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The World Bank

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Report No: PAD261

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON

PROPOSED GRANTS

IN THE AMOUNT OF SDR 8.6 MILLION (US\$12.0 MILLION EQUIVALENT) AND SDR  
7.1 MILLION (US\$10.0 MILLION EQUIVALENT)

TO MAURITANIA AND GUINEA, RESPECTIVELY

AND

A PROPOSED TRUST FUND GRANT FROM THE GLOBAL ENVIRONMENT FACILITY  
IN THE AMOUNT OF US\$7.0 MILLION

TO MAURITANIA

FOR THE

FIRST PHASE OF THE WEST AFRICA REGIONAL FISHERIES PROGRAM (WARFP)  
SOP-C

FEBRUARY 23, 2015

Global Practice Environment and Natural Resource Management (GENDR)  
Africa Region

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2015)

Currency Unit = SDR  
SDR 0.70932 = US\$1  
US\$1.40980 = SDR1

FISCAL YEAR  
July 1 – June 30

## ABBREVIATIONS AND ACRONYMS

CAS	Country Assistance Strategy
CNSHB	Fisheries Research Center in Guinea ( <i>Centre National des Science Halieutiques de Boussoura</i> )
CNSP	Fisheries Surveillance Center in Guinea ( <i>Centre National de Surveillance et de Protection des Pêches</i> )
CPS	Country Partnership Strategy
CSRP	Sub-Regional Fisheries Commission ( <i>Commission Sous-Régionale des Pêches</i> )
DCE	Environmental Monitoring Department ( <i>Direction du Contrôle Environnemental</i> )
DLI	Disbursement Linked Indicator
ECOWAS	Economic Community of West African States
EEZ	Exclusive Economic Zone
EITI	Extractive Industries Transparency Initiative
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
EU	European Union
FAO	Food and Agriculture Organization
FEU	Fisheries Enforcement Unit
FGRM	Feedback and Grievance Redress Mechanism
FY	Fiscal Year
GDP	Gross Domestic Product
GEF	Global Environment Facility
GN	Guinea
GIZ	German Agency for International Cooperation
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IDA	International Development Association
IFR	Interim Financial Report
IMROP	Mauritanian Research Center ( <i>Institut Mauritanien de Recherches Océanographiques et des Pêches</i> )
IPF	Investment Project Financing
IRR	Internal Rate of Return
IUU	Illegal, Unreported and Unregulated

KfW	KfW ( <i>Kreditanstalt für Wiederaufbau</i> ) Development Bank
LME	Large Marine Ecosystem
MCS	Monitoring, Control, and Surveillance
M&E	Monitoring & Evaluation
MPA	Ministry of Fisheries and Aquaculture in Guinea ( <i>Ministère de la Pêche et de l'Aquaculture</i> )
MPEM	Ministry of Fisheries and Maritime Economy in Mauritania ( <i>Ministère des Pêches et de l'Economie Maritime</i> )
MoU	Memorandum of Understanding
MR	Mauritania
MTR	Mid Term Review
NCB	National Competitive Bidding
NEPAD	New Partnership for Africa's Development
NPV	Net Present Value
NSC	National Steering Committee
OHADA	Organization pour Harmonization of Business Regulation in Africa ( <i>Organisation pour l'Harmonisation en Afrique du Droit des Affaires</i> )
ONSPA	Sanitary Authority in Guinea ( <i>Office National de Contrôle Sanitaire des Produits de la Pêche et de l'Aquaculture</i> )
PAD	Project Appraisal Document
PAP	Project Affected People
PIU	Project Implementation Unit
PDO	Project Development Objective
PFS	Project Financial Statement
PROFISH	World Bank's Global Program on Fisheries
RAP	Resettlement Action Plan
RPF	Resettlement Process Framework
RIAS	Regional Integration Assistance Strategy
RCU	Regional Coordination Unit
RSC	Regional Steering Committee
RPF	Resettlement Policy Framework
SBD	Standard Bidding Documents
SOP	Series Of Projects
SORT	Systematic Operations Risk-rating Tool
TAC	Total Allowable Catch
VMS	Vessel Monitoring System
WARFP	West Africa Regional Fisheries Program
WSSD	World Summit on Sustainable Development

Regional Vice President:	Makhtar Diop
Country Director:	Colin Bruce
Senior Global Practice Director:	Paula Caballero
Practice Manager/Manager:	Magda Lovei, Benoit Bosquet
Task Team Leaders:	Bérengère Prince, Mimako Kobayashi



**MAURITANIA AND GUINEA**  
**West Africa Regional Fisheries Program SOP-C1**

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**PAD DATA SHEET***Africa**West Africa Regional Fisheries Program SOP-C1 – Mauritania & Guinea (P126773/P131327)***PROJECT APPRAISAL DOCUMENT***AFRICA**0000009061*

Report No.: PAD261

<b>Basic Information</b>			
Project ID P126773 - P131327	EA Category B - Partial Assessment	Team Leader(s) Berengere P. C. Prince, Mimako Kobayashi	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ X ]		
Project Implementation Start Date 16-Mar-2015	Project Implementation End Date 15-Dec-2020		
Expected Effectiveness Date 15-Jul-2015	Expected Closing Date 15-Dec-2020		
Joint IFC No	GEF Focal Area International waters		
Practice Manager/Manager Magda Lovei	Senior Global Practice Director Paula Caballero	Country Director Colin Bruce	Regional Vice President Makhtar Diop
Borrower: Ministry of Finance, Ministry of Economic Affairs and Development			
Responsible Agency: Ministry of Fisheries and Maritime Economy			
Contact: Telephone No.:	Samboly Ba 22233470916	Title: Email:	Advisor to the Minister Praobm@yahoo.com
Responsible Agency: Ministry of Fisheries and Aquaculture			
Contact: Telephone No.:	Abdourahmane Kaba 22464298782	Title: Email:	Secretary General akaba@yahoo.fr
<b>Project Financing Data(in USD Million)</b>			
[ ]	Loan	[ X ]	IDA Grant
[ ]		[ ]	Guarantee

<input type="checkbox"/>	Credit	<input checked="" type="checkbox"/>	Grant	<input type="checkbox"/>	Other					
Total Project Cost:		30.05			Total Bank Financing:		22.00			
Financing Gap:		0.00								
<b>Financing Source</b>						<b>Amount</b>				
BORROWER/RECIPIENT						1.05				
IDA Grant						22.00				
Global Environment Facility (GEF)						7.00				
Total						30.05				
<b>Expected Disbursements (in USD Million)</b>										
Fiscal Year	2016	2017	2018	2019	2020	2021				
Annual	3.00	4.50	6.00	9.00	6.00	1.55				
Cumulative	3.00	7.50	13.50	22.50	28.50	30.05				
<b>Institutional Data</b>										
<b>Practice Area (Lead)</b>										
Environment & Natural Resources										
<b>Contributing Practice Areas</b>										
<b>Cross Cutting Areas</b>										
<input checked="" type="checkbox"/> Climate Change										
<input type="checkbox"/> Fragile, Conflict & Violence										
<input type="checkbox"/> Gender										
<input type="checkbox"/> Jobs										
<input type="checkbox"/> Public Private Partnership										
<b>Sectors / Climate Change</b>										
Sector (Maximum 5 and total % must equal 100)										
Major Sector				Sector		%	Adaptation Co-benefits %		Mitigation Co-benefits %	
Public Administration, Law, and Justice				Public administration-Agriculture, fishing and forestry		50	10			
Agriculture, fishing, and forestry				General agriculture, fishing and forestry sector		40	10			
Agriculture, fishing, and forestry				Animal production		10	10			
Total						100				



I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

**Themes**

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Environment and natural resources management	Environmental policies and institutions	60
Financial and private sector development	Infrastructure services for private sector development	15
Public sector governance	Other public sector governance	15
Rural development	Rural non-farm income generation	10
Total		100

**Project Development Objective(s)**

The development objective of this first phase of 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.

**Global Environmental Objective(s)**

The Global Environmental objective of the WARFP SOP-C1 (formerly APL-C1) is the same as the PDO: to strengthen governance and management of targeted fisheries and improve handling of landed catch at selected sites.

**Components**

Component Name	Cost (USD Millions)
Strengthening Good Governance and Sustainable Management of the Fisheries	10.40
Reducing Illegal, Unreported and Unregulated Fishing	3.02
Increasing Contribution of the Fish Resources to the Local Economy	9.48
Project Management, Monitoring and Evaluation, and Regional Coordination	7.15

**Systematic Operations Risk- Rating Tool (SORT)**

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	High

7. Environment and Social	Moderate		
8. Stakeholders	Substantial		
9. Other	Substantial		
<b>OVERALL</b>	Substantial		
<b>Compliance</b>			
<b>Policy</b>			
Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [ X ]	
Does the project require any waivers of Bank policies?	Yes [ ]	No [ X ]	
Have these been approved by Bank management?	Yes [ ]	No [ ]	
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [ X ]	
Does the project meet the Regional criteria for readiness for implementation?	Yes [ X ]	No [ ]	
<b>Safeguard Policies Triggered by the Project</b>	<b>Yes</b>	<b>No</b>	
Environmental Assessment OP/BP 4.01	X		
Natural Habitats OP/BP 4.04	X		
Forests OP/BP 4.36		X	
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11	X		
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12	X		
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50		X	
Projects in Disputed Areas OP/BP 7.60		X	
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Guinea: Full census of the number of artisanal boats operating in the EEZ.		15-Jul-2016	
<b>Description of Covenant</b>			
Guinea: Full census of the number of artisanal boats operating in the EEZ, in form and substance satisfactory to the Association. It is expected that the artisanal fleet will be fully registered through physical registration by the 4th year of the project. In the meanwhile and as a way to continue monitoring the fishing capacity, census should be carried out until the entire fleet is registered.			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Guinea: Update the census of the number of artisanal boats operating in the EEZ.		15-Jul-2017	

<b>Description of Covenant</b>			
Guinea: Complete update the census of the number of artisanal boats operating in the EEZ, in form and substance satisfactory to the Association.			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Guinea: Update the census of the number of artisanal boats operating in the EEZ.		15-Jul-2018	
<b>Description of Covenant</b>			
Guinea: Complete update the census of the number of artisanal boats operating in the EEZ, in form and substance satisfactory to the Association.			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Mauritania: allocation of fishing rights in the octopus industry.		15-Jul-2018	
<b>Description of Covenant</b>			
Mauritania: The allocation of fishing rights in the octopus industry is equitable, in a manner satisfactory to the Association. The term "equitable" refers to the allocation of fishing rights that ensure the inclusion of existing participants and protects the interests of vulnerable population in the fishing industry, in particular smaller players in the artisanal segment.			
<b>Conditions</b>			
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>	
IDA	Subsidiary Agreement with the CSRP	Effectiveness	
<b>Description of Condition</b>			
Guinea, Mauritania and CSRP: A Subsidiary Agreement, in form and substance satisfactory to the Association, has been executed on behalf of the Recipient and CSRP.			
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>	
IDA	Project Implementation Manual	Effectiveness	
<b>Description of Condition</b>			
Guinea and Mauritania: The Recipient has adopted the Project Implementation Manual, in form and substance satisfactory to the Association.			
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>	
IDA	Steering Committees and PIU	Effectiveness	
<b>Description of Condition</b>			
Guinea: The Recipient has: (i) established the National Project Steering Committee; (ii) appointed or recruited, in a manner satisfactory to the Association, a Project coordinator and a deputy coordinator; and (iii) recruited, on a competitive basis, the key staff to the Project Implementation Unit, including, a monitoring and evaluation expert, a procurement specialist, an administrative and financial specialist, all in accordance with Section III.C of Schedule 2 to the Agreement.			
<b>Team Composition</b>			
<b>Bank Staff</b>			
<b>Name</b>	<b>Role</b>	<b>Title</b>	<b>Unit</b>

Berengere P. C. Prince	Team Leader (ADM Responsible)	Sr Natural Resources Mgmt. Spec.	GENDR
Mimako Kobayashi	Team Leader	Natural Resources Economist	GENDR
Moustapha Ould El Bechir	Procurement Specialist	Senior Procurement Specialist	GGODR
Celestin Adjalou Niamien	Financial Management Specialist	Sr Financial Management Specialist	GGODR
Aissatou Diallo	Team Member	Senior Finance Officer	WFALA
Alexandre Hugo Laure	Team Member	Private Sector Development Specialist	GTCDR
Alpha Mamoudou Bah	Team Member	Senior Procurement Specialist	GGODR
Anders Jensen	Team Member	Senior Monitoring & Evaluation Specialist	GPSOS
Aurore Simbananiye	Team Member	Program Assistant	GENDR
Batouly Dieng	Team Member	Program Assistant	AFMMR
Bella Lelouma Diallo	Team Member	Sr Financial Management Specialist	GGODR
Boury Ndiaye	Team Member	Program Assistant	AFCF1
Brahim Sall	Team Member	Senior Rural Development Specialist	GFADR
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El Hadramy Oubeid	Team Member	Public Sector Specialist	GGODR
Fatou Fall Samba	Team Member	Financial Management Specialist	GGODR
Leoncie Niyonahabonye	Team Member	Office Manager	GENDR
Melissa C. Landesz	Safeguards Specialist	Natural Resources Mgmt. Spec.	GENDR
Nevena Ilieva	Team Member	Senior Operations Officer	GENDR
Peter Kristensen	Team Member	Program Manager	GENDR
Racky Dia Camara	Team Member	Program Assistant	AFMGN
Ruxandra Costache	Counsel	Counsel	LEGAM
Safiatou Lamarana Diallo	Team Member	E T Consultant	AFMGN
Salamata Bal	Safeguards Specialist	Senior Social Development Specialist	GSURR
Salimata D. Folleya	Team Member	Natural Resources	GENDR

		Mgmt. Spec.			
Timothy Bouley	Team Member	Environmental Specialist	GCCPT		
Victor Bundi Mosoti	Counsel	Senior Counsel	LEGEN		
<b>Extended Team</b>					
<b>Name</b>	<b>Title</b>	<b>Office Phone</b>	<b>Location</b>		
Anne-Cecile Souhaid	Consultant		London		
Boran Chuun			Dakar		
<b>Locations</b>					
<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>
Mauritania	Nouakchott	District de Nouakchott	X		
Guinea	Boke	Boke Region	X		
<b>Consultants (Will be disclosed in the Monthly Operational Summary)</b>					
Consultants Required: Consulting services to be determined					



## **I. STRATEGIC CONTEXT**

### **A. Regional and Country Context**

1. Coastal West Africa, from Mauritania to Ghana, is the westernmost region of the continent, and home to a growing population of almost 300 million. With the exception of Mauritania, all of these countries are members of the Economic Community of West African States (ECOWAS). The region includes a wide range of countries at varying stages of economic development: five of them have a per capita GDP below US\$1,000 (Gambia, Guinea, Guinea-Bissau, Liberia and Sierra Leone), and several others are emerging from conflicts within the last ten years. Poverty is widespread throughout this coastal region, and the economy of almost every country is heavily dependent on natural resources.

2. In recent years, Mauritania's medium growth potential has considerably improved. Following political instability with the overthrow of elected governments in 2005 and 2008, presidential elections in 2009 resulted in governmental consistency and created a necessary environment for World Bank re-engagement. Economically, Mauritania is also advancing – in 2006 the country began producing oil, which is now steady at a rate of nearly 6,500 barrels of crude per day. The combination of this economic and political stability has enabled the government to focus on other areas of development, such as employment, expansion of the mining sector, and investment in coastal regions.

3. Guinea has made considerable progress in stabilizing over the past two years until the outbreak of Ebola in mid-2014. Emerging from political isolation, instability and military rule, Guinea has adopted a new constitution, elected a President, and has been fully re-integrated into the international community. Macro-economic stability was restored, and debt repayment capacity dramatically improved with the attainment of the enhanced Highly Indebted Poor Countries (HIPC) completion point in September 2012. Social, institutional and economic decline, which had been ongoing for years, was halted. The Ebola outbreak has been affecting the country since mid-2014, closing Guinea's terrestrial borders, disrupting air travel, and drawing on government resources. Declared a global public health emergency by the World Health Organization, the international community has become heavily involved in the ongoing response.

### **B. Situations of Urgent Need of Assistance or Capacity Constraints**

4. The outbreak of the Ebola in Guinea and subsequent border closure has increased the urgency for the country to be more independent in terms of basic needs such as food. Beyond the immediate priority to control the pandemic, food security is a concern the project can address through the intervention in the fisheries sector. The Ebola outbreak also likely contributes to higher incidence of illegal fishing activities. In order for the country to be ready to work on the fisheries management reform at full capacity as soon as the outbreak is over, it is essential that the sector continues to receive attention so resource degradation does not accelerate during the difficult time of the Ebola outbreak. The project, targeting primarily the artisanal segment, is expected to actively contribute to the initial recovery phase from the Ebola crisis by supporting the vulnerable and the poor that depend on fisheries and fish resources.

## C. Sectoral and Institutional Context

5. A healthy ocean and sustainable fisheries sector are fundamental for achieving the World Bank's strategic goals of ending extreme poverty within a generation and boosting shared prosperity in a sustainable manner in coastal and island client countries. An estimated 61 percent of the world's GNP comes from the areas within 100 kilometers of the coastline, and seafood alone generates global annual revenues of more than US\$190 billion.<sup>1</sup> Fish (including finfish, shellfish and mollusks) account for 17 percent of the animal protein intake of the world's population, representing an important source of nutrition for one billion people in developing countries.<sup>2</sup> Hundreds of millions of livelihoods rely on the fisheries and aquaculture sectors, with 97 percent of those that are directly dependent on fisheries and aquaculture occurring in developing countries worldwide.<sup>3</sup>

6. Of the developing-world beneficiaries, West African nations have disproportionately more at stake from fisheries investment programs. Ocean waters off West Africa offer some of the richest fishing grounds in the world. A combination of westward winds over the Sahara depositing nutrients into the Atlantic and a deepsea upwelling create unique conditions enabling abundant fish populations. More than 1.6 million tons of fish are legally captured in West African waters each year, with an estimated wholesale value of US\$2.5 billion, contributing significantly to regional and national economies. Unfortunately, this ocean wealth is not maintained at the maximum level that the region can achieve.

7. To ensure the productivity of this resource, in 2009 the World Bank approved a nine-country, multi-phase series of projects (SOPs), the West Africa Regional Fisheries Program (WARFP; see Figure 1 for WARFP series and phases). Implementation began in 2010 with Cabo Verde, Liberia, Senegal, and Sierra Leone as the first group of countries in the Program (SOP A1). Box 1 highlights some of the results of the program. Subsequently, Guinea-Bissau (SOP B1) and Ghana joined the Program in 2011 and 2012, respectively. In SOP C1, the addition of Mauritania and Guinea is proposed. The program supports more sustainable contributions of these fisheries to wider economic growth via International

### Box 1. WARFP results

The WARFP program has yielded transformative results under SOP A1 in Cabo Verde, Liberia, Senegal, and Sierra Leone. The fight against illegal fishing has been particularly successful in countries that most suffered from this scourge. In Liberia, the incidence of illegal fishing has been reduced by 83%. A number of fraudulent licenses were discovered in Liberia, worth more than the annual revenues collected from official licenses, revealing a pattern of fraud in the past. In Liberia and Sierra Leone, the exclusion of illegal trawlers from the 6 mile inner zone has opened the space for fishing communities; coastal communities were visibly wealthier as a result of securing their activity. A recent assessment carried out by the EU commended Cabo Verde's efforts to fight illegal fishing, which was a condition for the country to be authorized to export to the EU market. This good result can be partly attributed to the observers program set up by the WARFP.

Improved management is also generating visible impact in early WARFP countries. As a result of improved governance in Sierra Leone's fisheries administration, official public revenues from the fisheries sector have increased from US\$0.9 million in 2008 to US\$3.8 million in 2013 – a 322% increase over the five years. The introduction of community-led fisheries management in Senegal has been successful in restoring the resources. Some communities have reported a 133% increase in catch efficiency. Almost all countries have reached a 100% registration rate for the artisanal fleet. Cabo Verde has piloted an incentive-based registration system, which is now reported as a best practice in West Africa.

<sup>1</sup> Ocean Diversity Core 2014 paper.

<sup>2</sup> FAO *The State of World Fisheries and Aquaculture* (2014).

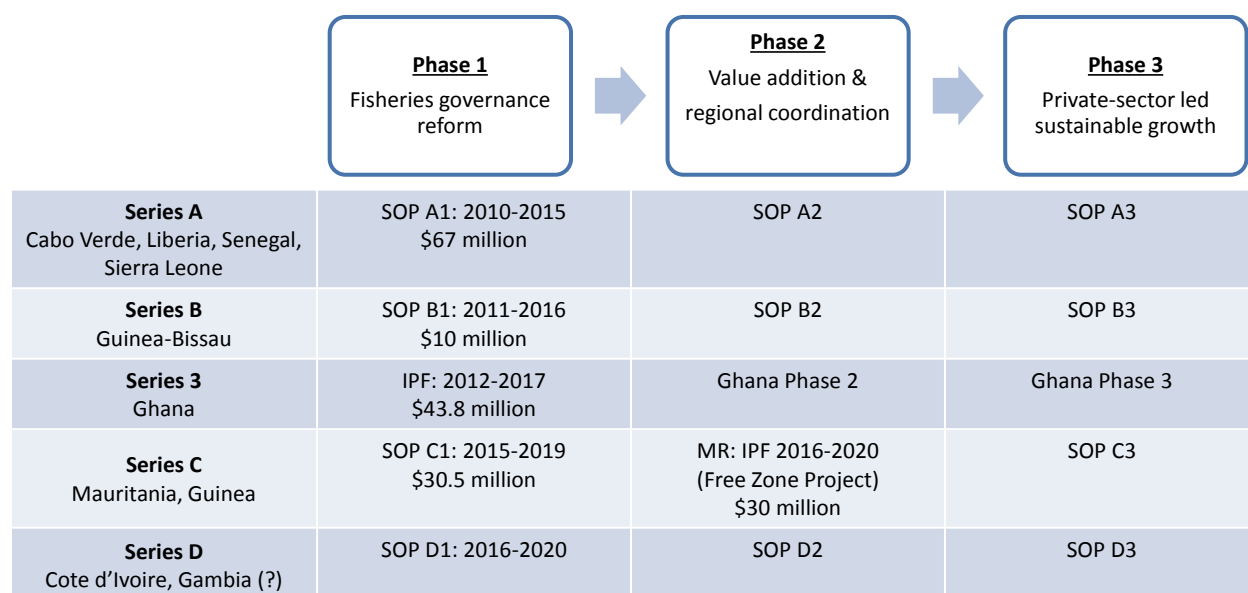
<sup>3</sup> FAO *The State of World Fisheries and Aquaculture* (2010).



Development Association (IDA) grants and Global Environment Facility (GEF) grants invested in governance reforms to support sustainable fish supply and industry transparency, and improvement of the sanitary and other conditions of post-harvest fish handling.

8. The development objective of the multi-phase WARFP, collectively, is to sustainably increase the overall wealth generated and captured by West African countries through better management of coastal fisheries. The series of projects (A, B, C) each in phases 1, 2 or 3 aim to achieve this objective by: (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 focuses more on objectives (i) and (ii), while the third objective is pursued in later phases.

Figure 1: WARFP Series and Phases



9. Mauritania and Guinea are the 7th and the 8th country, respectively, to be joining this program. They are essential to achieving the broader regional objectives. Given the absence of physical borders in the oceanscape, improved governance and management in the waters of one country could drive undesired practices and outcomes into the less-regulated waters of neighboring countries. Therefore, complete regional coverage is necessary to achieve the full benefit of the interventions at the regional level. Additionally, Mauritania and Guinea have considerable expected gains from the program in their own country contexts.

10. Mauritania's Exclusive Economic Zone (EEZ<sup>4</sup>) is ranked among the most productive fishing waters in the world. The fisheries sector provides jobs to 53,000 people,<sup>5</sup> of which 60 percent is for activities related to the artisanal segment and 26 percent is indirect employment;

<sup>4</sup> The EEZ is the area upon which a coastal State assumes jurisdiction over the exploration and exploitation of marine resources in its adjacent section of the continental shelf, taken to be a band extending 200 miles from the shore.

<sup>5</sup> 2014 IMROP Report. IMROP is the Mauritanian Research Center on Marine Resources.

approximately 30 percent of the jobs are occupied by women. Employment in the fisheries sector accounts only for 3 percent of national employment, but this figure masks wide local variations: for example, the fisheries sector accounts for 29 percent of total employment in Nouadhibou, the area of the Tax Free Zone that was established in 2013. The estimated value of primary production in 2011 was US\$179 million in marine artisanal fishing and US\$563 million in marine industrial fishing – a total of US\$742 million, contributing 3.4 percent to overall GDP. Mauritania's fisheries sector is export oriented with 90 percent of production being exported. Fish exports importantly contribute to foreign exchange earnings: during the period of 2008-11, fish exports accounted for 20-27 percent of total exports in value (excluding oil).

