the satisfaction of female beneficiaries, although needs for kindergartens and a system of garbage collection were also raised by them. A total of 7 complaints were recorded, but finally considered baseless by the Local Grievance Committee (LGC), and the process was fully documented by a local NGO. A final environmental and social compliance report, prepared in January 2022, reported the results of a satisfaction survey of 120 people representing all the socio-professional categories benefitting from project activities in the fish market. People were solicited to provide not only their own evaluation of the different activities, but also to formulate specific recommendations for improvement (according to the nature of the works people declaring themselves satisfied were between 70% and 93%). A workshop on Grievance Management issues was held in August 2020 with participation of about 28 stakeholders: women wholesalers and fish sellers highlighted the importance of GM mechanisms in helping them find a solution to their insecurity problems. Regular monitoring of environmental compliance and of the implementation of environment, health and safety (EHS) measures of by construction companies was jointly conducted by the PMU, the national Environmental Control Department (DCE) and the facilitating NGO. The DCE was responsible for the preparation of the Environmental Feasibility Notice for all the project construction works and for overall control and monitoring. E&S clauses were integrated into all bidding documents. However, the quality of the monitoring of these clauses by contractors was not always entirely satisfactory, and monthly reports have not systematically addressed E&S issues. Reminders on the importance of anti-COVID-19 measures and general safety measures at the worksite (such as systematic use of personal protective equipment) had to be consistently repeated by supervision missions.



- ***Fiduciary Compliance***

10. **Adequate FM arrangements were in place during the project implementation.** The project FM risk was moderate, and its FM performance was satisfactory during the project life cycle. The project has complied with its obligations of financial reporting and auditing: The required external audit reports as well as interim financial reports (IFRs) were mostly submitted on time to the World Bank with acceptable quality and there were no overdue external audit reports and IFRs at the project closing date. Furthermore, there are no outstanding FM issue and at the closing date, the Project's performance in financial management was considered satisfactory and its financial management risk was moderate. However, the project experienced an issue with some works delivered after the closing date of February 28, 2022, and the withdrawal application related to these expenses (US\$ 466,135.25) which were considered ineligible for payment under the financing was deleted. Consequently, there is no ineligible expenses at the Project closing date.

11. **Procurement is rated Moderately Satisfactory due to the execution of the majority of planned contracts.** The ICR team notes that the awarding of some contracts was subject to significant delays in relation to the deadlines planned in the project's procurement plan and that the archiving of documents was disorderly, which was due to shortcomings noted at the level of the project management team in terms of procurement as well as at the Departmental procurement commission. Difficulties were encountered in the application of the dual procedure of the World Bank and the Public Procurement Code, whose new reforms introduced confusion and conflicts in the roles of the different actors in the procurement cycle with the transfer of certain fiduciary responsibilities from the PMU to the Implementing Agencies. The issues were resolved through measures taken to: (i) implement PPM activities on time, (ii) put in place a rigorous monitoring system for the execution of contracts, and (iii) put in place a system of archiving procurement documents. It was also found that, despite a lot of effort on the part of the World Bank, some contracts post reviewed were not carried out in the STEP system.

**SIERRA LEONE**

12. **General compliance to triggered policies was satisfactory.** As a result of the inclusion of new investment activities in the January 5, 2017, restructuring of the Project (January 5th, 2017), the ESMF was prepared in April 2020. The US\$4 million grant aimed to support community-led fisheries management, regulatory and institutional reform, and improved fisheries monitoring. The first SOP-A1 project had concerned the establishment of an integrated landing site cluster at Konakreedee and ancillary facilities. Although no actual construction works have/had? been planned, restructuring investments included potential activities (such as construction of jetties, installation of improved smoking ovens, improvement of fish landing sites, sanitation facilities, and construction of a platform for ice plants) with corresponding implications for the environmental and social risks and impacts of the project. Therefore, several relevant safeguards instruments were prepared, such as: a Site-specific Environment and Social Management Plan (ESMP), an RPF and a RAP (to deal with involuntary resettlement), an Environmental and Social Assessment (ESA) (January 2021), a Stakeholder Engagement Plan (SEP) (to ensure open and transparent communication and prompt identification and resolution of complaints). Furthermore, the project also developed a Community and Employee Grievance Redress Mechanism (GRM) (to assist in resolving grievances or complaints raised regarding environmental and/or social issues arising from the project's investments), an Emergency Preparedness and Response Plan (EPRP), and a Contractor Environment Health and Safety (EHS) Plan (to provide a guide to workers on the procedures, regulations, standards of proper conduct, grievance recourse mechanism, etc.). An ESIA was conducted and a Biodiversity Action Plan (BAP) because potential project sites were just outside of marine protected areas. An