11. Reports indicate that the overexploitation of assessed fish stocks in the Mauritanian EEZ rose from 9 percent in 1993 to 67 percent in 2011.<sup>6</sup> The resource depletion is a consequence of the efficiency of industrial fishing fleets, as well as the volume of artisanal fleets, which have over the period 2007-2013 increased from 4,000 to 7,000 canoes (a 75 percent increase). The current management system is simply unable to support ecologically, economically and socially sustainable practices to carry the Mauritanian fisheries sector into the future, contributing to the development potential of the country.

12. According to a FAO report (de Graaf and Garibaldi, 2014), the marine fisheries sector in Guinea provided jobs to 31,685 (18,900 men and 12,785 women) in 2010 (the total population was 10 million). Fisheries employment is dominantly in the artisanal segment with its share exceeding 95 percent of total employment in the marine fisheries sector. Fifty-eight percent of the marine fisheries jobs were in the fishing sector, while 42 percent were in the processing sector. Ninety-five percent of the marine fish processing jobs were occupied by women, while 99 percent of the marine fishing jobs were held by men. The total value of primary production in 2010 was US\$215 million (of which marine fisheries represented US\$186 million), with the bulk generated in marine artisanal fishing (US\$152 million). Taking into account the cost of fishing, the value added of this sector was US\$124 million, contributing 2.4 percent to overall GDP and representing 10 percent of agriculture GDP. The value added of the post-harvest, fish processing sector in 2010 was US\$39 million, contributing 0.7 percent to the overall GDP and representing 3 percent of agriculture GDP.

13. In Guinea, the health of fish stocks is not known. Estimated marine fish catches within the EEZ are between 150,000 and 200,000 tons per year, though there have been insufficient studies to determine the state or health of these stocks. The success of WARFP in other countries places further urgency on addressing effective fisheries management in Guinea. As neighboring countries improve regulation and monitoring, illegal fishing is pushed into the less regulated Guinean waters.

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<sup>6</sup> IMROP reports. The latest figure of the proportion of overexploited stocks in 2014 was 33 percent. Since the assessments are based on a small number of stocks, the calculated percentage of overexploited stocks fluctuates considerably from year to year.

14. Both countries are members of the Sub-Regional Fisheries Commission (CSRP – *Commission Sous Regional des Pêches*, Box 2) established in 1985. The CSRP has legal personality and the capacity to sue on behalf of its Member Countries. The CSRP’s mandate is to harmonize Member Countries’ policy on preservation, conservation and management of fisheries resources.

**Box 2. Sub-Regional Fisheries Commission (CSRP)**

The CSRP is an intergovernmental organization created on March 29, 1985 by means of an international convention. The CSRP Strategic Action Plan for fisheries focuses in particular on strengthening resource management and increased monitoring, control, and surveillance (MCS) activities to reduce illegal fishing. Ministers and Directors in charge of fisheries meet on a regular basis to adopt decisions towards harmonization of fisheries governance and surveillance. The CSRP has received annual contributions from its Member Countries. It occasionally receives funds from donors (EU, Germany, France, etc.) for specific projects. It has received an IDA grant of US\$2 million for the period of 2011-2015.

15. As in many other developing coastal and island nations, weak fisheries governance and management is considered to be contributing to overcapacity, Illegal, Unreported and Unregulated (IUU) fishing, dissipation of resource rent, and depletion of fish resources. According to the bioeconomic models used in the economic analysis (Annex 6), Mauritania's octopus fishery would generate US\$296 million and Guinea's marine fisheries would achieve over US\$180 million in *potential annual sustainable rents*. In order to unlock this potential in both countries, the project will address what is considered the root cause of the weak fisheries performance – the de facto open access regime of the fisheries, associated with the lack of well-defined tenure and use rights - by strengthening the governance and management of the countries’ fisheries. However, the core principles of this operation will be to ensure that food security and small-scale fishers’ access is safeguarded during this transition, guided by FAO’s Voluntary Small-Scale Fisheries Guidelines and FAO’s Voluntary tenure guidelines. Both of these documents are well-regarded as a reasonable basis for consensus.

16. The EEZs of both countries are characterized by substantial presence of foreign industrial fishing fleets that operate under licensing or are based on foreign access arrangements. Given the context, some of the conclusions of the recent World Bank publication "Trade in Fishing Services" are most relevant. First, despite the conventional interpretation of the principle of the UN Convention on the Law of the Sea (UNCLOS) on ‘surplus’ stocks, the report concludes that a coastal state that has surplus fish resources is *not* obliged to grant access to other states, casting important implications about the client’s often-assumed legal obligation to open up its surplus fish resources to foreign fishing fleets. Second, granting access to fish resources to foreign fleets can be viewed as importation of harvest services, which could help clients generate optimal value from fish resources, and the decisions regarding foreign access should be made based on close examination of the countries' comparative advantage. Third, such decision, however, should reflect the concerns of all fishers, in particular, the concerns of small-scale fishers, which should be appropriately represented during negotiations concerning fishing by foreign fleet.

17. Both countries are strongly committed to improving their fisheries management, albeit from different perspectives. In Mauritania, the fisheries sector has substantial fiscal importance in the economy, both through export of high-value products (octopus in particular) and through foreign access agreements with the EU and other nations. Guinea, on the other hand, faces an import ban on its fish products by the EU due to IUU fishing activities occurring in its waters,

and thus reduction of IUU fishing activities to regain access to the EU export market is its highest priority.

## 18. Regional approach.

- (i) Fish stocks are shared across the regional coastal states and are thus inherently a regional asset.<sup>7</sup> There are no physical borders between the waters of these states. Lack of regional coordination typically leads to overcapitalization of the harvest sector and overexploitation of the fish stocks (the natural capital asset) and to unproductive competition among coastal nations in the form of overcapitalization in processing capacity and infrastructure. For these reasons:
  - a. It is practically impossible for any one country to effectively manage and develop its fisheries in isolation from other countries participating in the same shared fishery and operating in the same larger marine ecosystem. For example:
    - Fish resource degradation in Senegal has led to the migration of the local fleet all along the coast of West Africa, causing conflict with local communities.
    - Foreign fleets, often from Asia and Europe, tend to move from country to country in search of better/further fishing opportunities.
    - Illegal boats, in particular, quickly move to waters of countries with weaker regulations, undermining efforts to fight illegal fishing such as in Guinea, where illegal boats have found a refuge after the West Africa Regional Fisheries Program was initiated in Sierra Leone and Liberia.
  - b. Capturing and retaining the benefits from the fisheries, as planned under the second phase of the program, is better dealt with in a regional approach: appropriate regional cooperation contributes to coordinated management of the economic benefits from fisheries while strengthening African coastal states in their negotiation with foreign nations, fleets and investors.
- (ii) Since 2009, the Bank has committed to a long-term regional approach to Africa's fisheries. Mauritania and Guinea will join this regional program that already involves six other countries under implementation.
- (iii) Stronger management at the national level contributes to healthier stock and benefits for neighboring countries that share the same resource.
- (iv) Seafood products are traded widely within the region: fish is the biggest agricultural/food commodity exported from Africa by value, and 21 percent of protein intake on the continent originates from fish trade within Africa. The rehabilitation and improved sanitary conditions of the regional Fish Market of Nouakchott will benefit other countries in Africa that import fish from Mauritania by land or air.<sup>8</sup>
- (v) The Sub-Regional Fisheries Commission, of which Mauritania and Guinea are very active members, provides a platform for a high-level policy harmonization dialogue between the member countries.
- (vi) The CSRFP is directly empowered by the program. Each country contracts with the Commission through a subsidiary agreement for a set of pre-defined services including

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<sup>7</sup> Even non-migratory stocks are often shared as relatively non-migratory fish stocks often straddle borders, and are targeted by artisanal fleets.

<sup>8</sup> On the other hand, the investment site in Guinea will serve mostly local or domestic market, and regional spillover effects will be limited. For this reason, the share of regional IDA is smaller for Guinea than for Mauritania.

mobilization of experts, integration of fisheries management data in the regional dashboard and support to negotiate international fishing agreements. This mechanism strengthens the Commission through routine reliance of member countries upon the CSRP for the provision of services and expertise best rendered in the region.

#### **D. Higher Level Objectives to which the Project Contributes**

19. **Alignment with the World Bank Group's strategic goals:** The proposed project is designed to contribute to the World Bank Group's corporate goals of ending extreme poverty within a generation and boosting shared prosperity in a sustainable manner. It recognizes the importance of fisheries as a key contributor to food and nutrition security, social safety net, and job creation for the rural and coastal population in West Africa, which is among the poorest and most vulnerable. The project is based on the premise that promoting sustainable extraction of fish resources, linking small-scale operators to extended value chains and better harnessing fisheries contributions to national economies will improve the sector's socio-economic benefits and distributional outcomes. This will contribute to boosting shared prosperity in the targeted countries and in West Africa. However, the project recognizes that a solely technically-focused intervention should not be the approach to take; rather, for fish resources to become increasingly productive over time and to enable their contribution to growth and shared prosperity/poverty reduction, a transition to better fisheries management is needed.

20. **Alignment with the GEF Strategy:** Marine resources are an important component of the GEF work program and the project aligns well with the GEF vision in this area. As stated in the GEF strategy, "the GEF serves a unique role in building trust and confidence among States for catalyzing collective management of these large water systems while providing benefits for environment, food production, economic development, community health, and regional stability." This project is one of the child projects under the Strategic Partnership for Sustainable Fisheries Management in the Large Marine Ecosystems in Africa, the objective of which is to assist in the development, adoption, and implementation of governance reforms supporting environmentally, economically and socially sustainable marine fisheries in the large marine ecosystems (LMEs) of Africa. (See Annex 7 for further discussions.)

21. **Alignment with the World Summit on Sustainable Development (WSSD):** The WARFP contributes to the higher-level objectives set for the world's marine fisheries by the WSSD, which called for restoring the world's fisheries to health (including the coastal ecosystems that support these fisheries).

22. **Alignment with "Africa's Future and World Bank's Support to It":** The World Bank's Africa Strategy focuses on support to countries in the areas of (i) competitiveness and employment; and (ii) vulnerability and resilience, with a foundation on governance and public sector capacity. This investment aims to sustainably increase the competitiveness of the Mauritanian and Guinean fishing industries through governance reform and strengthening of the enabling environment for private investment. Given that large volumes of fish (particularly small pelagic fish) are exported to a number of countries throughout West Africa and the Sahel countries, the project is expected to contribute to regional food security.

23. **Alignment with the Regional Integration Assistance Strategy (RIAS):** The 2008 RIAS, updated in 2011, noted a need for the management of shared natural resources, such as fish stocks, which transcend borders and require collaboration to ensure sustainable harvesting and to prevent conflicts. (The WARFP is listed in the RIAS in the indicative lending program Table 3, page 47.)

24. **Alignment with the African Union's strategy:** The project is fully aligned with and will support the policy objectives of the Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (African Union/New Partnership for Africa's Development) endorsed in May 2014 by the African Union. The project will promote sustainable fisheries management and activities focused on improving economic benefits of selected fisheries.

25. **Alignment with the strategy of the Sub-Regional Fisheries Commission:** The seven member countries (including Mauritania and Guinea) of the CSRP have clearly expressed their interests to collaborate to manage the region's fisheries and help achieve the objectives set by the WSSD, through participation in the CSRP. The 2011-2015 Strategic Action Plan calls for strengthened fish resource management among the member countries and increased monitoring, control and surveillance activities to reduce illegal fishing.

26. **Alignment with the Mauritanian Country Partnership Strategy (CPS) and the Green Growth Strategy:** The Mauritanian CPS for FY14-16 highlights the fisheries sector under the first pillar aiming to accelerate growth and maintain macroeconomic equilibrium (pages 11, 18, 25, 29). Transitioning towards Inclusive Green Growth in Mauritania also highlights the fisheries as one of the key sectors to drive sustainable economic growth.

27. **Alignment with the Guinean CPS:** In the Guinean CPS, FY14-17, fisheries are mentioned in relation to the 4<sup>th</sup> pillar, fighting against poverty and malnutrition. They are also highlighted as a sector that is underperforming, due largely to illegal and unreported fishing activity, which is an important focus of the project investment.

28. **Relevance to IDA commitment with respect to climate change and gender mainstreaming:** As stated in the strategic vision of the World Bank's Global Program on Fisheries (PROFISH), "Well-managed fisheries can be sustainable and resilient in the face of climate change and other external shocks." In addition, the construction investments envisaged in this project are expected to contribute to building the resilience of the coastal environment. For example, in Mauritania, securing the perimeter of the Fish Market of Nouakchott will protect and help restore the coastal dunes in the area that have been subject to severe erosion. While fishing activity is mostly conducted by men, women represent a large part of the labor force in the post-harvest sector, in particular for processing of landed catches, whether in an artisanal or industrial setting. While the project will focus on the post-harvest value-addition sector of the fisheries industry in its second phase, the first phase of the project will focus on securing sustainable fish supply by local fisheries to ensure employment opportunities for women in fish processing and other activities.

## II. PROJECT DEVELOPMENT OBJECTIVES

### A. PDO

29. The development objective of the WARFP SOP-C1 (formerly APL-C1) is *to strengthen governance and management of targeted fisheries and improve handling of landed catch at selected sites*. Targeted fisheries for this phase include demersal (including cephalopod) and small pelagic fisheries by artisanal and industrial operators in the EEZ of the respective countries. Achieving the project objective will enable the fisheries sector to contribute to poverty alleviation and promotion of shared prosperity in these two countries whose economies and population are heavily dependent on fisheries.

30. The overarching development objective of the WARFP is to sustainably increase the overall wealth generated by the extraction of the marine fisheries resources of West Africa and the proportion of that wealth captured by West African countries. The approach to achieving the objective is by: (i) strengthening the countries' capacity to sustainably govern and manage their fisheries; (ii) reducing IUU fishing; and (iii) increasing the net value generated by fish resources and the proportion of that value captured by the countries.

### B. Project Beneficiaries

31. Project beneficiaries include those involved with or dependent upon the fisheries industry. This includes (i) people on the ground such as artisanal fishers, industrial fishers, processing plant workers (often women), and those who sell fish and fish products (often women); and (ii) those who work at the institutional or political level: the client country governments, international organizations, technical agencies, and members of the NGO community. In total for the two countries, the number of direct beneficiaries, i.e. those in group (i), is estimated approximately 243,100 men and 201,900 women.

32. In Mauritania, specific stakeholder groups include: government ministries in particular the Ministry of Fisheries and Maritime Economy (MPEM – *Ministère des Pêches et de l'Économie Maritime*), investors and employees of the regional Fish Market of Nouakchott, the research center and others.

33. In Guinea, stakeholder organizations include: the Ministry of Fisheries and Aquaculture (MPA – *Ministère de la Pêche et de l'Aquaculture*), the Maritime Prefecture, other ministries, the research center, the National Confederation of Fisheries Professionals in Guinea, the National Union of Artisanal Fishers, and the Regional Federation of Fish-culture and Forestry, among others.

### C. PDO Level Results Indicators

34. PDO-level indicators are:

- (i) Share of fisheries management data published regularly and made publicly accessible;

- (ii) Allocation of secure fishing rights in the small-scale segment in a participatory, transparent, and scientific manner;<sup>9</sup>
- (iii) Number of fishing vessels operating in the exclusive economic zones should not exceed the ceiling established for each segment;
- (iv) Share of fishing vessels inspected by the national fisheries surveillance agency for compliance with national regulations;
- (v) Share of marketable volume of fish landed at selected fish landing sites; and
- (vi) Direct project beneficiaries (of which female).

35. At the Program level, outcomes are measured using the following indicators:<sup>10</sup>

- (i) Environmental Indicator: At least 7 overexploited fish stocks show signs of recovery, as measured by an increase in total landings per unit of fishing capacity;
- (ii) Economic Indicator: Increase in annual net economic benefits to each participating country from targeted fisheries; and
- (iii) Social Indicator: Effective operation of management committees for community co-management and Territorial Use Right Fisheries (TURF) established in targeted fishing communities (%).

### **III. PROJECT DESCRIPTION**

#### **A. Project Components**

36. To achieve the PDO, the project will invest an estimated total of US\$30.05 million in Mauritania and Guinea, of which IDA will finance US\$12 million and GEF US\$7 million in Mauritania and IDA will finance US\$10 million in Guinea. All financing is provided as grants.

37. The project will have four components, with the overall composition being similar for the two countries (and consistent with all other WARFP countries). However, specific focus, and hence activities, under each component varies between the two countries because of the differences in the level of fisheries development, the nature of the industry (e.g. export orientation in Mauritania, substantial domestic fish consumption in Guinea), and existing commitments by other partners. Project activities have also evolved with the history of the WARFP reflecting the lessons learned from the implementation of the earlier SOPs. (See Annex 2 for a detailed project description.)

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<sup>9</sup> In addition to ensuring the process of fishing rights allocation to be participatory, transparent, and scientifically sound through the M&E activities, the project requires the process and outcome to be equitable in all segments. It is explicitly stated in a legal covenant, and the description of the covenant states that equitable allocation of fishing rights should ensure the inclusion of existing participants and protects the interests of vulnerable population in the fishing industry, in particular smaller players in the artisanal segment.

<sup>10</sup> Fish stocks are considered biologically overexploited on the basis of the most recent FAO stock assessment campaign. Fishing capacity is measured with respect to 1) the number of different types of fishing vessels, which is readily available in most countries and 2) other dimensions such as vessel horsepower and types of fishing gear, which will also be considered and incorporated into Program monitoring during the course of implementation. Net economic benefits = profits (i.e. net returns to owners, taking into consideration depreciation cost and cost of capital) + net transfers to Government + net returns to labor. Effective operation based on committees being representative of all stakeholder groups in the community, meeting regularly and developing a resource management plan for the fisheries under their jurisdiction.



**38. Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries (US\$1.00 million IDA and US\$6.93 million GEF in Mauritania; US\$2.47 million IDA in Guinea).** This component aims to build the capacity of the Government and stakeholders to develop and implement policies and systems that would ensure that the fish resources are used in a manner that is environmentally sustainable, socially equitable and economically profitable. The component contains four key subcomponents:

- (i) Developing the legal and operational policy and strengthening the institutional capacity to enable sustainable management of fisheries resources (long-term agenda);
- (ii) Strengthening the vessel registration systems for accurate assessment and effective control of fishing capacity (short-term agenda);
- (iii) Introducing new fisheries management schemes in target fisheries, segments, or communities to align fishing capacity and effort to sustainable catch levels, which is pursued in parallel with development and implementation of fisheries management plans (medium-term agenda); and
- (iv) Strengthening the system of fisheries-related data collection, compilation and management, and dissemination and communication in a transparent manner (long-term agenda).

**39. Component 2: Reducing Illegal, Unreported, and Unregulated (IUU) Fishing (US\$3.02 million IDA in Guinea).** This component aims to reduce IUU fishing activities that threaten the sustainable management of fish resources by strengthening fisheries Monitoring, Control and Surveillance (MCS) systems. The project will also provide legal assistance aimed at strengthening the alignment of the national fisheries legislation with the United Nations Convention on the Law of the Sea (UNCLOS), particularly Article 73, whereby any foreign vessels and crews detained in the Exclusive Economic Zone will be immediately released upon posting a reasonable bond, and the flag state of the vessel is immediately notified. Mauritania does not have this component as the fisheries surveillance program is already funded (see paragraph 45).

**40. Component 3: Increasing Contribution of the Fish Resources to the Local Economy (US\$6.87 million IDA, US\$0.07 million GEF and US\$0.3 million self-financing in Mauritania; US\$2.24 million IDA in Guinea).** This component aims to increase the benefits derived from fish caught in the EEZs of the countries in particular by investing in infrastructure and institutional capacity that enable improved handling of landed fish and reduction of post-harvest losses.

**41. Component 4: Project Management, Monitoring and Evaluation, and Regional Coordination (US\$4.13 million IDA and US\$0.75 million self-financing in Mauritania; US\$2.27 million IDA in Guinea).** This component aims to support project implementation and regional coordination<sup>11</sup> within the WARFP, ensuring that regular monitoring and evaluation is conducted and the results are fed back into decision making and project management. The component costs also include the PPA amount for Mauritania (US\$1.2 million or 6 percent of the

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<sup>11</sup> Each country contracts with CSRP through a subsidiary agreement for a set of pre-defined services including implementation support and regional coordination. The exact amounts are determined on a case by case basis and are normally around 5 percent of the project budget.

project budget). The PPA supports the project objectives as it has financed the sector strategy, the fisheries infrastructure master plan and the investment framework which will streamline project delivery.

42. The project recognizes that a governance and policy framework must be in place before any substantial investment is made in fisheries-related infrastructure. Thus, as seen in the next section, the first phase of the project focuses on fisheries management improvement at the national level and the second and third phases on regional integration and value chain development. Also, as discussed in Annex 2, the objectives and activities of components 1 and 2 are closely related. The MCS systems to be supported in component 2 are one of several tools to achieve the objective of improved fisheries governance by improving enforcement and compliance of good practice by the participants in the sector.

## **B. Project Financing**

43. **Secured Bank and GEF financing.** The project will be financed through national and regional IDA grants to Mauritania and Guinea. Drawing upon resources approved in November 2011 within the “Strategic Partnership for Sustainable Fisheries Management in the Large Marine Ecosystems in Africa,” Mauritania benefits from a GEF grant in an amount of US\$7 million.<sup>12</sup> Including the planned self-financing from Mauritania, the total cost of the project will be US\$30.05 million over 5 years. Whereas Mauritania benefits from GEF funding, Guinea has no access to GEF financing in this project.<sup>13</sup> The Guinea project, however, covers essential activities to achieve the PDO. A GEF 6 proposal will be prepared later in 2015 for several countries, including Guinea. If approved, the scope of the project in Guinea could be expanded with possible emphasis on long-term governance reform and scaling up of the work on Territorial Use Right Fisheries.

44. **Regional IDA.** The project satisfies the regional IDA access criteria. Regional benefits are summarized in paragraph 18.

45. **Additional secured parallel grant financing.** *Kreditanstalt für Wiederaufbau* (KfW) Development Bank has recently approved €14.59 million (US\$16.7 million) towards a new phase of the fisheries surveillance program in Mauritania, thus contributing directly to the objective of component 2 of the project. GIZ is also contributing in an amount of US\$2 million towards data transparency and climate change resilience nearby the Fish Market of Nouakchott (Table 2).

46. **Other potential parallel financing.** The European Investment Bank is planning to finance an additional US\$7 million towards the Fish Market of Nouakchott in Mauritania. This investment will complement the IDA investment in a coordinated manner (Table 2).<sup>14</sup>

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<sup>12</sup> The project will be allocating at least 1% of the GEF IW grants towards supporting IW:LEARN activities, for instance producing Experience Note, Results Note and establishing a homepage following the IW:LEARN guidelines. Moreover, the project will participate in regional IW:LEARN activities and International Water Conferences during the project implementation.

<sup>13</sup> By the time project preparation for Guinea started in 2014, the GEF 5 window had closed and GEF financing was not secured for Guinea.

<sup>14</sup> It is envisaged that IDA will focus on the infrastructure that serves as a platform for private sector activities, while European Investment Bank may focus on support for private sector needs.

47. In Mauritania, the WARFP Project Preparation Advance (PPA) has supported the government in developing a sector strategy and an investment framework. Both documents were prepared in a participatory and inclusive manner with sector participants and various donors in the spirit of close coordination across donors and projects.

Table 1: Financing Summary by Source (US\$ million)

Countries	National IDA	Regional IDA	GEF	Client	Total
<b>Mauritania</b>	4	8	7	1.05	20.05
<b>Guinea</b>	5	5			10.00
<b>Total</b>	9	13	7	1.05	30.05

Table 2: Additional and Potential Parallel Financing Summary by Source (US\$ million)

<b>Additional and potential parallel financing not included in budget table</b>		
Country	KfW Development Bank/GIZ	European Investment Bank
<b>Mauritania</b>	18.7	7.0

Table 3: Financing Summary by Component (US\$ million)

	<b>Mauritania</b>	<b>Guinea</b>
<b>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</b>	<b>7.93</b>	<b>2.47</b>
<i>IDA</i>	1.00	2.47
<i>GEF</i>	6.93	
<b>Component 2: Reducing Illegal, Unreported and Unregulated (IUU) Fishing</b>	<b>0.00</b>	<b>3.02</b>
<i>IDA</i>		3.02
<b>Component 3: Increasing Contribution of the Fish Resources to the Local Economy</b>	<b>7.24</b>	<b>2.24</b>
<i>IDA</i>	6.87	2.24
<i>GEF</i>	0.07	
<i>Government</i>	0.30	
<b>Component 4: Project Management, Monitoring and Evaluation, and Regional Coordination</b>	<b>4.88</b>	<b>2.27</b>
<i>IDA</i>	4.13	2.27
<i>Government</i>	0.75	
<b>Total</b>	<b>20.05</b>	<b>10.00</b>

### C. Series of Projects: Objective and Phases

48. The West Africa Regional Fisheries Program is a multi-country, multi-phase overlapping Series of Projects (SOPs, former APLs). The program encompasses (up to) nine countries. Each country receives resources after meeting the eligibility criteria for a country to join the program: identification of a series of policy reforms for improved governance of the fisheries and definition of a framework for investment to achieve these reforms (including actionable

milestones); and a minimum legal and regulatory framework for fisheries surveillance that is acceptable to the World Bank. The cumulative outcome at the end of the WARFP will be: (i) the initial recovery of the resource base on at least 7 overexploited fish stocks in the region as measured in total landings per unit of fishing capacity; (ii) increase in annual net economic benefits to each participating country in the region from the fisheries targeted by the Program; and (iii) effective operation of management committees for community co-management and TURF. Each SOP group can overlap with other regional WARFP lending (i.e. SOP-A for Cabo Verde, Liberia, Senegal and Sierra Leone; SOP-B for Guinea-Bissau and Ghana, and SOP-C for Mauritania and Guinea). Each country can receive two to three phases of support, based on progress made under the preceding phase(s), where the focus of the first phase is on fisheries management improvement at the national level and the second and third phases on regional integration and value chain development. Each phase of the program is expected to last about five years, thus, the WARFP is a long-term effort spanning about 15 years. The overall cost for the first two phases is estimated in the range of US\$ 200 million. The cost of phase 3 is difficult to estimate since it is far out in the future and depends on actual progress under the preceding phases.

49. The rationale behind this approach is that the coastal countries of West Africa are endowed with valuable and shared natural resources in the form of marine fish stocks in their EEZs, but the economic and social returns are far lower, due in large part to overexploitation and depletion of the resources by both legal and illegal operators. Moreover, the returns accrue mostly to foreign countries and fleets, because much of the fish caught is taken directly to foreign ports where further value is added and jobs are created. In other words, West Africa's fisheries today are characterized by: (i) the low capacity of countries to collaborate to sustainably manage the marine fish resources and prevent their overexploitation, particularly by illegal fishing vessels; and (ii) the foreign and offshore legal harvesting of the resources, which yields only a fraction of their value to local economies. Collaborating to overcome these challenges presents a significant opportunity for the region to sustainably increase the wealth from one of its largest sources of natural capital and provides the rationale for the Program's objective and design.

#### **D. Lessons Learned and Reflected in the Project Design**

50. The project draws on lessons learned from several national and regional projects.<sup>15</sup> These lessons include the following:

51. **Managing access to resources:** The 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 pressure for fisheries as a social safety net is strong especially in poor coastal areas, where there is little other job opportunity. For fisheries to become an instrument of economic growth and poverty alleviation, it is of critical importance that an effective management system of access to fisheries resources is

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<sup>15</sup> These include earlier projects under the West Africa Regional Fisheries Program in Cabo Verde, Guinea Bissau, Ghana, Liberia, Senegal and Sierra Leone; the Senegal Sustainable Development of Fish Resources project; the Senegal Integrated Coastal and Marine Resources Project; the South West Indian Ocean Fisheries Project; Tanzania's MACEMP and Kenya Coastal Development Project (KCDP) projects; and the Coastal Resources Management Project (COREMAP) in East Asia.

put in place.<sup>16</sup> Based on lessons learned from SOP A1, it is particularly important to implement an intermediate or transitory measure to protect existing small-scale fishers and communities to prevent the resource from further degradation until more refined management systems are in place. This will be a temporary measure until management plans by fishery or by management unit based on a sustainable level of harvest and associated fishing capacity are operational. In addition, introduction of access control to fish resources can result in reduced or denied access for certain population groups within and outside the fishing communities, when the wealth of the ocean is often considered as a national asset. The project recognizes the need for the sensitivity to the issue and encourages the clients to devise plans that describe how the benefit from fisheries will be redistributed back to the broader population.

**52. Sequencing of activities:** Without an appropriate management regime for access to resources in place, investments aimed at facilitating fish landing or value addition through fish processing could lead to further increase in fishing effort and contribute to overexploitation. While the current project staff understands well the interactions between the harvest and post-harvest sectors, full understanding for the need for appropriate sequencing of fisheries interventions will not be guaranteed when there is a change in personnel within the Ministry. The Disbursement Linked Indicator (DLI) mechanism approach outlined below will facilitate the dialogue during project implementation between the incoming new Minister, the fisheries administration, and the Bank's task team, on the required sequencing of activities to achieve desired project results.

**53. Managing all segments:** Experience from other countries shows that an access management policy, if it leaves some fishing segment unmanaged, could provide an immediate expansion opportunity for the unmanaged segment. For instance, in Senegal the artisanal segment has further expanded after the introduction of a management policy for the industrial segment. The access management systems supported by the project will cover both industrial and artisanal segments, starting with the industrial one, with the intent to reduce the time lapse in the implementation of access management in all segments.

**54. Building on prior analytical work:** The 2014 study on "Transitioning towards Inclusive Green Growth in Mauritania" highlights fisheries as being one of the key sectors to drive sustainable economic growth. A less recent World Bank report, "The Main Results and Recommendations for the Fisheries Sector" of 2008 suggests to prioritize the restoration of the overexploited octopus fisheries and the improvement of fisheries information availability. This operation directly builds on those previous studies.

**55. Securing experts for governance reform:** Beyond access management, the project aims at supporting governance reform and introduction of secure fishing tenure system to establish a sustainable fisheries management regime. The experience from other WARFP countries has shown that identifying and mobilizing the appropriate level of expertise to appropriately and adequately support fisheries governance reform processes is challenging. This is due to the facts that very few experts exist in the world that are truly knowledgeable of the peculiarities of the fisheries industry and are adequately experienced to support fisheries governance reform processes that cover strategy, policy, legal and institutional aspects, and that resources to

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<sup>16</sup> The project recognizes that issues such as food security and job creation should be properly discussed in the context of the wider economy and that to ascribe this challenge to the fisheries sector in isolation is inappropriate.

mobilize such experts are inherently limited in fisheries reform projects. To partially overcome this challenge, the CSRP will be tasked to provide required expertise to the project countries. It is also the intent that, through a series of requests received from the WARFP countries, the CSRP will identify, secure and mobilize necessary expertise and build and expand a database of qualified experts.

**56. Incentive-based approach:** While an Investment Project Financing (IPF), such as this project, can provide means and tools for the implementing agency, the challenge with this financing instrument is to ensure that such means and tools are used effectively to achieve project objectives. For instance, an IPF can finance technical assistance for governance reform, but governance reform will not be implemented, or not to a satisfactory level, unless the responsible staff willingly accepts the very concept of change and performs their duties accordingly. To overcome this challenge, and based on the recently approved Pacific Islands Regional Oceanscape Program (PROP), an incentive-based approach is suggested in this project in addition to the high level political dialogue at the Ministerial level. As mentioned above, the use of a DLI mechanism is suggested, where some disbursements will be linked to selected indicators on fisheries management and transparency. The project suggests the use of a "training-for-results" approach in conjunction with the DLI mechanism, where key civil servants that will perform services directly contributing to achieving the project objectives are among those selected to receive some specific training programs upon meeting a set of criteria of DLI indicators. (See Annex 4 for more details on the DLI mechanism.) As most African civil servants have a genuine eagerness for receiving training as a practical means of career development, the approach likely will serve as a highly effective incentive mechanism. This "training-for-results" approach has to be very carefully designed so as to ensure fairness and transparency, including the selection of participating civil servants, which needs to be conducted through a transparent and independent process (e.g. by a designated committee). The modalities will be outlined in the Project Implementation Manual.

**57. Monitoring & Evaluation:** Under previous WARFP SOPs, monitoring and evaluation has performed poorly as the result of a combination of factors: lack of availability of data; lack of strong preparation for data collection; and ultimately indicators that were either too complex and sometimes slightly too ambitious considering the circumstances. The results framework under this SOP is designed based on data that are readily available, and the Project Implementation Manual will detail data collection procedures for each indicator. Formally establishing and staffing a Monitoring and Evaluation unit and setting up a well-functioning M&E system is fundamental.

## **IV. IMPLEMENTATION**

### **A. Institutional and Implementation Arrangements**

**58. At the regional level,** the Program is coordinated and supported by a Regional Coordination Unit (RCU) that is housed at the CSRP. The RCU has provided a number of services to WARFP Countries, including: (i) access to high level expertise to support the reform process at the national level on fisheries policy, legal and regulatory as well as institutional frameworks; (ii) an independent panel of monitoring, control and surveillance experts who can

provide guidance to the Government on the implementation of component 2; (iii) linkages to a regional fishing vessel register and dashboard; (iv) exchange visits and study tours with other countries participating in the WARFP; and (v) ongoing fiduciary and monitoring and evaluation support. In SOP-C1, the CSRP will also recruit and coordinate the independent verifier of DLI achievements.

59. The CSRP receives, through a subsidiary agreement, a portion of the IDA funding to the country (usually 5 percent) as payment for the services rendered and listed above.<sup>17</sup> The RCU has sole fiduciary responsibility for the funds provided to it by the countries. The account is audited annually by independent auditors and the RCU reports to a Regional Steering Committee (RSC) comprised of Directors of Fisheries or representatives of the Departments of Fisheries from each of the participating countries. The RCU collects and transmits each participating country's annual work program, budget, update of the monitoring and evaluation indicators and procurement plan to the World Bank for no-objection. The RCU is a repository of the WARFP institutional memory, and thus it can serve, when solicited, as a unique and rich source of advice to all national Project Implementation Units (PIUs).

60. A Regional Steering Committee (RSC) is in place and the new countries will join the RSC as soon as their projects become effective. The role of the RSC is to oversee activities of the RCU, approve its annual work plan and budget and to coordinate and communicate between decision-makers in the countries. The committee meets in person at most twice per year in order to monitor Program progress, as well as to review implementation progress and measurements for key performance indicators, in order to recommend any specific adjustments needed to ensure that the Program achieves its objectives.

61. **At the national level**, the project aims to demonstrate concrete results in the early stages of implementation in each country, in order to further build national ownership of the project. The project will therefore be implemented by a national Project Implementation Unit (PIU) in each country, embedded within the responsible technical agency for fisheries. Each PIU will be fully mainstreamed into this technical agency, although fiduciary responsibilities will vary by PIU depending on the capacity of each country.

62. Each PIU comprises at minimum: (i) a Project Coordinator,<sup>18</sup> (ii) a Monitoring and Evaluation Expert, (iii) an Environmental and Social Safeguard Specialist, (iv) a Procurement Specialist, (v) an Administrative and Financial Management Specialist, and (vi) an Internal Auditor. The recruitment process of the above key staff of the PIU will be competitive and consistent with the World Bank procedures. The technical expertise will be provided locally by the fisheries specialists from the administration and the research center. In addition, the CSRP can mobilize fisheries experts either directly from the RCU or from a broader pool of experts.

63. The reporting line of the PIU will vary with the type of activity. Policy and governance activity grouped in subcomponent 1.1 will be reported directly at the Ministerial level whereas

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<sup>17</sup> It is our hope that, even after the end of the program, WARFP countries will continue to seek CSRP's advice and support routinely and in return financially support CSRP operation.

<sup>18</sup> The Coordinator should preferably have a background and necessary technical expertise in fisheries and fish resource management.

other activity will be reported to the Director of Fisheries or other persons designated by the Minister in charge of Fisheries.

64. In each country, a National Steering Committee (NSC) has been established and is comprised of relevant Government officials and local stakeholder representatives. This committee is chaired by the Secretary General or another designated person, supported by the Project Coordinator of the PIU. The NSC will convene every six months and will make decisions on the overall direction of the Program, and will be responsible for approving the annual work program and budget. The Director of Fisheries/designated person by the Minister and PIU Coordinator will be responsible for providing summaries of implementation progress and results from M&E to the Steering Committee at each meeting. The Committee will make decisions on any necessary adjustments to project implementation as a result. The Committee will also meet whenever there is an urgent issue regarding project implementation that requires their attention.

## **B. Results Monitoring and Evaluation**

65. M&E in the regional fisheries project for the two countries has been developed around the following five principles and objectives.

- (i) M&E serves as a tool for results-based management to ensure that data and information on project progress - or lack of progress - towards achievement of objectives feed into management decisions.
- (ii) M&E provides a framework for accountability of progress towards national and regional development objectives attributable to interventions and actions of the concerned institutions in the two countries and the CSRP.
- (iii) M&E serves as an approach to monitoring performance of participating countries to ensure a certain level of regional performance and contribution to regional objectives from the two countries.
- (iv) M&E provides a communication platform of project results and benefits to value chain actors including fishers, middlemen, artisanal processors, merchants, consumers and the administrators.
- (v) M&E should meet the World Bank's routine reporting requirements, i.e. the biannual progress report, Implementation Status and Results (ISR) report which is developed for each country and publicly disclosed, and data and information requirements for the mid-term review (MTR) of the project.

66. Government's capacity to lead the M&E agenda and carry out the necessary activities is often weak. An assessment of M&E capacity in the two countries is presented in Table 4 below.

Table 4: Assessment of M&E capacity. Rating scale: 1 = lowest, 5 = highest.

<b>Country</b>	<b>1. Availability of key data</b>	<b>2. Routine data collection</b>	<b>3. Quality of data</b>	<b>4. Government capacity</b>	<b>5. Use of data and information</b>
<b>Mauritania</b>	3	3	3	3	2
<b>Guinea</b>	2	2	1	2	1



67. These weaknesses have been taken into account in the design of the M&E and reflected in the selection of indicators and data sources and methodologies for data collection (Annex 1). Sources of data can vary between the two countries and data quality assurance mechanisms will be put in place with research centers in the respective countries and with the technical support from the CSRP. Baselines for some of the indicators have been established based on available information from a variety of sources (e.g. national statistics, key informants' interview, one-off field surveys by donors, etc.) and need to be verified and updated within the first year of project implementation.

68. M&E at the regional level will be undertaken by the CSRP, which will also be responsible for coordinating M&E activities in the two countries with the respective fisheries ministries and assisted by the PIUs. CSRP will also provide technical backstopping to the countries on M&E, apply the data quality assurance mechanism already in place for other WARFP countries as well as undertaking data collection on its own and encouraging cross-country learning. The regional M&E activities will: (i) generate information on progress of the project; (ii) analyze and aggregate data generated at regional, country and local levels; and (iii) document and disseminate key lessons to users and stakeholders across the two countries together with the communication function. CSRP will also be the recipient of all countries' evaluation and progress reports and will be able to share results and best practices across coastal West Africa and elsewhere. The project-level M&E will draw on and strengthen national and regional systems to monitor results and needs.

### **C. Sustainability**

69. The project will support governance reform under Subcomponent 1.1 to achieve sustainable fisheries management. Such reform will entail efforts to establish and secure sustainable financing of recurrent fisheries management activities and support for effective institutional arrangements to achieve sustainability of fish resources.

70. **Sustainable financing of recurrent fisheries management activities:** A key area of continued and recurrent resource needs after the close of the project will be associated with the continued implementation of fisheries surveillance systems and activities. For this reason, the project will support a pragmatic approach based on low-cost methods and technologies, with a minimum of recurrent costs. In addition, the project will support the Governments to develop sustainable financing mechanisms for management and surveillance operations, for example through a public expenditure review to demonstrate the economic benefits of these operations, including potential gains in the public revenues due to increased correct reporting of fishing activities. The project will also support the Governments to collaborate with other countries in the WARFP to develop a low-cost regional surveillance network that could allow pooling of scarce resources and increase the geographic coverage of surveillance activities. Lastly, 'follow-on' projects are envisaged (phase 2) to continue the transition reforms begun by this project (phase 1), which could support recurrent costs if necessary.

71. **Institutional arrangements to ensure long term sustainability:** It is generally understood and confirmed on the basis of global experiences that fisheries can only be governed and managed in an environmentally sustainable and economically profitable manner when institutional arrangements align the incentives of resource users with the overall long-term goal.

While institutional arrangements can be designed and implemented in many different ways, the activities of Subcomponent 1.3 were chosen with respect to the capacity and readiness of each country in taking the first step of a long process (beyond the project time frame) of fisheries governance reform. Neither country is likely to achieve full implementation of the fisheries governance reform by the end of the first phase. Thus there is a need to plan for another phase to achieve sustainability of project results.

## V. KEY RISKS AND MITIGATION MEASURES

Table 5: Systematic Operation Risk-rating Tool (SORT)

Risk Categories	Rating (H, S, M or L)
1. Political and governance	S
2. Macroeconomic	M
3. Sector strategies and policies	S
4. Technical design of project or program	M
5. Institutional capacity for implementation and sustainability	H
6. Fiduciary	H
7. Environment and social	M
8. Stakeholders	S
9. Other: Adequacy of technical implementation and supervision support	S
Overall	S

72. PDO: to strengthen governance and management of targeted fisheries and improve handling of landed catch at selected sites.

73. The overall risk rating for this project (both Mauritania and Guinea) is substantial, based on gaps in the national systems and frameworks to enforce existing or future laws, and weak enforcement and possible interference driven by vested interests. In Guinea, the Ebola outbreak is affecting all levels of political, economic and social activity. There are inevitable repercussions on the project in terms of delays due to the lack of access to project sites and the need to focus resources and attention to dealing with the crisis.

74. Political and governance: This risk is rated substantial due to the following factors: In **Mauritania**, the operation may be perceived as a threat to vested interests, which could resist change and affect decisions at high levels of government. This risk may be mitigated through several actions including (a) as an activity in subcomponent 1.1, support to a "consultative committee," a transparent and participatory forum where stakeholder representatives exchange constructive opinions to inform policy decision making; (b) support to an industry association that will monitor project implementation from the beneficiaries' perspective, in particular to ensure the concerns of vulnerable populations are represented; (c) required consideration of equity in the fishing rights allocation process as stated in a legal covenant; (d) the M&E process will also monitor the process of rights allocation to be participatory, transparent, and scientifically based; and (e) encouraging transparency of the fisheries sector, which in part will be achieved by incorporation of the fisheries industry in the Extractive Industries Transparency Initiative (EITI), an activity of subcomponent 1.4. **Guinea** has a past record of political instability, because of which the country remains vulnerable. The President has been very supportive of the project but that support could be taken over by priorities shifting towards the Ebola crisis. While this is a risk generally beyond the control of the project, by maintaining close and high-level dialogue with Guinea's partners, such as the EU, the momentum for policy reform could be maintained.

75. Sector strategies and policies: This risk is rated substantial since a key element of short term reforms, namely control over the fishing capacity, is not explicit in the sector strategies<sup>19</sup> of both countries. Therefore, technical assistance for capacity building provided by this project (subcomponent 1.2) may not be met with effective enforcement due to lack of will on the part of the recipients. As a mitigation measure, the team proposes to incorporate an incentive-based approach in the project design, namely the use of the DLI mechanism in conjunction with direct motivation of key personnel by allowing them to receive career-development training upon achievement of high performance. Another area of potential risk is the sometimes *ad hoc* nature of investments made both by the recipient countries and by donors, thereby compromising proper sequencing of interventions (e.g. installation of fish processing plants before fish resource management plans are in place may lead to excessive pressure for fish harvesting). Risk mitigation efforts have included and will continue to include close and frequent dialogue with counterparts during project preparation and implementation to ensure that appropriate measures are taken to coordinate sequencing and prioritization of interventions.

76. Institutional capacity for implementation and sustainability: This risk is rated high. In **Mauritania** the main risks are: (a) resistance of the administration to devolve some of the fisheries management to other stakeholders; and (b) lack of coordination between agencies. Risk mitigation measures include (i) an incentive-based approach incorporated in the project design as outlined above, (ii) financing of the fisheries stakeholder consultative committee mentioned above to institutionalize adequate consultation in the implementation of the octopus management plan and (iii) an inter-agency committee and a multi-agency steering committee built into the project design. In **Guinea** the PIU selection process is yet to be completed. Major risks are: (a) lack of cooperation between key agencies; and (b) institutional weaknesses, particularly lack of understanding and vision for the fisheries sector. The fact that there is a champion (the Secretary General of the Ministry of Fisheries and Aquaculture) will be a major risk mitigating factor. He will be a member of the steering committee and the head of the monitoring committee, and he will be instrumental in gearing the project into the right direction. However, the vision shared with the Secretary General needs to be understood by other players and stakeholders as well. A Joint Maritime Committee is also in place, but it needs to be strengthened.

77. The Regional Coordination Unit at the Sub-Regional Fisheries Commission will play an important role in further mitigating the risks from weak implementation capacity in both countries. Timely provision of guidance and support by CSRP in various aspects of project implementation is embedded in the project through subsidiary agreements. The CSRP team has been operational since 2009, providing guidance and technical support to the earlier WARFP countries. The CSRP team has accumulated profound knowledge of World Bank procedures including fiduciary and M&E processes as well as technical expertise of fisheries management in West Africa. As in the other six WARFP countries, the CSRP team will make regular trips to the project sites to closely monitor the progress of the project.

78. Fiduciary: Fiduciary risk is rated high since procurement risk is high in both countries. The details concerning the risks and mitigation measures are discussed in Annex 3. Again, CSRP will provide technical assistance in fiduciary management.

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<sup>19</sup> Guinea has outlined a broad strategic plan for implementing a new fisheries strategy, while Mauritania is in the process of revising the previous strategy document into a more comprehensive industry-wide strategy. The management of the fishing capacity would be easier to incorporate in Mauritania's sector strategy since it is still in a draft form.

79. Stakeholders: This risk is rated substantial for Mauritania, since donors are not fully coordinated and such initiatives could be supported that may be detrimental to the objectives of this project, such as those that could lead to higher fishing effort. As a mitigation measure, the Bank has been working with the Government and donors to prepare an investment framework to coordinate the views and messages amongst the bilateral and multilateral donors. In Guinea, only a few donors are active in the fisheries sector, and it is unlikely for this kind of risk to affect project performance. In addition, Mauritania faces difficulties in allocating fishing rights to various actors in view of vested interests and important economic issues in the octopus industry. The process of fishing rights allocation could also alienate vulnerable population groups, including small-scale commercial fishers and those that depend on fish resources for food security, routinely or in emergency situations. As a mitigation measure, the project has planned to set up a Feedback and Grievance Redress Mechanisms as described in Annex 3. As mentioned under the political and governance risk, the project will support an industry association that will monitor project implementation from the beneficiaries' perspective, in particular to protect vulnerable population from improper exclusion from their fishing grounds coerced by elite and other interests. In addition, a legal covenant is proposed whereby the allocation of fishing rights in the octopus industry should be done in an equitable manner. In Guinea, as fishing rights allocation is not envisaged at this point, this kind of risk is not expected. However, surveillance activities in the artisanal segment to be supported by the project will mitigate the risk of improper exclusion of vulnerable populations from their fishing grounds coerced by elite and other interests. Finally, in neither country, the project will finance active reduction of fishing capacity; the project will support non-increase of fishing capacity and thus exclusion of existing fishers from fishing grounds due to the project will not be an issue.

80. Adequacy of technical implementation and supervision support: Carrying out the activities of this project for meaningful results will demand close and substantial engagement of fisheries experts in implementation and supervision. Lack of resource to mobilize experts, both within the Bank (e.g. PROFISH staff) and outside consultants, in the implementation phase represents a serious risk to the quality of delivery. To address this risk, the project will try to ensure the mobilization of at least two fisheries experts so that there is always a back-up and continuity. The team will seek resources to secure adequate implementation support. Furthermore, the team will draw from the network across the regions on who could provide "cross-support." Lastly, this project will also secure expertise through the CSRP to provide technical assistance as needed.

## **VI. APPRAISAL SUMMARY**

### **A. Economic and Financial Analysis**

81. Although it is not generally well understood, improving the management of marine resources can substantially contribute to the economy of coastal nations. Much of the fish resources around the world have deteriorated through intensive fishing activities of the past decades. Lack of management and virtually open access regime observed in the management of marine resources in many developing coastal nations are a serious cause of allowing resource degradation as well as depletion of the opportunity to sustainably extract benefit or rent from the resources they are endowed with. If fisheries management reform packages, such as envisaged in this project, were appropriately and effectively applied around the globe, the world economy

would benefit from the sustainable wealth of the oceans. World Bank (2009) estimated that at the global level, gains from such reforms would be in the order of US\$50-100 billion *annually*. The project's intended development impact is clear.