environmental and social officer was appointed within the PMU. Close partnership was established with the Environmental Protection Agency/Sierra Leone (EPASL).

- ***Fiduciary Compliance***

13. **Over the lifetime of the project, FM was rated as Satisfactory.** FM reviews were conducted periodically. In general, findings revealed that the proceeds were being used for its intended purposes and accordingly, were compliant with FM covenants. Interim Financial Reports (IFR)s and audit reports were submitted in a timely manner and in accordance with established World Bank procedures. There were no fundamental internal control issues identified in financial statements nor were there major audit observations. Overall, funds flows, reporting and accounting system(s) were deemed sound. Fiduciary clinics were also provided throughout project implementation. Disbursement at the closing date of the Project stood at USD3,998,963.42 (99.9%). The FM rating at project closing thus stands as Satisfactory.

14. **Procurement in SL is rated Moderately Satisfactory.** Sierra Leone portfolio had five procurement activities planned during the entire project life, only two activity contract was signed, and one activity was completed two are still under implementation based on the information available in STEP to date. Mainly this project was doing capacity building through IMBO. Some significant issues were in the purchase of patrol boats including determination of technical specifications, market approach, delays in procurement process and delivery of the boats. We had also a discussion about construction of fish smoking ovens, but later we advised it to be community participation not procurement. There was also a problem of coordination between the procurement agent, which was project fiduciary management housed in the ministry of finance and the PIU in the ministry of fisheries that contributed to delays in decision making and approval processes.

**LIBERIA**

15. Following the 2017 restructuring, Liberia was added under the WARFP Phase I and an additional US\$ 1 million was earmarked to advance existing management efforts for targeted fisheries, further build up the Community Management Association (CMA) model and strengthen local monitoring and surveillance. There were no construction works. The project in Liberia closed on March 1, 2019.

- ***Fiduciary Compliance***

16. **The overall FM rating is Moderately Satisfactory.** Financial management performance was somewhat adequate during the implementation of the project in terms of staffing, budgeting, reporting, accounting, and external audit. The submission of the Interim Financial Reports (IFRs), Internal and external audit reports was, on average, submitted on time, meeting the financial covenants. However, there were some challenges in the execution of the budgets as, in most cases, what was budgeted was not being executed, with some vast variances observed in the IFRs submitted throughout the project. There was also a general capacity constraint concerning FM. The PFMU did not have sufficient capacity to perform the internal audits as there was initially only one internal auditor, but the PFMU eventually recruited more.

17. **Procurement was rated as Moderately Satisfactory at the end of the project.** This was in view of project performance in terms of procurement planning, procurement processes, contract implementation and management, and timely upload of procurement documentation in STEP. During the project implementation,



majority of the contract were delayed in execution and delivery, due to low level of both technical and procurement capacity on the project. There were significant delays on preparation of TORs, evaluation of CVs, and proposals, and award of contracts; and this contributed to not meeting the agreed timelines in the procurement plans for each year. In subsequent projects, IDA will ensure that all the lessons learnt are adequately examined to ensure that some of the procurement issues seen under the project are avoided. The World Bank will also be providing more efficient and continuous supports to the implementing agency during the preparation of PPSD.

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Virtual meetings were held with project team members:

- Environmental Safeguards Specialist, WARFP Guinea
- Environmental and Social Safeguard Specialist, WARFP Mauritania