82. However, the scale and effectiveness of such activities intended to improve the management of global fisheries have been limited due to limitations in the resources allocated to achieve this ambitious objective. It is envisaged that, once the conditions are met, the private sector would play a leading role in making the industries surrounding marine resources sustainably profitable, contributing to the national and global economy. However, in the initial phase of transition from unmanaged, open-access regime to an environment with proper management system in place, the public sector must commit decisive and responsible involvement. Thus, strong, long-term support must be provided to the committed public sector actors responsible for the management of marine resources of coastal nations. And the World Bank is in a unique and ideal position for providing such support, implicitly and explicitly coordinating across programs of bilateral donors and leveraging much-needed additional resources.

83. An economic and financial analysis of the project was conducted to evaluate the expected benefit mainly of the activities in Component 1 in both countries using quantitative bioeconomic models developed for the analysis. In both countries, 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. The 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 imply lower fishing costs; cost reduction was also estimated based on available information. The simulated catch levels are then used to calculate expected fishing revenue, from which, combined with estimated fishing cost, we obtained expected net revenue from fishing.

84. The exercise was applied to the octopus fishery in Mauritania, while it was applied 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 and US\$23.3 million in Guinea. Although Mauritania's result is subject to potential overestimation due to restrictive model assumptions and lack of reliable cost data, the analysis does not incorporate potential benefit from other fisheries or other project components, which likely contributes to underestimation. Underestimation is also suspected for Guinea because the potential benefits from other project components are not included in the estimates. Therefore, overall, the benefit from this project likely far exceeds the project cost. In combination with other activities in Component 1, in particular targeted for improvement of catch reporting and tax collection systems, higher fish revenue due to project interventions likely will lead to higher fiscal revenues in both countries. See Annex 6 for the complete analysis.

## **B. Technical**

85. The technical design and approach selected for this project, namely improvement of the management of marine resources through fisheries governance reform, is consistent with the recognition and understanding of the international fisheries management community and is strongly advocated in a series of World Bank publications by PROFISH. As stated in the

"Economic and Financial Analysis" section, at the global level, improving the management of marine resources is estimated to result in an increase of sustainable resource rents by US\$50-100 billion *annually*.

86. Such "sunken billions" could be recovered most rapidly with drastic and extreme reforms that pursue pure economic efficiency and rapid recovery of overexploited stocks. However, given the increasing international knowledge and lessons learned from past Bank projects, the approach taken in this project, and in other World Bank fisheries projects, takes into consideration the specificities of developing country fisheries as well as country-specific concerns. For example, fishing right schemes that are effective in developed countries (e.g. individual transferable quotas) would not be effective or practical in a situation where institutional capacity or physical infrastructure for implementing such scheme is lacking. Processes and outcomes of fisheries reform also need to be socially acceptable, in order for the benefits to be socially sustainable. From these perspectives, the following decisions regarding project design were made. In Mauritania, individual quotas in the octopus fishery will not be transferable at least during the first 10 years in order to prevent excessive consolidation of fishing rights into a few operators, which could threaten social sustainability of the scheme. In Guinea, where the fisheries management system is less developed, the goal is much more modest – the first step objective is non-increase of the fishing capacity and overall fishing effort, by strengthening the vessel and boat registration systems. In both countries, transitory protection of small-scale fisheries from introduction of new fisheries tenure systems will be a maintained priority of the Program.

### **C. Financial Management**

87. The project will employ a DLI mechanism using a subset of performance indicators in the results framework, including PDO level indicators #1 and 3, as those linked to disbursements. This innovative approach builds on lessons from a similar fisheries project in the Pacific region, and from application of such indicators in the education and health sectors in the West Africa Sub-Region. The disbursement arrangements have been designed accordingly, and the implementation support during the implementation phase will ensure that the performance is maintained so that disbursements will be made as smoothly as possible.

88. Financial Management (FM) assessments were conducted on the FM arrangements for the SOP-C1 of WARFP in Mauritania and Guinea. The objective of the assessments was to determine whether the Mauritanian MPEM and the Guinean MPA, the implementing agencies of the Project, have acceptable FM arrangements in place that satisfy the Bank's Operation Policy/Bank Procedure (OP/BP) 10.00.

89. The assessments concluded that the **Mauritanian** MPEM's existing FM system can adequately handle the FM tasks of this project: the MPEM has appointed a financial management officer and an accountant and the accounting software is installed. However, the FM system has a weak internal control environment that needs to be strengthened. **In Guinea**, the MPA has limited experience with Bank-financed operations and the FM arrangements in place that were used for previous donor-financed operations are not adequate to carry out the FM operations of this project with regards mainly to staffing, information system, internal control and reporting.

90. As a result, in addition to the recruitment of internal and external auditors for both implementing units to reinforce internal control systems, the following measures will be implemented:

- (a) **In Mauritania**, the FM manual should be revised in order to take into account the DLI mechanism. Therefore, before the project becomes effective, the MPEM should finalize the manual of administrative and accounting procedures, which is a part of the larger Project Implementation Manual.
- (b) **In Guinea**
  - a. Before the project becomes effective, the MPA will (i) competitively recruit an Administrative and Financial Management Officer with strong accounting skills and (ii) elaborate an acceptable draft of FM procedures for the project, as part of the project implementation manual; and
  - b. As additional dated covenants, the PIU will be reinforced with a competitively recruited accountant and an accounting software will be set up including provision of necessary trainings to the FM team.

91. For capacity building purposes within the Ministry with regards to Bank-financed operations, the Guinean MPA could consider adding additional accountant(s), preferably civil servants from the Finance Department, to assist the FM team and acquire experience in managing Bank-funded operations.

92. The conclusion of the assessment is that the FM arrangements in place in Mauritania and the proposed arrangements in Guinea meet IDA's minimum requirements under OP/BP10.00, and therefore are adequate to provide, with reasonable assurance, accurate and timely information on the status of the project as required by IDA. With the implementation of the FM action plan, the FM arrangements for both projects will be further strengthened. The overall Financial Management residual risk rating of the project is Moderate for Mauritania and Substantial for Guinea.

93. Details on the financial management and disbursement arrangements for this project are included under Annex 3.

#### **D. Procurement**

94. Procurement under the project will be carried out in accordance with the World Bank's (i) "*Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*" dated January 2011, revised in July 2014, (ii) "*Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*" dated January 2011, revised in July 2014, and (iii) "*Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants*", dated October 15, 2006, as revised in January 2011, as well as the provisions stipulated in the Financing Agreement.



## **Mauritania**

95. An assessment of the procurement arrangements was conducted for the Mauritania project under the WARFP. The objective of the assessment was to determine whether the Mauritanian MPEM, the recipient and the implementing agency, has acceptable procurement capacity and arrangements in place that satisfy the Bank's Operation Policy and Procurement Procedures. These arrangements would ensure that the implementing entity: (i) uses project funds only for the intended purposes in an efficient and economical way in compliance with the project's objectives and the Bank's requirements for procurement procedures; and (ii) prepares, carries out and implements the procurement activities in an accurate and timely manner.

96. The assessment reviewed the organizational structure of the project implementing agency and the interaction between staff responsible for procurement and other relevant technical units of other entities that will be the beneficiaries of project activities. The initial lack of experience of the MPEM in IDA-specific procurement procedures has been compensated by the appointment of a procurement specialist who has gained extensive implementation experience in Bank procedures with the IDA-funded Business Environment and Enterprise Performance project (BEEP). The first draft of the Procurement manual was submitted in 2014 to the Bank for review. The assessment indicated gaps and weaknesses at the MPEM level. The overall procurement risk is rated High.

## **Guinea**

97. In Guinea the Bank conducted an assessment of the procurement capacity of the Ministry of Fisheries and Aquaculture (MPA) in September 2014 in accordance with the Bank's Procurement Risk Assessment and Management System. The assessment reviewed the organizational structure for implementing the project taking into account the regional program context, and a number of actors and stakeholders. The assessment identified that the Ministry of Fisheries and Aquaculture is not familiar with the IDA procurement procedures and it has identified a number of critical areas which have potential risk.

98. The potential risks identified are: (i) a large number of actors; (ii) the need to put in place a National Project Implementation Unit which includes one Procurement Officer who is familiar with Bank procurement procedures; and (iii) the need for an implementation manual which includes the procurement procedures for the project. Based on the assessment of the system in place, the overall project risk for procurement is High. It may be lowered to Substantial once the mitigation measures are implemented.

99. The detailed procurement risk mitigation measures are presented in Annex 3.

### **E. Environmental and Social (including safeguards)**

100. **Overall, the project is expected to have a positive environmental and social impact** as it aims to implement a process that empowers communities to co-manage the fisheries more sustainably and to help restore the fish stocks where needed. Activities are designed to help implement policies and institutional frameworks for fisheries resource management and to

enhance the livelihoods of poor fishing communities as a result. However, potential negative impacts on the environment could result from investments in the construction or rehabilitation of small to medium scale infrastructure (e.g., sanitation works and wastewater treatment in Mauritania; construction of a fish landing site in Guinea). These potential negative impacts are deemed to be of moderate to small scale, site-specific and can be either easily mitigated or eliminated. There are no foreseen potentially significant or irreversible impacts. Accordingly, the project is classified as Category B (partial assessment) for Environmental Assessment (EA) purposes.

101. The project triggers four environmental safeguard policies: OP/BP 4.01 Environmental Assessment, OP/BP 4.04 Natural Habitats, OP/BP 4.11 Physical Cultural Resources and OP/BP 4.12 Involuntary Resettlement. In addition, OP 10.00, paragraph 12 related to *Projects in Situations of Urgent Need of Assistance or Capacity Constraints* applies to Guinea.

## **Mauritania**

102. In Mauritania, civil works will be limited to one site, the Fish Market of Nouakchott (*Marché aux Poissons de Nouakchott – MPN*). A socio-economic study was completed during the project preparation phase, which included an analysis of various potential impacts associated with the rehabilitation works of the fish market. The positive social impacts of the project will likely be more important than the negative ones. Important positive social impacts identified are: (i) improving the quality of life of local residents and users of the fish markets; (ii) job creation for local population groups including women and young people, in particular; (iii) improved fisher working conditions and accessibility to the market; (iv) increase in local demand for food, beverages, consumer products and manufactured food, housing and transportation in the project area; (v) improved fish preservation and disposal on the premises; (vi) improved production and marketing of fishery products; (vii) development of ecotourism; and (viii) improved conditions for female workers at fish processing plants. The project will contribute to reducing poverty and improving the environment and living conditions of the population, particularly women.

103. The rehabilitation of the Fish Market of Nouakchott will include land acquisition to consolidate the fish market site; fencing the whole perimeter of the site for security purposes; road construction and sanitation works including a wastewater treatment plant; and construction of warehouses and administrative buildings. The construction of these facilities will require mobilization of heavy equipment, which will limit the access of the population to the north part of the site and will require temporary land acquisition during construction. The potential impacts of these activities will not only affect the local population, but also the users of the fish market in terms of restriction of access to certain fishing sites during a certain period of time as well as loss of shelter and enclosures due to the construction works. The rehabilitation work of the fish market will require land acquisition, but the needs for displacing population under the project would be limited.

104. During the preparation phase, the MPEM prepared an inclusive and participatory Resettlement Action Plan (RAP) in compliance with the OP 4.12 policy. Extensive consultations were organized with various stakeholders involved. The outcomes from such meetings have been taken into account in the project design and have helped MPEM to initiate a consultation

with existing professional associations. The RAP concluded that the overall social impact of the project is positive though some adverse impacts must be considered during the construction of the infrastructure. A provision will be made by the government for compensating those whose land may be acquired.

105. On the environmental side, the project will have localized potential negative impacts from infrastructure rehabilitation, upgrading, or construction, which may include air, soil and water pollution, noise pollution, increase in STI and HIV/AIDS and safety concerns (accidents on the work camps; traffic accidents), poor management of construction waste, and damage to the landscape integrity of the current site. The project will also finance enhancement measures to the area directly south of the MPN. The area consists of a fragile dune ridge, 3.5 km long, undergoing rehabilitation through a coastal cities adaptation to climate change project financed by the Ministry of Environment and GIZ.

106. The Government has prepared an Environmental and Social Impact Assessment (ESIA) and a RAP. The ESIA was consulted upon, validated by the Bank and subsequently disclosed in-country (12/08/14) and at the InfoShop (12/04/14). The RAP was consulted upon, validated by the Bank and subsequently disclosed in-country (12/08/14) and at the InfoShop (12/04/14).

107. In addition to the rehabilitation of the Fish Market of Nouakchott, activities in component 1, in particular subcomponent 1.3 "introducing new fisheries management schemes" could also trigger social concerns. This subcomponent involves allocation of fishing rights to individuals and other entities, and potential conflicts and disputes may arise in the process. In order to address the need for handling and responding to such potential social concerns, the WARFP will implement a Feedback and Grievance Redress Mechanism (FGRM) for some activities under components 1 and 3 (see also paragraph 60, Annex 3, and section VII, Annex 8). An FGRM is a locally based, formalized way to accept, assess, and resolve community feedback or complaints. It should offer communities an accessible point to file feedback and complaints and obtain a response under a predictable process and timeline. To help manage the operational risk, an FGRM can be an effective tool for early identification, assessment, and resolution of complaints on projects. It will give voice to the affected and marginalized persons and build greater trust and mutual respect between beneficiaries and WARFP authorities. A series of discussions took place during the appraisal mission in December 2014 on how the mechanism will be set up. Although the FGRM is not in place yet, the Bank has experience with the FGRM in forestry projects and will apply the model here.

## **Guinea**

108. Recognizing the public health crisis that Guinea currently faces due to the severe Ebola outbreak and the related need to provide immediate assistance in an environment with exacerbated capacity constraints, while at the same time ensuring due diligence in managing potential environmental and social risks, an Environmental and Social Screening Assessment Framework (ESSAF) was prepared (Annex 8).

109. The ESSAF is consistent with Bank operational policies and procedures, investment operations subject to paragraph 12 of OP/BP 10.00, (Projects in situations of Urgent Need of

Assistance or Capacity Constraints) and the guidance note for crises and emergency operations with regard to the application of Bank safeguard and disclosure policies. The ESSAF provides general policies, guidelines, codes of practice and procedures to be integrated into the WARFP implementation in Guinea. The Framework has been developed to ensure compliance with the World Bank's safeguards policies during the implementation of the project.

110. In Guinea, a potential investment concept has been identified in Koukoudé village in the prefecture of Boffa. Although the government has significantly narrowed down the target area, the selection has not been finalized, as the Ebola outbreak has prevented further field visits/studies. The investment will involve construction of artisanal fish landing handling facilities. The proposed investment includes: (a) landing platform with access ramps; (b) a basic platform on which the private sector may invest in a fish processing plant or unit, warehouse to store and repair equipment, and cold room; (c) administrative offices; (d) sanitation works; (e) auction hall; (f) first aid room; and (g) latrines. However, because the technical team has not been able to visit the exact site to confirm the proposal made by Guinea, the government will begin by preparing an Environmental and Social Management Framework (ESMF) during implementation, which will be consulted upon, validated by the Bank and disclosed in-country and at the InfoShop within 4 months of project effectiveness. The ESMF will guide the preparation of an Environmental and Social Impact Assessment (ESIA) once a site is chosen and the team has had an opportunity to visit the site. No civil works shall commence until the ESIA is prepared, consulted, finalized and disclosed in a manner satisfactory to the Bank.

111. The construction project could cause potential negative social impacts on the local communities, though the impacts are expected to be small, site-specific, and easily mitigated. No irreversible negative impacts are anticipated. However, the Ebola outbreak has prevented field visits, and site selection or determination of precise social impacts has not been possible. The project may finance the acquisition of land to facilitate the expansion of a fish landing site and associated fish handling facilities. The government will prepare a Resettlement Policy Framework (RPF) during implementation, which will be consulted upon, validated by the Bank and disclosed in-country and at the InfoShop within 4 months of project effectiveness. The RPF will guide the preparation of a Resettlement Action Plan (RAP) once a site is chosen for the artisanal fish landing platform. No civil works shall commence until the RAP is prepared, consulted, finalized and disclosed in a manner satisfactory to the Association.

112. Some consultations have been organized and more consultations are planned with stakeholders including: the MPA, the *Préfecture Maritime*, other ministries, the research center, the National Confederation of Fisheries Professionals in Guinea, the National Union of Artisanal Fishers, the Regional Federation of Fish-culture and Forestry, and the Guinean Office of Environmental Studies.

113. **Clients' Responsibilities Regarding the United Nations Convention on the Law of the Sea (UNCLOS).** The World Bank's OP 4.01 addresses project activities and their relation to international treaties and agreements. In order to be eligible for Bank financing for fisheries enforcement, the fisheries legislation of a country should be compatible with UNCLOS particularly Article 73, whereby any foreign vessels and crews detained in the Exclusive Economic Zone will be immediately released upon posting a reasonable bond, and the flag state

of the vessel is immediately notified. Both Guinea and Mauritania have signed and ratified UNCLOS, and as part of project preparation, the Bank undertook a review of their fisheries legislation. The review of Guinean laws confirmed that the legislation is mostly aligned with UNCLOS and in particular its Article 73. Support will be provided under Component 2 of the project to ensure full alignment during project implementation. While the project will not finance any monitoring, control or surveillance activities in Mauritania, the Government of Mauritania informed the Bank on the measures that it will take to ensure compliance of its fisheries legal framework with UNCLOS.

114. Annex 3 presents details of the institutional arrangements for safeguards implementation in each country.

#### **F. Other Safeguards Policies Triggered**

115. The Program is not investing in marine fish resources in shared or disputed waters, so the safeguards policies OP 7.50 Projects in International Waterways and OP 7.60 Projects in Disputed Areas are not triggered.

**Annex 1: Results Framework and Monitoring**  
**MAURITANIA AND GUINEA**  
**West Africa Regional Fisheries Program SOP-C1**

**Project Development Objective (PDO):** to strengthen governance and management of targeted fisheries and improve handling of landed catch at selected sites

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>PDO Indicator 1:</b> Share of fisheries management data published regularly and made publicly accessible (disaggregated by country)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	%	GN: 0  MR: 0	16 (1 var) 16 (1 var)	33 (2 var) 33 (2 var)	50 (3 var) 50 (3 var)	66 (4 var) 66 (4 var)	83 (5 var) 83 (5 var)	Annual	<u>Data sources:</u> <ul style="list-style-type: none"> <li>• List with defined data and information and frequency</li> <li>• Direct observation on websites</li> <li>• National Daily newspaper of general circulation</li> <li>• Statistic reports of ONP<sup>20</sup> (GN)</li> <li>• Review of data quality assurance reports</li> </ul> Triangulation with monthly accounts with National Revenue Authority (Ministry of Finance)  Protocol of results verification and independent validation of DLI achievement by third party.	Ministries of fisheries  Ministries of finance (budget and treasury departments)	DLI for all years.  Value is calculated annually.  This indicator measures governance improvement with respect to transparency.  Six variables will be tracked (MR): <ul style="list-style-type: none"> <li>• list of valid fishing licenses from all segments (monthly)</li> <li>• list of infractions in artisanal and coastal segments (annually)</li> <li>• list of infractions in industrial segment (monthly)</li> <li>• fees from licenses (every trimester)</li> </ul>

<sup>20</sup> Direction Générale de l'Observatoire National des Pêches

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
											<u>Methodology:</u> Calculation by division of number of accessible fisheries management variables in annual equivalent <sup>21</sup> by defined total number of variables (6) x 100		<ul style="list-style-type: none"> <li>• fees collected under fishing agreements (annually)</li> <li>• fees from infractions (annually)</li> </ul> Six variables will be tracked (GN): <ul style="list-style-type: none"> <li>• list of valid vessel licenses in industrial segment (monthly)</li> <li>• list of artisanal fishing boats (annually)</li> <li>• list of infractions in industrial segment (monthly)</li> <li>• fees from licenses (every trimester)</li> <li>• fees collected under fishing agreements (annually)</li> <li>• fees from infractions (annually)</li> </ul>
											<u>Methodology:</u> Calculation by division of number of accessible fisheries management variables in annual equivalent <sup>22</sup> by defined total number of variables (6) x 100		Publicly accessible in Ministry of Fisheries and/or daily newspaper

<sup>21</sup> For example, each monthly data will be recorded by 1/12. If this variable is published monthly during the year, its value will be 1. If this variable is published regularly for 6 months, its value will be 0.5.

<sup>22</sup> For example, each monthly data will be recorded by 1/12. If this variable is published monthly during the year, its value will be 1. If this variable is published regularly for 6 months, its value will be 0.5.

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>PDO Indicator 2:</b> Allocation of secure fishing rights in the small-scale segment in a participatory, transparent, and scientific manner.	<input type="checkbox"/>	<input type="checkbox"/>	Score	GN: n/a MR: 0	n/a 0	n/a 0	n/a 0	n/a 2	n/a 3	Annual	<u>Data sources:</u> <ul style="list-style-type: none"> <li>• IMROP<sup>23</sup>, SMCP<sup>24</sup> and Ministry of Fisheries and Maritime Economy (MR)</li> <li>• List of specialized licenses allocated in the octopus fishery (MR)</li> </ul> <u>Methodology:</u> <ul style="list-style-type: none"> <li>• Review of fishing rights allocation process in the octopus fishery (MR)</li> <li>• Value is 0 if no allocation or allocated in non-participatory, non-transparent, and non-scientific manner.</li> </ul>	Ministries of Fisheries	Value is calculated annually.  Mauritania: <ul style="list-style-type: none"> <li>• Secure fishing rights envisaged in the artisanal and coastal segments are specialized individual licenses.</li> <li>• This is one of the last steps in the implementation of the octopus plan after the percentage distribution of the TAC across segments.</li> </ul>

<sup>23</sup> Institut Mauritanien de Recherches Océanographiques et des Pêche.

<sup>24</sup> Société Mauritanienne de Commercialisation de Poisson.



PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
											<ul style="list-style-type: none"> <li>One point is added for each qualifier: one point for participatory allocation; additional one point for transparent allocation; and one point for scientific allocation. The maximum score is 3.</li> </ul>		<p>Transparent: Publication of allocation criteria and data based on which fishing rights will be allocated (catches, etc.)</p> <p>Participatory: Publication of results of consultations that include a large number of players and vulnerable populations leading to the distribution of individual fishing rights</p> <p>Scientific: The allocation should not exceed the TAC (quantity that can be sustainably harvested) taking into account the allocation to the industrial segment. The allocation must also be based on octopus habitat and population growth rate.</p>

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>PDO Indicator 3:</b> Number of fishing vessels operating in the exclusive economic zones should not exceed the ceiling established for each segment (disaggregated by country and by segment)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes/ No	Ceiling: GN: Artisanal 10,000 Industrial 85 MR: Artisanal 7,661 Coastal 261 Industrial 245	Yes	Yes	Yes	Yes	Yes	Annual	<u>Data sources:</u> <ul style="list-style-type: none"> <li>Estimation of the number of fishing vessels based on data from surveillance systems (patrol and vessel monitoring)</li> <li>Central fishing vessel registry by Ministry of Fisheries</li> </ul> <p>Protocol of results verification and independent validation of DLI achievement by third party.</p> <u>Methodology:</u> <ul style="list-style-type: none"> <li>Number of vessels compared against the ceiling value.</li> <li>See notes for different methodological approaches for each segment.</li> </ul>	Ministries of Fisheries	<p>DLI for all years.</p> <p>This is a proxy measure of fishing capacity with the idea that the number of vessels should not increase to curb the trend of resource degradation.</p> <p>The number of fishing vessels includes foreign vessels.</p> <p>In the industrial segment, the number of vessel is measured with reference to the number of fishing licenses in annual equivalence.</p> <p>MR: the indicator for artisanal and coastal segments will be calculated based on the number of registered boats to include unknown dormant capacity.</p>

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
													GN: in the artisanal segment, measurement of the number of vessels will be based on the census in year 1; on the basis of the census update in years 2 and 3 and then on the basis the number of registered vessels in years 4 and 5.
<b>PDO Indicator 4:</b> Share of fishing vessels inspected by the national fisheries surveillance agency for compliance with national regulations	<input type="checkbox"/>	<input type="checkbox"/>	%	GN: National and foreign industrial fleet 25 MR: n/a	45 n/a	50 n/a	60 n/a	70 n/a	80 n/a	Annual	<u>Data sources:</u> <ul style="list-style-type: none"> <li>Review of inspection reports</li> <li>Estimate of the number of all fishing vessels</li> </ul> <u>Methodology:</u> <ul style="list-style-type: none"> <li>Calculation by division of total of fishing vessels inspected by estimated total number of fishing vessels.</li> <li>Cumulatively over time, without counting same vessels inspected multiple times.</li> </ul>	Ministries of Fisheries	Value is calculated cumulatively.  In Guinea, the national supervisory agency is <i>Centre National de Surveillance et de Protection de la Pêche</i> .  This indicator only concerns the industrial segment. However, IR indicator 2.3 was specifically added for artisanal segment.

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>PDO Indicator 5:</b> Share of marketable volume of fish landed at selected fish landing sites (disaggregated by country)	<input type="checkbox"/>	<input type="checkbox"/>	Ratio	GN: 0 MR: 0	0 70	0 70	0 70	50 80	70 90	Annual	<u>Data sources:</u> <ul style="list-style-type: none"> <li>• Direct measurement</li> <li>• Sales report from auction hall</li> <li>• Statistics Unit of Ministry of Fisheries</li> </ul> <u>Methodology:</u> Marketable volume divided by total landed volume at selected fish landing sites	Ministries of Fisheries	Value is calculated annually.  Calculated in equivalent weight at landing.  Start point: landing End point: auction hall  <u>Marketable fish:</u> <ul style="list-style-type: none"> <li>• MR: marketable for direct human consumption</li> <li>• GN: marketable for all consumption</li> </ul>

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>PDO Indicator 6:</b> Direct project beneficiaries (of which female) (disaggregated by country)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	# (%)	GN: 0 (0)  MR: 0 (0)	300 (66)	500 (66)	2,500 (66)	70,000 (66)	190K (66)	Annual	<u>Data sources:</u> Project records on activities  <u>MR:</u> Attendance record of meetings organized for strengthening the management and governance of fisheries (PV du CCNADPM <sup>25</sup> , working group of IMROP, etc.)  <u>Methodology:</u> Count of beneficiaries	Ministries of Fisheries	Value is calculated annually. <sup>26</sup>
<b>Intermediate results</b>													
<b>Component 1:</b> improved capacity in governance and management of targeted fisheries													

<sup>25</sup> Official report of CCNADPM, where CCNADPM stands for *Conseil Consultatif National pour l'Aménagement et le développement des Pêcheries en Mauritanie*.

<sup>26</sup> **Mauritania:** The project's Component 1 aims to strengthen good governance and management of the fisheries sector, and many stakeholders will benefit from this reform. The 8,100 boats operate on average with 20 to 30 crew (low estimate), which makes 243,000 people in all segments (artisanal, coastal and industrial). The reforms will also benefit investors and incumbents in Nouakchott and Nouadhibou, where 94 companies on average employ 20 people per plant, a total of 1,880 people (of which 40% women). The project implementation will also improve the living conditions of the consumers of fish. The investments to be made will allow better handling of landings and therefore the amount and quality of fishery products will be improved (less rejection) for the benefit of users and consumers of fish. The fish supply on the markets will be improved and improved household purchasing power is expected at the end of the project. The direct beneficiaries of the project at the MPN are estimated at 10,000 including 2,500 women. The number of direct beneficiaries throughout the project life is estimated around 255,000 people, with more than 70,000 women beneficiaries.

**Guinea:** The project will directly benefit more than 50,000 people in the industrial segment. In the artisanal segment, the total number of beneficiaries is estimated at 41,600 fishers. It is also estimated that there exist 750 shipwrights, 350 outboard mechanics and nearly 12,000 women involved in drying and smoking of fish products. In addition, assuming each fisherman is associated with woman wholesaler and processor, the number of jobs held by women can be estimated at 83,000. Overall, the total number of direct beneficiaries is estimated at about 150 000 people in the artisanal segment. Thus, for both artisanal and industrial segments, the total number of direct beneficiaries is estimated at 190,000 people, including 125,000 women or 65.79% of the workforce.

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>IR Indicator 1.1:</b> Reliable fisheries management data regularly available (disaggregated by country)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#	GN: 0 MR: 5	1 6	2 7	3 10	4 12	5 13	Annual	<u>Data sources:</u> <ul style="list-style-type: none"> <li>• Ministries of Fisheries regular reports</li> <li>• Data quality check report</li> <li>• Validation Reports of Technical Committee on Statistics (CTS) (MR)</li> <li>• Validation Reports of Sub-Committee on Statistics (CRSP) (MR)</li> <li>• Statistical Report of ONP (GN)</li> </ul> Protocol of results verification and independent validation of DLI achievement by third party.	Ministries of Fisheries	DLI for all years.  Value is calculated annually.  Availability and the validity of key data and the assurance of the reliability of the data.  Availability and regularity of key data and assurance of quality of data.  GN: Same six variables as in PDO indicator 1.  MR: Variables of the PDO indicator 1 plus 7 additional variables identified by DARO:

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
											<u>Methodology:</u> Count of variables		<ul style="list-style-type: none"> <li>• Estimate of octopus catch potential in the EEZ (metric ton estimate) (annual)</li> <li>• Fishing effort, in thousands of hours of industrial fleets (by category of vessels) (annual)</li> <li>• Volume in tons of fish production (pelagic, demersal cephalopods and crustaceans) (annual)</li> <li>• FOB value of frozen fish exports in thousands of US dollars (current prices), by segment (artisanal and coastal) (annual)</li> <li>• FOB price of octopus exports in US dollars per ton (monthly)</li> <li>• Value of public and private investments made in the fisheries sector (in US dollars) (annual)</li> <li>• Number of shipyard approved by the State serving fisheries units (annual)</li> </ul>

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>IR Indicator 1.2:</b> Share of fishing vessels registered (disaggregated by country and by segment)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	%	GN: Industrial: 100 Artisanal: 0 MR: Industrial: 100 Coastal 60 Artisanal: 0	100	100	100	100	100	100	Annual	Ministries of Fisheries	DLI for all years.  Value is calculated annually.  This indicator measures the country's preparedness for controlling fishing effort in each segment (PDO indicator 3). The first step is to complete the registration process for all vessels, <u>including the dormant capacity</u> in the fleet.  GN: a census of the artisanal segment will be necessary to calculate this indicator in the first year. In the subsequent years the percentage will be calculated by administrative updating and on site verification at the landing sites.  MR: in artisanal segment, new registration linked to a secure identification system of boat.



PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>IR Indicator 1.3:</b> Proposal for institutional and functional reform submitted to Cabinet by Ministry of Fisheries	<input type="checkbox"/>	<input type="checkbox"/>	Yes/ No	GN: n/a MR: No	n/a No	n/a No	n/a No	n/a Yes	n/a Yes	Annual	<u>Data sources:</u> Submission letter to Cabinet with proposal for reform attached  <u>Methodology:</u> Review of proposal	Ministries of Fisheries	Reforms include sustainable financing of certain functions, separation of control and regulatory functions, separation of policy formulation and day-to-day management of fisheries, ensuring adequate human resources in concerned institutions
<b>IR Indicator 1.4:</b> Revised appropriate regulations integrating (i) access management and (ii) secure fishing rights submitted to Cabinet by Ministry of Fisheries	<input type="checkbox"/>	<input type="checkbox"/>	Yes/ No	GN: n/a MR: No	n/a No	n/a No	n/a No	n/a Yes	n/a Yes	Annual	<u>Data sources:</u> Submission letter to Cabinet with proposal for regulations attached  <u>Methodology:</u> Review of revised regulations	Ministries of Fisheries	Requires a review of the existing regulations governing access to fish resources in both countries.  In Mauritania, this regulation will integrate the access by zone.
<b>IR Indicator 1.5:</b> Fisheries management plans developed (disaggregated by country)	<input type="checkbox"/>	<input type="checkbox"/>	#	GN: 1 MR: 0	1 0	1 1	1 1	1 2	1 3	Annual	<u>Data sources:</u> • Review of annual fisheries management plans (GN) •	Ministries of Fisheries	Value is calculated annually (GN). Value is calculated cumulatively (MR).

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
											<ul style="list-style-type: none"> <li>• Order or decree <u>Methodology:</u></li> <li>• GN: count the number of management plans updated. Annual value.</li> <li>• MR: review and count the number of management plans adopted at least by decree.</li> </ul> <p>Cumulative value.</p>		<p>A plan generally adopted by order (GN) or decree, at least includes recommendations on fishing capacity (number of vessels) and fishing effort in line with resource availability.</p> <p>The plan may also include annual sustainable harvest levels (or total allowable catch, TAC) and is preferably developed at the level of the management unit.</p> <p>MR: a revised octopus plan, a shrimp plan and the fisheries management plan for the artisanal and coastal segment.</p> <p>GN: the overall fisheries management plan updated annually.</p>

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>IR Indicator 1.6:</b> Fisheries management data incorporated in the regional dashboard (disaggregated by country)	<input type="checkbox"/>	<input type="checkbox"/>	#	GN: 0 MR: 0	0 0	0 3	3 5	4 8	5 9	Annual	<u>Data sources:</u> <ul style="list-style-type: none"> <li>• Direct observation of regional dashboard</li> <li>• Count of data available on national dashboard against list of data needed (PDO indicator 1)</li> </ul> <u>Methodology:</u> Calculation by division of number of variables available on regional dashboard by defined total number of variables x 100	Ministries of Fisheries  Ministry of Finance (MR)	Value is calculated annually.  GN: Same six variables as in PDO indicator 1.  MR: Same variables as in PDO indicator 1 plus <ul style="list-style-type: none"> <li>• Number of vessels registered by segments (artisanal and coastal) (annual)</li> <li>• Quantity of total fish production (pelagic, demersal, cephalopods and crustaceans) in ton (annually)</li> <li>• Value of exports of fish of all species (in thousands of UM in current prices) (annual)</li> <li>• 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)</li> </ul>

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
													<ul style="list-style-type: none"> <li>Number of people employed in the fishing industry by segment (artisanal, coastal and industrial) (annual)</li> </ul>
<b>IR Indicator 1.7:</b> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Score	GN: n/a MR: 0	n/a 0	n/a 0	n/a 1	n/a 2	n/a 3	Annual	<u>Data sources:</u> <ul style="list-style-type: none"> <li>Marine Institute and Ministry of Fisheries</li> <li>Official reports and minutes of meetings of consultation frameworks (Working group of CCNADPM)</li> </ul> Protocol of results verification and independent validation of DLI achievement by third party.  <u>Methodology:</u> <ul style="list-style-type: none"> <li>Observation of the process leading to the distribution of the shares of TAC in the octopus fishery</li> <li>Value is 0 if no distribution or distributed in non-participatory, non-transparent, and non-scientific manner.</li> </ul>	Ministries of Fisheries	DLI for all years (MR).  Value is calculated annually.  TAC: Total allowable catch to ensure stock sustainability without undermining the renewal potential of the stock.  Transparent: Publication of allocation criteria and data based on which TAC distribution will be made.  Participatory: Annual publication of results of consultations that include a large number of players and vulnerable populations leading to the distribution of TAC

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
											<ul style="list-style-type: none"> <li>One point is added for each of the three qualifiers (participatory, transparent, and scientific). The maximum score is 3.</li> </ul>		Scientific: The distribution should be consistent with biological and economic sustainability adjusted depending on resource availability.
<b>IR Indicator 1.8:</b> Individual quotas in the octopus fishery are allocated in the industrial segments in a participatory, transparent, and scientific manner.	<input type="checkbox"/>	<input type="checkbox"/>	Score	GN: n/a MR: 0	n/a 0	n/a 0	n/a 0	n/a 2	n/a 3	Annual	<u>Data sources:</u> <ul style="list-style-type: none"> <li>DPI<sup>27</sup>, SMCP, GCM<sup>28</sup> and Ministry of Fisheries and Maritime Economy</li> <li>List of quotas allocated in the octopus fishery</li> <li>One point is added for each qualifier: one point for participatory allocation; additional one point for transparent allocation; and one point for scientific allocation. The maximum score is 3.</li> </ul>	Ministries of Fisheries	Value is calculated annually.  Transparent: Publication of allocation criteria and data based on which fishing rights will be allocated (catches, etc.)  Participatory: Publication of results of consultations that include a large number of players and vulnerable populations leading to the allocation of individual quotas

<sup>27</sup> DPI: Direction de la pêche industrielle.

<sup>28</sup> GCM: Garde Côtes Mauritanienes.

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
													<p>Scientific: The allocation should not exceed the TAC (quantity that can be sustainably harvested) taking into account the allocation to the artisanal and coastal segment. The allocation must also be based on octopus habitat and population growth rate.</p> <p>TAC: Total allowable catch to ensure stock sustainability without undermining the renewal potential of the stock.</p>
<b>IR Indicator 1.9:</b> Monitoring, evaluation and surveillance reports of project activity implementation by an organization are regularly published.	<input type="checkbox"/>	<input type="checkbox"/>	Yes/ No	GN: n/a MR: No	n/a No	n/a Yes	n/a Yes	n/a Yes	n/a Yes	Annual	<u>Data sources:</u> Organization report  <u>Methodology:</u> Review of published reports	Ministries of Fisheries	MR: An association will be selected as representative of the various industry associations.

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
													<p>The report will be published once a year.</p> <p>The report will review the following: engagement of artisanal fishermen and women in the consultation process of fisheries management.</p> <p>The association may catalyze engagement and good representation of artisanal fishermen and women in consultative processes.</p> <p>This association will also review the social and environmental aspects.</p>

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>Component 2:</b> strengthening fisheries monitoring, control and surveillance (MCS) systems													
<b>IR Indicator 2.1:</b> Satellite-based surveillance system for industrial fishing vessels by the national fisheries surveillance agency is functional	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hours/day (annual avg.)	GN: 8 MR: n/a	10	14	16	20	24	Annual	<u>Data sources:</u> Review of daily reports from surveillance patrol  <u>Protocol of results verification and independent validation of DLI achievement by third party.</u>  <u>Methodology:</u> Count of total number of total hours of surveillance in a year divided by 365	Ministries of Fisheries	DLI for all years (GN).  Value is calculated annually.  Annual average of hours per day. This indicator pertains to surveillance only, not an indicator of enforcement.  In 2014, the national surveillance agency instituted the National Centre for Surveillance and Protection of Fisheries.
<b>IR Indicator 2.2:</b> Surveillance patrol of industrial fishing vessels (number of days per year)	<input type="checkbox"/>	<input type="checkbox"/>	Days	GN: 80 MR: n/a	80 n/a	100 n/a	120 n/a	150 n/a	200 n/a	Annual	<u>Data sources:</u> Review of daily reports from surveillance patrol  <u>Methodology:</u> Count of total number of hours of patrol	Ministries of Fisheries	Value is calculated annually.  Surveillance on the sea, on land and from the air.  Number of patrols carried out (monitoring and control).



PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
<b>IR Indicator 2.3:</b> Surveillance patrol of artisanal fishing boats	<input type="checkbox"/>	<input type="checkbox"/>	#	GN: 0 MR: n/a	0 n/a	0 n/a	48 n/a	72 n/a	96 n/a	Annual	<u>Data sources:</u> Review of daily reports from surveillance patrol  <u>Methodology:</u> Count of total number of hours of patrol	Ministries of Fisheries	Value is calculated annually.  Surveillance on the sea and on land, with priority in TURF areas.  Number of patrols carried out (monitoring and control).
<b>Component 3:</b> improved handling of landed fish at selected sites													
<b>IR Indicator 3.1</b> Integrated fish handling sites operational (disaggregated by country)	<input type="checkbox"/>	<input type="checkbox"/>	#	GN: 0 MR: 0	0 0	0 0	0 0	1 1	1 1	Annual	<u>Data sources:</u> Review of technical inspection reports once a year  <u>Methodology:</u> Review of technical inspection reports  Cumulative value.	Ministries of Fisheries	Value is calculated annually.  Limited to investment sites (one in Mauritania and one in Guinea) GN: landing site in Koukoude

PDO Level Indicators*	DLI	Core	UoM	Baseline	YR1	YR2	YR3	YR4	YR5	Frequency	Data sources and methodology (Verification protocol)	Responsibility for data collection	Description / comments
													Operational: ice is available and accessible (MR & GN), water and electricity are available (MR & GN), waste is properly managed (MR & GN), wastewater is treated (MR), user fees are collected in a transparent manner (MR & GN), site security is ensured (MR), and a landing dock is functional (GN).

**Annex 2: Detailed Project Description**  
**MAURITANIA AND GUINEA**  
**West Africa Regional Fisheries Program SOP-C1**

1. The Project Development Objective to strengthen the governance and management of targeted fisheries and improve the handling of landed catch at selected sites.
2. WARFP includes four components: (1) strengthening good governance and sustainable management of fisheries; (2) reducing illegal, unreported and unregulated (IUU) fishing; (3) increasing the contribution of marine fish resources to local economies; and (4) project management, monitoring and evaluation, and regional coordination. While the overall project composition is the same for the two countries (and for all other WARFP countries), specific focus and hence activities under each component vary between the two countries. This is because of the differences in the level of fisheries development, the nature of the industry (e.g. export orientation in Mauritania, substantial domestic fish consumption in Guinea), and existing commitment by other donor partners. Project activities also evolved over the history of the WARFP reflecting the lessons learned from earlier implementation. This Annex presents specific activities proposed in the project for the two countries as well as the overall description and objective of each project component common to both countries.
3. The four components are closely interrelated and complementary. Components 1 and 2 together aim to reduce the pressure on fish resources by introducing (Component 1) and enforcing (Component 2) rules of resource use and management. While the first two components mainly focus on the harvest subsector, Component 3 deals with the post-harvest subsector by investing in platform infrastructure and its supporting services that allow better handling of landed fish for reduced waste and improved product quality. Since investments in the post-harvest subsector in the fisheries industry often influence behavior in the harvest subsector, the project aims at coordinating interventions in the two subsectors from a broader perspective of seafood value chain and larger economy. 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 monitors national activities and coordinates at the regional level. In particular, data and information collected through activities in Components 1-3 will be consolidated and shared domestically and regionally in Component 4.

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

4. This component aims to build the capacity of the Government and stakeholders to develop and implement policies and systems that would ensure that the fish resources be used in a manner that is environmentally sustainable, socially equitable and economically profitable. The component contains four key subcomponents:
  - (i) Developing the legal and operational policy and strengthening the institutional capacity to enable sustainable management of fisheries resources (long-term agenda);
  - (ii) Strengthening the vessel registration systems for accurate assessment and effective control of fishing capacity (short-term agenda);

- (iii) Introducing new fisheries management schemes in target fisheries, segments, or communities to align fishing capacity and effort to sustainable catch levels, which is pursued in parallel with development and implementation of fisheries management plans (medium-term agenda); and
- (iv) Strengthening the system of fisheries-related data collection, compilation and management, and dissemination and communication in a transparent manner (long-term agenda).

5. WARFP takes a two-step approach to fisheries reform. In the first step, the project aims at managing the access to fish resources through controlling the fishing capacity in all segments (industrial, artisanal, coastal) so that the pressure on the fish resources in the countries' EEZs will not increase. Active surveillance of illegal activities in Component 2 also helps reduce the extractive pressure on the resources. Then, in the second step, the project implements measures to make fisheries management more efficient and consistent with environmental, economic, and social sustainability of the industry. The main thrust of the second step is (a) the reform of fisheries management institutions and their governance structure, with the objective that the institutions are to become partially self-financed by the end of the project; and (b) allocation of secure fishing rights to induce the profession to be involved more actively and responsibly in sustainable fisheries management. If effectively implemented, the approach will help the fish resources to rebuild to allow higher long-run fishing yields and revenues in this sector, which, collected through improved fiscal systems, will contribute to the state budget and in part to the financing of the costs of fisheries management.

6. ***Subcomponent 1.1: Developing the legal and operational policy and strengthening the institutional capacity.*** The first subcomponent addresses a long-term agenda in the second step described in the previous paragraph, through five sets of activities:

- (1) Revision of the national legal and regulatory framework governing rights and responsibilities of individuals and entities operating in the fisheries sector (from resource management and use to post-harvest value chain) (MR);<sup>29</sup>
- (2) Close monitoring by CSRP of the first set of activities in each country to ensure harmonization of fisheries policies and regulatory frameworks at the regional level and mobilization of high level expertise to support the national reform process of fisheries policies, regulatory and institutional frameworks, as well as technical assistance to the country to support their negotiations for foreign fishing agreements (MR);
- (3) Institutional reform of the ministry responsible for the fisheries sector and of other institutions that support the ministry for informed decision making and effective implementation of fisheries management policies, while ensuring separation of roles as outlined in point (1) and adequacy between human resources and fisheries management functions (MR);
- (4) Coordination across diverse stakeholders for effective implementation of the strategic vision; the National Consultative Committee will be strengthened and an association

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<sup>29</sup> Principles that should be integrated in the renewed legal and regulatory framework are found in FAO's "Code of conduct for Responsible Fisheries." These principles include: (a) sustainable financing of recurrent fisheries management functions, (b) separation of control and regulatory functions, and (c) separation of policy formulation and day-to-day management of fisheries.

will be selected as representative of various industry associations to report engagement of artisanal fishermen and women in the consultation processes (MR); and

- (5) Support to scientific research activities that inform operational planning and management policies, in particular stock assessment campaigns to measure abundance of fish resource (GN).

In Guinea, activities (1) through (4) are not financed under this project.

7. ***Subcomponent 1.2: Control of fishing capacity.*** The activities under this subcomponent correspond to the first step (short-term agenda) in the WARFP approach to fisheries reform. The two sets of activities are:

- (1) Establishment or strengthening of the registration systems for vessels and boats in all segments (industrial, artisanal, coastal), which allows accurate assessment of the fishing capacity within the countries' EEZs and, if the registration information is appropriately compiled and shared, helps effective identification of unregistered (illegal) operators (link to Component 2) (GN & MR); and
- (2) Access management through a tight control over the fishing capacity at the current levels through a combination of measures such as fishing permits and licenses (see Subcomponent 1.3) and transparent and open policies on boats replacement and repair prepared with large consultation and participation of fishers communities (GN & MR).

Since successful completion of these activities is essential for subsequent efforts, DLI indicators are largely associated with results of these activities.

8. ***Subcomponent 1.3: Introducing new fisheries management schemes.*** This subcomponent corresponds to the medium-run agenda of the second step of the WARFP approach to fisheries reform. The main activity is to develop or finalize fisheries management plans, which describe how the fish resources in the countries' EEZs are to be managed, including the methods of controlling access to the resources and/or quantity of harvest, and how to implement them. Because the progress made to date with management plans as well as the focus fisheries and segments are different between the two countries, the proposed activities in this subcomponent are described separately for each country.

9. **In Mauritania**, the fisheries management plan for the octopus fishery has already been developed and adopted by decree (development of the four other fisheries management plans – for shrimp, mullet, croaker, and small pelagic – is still in progress or stagnant). Because of the importance of the octopus fishery within the sector and the client preparedness and willingness to better manage this fishery, the project starts by introducing management changes in the octopus fishery. The administrative framework and lessons learned can later be applied to the reform of other fisheries. Because there is a substantial interaction between the octopus and shrimp fisheries (octopus is a major bycatch species by shrimp trawlers), some project activities target the shrimp fishery in conjunction with the octopus fishery. In Mauritania, the following activities are envisaged in this subcomponent:

- (1) Finalization and adoption of the fisheries management plans for the octopus fishery (final revision) and for the shrimp fishery; and
- (2) 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.

10. It is envisaged that individual quotas will be allocated to existing entities in the industrial segment. In order to prevent excessively rapid consolidation, it is recommended that the quotas should not be made transferable at least during the initial 10 years. However, in the process of renewing the aging national industrial fleet, it is expected that the fishing capacity will be reduced and some quotas be left unused. The unused quotas would represent a tool to manage the fishing effort in this segment. On the other hand, in the artisanal and coastal segment, octopus fishing licenses will be allocated; the process of license allocation is not yet designed and the project will finance a study that will inform such process. The licenses will specify the zones in which the license holders can operate; management of the licenses will be done by zone (three to five zones envisaged) and thus allow decentralized, more locally-tailored control of access to octopus resources. The licenses will not be transferable but granting for a long term is envisaged. Octopus licenses do not specify allowable catch or individual quota but a cap will be applied on the catch by the entire artisanal and coastal segment. Introduction of TAC necessitates a system of accurate catch reporting (including octopus bycatch by shrimp trawlers) and record tracking over the fishing season in all segments, and support to implementation of such system is an important project activity in this subcomponent for Mauritania.

11. The last set of activities in Mauritania for this subcomponent is:

- (3) Implementation of measures to regulate access to fish resources in the artisanal and coastal segment as envisaged in the managing plan for the segment.

In principle, this set of activities extends the octopus (cephalopod) licensing scheme to three other groups of species: demersal fish, pelagic fish, and crustaceans. Again, specialized fishing licenses for each species group will be managed by zone. In contrast to the cephalopod license, granting for one year is envisaged for licenses for other groups of species.

12. **Although Guinea** has already a long-term strategy that was developed based on the large assembly (*Etats Généraux*) of 2013, this strategy is not as elaborated as in Mauritania. This project will support Guinea with shorter-term fisheries management plans. In particular, the project will support Guinea to elaborate the existing general fishery management plan and develop management plans for specific fisheries. The activities envisaged in Guinea for this subcomponent are:

- (1) Preparation of fisheries management plans for target species groups (demersal fish, small pelagic fish, crustaceans, and cephalopods), which define aggregate fishing effort levels allowable on the basis of scientific recommendations; and
- (2) Implementation of the fisheries management plans, which also describe the methods of controlling access to the resources and/or quantity of harvest, envisaged in the following three ways:
  - (a) Strengthening fishing rights in the industrial segment for targeted fisheries (the first priority for small pelagic fish and the second for demersal fish), where the project will work to establish a quota system to allocate rights to resources in terms of allowable fishing effort;

- (b) Introduction of secure fishing rights in the artisanal segment in terms of fishing licenses that are defined by fishery (the current licensing scheme does not specify species); and
- (c) Preparation of pilot introduction of co-management process combined with territorial use rights fisheries (TURF) in selected fishing communities.

13. **Subcomponent 1.4: Strengthening the system of fisheries-related data collection, compilation and management, and dissemination and communication.** Much of the activities in this subcomponent pertain to the compilation and dissemination of information generated in Subcomponents 1.1-1.3 (e.g. stock assessment, results of bio-economic analysis, information of registered vessels and boats, quotas and licenses, reported catches) as well as generating additional information by processing and analyzing such and other information. The project emphasizes transparency and accessibility of information on fisheries management, which is known to improve the scope and quality of fisheries management at every level, from effective detection of IUU fishing to proper collection of taxes. Specific activities are different between the two countries as described next.

14. **In Mauritania**, two sets of activities are envisaged for this subcomponent:

- (1) Establishment and operationalization of an "economic and social observatory of the fisheries sector," which will serve as an economic planning unit responsible for, among other things, publication of annual reports on the performance of the sector, management of a database on fisheries-related information, and bioeconomic analysis to inform sustainable fisheries management; and
- (2) Support to the process of integration of the fisheries sector in the Extractive Industries Transparency Initiative (EITI), where the project will support the collaborative effort between experts at the Ministry of Fisheries and Maritime Economy and the National Committee of EITI to conduct a scoping study for integration of the fisheries sector and to pilot EITI integration with the octopus fishery.

15. **In Guinea**, three sets of activities will be implemented:

- (1) Support in technical assistance and equipment to strengthen the system of collecting, processing, analyzing and publishing fisheries data and statistics, which will reinforce the other project activities by contributing broadly through making data available regarding resource utilization in all fisheries in Guinea's EEZ;
- (2) Improving transparency and access to information on fisheries management by supporting the establishment of a dashboard or "*tableau de bord*" of indicators for fisheries management in conjunction with the database at the sub-regional level, which is developed for other WARFP countries; and
- (3) Communication of project objectives and progress to the public.

16. **Incentive-based approach.** In addition, in each country, a set of activities are envisaged that promote incentive-enhancing, result-based approach associated with the use of the DLI mechanism in the project. These activities include short-term training of pre-selected staff and those associated with the ministerial operation as outlined in the DLI implementation protocols (see Annex 4),

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

17. This component aims to reduce IUU fishing activities threatening the sustainable management of fish resources by strengthening fisheries monitoring, control and surveillance (MCS) systems. The Mauritania project does not include this component. However, this does not imply that the issue of IUU fishing is not addressed in Mauritania. As mentioned earlier, Components 1 and 2 are closely related. Activities in Component 1, in particular revision of the national legal and regulatory framework and establishment or strengthening of the registration systems for vessels and boats help defining and identifying illegal fishing. Similarly, improving the system of reporting catches and regulating fishing activities within EEZs are important objectives of Component 1. The Mauritania project deals with IUU fishing issues indirectly in Component 1, if not directly through active surveillance activities, which is supported by the KfW Development Bank with the recent approval of a new phase of the Fishery Monitoring and Surveillance program. The rest describes activities in Guinea for this component.

18. *Subcomponent 2.1: Enabling environment for reducing IUU.* The objective of this subcomponent is to prevent and reduce IUU fishing practices by enhancing the effectiveness of fisheries surveillance and strengthening the management of violations. The project will support:

- (1) Strengthening or development of an appropriate legal and institutional framework and practices to pursue vessels in the act of illegal fishing; and
- (2) Implementing appropriate financing mechanisms for efficient surveillance of fisheries.

The project will also provide legal assistance aimed at strengthening the alignment of the national fisheries legislation with the United Nations Convention on the Law of the Sea (UNCLOS), particularly Article 73, whereby any foreign vessels and crews detained in the Exclusive Economic Zone will be immediately released upon posting a reasonable bond, and the flag state of the vessel is immediately notified.

19. *Subcomponent 2.2: Fisheries monitoring, control and surveillance (MCS) systems.* The objective of this subcomponent is the development and implementation of surveillance strategies, adapted in the context of targeted fisheries and based on good practices. These strategies will be based on better use of available surveillance systems, i.e. based on the existing technical, human and financial capacities provided in coordination by *Prefecture Maritime* and *Centre National de Surveillance et de Protection des Pêches* (CNSP). The project will support:

- (1) An integrated approach and coordination of fisheries MCS along the value chain;
- (2) Development of MCS plans;
- (3) Acquisition of material and/or surveillance services; and
- (4) Development and dissemination of good operating practices of surveillance and control.

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

20. This component aims to increase the benefits derived from fish caught in the EEZs of the countries in particular by investing in infrastructure and institutional capacity that enable improved handling of landed fish and reduction of post-harvest losses. As discussed earlier, interventions in the post-harvest subsector potentially influence behavior in the harvest subsector, with potentially negative interaction with fish resource management effort. Pursued investments also need to be consistent with the countries' comparative advantage. Therefore, the



activities in this component must be carefully chosen with their implications to resource utilization and to the overall economy fully analyzed. For this reason, the project will make certain that activities under this component in Mauritania will be consistent with the sector strategy and its multi-donor investment framework, whose development is undertaken by the Ministry of Fisheries and Maritime Economy (in progress, to be completed in early 2015).

21. ***Subcomponent 3.1: Improvement of infrastructure and handling of fish.*** Infrastructure investments supported by the WARFP are of the kind that facilitates proper fish handling at and immediately after landing and that provides platform for private sector involvement in seafood value chain.

22. **In Mauritania**, the selected project activity is the rehabilitation of Nouakchott Fish Market. The fish market, located in the capital city, is a major hub of regional seafood trade and it provides jobs to about 5,000 to 8,000 workers daily. The project activities will include:

- (1) Land acquisition to consolidate the fish market site;
- (2) Fencing the entire perimeter of the site for security purposes;
- (3) Road construction and sanitation works including a wastewater treatment plant; and
- (4) Construction of warehouses and administrative buildings.

23. **In Guinea**, a potential investment concept has been identified in Koukoudé village in the prefecture of Boffa. While the exact site location is not yet determined, the investment will aim to expand or improve fish landing and market facilities to serve artisanal fishers supplying the domestic market. Site selection has not been finalized partly because the ongoing Ebola outbreak has prevented further field visits or studies. The proposed menu of investments for the site includes: (a) landing platform with access ramps; (b) basic platform on which private sector may investment in fish processing plant or unit, warehouse to store and repair equipment, and cold room; (c) administrative offices; (d) sanitation works; (e) auction hall; (f) first aid room; and (g) latrines. The project will support studies on potential environmental impacts and resettlement of affected populations due to the investment.

24. ***Subcomponent 3.2: Planning of fish landing management and building capacity for proper fish handling (MR).*** In addition to investment in physical facilities, the project will support management plans and capacity for improving fish handling in other sites in Mauritania. The project will support development of management plan and land use plan for landing sites Tanit, PK 93, PK 114 and N'Diago as well as demarcation of their boundaries by installing terminals, stakes or posts at corners.

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

25. This component aims to support project implementation and regional coordination within the WARFP, ensuring that regular monitoring and evaluation is conducted and the results are fed back into decision making and project management. The first subcomponent pertains to project implementation at the national level, and the second subcomponent to regional coordination. Section I of Annex 3 describes institutional arrangements in project implementation, including the role of CSRP.

**Annex 3: Implementation Arrangements**  
**MAURITANIA AND GUINEA**  
**West Africa Regional Fisheries Program SOP-C1**

**I. Project Administration Mechanisms**

1. **At the regional level**, the Program will be coordinated and supported by a Regional Coordination Unit (RCU) that is housed at the CSRP. The RCU has provided to WARFP Countries a number of services within the regional program, including: (i) access to high level expertise to support reform process at the national level on fisheries policy, legal and regulatory as well as institutional frameworks; (ii) an independent panel of monitoring, control and surveillance experts who can provide guidance to the Government on the implementation of component 2; (iii) linkages to a regional fishing vessel register and dashboard; (iv) exchange visits and study tours with other countries participating in the WARFP; and (v) ongoing fiduciary and monitoring and evaluation support. In SOP-C1, the CSRP will also recruit and coordinate the independent verifier of DLI achievements.
2. The CSRP receives, through a subsidiary agreement, a portion of the IDA contribution to the country (usually 5 percent of the IDA allocation) as payment for the services rendered and listed above.<sup>30</sup> The RCU has sole fiduciary responsibility for the funds provided to it by the countries. The account is audited annually by independent auditors and the RCU reports to a Regional Steering Committee (RSC) comprised of Directors of Fisheries or representatives of the Department of Fisheries from each of the participating countries. The RCU will collect and transmit each participating country's annual work program, budget, update of the monitoring and evaluation indicators and procurement plan to the World Bank for no-objection. The RCU is a repository of the institutional memory of the WARFP, and thus it can serve, when solicited, as a unique and resourceful source of advices to all national PIUs.
3. A Regional Steering Committee (RSC) is in place and the new countries will join the RSC as soon as their projects become effective. The role of the RSC is to oversee activities of the RCU, approve its annual work plan and Budget and to coordinate and communicate between decision-makers in the countries. The committee meets in person at most twice per in order to monitor Program progress, as well as to review implementation progress and measurements for key performance indicators, in order to recommend any specific adjustments needed to ensure that the Program achieves its objectives.
4. **At the national level**, project aims to demonstrate concrete results in the early stages of implementation in each country, in order to encourage further sense of national ownership of the project. The project will therefore be implemented by a national Project Implementation Unit (PIU) in each country, embedded within the responsible technical agency for fisheries. Each PIU will be fully mainstreamed into this technical agency, although fiduciary responsibilities will vary by PIU depending on the capacity of each country.

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<sup>30</sup> It is our hope that, even after the end of the program, WARFP countries will continue to seek CSRP's advice and support routinely and in return financially support CSRP operation.

5. The Project Implementation Unit (PIU) comprises, at minimum: (i) a Project Coordinator, (ii) a Monitoring and Evaluation Expert, (iii) an Environmental and Social Safeguard Specialist, (iv) a Procurement Specialist, (v) an Administrative and Financial Management Specialist, and (vi) an Internal Auditor. The Coordinator should preferably have a background and necessary technical expertise in fisheries and fish resource management. The recruitment process of the above key staff of the PIU will be competitive and consistent with the World Bank procedures.
6. Reporting line of the PIU will vary with the type of activity. Policy and governance activity grouped in subcomponent 1.1 will be reported directly at the Ministerial level whereas other activity will be reported to the Director of fisheries or other persons designated by the Minister in charge of Fisheries.
7. In each country, a National Steering Committee (NSC) has been established that is comprised of relevant Government officials and local stakeholder representatives. This committee will be chaired by the Secretary General or another designated person, supported by the Project Coordinator of the PIU. The NSC will convene every six months and will make decisions on the overall direction of the Program, and will be responsible for approving the annual work program and budget. The Director of Fisheries/designated person by the Minister and PIU Coordinator will be responsible for providing summaries of implementation progress and results from M&E to the Steering Committee at each meeting, and the Committee will make decisions on any necessary adjustments to Program implementation as a result of monitoring and evaluation. The committee also will meet whenever there is an urgent issue regarding project implementation that requires their attention.
8. **In Mauritania**, the project will be implemented by the Minister of Fisheries and Maritime Economy (MPEM – *Ministère des pêches et de l'économie maritime*).
9. **The Mauritanian NSC** has been established by a joint decree of the MPEM and the Ministry of Economic Affairs and Development (N°0158/MPEM/MAED). It is composed of the Permanent Secretary as the Chairman, the Director of Programming and Cooperation, the Director of Resource Management and Oceanography, Project Coordinator, representatives of the Ministry of Finance, Ministry of Economic Affairs and Development, Ministry of Equipment, Ministry of Environment, Free Zone Authority of Nouadhibou, one representative from a civil society organization and two representatives from professional organizations. The Secretariat function of the NSC will be provided by the Director of Programming and Cooperation of the MPEM. The NSC will meet at least twice a year.
10. **Mauritanian Monitoring Committee:** This is technical committee of which members are: the Director of Resource Development and Oceanography; Director of Artisanal and Coastal Fisheries; Director of Industrial Fisheries; Director of Programming and Co-operation; Director of Merchant Shipping; Director of Institute of Oceanography and Fisheries Research of Mauritania (*Institut Mauritanien de Recherches Océanographiques et des Pêches*, or IMROP). The committee will provide technical expertise and knowledge to the PIU in preparing project activities including terms of references when relevant. It will also advise the PIU on project implementation.

11. **Stakeholder Participation in Mauritania:** The MPEM in collaboration with the PIU will create a platforms for active participation of stakeholders. The objective is to strengthen stakeholder involvement to influence decision making and to promote transparency in the fisheries management.

12. **Project Implementation Partner Institutions in Mauritania:** In order to facilitate project implementation, institutions that are autonomous such as the Fish Market of Nouakchott, the Free Zone of Nouadhibou, the IMROP, and the Initiative of Transparency and Extractive Industries (EITI) will each sign a Memorandum of Understanding (MoU) with the MPEM. The MoU will describe in details the responsibilities and duties of each party and respective deliverables they are responsible for. Activities and budgets will be detailed in annual work plans to be revised as necessary.

13. **In Guinea,** the lead agency for the project will be the Ministry of Fisheries and Aquaculture (MPA – *Ministère de la Pêche et de l’Aquaculture*), which will supervise the national PIU that is directly housed in the Ministry.

14. **The Guinean National Steering Committee (NSC):** The Ministry of Fisheries and Aquaculture (MPA) has established an NSC. The member organizations of the Guinean NSC will be: the *Préfecture Maritime*, the Secretary General of MPA, Ministry of Economy and Finance, Ministry of Environment, Ministry of Country Planning, Director General of *Bureau de la Stratégie et Développement*, *Centre de Recherche Scientifique et Océanographique de Rogbané* (CERESCOR), *la Confédération Nationale de Professionnelle des Pêcheurs de Guinée* (CONAPEG), *L’Union Nationale des Pêcheurs Artisans de Guinée* (UNPAG) , Union of Women Fishmongers of Guinea, the National Union of Women smokers of Guinea, the ADEPEG-CPA (*Association pour le Développement des Communautés des Pêcheurs Artisans de Guinée*), lead technical adviser of MPA, Directorate of Administrative and Financial Affairs. The NSC will be chaired by the Chairperson of the Office of the Prime Minister (*Primature*) and the Director of Marine Fisheries will be the secretary.

15. **The Guinean Monitoring Committee (*Cellule de Suivi*):** This committee will established by Ministerial Order before the board approval to assist the PIU to facilitate internal coordination within the Ministry and fast-track project implementation. Its members are the Directors of the different relevant Directorates of the MPA and their role is to provide technical backstopping to the PIU in project implementation. The Committee will work closely with the PIU in developing annual project activities including budget that will be submitted to the NSC for approval. This committee will meet with the PIU before each steering committee meeting.

16. **Stakeholders Participation in Guinea:** The MPA in collaboration with the PIU will create a platform for active participation of stakeholders in the development and implementation of the project activities. The objective is to strengthen stakeholder involvement to influence decision making and promote ownership of fisheries management issues.

17. **Project Implementation Partner institutions in Guinea:** In order to facilitate project implementation, institutions that are autonomous such as National Fisheries Surveillance Center (CNSP for *Centre National de Surveillance et de Protection des Pêches*), the National Institute

of Fisheries Research of Boussoura (CNSHB for *Centre National des Science Halieutiques de Boussoura*), the Ministry of Maritime Transport, the National Office of Sanitary Control of Fishery and Aquaculture Products (ONSPA - *Office National de Contrôle Sanitaire des Produits de la Pêche et Aquaculture*) will each sign an MoU with the MPA. The MoU will describe in detail the responsibilities and duties of each party and the deliverables for which each party is responsible for. Activities and budgets will be detailed in annual work plans and may be revised as necessary.

## **II. Consolidated FM and disbursement arrangements for Guinea and Mauritania**

### ***Budgeting arrangements***

18. The MPEM and MPA/PIU will prepare annual budgets based on agreed annual work programs and annual procurement plans. The budget will be adopted by the National Steering Committees before the beginning of the year and its execution will be monitored through the project accounting software on a quarterly basis. The budgeting process and monitoring will be clearly defined in the Administrative and Accounting Manual of Procedures, which is a part of the larger Project Implementation Manual. Annual draft budgets will be submitted to the Bank's no-objection before adoption and implementation no later than November 30 every year.

### ***Accounting arrangements***

19. The current accounting standards in use in Mauritania and in Guinea for ongoing Bank-financed projects will be applicable. A computerized and integrated financial management system will be installed and customized to maintain and support project accounts with appropriate records and procedures to track commitments and to safeguard assets and generate reporting information. Said system is being installed in the MPEM and similar information system will be set up through a PPA in Guinea. Accounting procedures and policies will help support proper record of the project transactions. In Mauritania, an Administrative and Accounting Procedures Manual is being elaborated to serve as a basis of the fiduciary procedures relevant to the project and the financial officer and an accountant are already recruited while MPA in Guinea will need to recruit its accounting staff and elaborate accounting procedures as part of the FM procedures manual.

### ***Internal control and internal auditing arrangements***

20. The Administrative and Accounting Procedures Manual, as part of the larger project implementation manual, will provide a clear description of the approval and authorization processes in respect of the rule of segregation of duties. The manual will also provide a clear description of disbursement linked to indicators. Said manual will ensure that adequate internal controls are in place for the preparation, approval and recording of transactions and will be subject to updates as needed. To maintain a sound control environment, the project team is expected to follow the control mechanisms that will be described in the manual of procedures. As the Project design will include DLI mechanism, an internal auditor will be recruited on a competitive basis. In addition the MPA in Guinea has confirmed that prior review will be done by the finance controller of the Ministry over the project transactions.

### ***Financial reporting arrangements***

21. The MPEM and MPA/PIU will prepare quarterly un-audited Interim Financial Report (IFRs) for the project in form and content satisfactory to the Bank. It will include (i) Statement of Sources of Funds and Project Revenues and Utilization of funds; (ii) Statement of Expenditures classified by project components/activities (economic classification) showing comparisons with budgets for the reporting period and cumulative for the project life; (iii) Note to the IFR providing reasons for the variances and any information on the statement of sources of funds and project revenues and utilization of funds. These IFRs will be submitted to the Bank within 45 days after the end of the quarter to which they relate. The format of the IFR was agreed upon during negotiations. The implementing units will also prepare Project Financial Statements (PFS) in compliance with International Accounting Standards (IAS) and World Bank requirements. These Financial Statements<sup>31</sup> will comprise:

- (a) A balance sheet;
- (b) A Statement of Sources and Uses of Funds;
- (c) A statement of Commitments;
- (d) The Accounting Policies adopted with appropriate notes and disclosures; and
- (e) A Management Assertion that Program funds have been expended for the intended purposes as specified in the relevant grant agreement.

### ***Flow of funds and Disbursement arrangements***

22. **Flow of funds:** Six Designated Accounts (DA), two for Mauritania (IDA and GEF), one for Guinea (IDA), and three for CSRP (two for MR, one for GN), will be opened by each Implementing unit on terms and conditions acceptable to the Bank and managed according to the disbursement procedures described in the Administrative, Accounting and Financial procedures in the Project Implementation Manual and the Disbursement Letter. In Guinea, the Designated Account (DA) and its associated transaction account (TA) will be opened in a commercial bank (SGBG) and maintained respectively in US\$ and GNF (Guinea National Franc). In Mauritania, the DAs will be opened in the *Banque El Amana*, a commercial Bank in Nouakchott. For CSRP, the DAs will be opened in a commercial bank (Eco Bank) in Dakar, Senegal in West African CFA franc (XOF). The DAs will be used for all eligible payments financed by the grants as indicated in the specific terms and conditions of the Financing Agreements. Funds will therefore flow from the DA to the TA or PA and from said DAs associated accounts to Suppliers, contractors and other service providers. For Mauritania, IDA and GEF will share related project expenditures through the PA based on a financing percentage. All expenses, including taxes, will be financed at 100 percent by the project.

23. **Disbursement methods:** The following disbursement methods may be used under the project: reimbursement, advance, direct payment and special commitment as specified in the Disbursement Letter and in accordance with the World Bank Disbursement Guidelines for Projects, dated May 1, 2006. Disbursements would be transactions-based whereby withdrawal applications will be supported with Statement of Expenditures (SOE). Initial advances up to the ceiling of each DA (US\$400,000 for Guinea; respectively US\$700,000 and US\$450,000 for IDA and GEF in Mauritania; and respectively XOF50 million, XOF50 million, and XOF25 million for IDA-GN, IDA-MR, and GEF-MR for CSRP) and representing 4 months forecasted project

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<sup>31</sup> It should be noted that the project financial statements should be all inclusive and cover all sources and uses of funds and not only those provided through IDA funding. It thus reflects all program activities, financing, and expenditures, including funds from other development partners.

expenditures will be made into the Designated Accounts and subsequent disbursements will be made on a monthly basis against submission of Statement of expenditures (SOE) and bank statements or records as specified in the Disbursement Letter (DL). The DAs and their associated accounts (PA and TA) will be used to pay for most eligible expenditures except for those exceeding 20 percent of the DA ceiling. Such payments should be made through the direct payment method or a special commitment letter issued by the Association.

24. All replenishments or reimbursement applications will be fully documented. Documentation will be retained at the Coordination units for review by Bank staff members and external auditors. The Disbursement Letter (DL) will provide details of the disbursement methods, required documentation, DA ceiling and minimum application size. The DL was also discussed and agreed upon during negotiations of the Financing Agreement.

25. **Disbursement of DLI Funds:** With regards to the DLI mechanism, funds will be disbursed annually for eligible expenditures (short trainings and operating costs) for identified departments within the Ministry conditional on satisfactory achievement of agreed upon DLIs. Said achievement will be ascertained annually by an independent verification entity in line with the verification protocols outlined in the DLI tables found in Annex 4 and upon provision by the Recipient of customized Statement of Expenditures evidencing eligible expenditures incurred under Category 4 in the Financing Agreement for Mauritania and Category 3 in the Financing Agreement for Guinea. Achievement of the DLI planned for the first year will trigger disbursement of funds during the second year of the project implementation and so on.

### *Flow of funds diagrams*

Figure 1. The project fund flow diagram for Mauritania

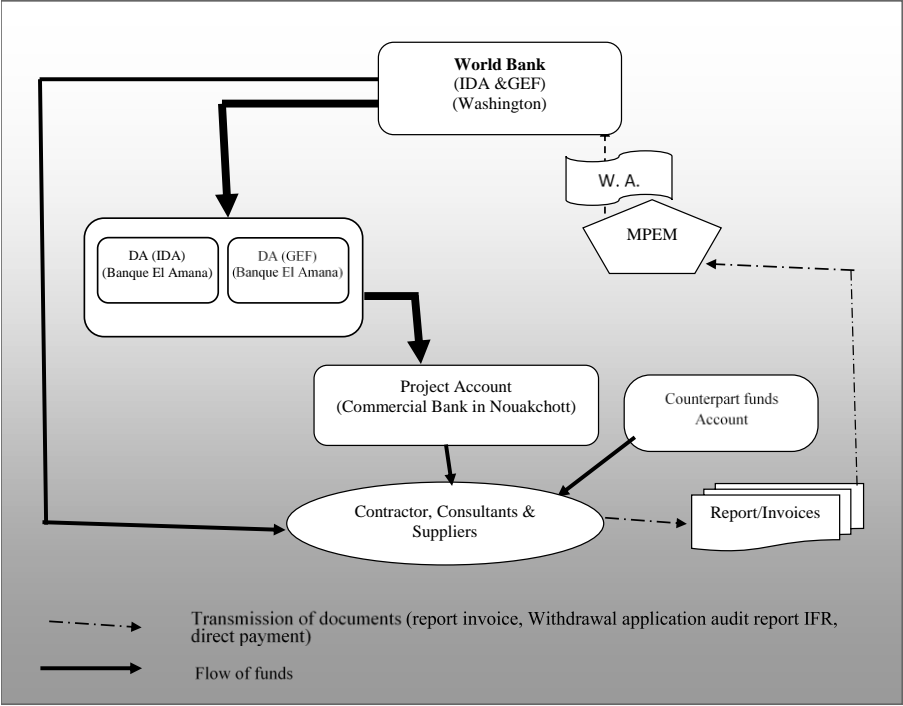


Figure 2. The project fund flow diagram for Guinea

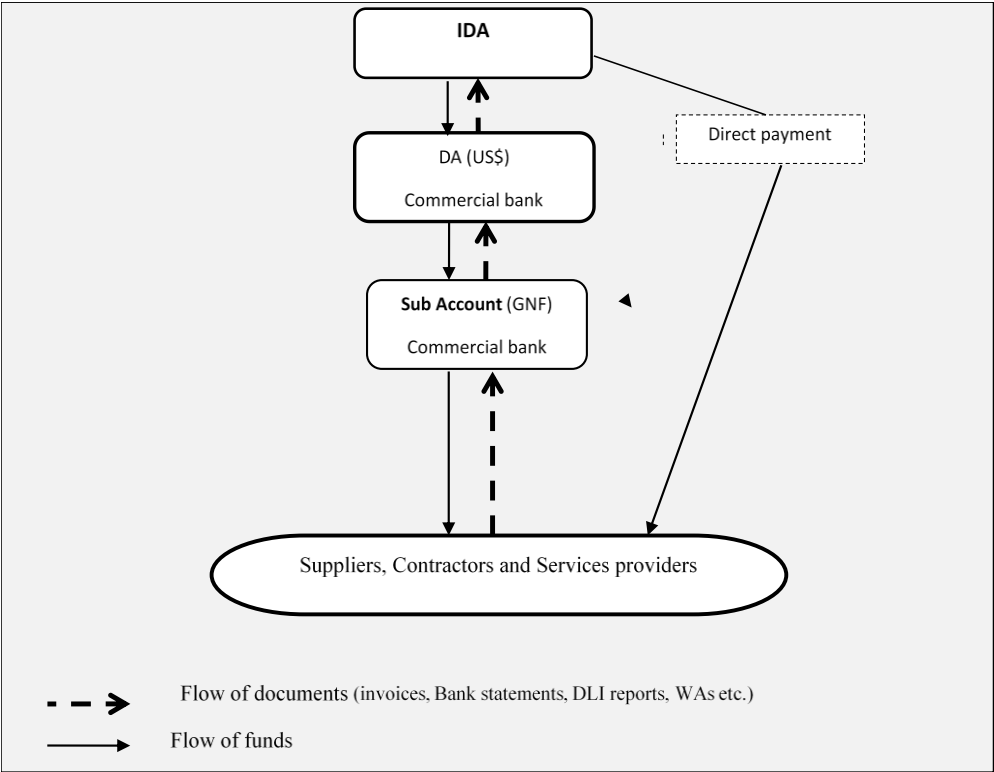
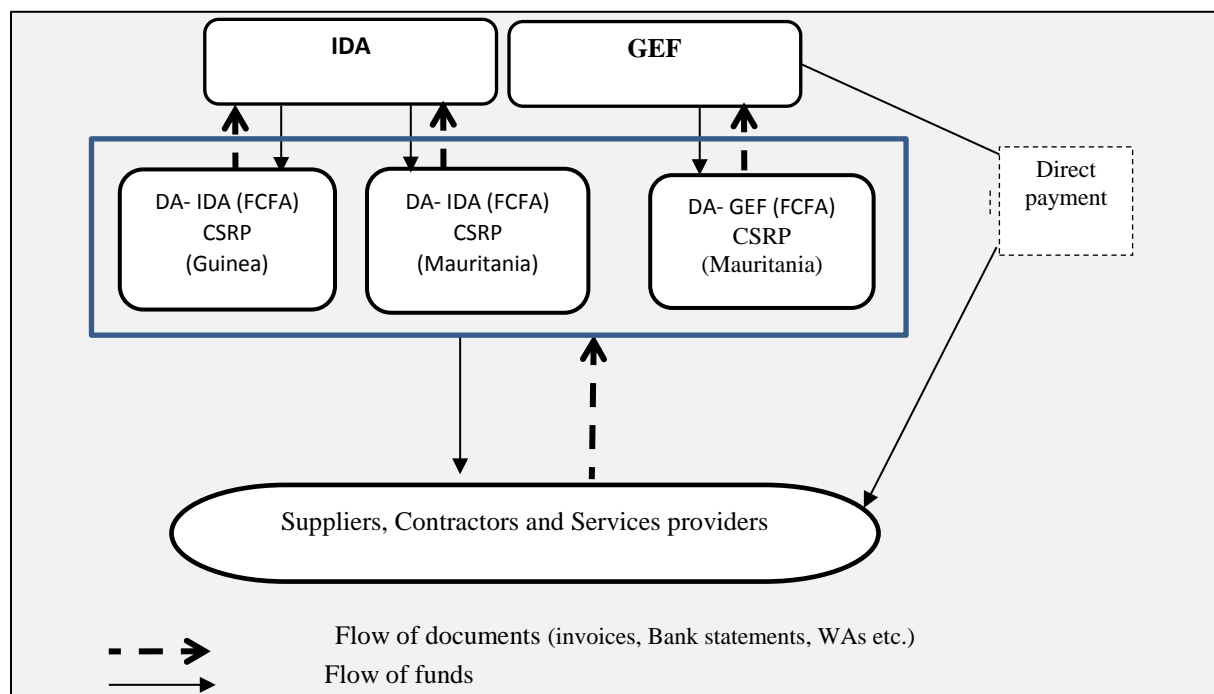


Figure 3. The project fund flow diagram for CSRP





**External Auditing arrangements**

26. The Financing Agreement will require the submission of Audited Financial Statements for Projects to IDA within six months after the end of each fiscal year. The audit reports should reflect all the activities of the project in Mauritania and Guinea. External auditors with qualification and experience satisfactory to the World Bank will be appointed to conduct annual audits of the project financial statement (PFS). Appropriate terms of reference for the external auditors will be provided to the project team. The external auditors will prepare a Management Letter giving observations and comments, providing recommendations for improvements in accounting records, systems, controls and compliance with financial covenants in the Financial Agreement.

Table 1: Auditing arrangements

Audit Report	Entity	Due Date
Annual audited financial statements and Management Letter (including reconciliation of the Designated Accounts with appropriate notes and disclosures	MPEM/MPA	June 30 N+1

**Action Plan**

27. The following actions, agreed with the PIU, need to be taken in order to enhance the financial management arrangements for the project:

Table 2: Action plan

N°	Action	Due Date	Responsible Entity
1	Prepare and agree with the Bank on the format of the IFRs	By Board (done)	MPEM/MPA
2	Update and finalize the Administrative and Accounting Manual of Procedures	By effectiveness	MPEM
3	Recruit an internal auditor to carry out ex-post reviews of the project transactions including DLI expenditures verifications	Four months after effectiveness	MPEM/MPA
4	Select an external auditor with ToR acceptable to the Bank (including fraud & corruption)	Four months after effectiveness	MPEM/MPA
5	Elaborate FM procedures for the project including detailed asset management procedures. Said FM procedures would be part of the Project Implementation Manual	Before effectiveness	MPA
6	Recruit an FM officer to take responsibility over the FM activities under ToR acceptable to the Bank	Before effectiveness	MPA
7	Recruit an accountant	Within two months after effectiveness	MPA
8	Set up an accounting software	Within two months after effectiveness	MPA

### ***Implementation Support Plan***

28. Based on the outcome of the FM risk assessment, the following implementation support plan is proposed based on the project FM residual overall rating for each country. The objective of the implementation support plan is to ensure the ministry of fisheries in each country maintains a satisfactory financial management system throughout the project's life.

<b>FM Activity</b>	<b>Frequency</b>
<b>Desk reviews</b>	
<b>Interim financial reports review</b>	Quarterly
<b>Audit report review of the program</b>	Annually
<b>Review of other relevant information such as interim internal control systems reports.</b>	Continuous as they become available
<b>Review of overall operation of the FM system</b>	Annual for Implementation Support Mission in Mauritania/bi-annual for Guinea
<b>Monitoring of actions taken on issues highlighted in audit reports, auditors' management letters, internal audit and other reports</b>	As needed
<b>Transaction reviews (if needed)</b>	As needed
<b>FM training sessions</b>	During implementation and as and when needed.

## 29. Financial Covenants

- a) A financial management system including records, accounts and preparation of related financial statements shall be maintained in accordance with accounting standards acceptable to the Bank.
- b) The Financial Statements will be audited in accordance with international auditing standards. The Audited Financial Statements for each period shall be furnished to the Association not later than six (6) months after the end of the project fiscal year. The Client shall therefore recruit an external auditor not later than six (6) months of effectiveness.
- c) The Client shall prepare and furnish to the Association not later than 45 days after the end of each calendar quarter, interim un-audited financial reports for the Project, in form and substance satisfactory to the Association.
- d) The Client will be compliant with all the rules and procedures required for withdrawals from the Designated Accounts of the project.

## III. Procurement

### *Processes and Procedures*

30. Procurement under the project will be carried out in accordance with the World Bank's (i) "*Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*" dated January 2011, revised in July 2014, (ii) "*Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*" dated January 2011, revised in July 2014, and (iii) "*Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants*", dated October 15, 2006, as revised in January 2011, as well as the provisions stipulated in the Financing Agreement.

31. The general description of various items under different expenditure categories is presented below under *Procurement Arrangements*. For each contract, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the Client and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually, or as required, to reflect the actual project implementation needs and improvements in institutional capacity.

32. In addition to prior review of contracts by the Bank as indicated in the Procurement Plan, the procurement capacity assessment recommends at least one supervision mission each year to carry out post-review of procurement actions and technical review. Post reviews focus on technical, financial and procurement reports carried out by World Bank and/or consultants selected and hired under the project. The percentage of the procurements subject to post-reviews and technical reviews will be decided on case-by-case by the World Bank mission.

33. **Advertising procedures:** In order to get the broadest attention from eligible bidders and consultants, a General Procurement Notice (GPN) will be prepared by the implementing entity and published in the United Nations Development Business online (UNDB online), on the World Bank's external website and in at least one newspaper of national circulation in the Client's

country, or in the official gazette, or a widely used website or electronic portal with free national and international access. The Client will keep record of the responses received from potential bidders/consultants interested in the contracts and send them the Specific Procurement Notices.

34. Specific Procurement Notices for all goods and non-consulting services to be procured under International Competitive Bidding (ICB) and Expressions of Interest for all consulting services with a cost equal to or above US\$200,000 will be published in the UNDB online, on the Bank's external website, and in at least one newspaper of national circulation in the Client's country, or in the official gazette, or a widely used website or electronic portal with free national and international access. Specific Procurement Notices (SPN) for goods and non-consulting services to be procured using National Competitive Bidding (NCB) will be published in at least one newspaper of national circulation in the Client's country.

35. **For National Competitive Bidding (NCB) in Mauritania**, the procurement procedure to be followed shall be the open competitive bidding procedure set forth in the Public Procurement Code 2010-044 of July 22, 2010, of Mauritania (the "Code"); provided, however, that such procedure shall be subject to the provisions of Section I, and Paragraphs 3.3 and 3.4 of the Procurement Guidelines, and the following additional provisions:

- a. Bidding documents acceptable to the Bank shall be used.
- b. Eligibility to participate in a procurement process and to be awarded a Bank-financed contract shall be as defined under Section I of the Procurement Guidelines; accordingly, no bidder or potential bidder shall be declared ineligible for contracts financed by the Association for reasons other than those provided in Section I of the Procurement Guidelines. Foreign bidders shall be allowed to participate in NCB procedures, and foreign bidders shall not be obligated to partner with local bidders in order to participate in a procurement process.
- c. Bidding shall not be restricted to pre-registered firms, and foreign bidders shall not be required to be registered with local authorities as a prerequisite for submitting bids.
- d. No margins of preference of any sort (e.g., on the basis of bidder nationality, origin of goods, services or labor, and/or preferential programs) shall be applied in the bid evaluation.
- e. Joint venture or consortium partners shall be jointly and severally liable for their obligations. Bidders shall be given at least thirty (30) days from the date of publication of the invitation to bid or the date of availability of the bidding documents, whichever is later, to prepare and submit bids. Bids shall be submitted in a single envelope.
- f. An extension of bid validity, if justified by exceptional circumstances, may be requested in writing from all bidders before the original bid validity expiration date, provided that such extension shall cover only the minimum period required to complete the evaluation and award a contract, but not to exceed thirty (30) days. No further extensions shall be requested without the prior written concurrence of the Bank.
- g. All bids (or the sole bid if only one bid is received) shall not be rejected, the procurement process shall not be cancelled, and new bids shall not be solicited without the Bank's prior written concurrence.
- h. Qualification criteria shall be applied on a pass or fail basis.
- i. Bidders shall be given at least twenty-eight (28) days from the receipt of notification of award to submit performance securities.

- j. In accordance with the Procurement Guidelines, each bidding document and contract shall include provisions stating the Bank's policy to sanction firms or individuals found to have engaged in fraud and corruption as set forth in the Procurement Guidelines.
- k. In accordance with the Procurement Guidelines, each bidding document and contract shall include provisions stating the Bank's policy with respect to inspection and audit of accounts, records and other documents relating to the submission of bids and contract performance.
- l. The evaluation committee should not include any Tender Committee member.

36. **For NCB in Guinea**, the client should ensure that the following special requirements are taken into account:

- a. Four weeks will be provided for preparation and submission of bids, after the issuance of the Invitation for Bids or availability of the bidding documents, whichever is later;
- b. Bidding documents acceptable to the Bank shall be used;
- c. Bids will be advertised in national newspapers with wide circulation;
- d. Bids will be presented and submitted only in one internal envelope (no system with two envelopes will be used);
- e. Bid evaluation, bidder qualifications criteria, and the contract award criteria will be clearly specified in the bidding documents;
- f. No preference margin will be granted to domestic bidders;
- g. Eligible firms, including foreign firms, will not be excluded from the competition;
- h. The procedures will include the publication of the results of evaluation and of the award of the contract, and provisions for bidders to protest;
- i. Procurement audit will be included in the terms of reference of financial audits of the project;
- j. If the procurement Code does not apply to small contracts, the procedures will require that for such contracts, a competitive method be used (reference for example to the shopping method in instance); and
- k. In accordance with the Procurement Guidelines, each bidding document and contract shall include provisions stating the Bank's policy to sanction firms or individuals found to have engaged in fraud and corruption as set forth in the Procurement Guidelines.

37. **Fraud and Corruption:** All procurement entities as well as bidders and service providers (i.e., suppliers, service providers, and consultants) shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraphs 1.16 and 1.17 (Fraud and Corruption) of the Procurement Guidelines and paragraph 1.23 and 1.24 (Fraud and Corruption) of the Consultants Guidelines, and the *“Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants”*, dated October 15, 2006 and revised in January 2011.

### ***Procurement Arrangements***

38. **Procurement of Works:** Works procured under this project would include construction or rehabilitation of the Fish Market in Nouakchott in Mauritania and a fish landing site in Guinea. The Contracts of works estimated to cost US\$5,000,000 equivalent or more per contract shall be procured through ICB. Contracts estimated to cost less than US\$5,000,000 equivalent may be procured through NCB. Contract estimated to cost less than US\$500,000 equivalent per contract

may be procured through shopping procedures. For shopping, contracts will be awarded following evaluation of bids received in writing on the basis of written solicitation issued to several qualified suppliers (at least three). The award would be made to the supplier with the lowest price, only after comparing a minimum of three quotations open at the same time, provided he has the experience and resources to execute the contract successfully. For shopping, the project procurement officer will keep a register of suppliers updated at least every six month.

39. **Procurement of Goods:** Goods to be procured under the project will include fisheries equipment, vehicles, computers and accessories, printers, photocopiers, IT equipment, specialized equipment and material for fisheries management systems, furniture and equipment for offices, and specialized equipment for fisheries. Contracts with an amount equal or above US\$500,000 equivalent shall be procured through ICB. Goods orders shall be grouped into larger contracts wherever possible to achieve greater economies of scale. Contracts with an amount lower than US\$500,000, but equal to or above US\$100,000 may be procured through NCB. Contracts with an amount below US\$50,000 may be procured using shopping procedures in accordance with paragraph 3.5 of the Procurement Guidelines and based on a model request for quotations satisfactory to the Bank. Shopping consists of the comparison of at least three price quotations in response to a written request. Direct contracting may be used in exceptional circumstances only with the prior approval of the Bank regardless of the amount, in accordance with paragraph 3.7 and 3.8 of the Procurement Guidelines.

40. **Procurement of non-consulting services:** Procurement of non-consulting services, such as related to the fisheries systems, information system, financial management system, software and licenses will follow procurement procedures similar to those stipulated for the procurement of goods, depending on their nature. The applicable methods shall include ICB, NCB, Shopping and Direct Contracting.

41. **Selection of Consultants:** Services of both national and international consultants will be required under the project for developing the legal and operational policy and strengthening the institutional capacity for managing fisheries resources, strengthening the vessel registration systems, developing and implementing fisheries management plans, strengthening the system of fisheries-related data collection, compilation and management, and dissemination and communication in a transparent manner, support to scientific research activities that inform operational planning and management policies and financial auditing. Selection of consultants will be carried out in compliance with the Consultant Guidelines. The provisions vary for consulting services provided by firms and individual consultants as follows:

- (a) **Firm.** Selection of consulting firms will include launching a Request for Expressions of Interest, preparing short-lists and issuing a Request for Proposal using Banks' standard formats, when and as required by the Bank's Guidelines. The selection method shall be chosen among the following: Quality and Cost Based Selection (QCBS) whenever possible; Quality Based Selection (QBS); Selection under a Fixed Budget (FBS); Least Cost Selection (LCS); Single Source Selection (SSS) as appropriate; Consultant's Qualifications (CQS) for all consultancy services estimated to cost less than US\$200,000 equivalent. The shortlist of firms for assignments estimated to cost less than US\$200,000 equivalent per contract may be composed entirely of national firms in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines, provided that a sufficient

number of qualified national firms are available and no foreign consultant desiring to participate is barred.

- (b) Individual Consultants. Individual consultants will be selected by comparing qualifications of at least three candidates and hired in accordance with the provisions of Section V. of the Consultant Guidelines.

42. Single-Source Selection (SSS) may be used for consulting assignments that meet the requirements of paragraphs 3.8 - 3.11 of the Consultant Guidelines and will always require Bank's prior review regardless of the amount. Procedures of Selection of Individual Consultants (IC) will apply to assignments which meet the requirements of paragraphs 5.1 and 5.6 of the Consultant Guidelines.

43. All terms of reference (ToRs) for the selection of firms and individual consultants, regardless of the estimated value of the assignment, will be subject to Bank review and clearance.

44. The recruitment of civil servants as individual consultants or as part of the team of consulting firms will strictly abide by the provisions of paragraphs 1.9 to 1.13 of the Consultants Guidelines.

45. **Workshops, Seminars and Conferences:** Training activities would comprise workshops and training, based on individual needs, as well as group requirements, on-the-job training, and hiring consultants for developing training materials and conducting training. Selection of consultants for training services follows the requirements for selection of consultants above. All training and workshop activities (other than consulting services) would be carried out on the basis of approved Annual Work Plans / Training Plans that would identify the general framework of training activities for the year, including: (i) the type of training or workshop; (ii) the personnel to be trained; (iii) the institutions which would conduct the training and reason for selection of this particular institution; (iv) the justification for the training, how it would lead to effective performance and implementation of the project and or sector; (v) the duration of the proposed training; and (vi) the cost estimate of the training. Report by the trainee(s), including completion certificate/diploma upon completion of training, shall be provided to the Project Coordinator and will be kept as parts of the records, and will be shared with the Bank if required.

46. **Operating Costs:** Operating Costs are incremental expenses arising under the project and based on Annual Work Plans and Budgets approved by the Bank pursuant to the Financing Agreements. They are incurred based on eligible expenses as defined in the Financing Agreement and cannot include salaries of the Client's civil and public servants. The procedures for managing these expenditures will be governed by the Recipient's own administrative procedures, acceptable to the Bank.

47. **Procurement Documents:** Procurement of works and goods under ICB and recruitment of consultants will be carried out using the latest Bank's Standard Bidding Documents (SBD) and, respectively, Standard Request for Proposal (RFP). For NCB, the Client shall submit a sample format of bidding documents to the Bank for prior review. Bidding documents shall incorporate the exceptions listed under paragraphs 35 and 36 above and shall be used throughout the project

once the format has been agreed. The Forms of Evaluation Reports developed by the Bank will be used. SBD for NCB will be updated to include clauses related to Fraud and Corruption, Conflict of Interest, Eligibility and Bank's inspection and auditing rights requirements consistently with the Bank's Procurement Guidelines dated January 2011.

48. **Procurement Plan:** For each contract, the procurement plan will define the appropriate procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, the prior review requirements, and the time frame. The procurement plan was reviewed during project appraisal and has been formally confirmed during negotiations. The procurement plan will be updated at least annually, or as required, to reflect the actual project implementation needs and capacity improvements. All procurement activities will be carried out in accordance with approved original or updated procurement plans. All procurement plans should be published on Bank website according to the Guidelines.

49. **Frequency of procurement reviews and supervision:** Bank's pre- and post- reviews will be carried out on the basis of thresholds indicated in the Procurement Plan. The Bank will conduct implementation support missions every six months and annual Post Procurement Reviews (PPR); with the ratio of post review at least 1 to 5 contracts. The Bank may also conduct an Independent Procurement Review (IPR) at any time up to two years after the closing date of the project.



Table 3: Procurement and Selection Review Thresholds

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contract Subject to Prior Review
	US\$		
1. Works	≥5,000,000	ICB	All
	<5,000,000	NCB	First contract
	<100,000	Shopping	The first contract
	No threshold	Direct contracting	All
2. Goods	≥500,000	ICB	All
	<500,000	NCB	The First contract
	<50,000	Shopping	The first contract
	No threshold	Direct contracting	All
3. Consultants Firms	≥200,000	QCBS; QBS; LCS; FBS	All contracts
	<200,000	QCBS; QBS; LCS; FBS,	The first contract
Consultants Firms	< 100 000	CQ	Two contracts
Individuals	≥100,000	EOI	All contracts
	<100,000	comparison of 3 CVs	The first contract (for others missions); Prior review for PIU staff
(Selection Firms & Individuals)	No threshold	Single Source	All

### *Assessment of Procurement Capacity of the Implementing Agency and Risks*

#### **Mauritania**

50. An assessment was conducted on the procurement arrangements for the Mauritania project under WARFP. The objective of the assessment was to determine whether the Mauritanian MPEM, the recipient and the implementing agency, have acceptable procurement capacity and arrangements in place that satisfy the Bank's Operation Policy and Procurement Procedures. These arrangements would ensure that the implementing entity: (i) use project funds only for the intended purposes in an efficient and economical way in compliance with project's objectives and Bank's requirements of procurement procedures; and (ii) prepare, care out and implement accurate and timely the procurement activities.

51. The assessment reviewed the organizational structure for the project implementing agency and the interaction between staff responsible for procurement and other relevant technical units of other entities that will be beneficiaries of project activities. While the MPEM has no experience in IDA-specific procurement procedures, it has set in place a PIU which has

appointed a procurement specialist who has had gained extensive implementation experience in Bank’s procedures with the IDA-funded Business Environment and Enterprise Performance project (BEEP), and the first draft of Procurement manual was already submitted to Bank review. The assessment indicated gaps and weaknesses at the MPEM level. The overall procurement risk is rated High.

52. The keys risks for procurement are: (a) inadequate capacity of MPEM and PIU staff in procurement practice and knowledge of Bank procurement policies and procedures and the Ministry’s Tender Committee to handle the volume of procurement for their respective activities under the project; (b) possible delays in the procurement process and poor quality of contract deliverables; and (c) absence of clear procedure for contracts with amounts below the threshold of the law (US\$33,000).

53. To address the above risks the following mitigation measures should be put in place: (a) development of a procurement procedural manual, approved by the Bank; (b) recruitment of a procurement consultant firm with experience in IDA-specific procurement procedures, which should provide technical assistant in procurement for the first year of project and coach the PS of MPEM and the Tender Committee of MPEM (*Commission Sectorielle des Secteurs de l’Economie*); (c) implementation of the capacity building action plan prepared by the MPEM and approved by the Bank for the PIU and entities involved in project implementation, the MPEM’s Tender Committee and other implementation entities involved in project implementation focusing on procurement and contracts management capacities; and (d) training for the Procurement specialist and all staff involved in project implementation designated by the MPEM which will be coached by the recruited Procurement Consultant over the course of one year at minimum.

Table 4: Procurement Action plan: Mauritania

	<b>Recommended Actions</b>	<b>Due Date</b>
1	Manual for Procurement procedures for all goods, works, no-consultant services and consultant services approved by the Bank	Before the project effectiveness
2	Select a specialized firm to assist the project for all procurement activities during the first year of project implementation	During the 12 months following project effectiveness or PPA period
3	Train MPEM staff and staff of all entities involved in project implementation on procurement procedures	During the 12 months following project effectiveness or PPA period

## Guinea

54. **In Guinea** the Bank conducted an assessment of the procurement capacity of the Ministry of Fisheries and Aquaculture (MPA) in September 2014 in accordance with Bank’s procurement Risk Assessment and Management System. The assessment reviewed the organizational structure for implementing the project taking into account the regional program context, a number of actors and stakeholders. The assessment identified that the Ministry of Fisheries and Aquaculture is not familiar with the IDA procurement procedures and it has identified a number of critical areas which have potential risk.

55. The potential risks identified are: (i) a large number of actors; (ii) the need to put in place a National Project Implementation Unit which comprises one Procurement officer who is familiar with Bank procurement procedures; and (iii) the need to elaborate an implementation manual which includes the procurement procedures for the project. Based on the assessment of the system in place, the overall project risk for procurement is High. It may be lowered to Substantial once the mitigations measures are implemented.

56. **Mitigation measures:** In order for these bodies to implement Bank funded activities in accordance with the Bank guidelines on procurement, the assessment mission recommended the following: (i) the recruitment, by the Ministry of Fisheries and Aquaculture, of one Procurement Specialist who is familiar with Bank procurement procedures; (ii) elaboration of an implementation manual which includes the procurement procedures for the project; and (iii) putting in place a good filing system.

Table 5: Procurement Action plan: Guinea

	<b>Recommended Action</b>	<b>Due Date</b>
1	Recruitment by the Ministry of Fisheries and Aquaculture of one procurement specialists on Terms of Reference acceptable to IDA	Before effectiveness
2	Elaborate an implementation manual which includes procurement procedures	Before effectiveness

#### **IV. Environmental and Social (including safeguards)**

##### **Mauritania**

###### (1) Project Management

57. The PIU will be in charge of the project management. It will be responsible for the implementation of the Environmental and Social Management Plan (ESMP) and Resettlement Action Plan (RAP) as well as related environmental and social mitigation measures detailed therein. To fulfill that role the PIU will hire a dedicated safeguards specialist. The PIU will make sure that the mitigation measures will be integrated in (1) bidding documents, and (2) the contracts for civil works. The PIU will ensure the implementation of the ESMP through the monitoring and coordination committee. Further, an environmental expert will be hired as part of the supervision company and will be tasked with regular site monitoring missions: (1) first mission at the beginning of construction; (2) regular missions at least every 3 months thereafter; (3) last mission at completion/restitution of works. The PIU will handle environmental and social safeguards activities and will ensure regular reporting as well as mid-term and final audits of the environmental and social measures and recommendations. These reports will be shared with the Ministry of Environment, in particular the environmental compliance unit (DCE – *Direction du Contrôle Environnemental*) in line with national laws and regulations.

58. Civil works will not start until the RAP is fully implemented. Since the RAP has already been consulted upon, validated, and disclosed in country and at the InfoShop, the PIU will need

to start its implementation as soon as the project becomes effective in order to avoid delays to the project implementation timeline.

59. A steering committee, chaired by the administrative authorities and assisted by the safeguards specialist of the PIU, will handle the implementation of the resettlement activities and compensation of losses. The PIU safeguards specialist will assume the role of facilitator for the committee which will be composed by relevant of public institutions, local authorities, NGOs and representatives of affected people. Some awareness-building programs will be conducted with the Project Affected People (PAP). Given the nature of the resettlement activities, the plan will include assistance to vulnerable groups and compensation programs. The project site is located in an area where land is available and where it will be easy to relocate the affected people not too far from project area. The PAPs and the government have agreed on this option following consultations on the RAP. The PAPs have been fully involved in the resettlement decisions and they will participate in the identification of the new sites. The PIU safeguards specialist in collaboration with the steering committee will organize regular meetings to successfully implement the RAP. The key steps of the RAP's implementation will include:

- Information and awareness campaign;
- Declaration of Public Utility;
- Mobilization of resources from GoM;
- Land acquisition;
- Compensation of PAPs;
- Assistance to the vulnerable groups;
- Monitoring and evaluation; and
- Continued support to and follow-up with PAPs on the implementation of the RAP.

60. **Feedback and Grievance Redress Mechanism:** An action plan that identifies priority areas for strengthening grievance capacity will be set up and dedicated resources will be allocated for the implementation of this action plan. A series of discussions took place during the appraisal mission in December 2014 on how the mechanism will be set up. Although the FGRM is not yet in place for this project, the Bank has experience with the FGRM in forestry projects and will apply the model here. A committee (constituted by administrative staff, local government, PAPs and civil society) set up for the implementation of the RAP will play the role of facilitator for community members and affected persons. A focal point will be designated by PIU and a training of implementation staff will ensure establishment of a well-functioning FGRM. The WARFP will allocate budget for local capacity building for dispute resolution and operating costs (e.g. email, fax, telephone). The project unit will also assist the steering committee to publicize feedback and grievance redress policy and processing procedures and provide guidance on how to create interagency entity to oversee, evaluate, support and manage disputes. The communication focal point and safeguards staff will work together to compile feedback and grievances for the committee and prepare report and monitor redress. If necessary the committee will bring grievances to higher levels and track them and inform the complainant on investigations and the results of actions taken on the grievances.

(2) Contractors

61. Contractors are responsible for the efficient implementation of environmental and social measures as indicated and detailed in the safeguards instruments. Within 30 days after the signature of the civil works contract, the contractor will prepare the plans and documents that will help the enterprise implement concretely the measures outlined in the ESMP. These plans and documents will be approved by the supervision company after consultation and validation of their soundness by the PIU. These plans and documents will include:

- Water supply system plan for the water needs of the work site and the base camp;
- Waste management plan for the work site (expected type of waste; collection method; type and location of temporary storage; type and location of disposal);
- Overall management plan for the exploitation and restoration of borrow pits, quarries and deposit areas (anti-erosion measures and site restoration);
- Environmental, health and safety plan;
- STI/HIV/AIDS prevention plan;
- Site installation plan;
- Hazardous substance spillage emergency plan;
- Communication and reporting plan;
- Recruitment plan;
- Site and base camp rules; and
- Site closing procedures.

62. The contractor's team will have to include an environmental and social focal point who will be responsible for ensuring the implementation of environmental and social clauses after integrating the most sensitive environmental and social measures to the work site, integrating environmental and social monitoring and oversight in the site's log, and to serve as counterpart to the supervision company on environmental and social issues.

### (3) Engineering Firm

63. In addition to the traditional supervision of works, the engineering firm recruited by the PIU will be responsible for the environmental and social oversight on the site. The firm will be responsible to the same extent as the contractor for environmental quality in the area of influence of the project.

64. Both the contractor and the engineering firm will be responsible for any environmental or social damages, regardless of their nature. The engineering firm will oversee the implementation of the ESMP in concert with the PIU.

65. The engineering firm can, if needed and in concert with the PIU, modify construction/work methods in order to achieve the environmental and social protection objectives of the project without changing the final works delivery schedule.

66. The engineering firm will produce three (3) status reports on its activities and the implementation of the environmental and social measures. Each report should highlight any environmental and social issues that may have arisen during the corresponding oversight period.

## Guinea

67. The following guidelines, codes of practice and requirements will constitute the framework of reference for the selection, design, contracting, monitoring and evaluation of subprojects. The safeguard screening and mitigation process will include:

- A list of negative characteristics rendering a proposed activity ineligible for support (Annex 8, Attachment 1);
- A proposed checklist of likely environment and social impacts to be filled out for each subproject or group of activities (Annex 8, Attachment 2);
- Guidelines for land and asset acquisition, entitlements and compensation (Annex 8, Attachment 3);
- Procedures for the protection of cultural property, including the chance discovery of archaeological artifacts, unrecorded graveyards and burial sites, etc. (Annex 8, Attachment 4);
- Relevant elements of the codes of practice for the prevention and mitigation of potential environmental impacts (Annex 8, Attachment 5); and
- A sample Environmental Safeguards procedures for Inclusion in the Technical Specifications of Contracts (Annex 8, Attachment 6).

### (1) Responsibilities for Safeguard Screening and Mitigation

68. Implementation capacity is weak in Guinea and will be supplemented by a technical team embedded in the Ministry's monitoring and implementation unit, with oversight provided by a multi-stakeholder national steering committee. In addition, the regional structure mandated with supporting the management of marine fish resources, the *Commission Sous-Régionale des Pêches* (CSRPE), will help coordinate and supervise compliance with safeguard policies.

### (2) Capacity Building and Monitoring of Safeguard Framework Implementation

69. As part of the capacity building to be provided for implementation of the proposed operation, the PIU's environmental and social focal point will receive training on the Bank's safeguards policies implementation requirements and on the ESSAF's application from the Bank's safeguards specialists. During supervision, the project team will assess the implementation of the ESSAF, including the preparation and implementation of the safeguards instruments (such as ESIA's and RAP's). The project team may recommend additional strengthening if required.

## V. Project Monitoring and Evaluation

70. **Objective:** M&E in the regional fisheries project for the two countries has been developed around the following five principles and objectives.

- (i) M&E serves as a tool for results-based management to ensure that data and information of the progress of the project - or lack of progress - towards achievement of objectives feed into management decisions.

- (ii) M&E provides a framework for accountability of progress towards national and regional development objectives attributable to interventions and actions of the concerned institutions in the two countries and the CSRP.
- (iii) M&E serves as an approach to monitoring performance of participating countries to ensure a certain level of regional performance and contribution to regional objectives from the two countries.
- (iv) M&E provides a communication platform of project results and benefits to value chain actors including fishers, middlemen, artisanal processors, merchants, consumers and the administrators.
- (v) M&E should meet the World Bank’s routine reporting requirements, i.e. the biannual progress report, Implementation Status and Results (ISR) report which is developed for each country and publicly disclosed, and data and information requirements for the mid-term review (MTR) of the project.

71. **Context and capacity:** Fulfillment of these objectives in the context of capture fisheries in West Africa poses certain challenges. Governments’ capacity to lead the M&E agenda and carry out the necessary activities is often weak due to insufficient experience in planning and execution of project M&E and little administrative infrastructure, while the task of M&E itself is difficult because of certain peculiarities of the M&E context including the extent of spatial spread of fishing activities and fish resources and trans-boundary nature of some fish species. Signs of weak capacity include (but not limited to) lack of validation of field-level data, incomplete datasets, missing information, inconsistent reporting, informal acquisition of data and information, and no- or under-utilization of data in decision-making and policy formulation. An assessment of M&E capacity in the two countries is presented in Table 5 below.

Table 6: Assessment of M&E capacity. Rating scale: 1 = lowest, 5 = highest.

Country	1. Availability of key data	2. Routine data collection	3. Quality of data	4. Government capacity	5. Use of data and information
Mauritania	3	3	3	3	2
Guinea	2	2	1	2	1

72. **Design of results framework:** These weaknesses have been taken into account in the design of the M&E and reflected mostly in the number and selection of indicators and data sources and methodologies for data collection. The main instrument for M&E is the results framework (Annex 1) which is common to the two countries and will be reported in the ISRs. It consists of the PDO statement and six PDO indicators and 13 intermediate indicators. Several of PDO-level and intermediate results indicators are chosen as DLI indicators (Annex 4). A core indicator of the World Bank is also included, i.e. core indicator on direct project beneficiaries. All indicators are disaggregated by country with further disaggregation as necessary: fishing segments for the PDO indicator on vessel registration and by gender for the core indicator on project beneficiaries. All of the indicators have baselines and targets listed as well as frequency for data collection, data sources and methodology for calculation of baseline and target values of indicators and responsible entities for data collections. Sources of data can vary between the two countries and data quality assurance mechanism will be put in place with research centers in the respective countries and with the technical support from the CSRP. Baselines for some of the indicators have been established based on available information from a variety of sources (e.g.

national statistics, key informants' interview, one-off field surveys by donors, etc.) and need to be verified and updated as soon as possible by the first year data collection. Furthermore, in the results framework there is a column for definition of indicators and remarks.

73. **M&E activities:** The M&E activities will: (i) generate information on progress of the project; (ii) analyze and aggregate data generated at regional, country and local levels; and (iii) document and disseminate key lessons to users and stakeholders across the two countries together with the communication function. CSRP will also be the recipient of all countries' evaluation and progress reports and will be able to share results and best practices across coastal West Africa and elsewhere. The project-level M&E will draw on and strengthen national and regional systems to monitor results and needs.

74. **Consistency with Fishery Performance Indicators (FPI):** Direct implementation of the instrument of Fishery Performance Indicators, developed at the World Bank and applied in fisheries around the world, is not envisaged in this phase of the project. However if resources become available, such implementation is desirable, in part for the GEF results management purposes, but also as a potential standard approach to measuring performance of fisheries in Bank operations. At the least, the indicators found in the results framework as well as additional indicators for larger M&E purposes are of the type found in the FPI instrument.

## **VI. Role of Partners**

75. In both countries the main partners are the technical ministries and the CSRP based in Dakar. Both countries are members of the CSRP, which promotes policy harmonization and regional coordination of surveillance on the sea.

76. In Mauritania, the Ministry has requested in September 2014 the support from FAO and the World Bank to elaborate the new sector development strategy. Since 2013, the World Bank has been supporting the Ministry to prepare an Investment Framework to coordinate the development and implementation of the new strategy. The Investment Framework encompasses both soft investments such as policy and governance reforms and surveillance as well as hard investments in line with the Master Plan of fisheries infrastructure, which was also financed by the project preparation advance. Activity to be identified under the investment framework can be supported by donor and partners based on their comparative advantage. If well managed by the Ministry, the Investment Framework has the potential to become a coordination tool for all investments in the fisheries sector.

77. During the preparation phase, the Bank held several consultation sessions in Mauritania on the Investment Framework with technical partners and financial donors, convening representatives from China, France, Germany, Japan, Spain, EU, FAO and the Islamic Investment Bank. The World Bank has also closely liaised with KfW Development Bank, GIZ and the European Investment Bank (potential) that will provide parallel funding to this project in the areas of surveillance, fisheries management transparency and the Fish Market of Nouakchott, respectively.

78. In Mauritania, the project is working very closely with three other Bank operations, namely the Nouadhibou Free Zone Support and Competitiveness Project (P151058), Extractive Industry



Transparency Initiative (EITI) Post Compliance II (P150123) and ICT Sector Dialogue (P152061).

- a. The Free Zone project will invest approximately US\$30 million in the Free Zone. The two task teams closely coordinate and have joint staff to ensure full synergies. The two teams also promote and finance close dialogue between the MPEM and the Free Zone Authority. In fact, the MPEM has the jurisdiction over fisheries management whereas the Free Zone Authority has jurisdiction over fisheries infrastructure management. A strong coordination is essential for the success of both projects.
- b. The EITI promotes transparency in extractive industry. The project will directly support the integration, on a pilot basis, of the octopus fishery in EITI. If successful, the approach could be replicated in other WARFP countries.
- c. The ICT operation has launched a youth challenge to develop mobile phone applications, some of which could support fisheries management (e.g. data collection and reporting, surveillance).

79. In Guinea, the World Bank has partnered with the NEPAD. During a joint mission in January 2014, the NEPAD committed to finance a study complementary to the project, in particular a study on aquaculture development. The World Bank has also liaised with the European Commission to better understand why Guinea has been classified as a non-cooperative country to fight IUU fishing.

## **Annex 4: Notes on Disbursement-Linked Indicators**

### **MAURITANIA AND GUINEA West Africa Regional Fisheries Program SOP-C1**

1. The DLI mechanism has been introduced in WARFP SOP C1 for Mauritania and Guinea to serve the role of signaling incentives for rewarding performance (outputs, outcomes) in order to encourage the practice of managing for results.
2. **A pool of funds, the DLI funds,** has been identified, and will be released on an annual basis upon achievement of specific targets values of the DLIs. The funds identified for DLIs were drawn from IDA funds allocated to the Project. These funds do not constitute expenses related to specific activities in the components and will be used for payments when DLI target values are achieved at the end of each year of implementation. The total amount retained in the DLI fund is US\$1,000,000 for Mauritania and US\$700,000 for Guinea, or 5% and 7% of project financing respectively.
3. **Seven principles** were agreed upon with the Governments during the appraisal missions in December 2014 and in January 2015 to guide the DLI mechanism.

Principle 1. Annual Predictability: Funds will be made available in the first quarter of the following project year following successful independent verification;

Principle 2. Eligibility of Expenses: Funds will be used for short-term training according to a pre-approved plan, and for operating cost of services contributing to DLI achievements;

Principle 3. Repartition Key: Approximately one third of the DLI funds will be used for recurrent operating costs of the pre-selected services, and two thirds for short term training of pre-selected staff from the same services;

Principle 4. Respect of Procedures: Use of DLI funds will be managed by the PIU in compliance with the Bank's fiduciary guidelines;

Principle 5. Two-year Accumulation: Should a DLI target not be met in a year but is achieved the following year, then the corresponding two tranches of DLI funds can be paid concurrently;

Principle 6. Third Year Redistribution: Should a target not be met after two years, it cannot be transferred for award in the third year. DLI funds that are not disbursed will be used for a workshop on "the reasons of the lack of performance" and "learning from the practice of managing for results" aimed at producing an action plan for improving results management. Any remaining funds will be redirected and used for project activities under a restructuring; and

Principle 7. Ceiling Amounts: Expenses will be made available to agencies according to a detailed table of distribution, within which the ceiling of amounts cannot be changed (see table below).

4. **Verification Protocol:** The same protocol applies to all DLIs in both countries. The project will compile the information into a DLI verification packet, which will be reviewed by an independent third-party verifier.

4.1. **Independent third-party verification:** The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission (CSRP), and financed by the CSRP using funds from the subsidiary agreements with the two countries. This entity will be selected based on its proven experience in fisheries management, in particular familiarity with fisheries management data, approach and methodology to assess fishing vessel registration processes and monitoring, control and surveillance (MCS) systems. The Bank will retain its right to due diligence, including no-objection to the TORs and oversight of the tendering process.

4.2. **Verification modalities:** In the first year, the DLI will be prepared after 10 months and submitted for verification no later than 12 months after effectiveness date. This gives the governments two months for the delivery of the first verification packet. In subsequent years, the DLI verification packet will be produced covering a period of 12 months and submitted to the Bank every 12 months on the effectiveness anniversary date. If satisfactory, the Bank will provide a no-objection to a DLI verification report from the independent verification entity stating which of the DLI targets have been met. The Bank will then confirm the amount to be disbursed against each DLI target that has been met.

5. **For Mauritania,** the DLI fund totals US\$1,000,000, distributed by year and by indicator as follows:

<b>DLI 1: Number of Reliable fisheries management data regularly available (IR Indicator 1.1)</b>						
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total (US\$)</b>
<b>Target</b>	6 out of 13 variables are made available	7 out of 13 variables are made available	10 out of 13 variables are made available	12 out of 13 variables are made available	13 out of 13 variables are made available	N/A
<b>DLI Value (US\$)</b>	18,750	18,750	56,250	37,500	18,750	<b>150,000</b>
<b>Description of Achievement</b>	<p>The achievement of the DLI target will be measured by assessing the degree of reliable fisheries data that are made available.</p> <p>The fisheries variables that will be made available include:</p> <ol style="list-style-type: none"> <li>1. List of valid fishing licenses from all segments (monthly)</li> <li>2. List of infractions in artisanal and coastal segments (annually)</li> <li>3. List of infractions in industrial segment (monthly)</li> <li>4. Fees from licenses (every trimester)</li> <li>5. Fees collected under fishing agreements (annually)</li> <li>6. Fees from infractions (annually)</li> <li>7. Estimate of octopus catch potential in the EEZ (metric ton estimate) (annual)</li> <li>8. Fishing effort, in thousands of hours of industrial fleets (by category of vessels) (annual)</li> <li>9. Volume in tons of fish production (pelagic, demersal cephalopods and crustaceans) (annual)</li> <li>10. FOB value of frozen fish exports in thousands of US dollars (current prices), by segment (artisanal and coastal) (annual)</li> <li>11. FOB price of octopus exports in US dollars per ton (monthly)</li> <li>12. Value of public and private investments made in the fisheries sector (in US dollars) (annual)</li> <li>13. Number of shipyard approved by the State serving fisheries units (annual)</li> </ol> <p>The DLI is not scalable.</p>					
<b>Verification</b>	Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by					

<b>Protocol</b>	<p>the Sub-Regional Fisheries Commission.</p> <p>Data source: The independent entity will verify the achievement of this DLI by reviewing the annual report of the <i>Comité Restreint sur les Statistiques de Pêche</i> (CSRP) to assess whether the fisheries data was made available.</p> <p>Procedure: The methodology used to assess the data availability is a simple count of the number of the 13 variables that are made available.</p>
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<b>DLI 2: Share of fisheries management data published regularly and made publicly accessible (PDO Indicator 1)</b>						
<b>Year</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total (US\$)</b>
<b>Target</b>	16% of fisheries management data published regularly and made publicly accessible	33% of fisheries management data published regularly and made publicly accessible	50% of fisheries management data published regularly and made publicly accessible	66% of fisheries management data published regularly and made publicly accessible	83% of fisheries management data published regularly and made publicly accessible	N/A
<b>DLI Value (US\$)</b>	40,000	40,000	40,000	40,000	40,000	<b>200,000</b>
<b>Description of Achievement</b>	<p>The achievement of the DLI target will be measured by the degree of fisheries management data that are made publicly accessible so as to improve transparency in the governance of fisheries.</p> <p>Six variables constitute the fisheries management data that are expected to be made publicly accessible:</p> <ol style="list-style-type: none"> <li>1. List of valid fishing licenses from all segments (monthly)</li> <li>2. List of infractions in artisanal and coastal segments (annually)</li> <li>3. List of infractions in industrial segment (monthly)</li> <li>4. Fees from licenses (every trimester)</li> <li>5. Fees collected under fishing agreements (annually)</li> <li>6. Fees from infractions (annually)</li> </ol> <p>The DLI is not scalable.</p>					
<b>Verification Protocol</b>	<p>Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission.</p> <p>Data source: The website of the government agency responsible for fisheries management</p> <p>Procedure: The methodology to compute the target value is as follows: Calculation by division of number of accessible fisheries management variables in annual equivalent by defined total number of variables (6) x 100. For example, each monthly data will be recorded by 1/12. If this variable is published monthly during the year, its value will be 1. If this variable is published regularly for 6 months, its value will be 0.5.</p>					

<b>DLI 3: Number of fishing vessels operating in the exclusive economic zones should not exceed the ceiling established for each segment (PDO Indicator 3)</b>						
<b>Year</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total (US\$)</b>
<b>Target</b>	“Yes”: number does not exceed ceiling of 7,661 artisanal vessels, 261 coastal vessels, and 245 industrial vessels	“Yes”: number does not exceed ceiling of 7,661 artisanal vessels, 261 coastal vessels, and 245 industrial vessels	“Yes”: number does not exceed ceiling of 7,661 artisanal vessels, 261 coastal vessels, and 245 industrial vessels	“Yes”: number does not exceed ceiling of 7,661 artisanal vessels, 261 coastal vessels, and 245 industrial vessels	“Yes”: number does not exceed ceiling of 7,661 artisanal vessels, 261 coastal vessels, and 245 industrial vessels	N/A
<b>DLI Value (US\$)</b>	50,000	50,000	50,000	50,000	50,000	<b>250,000</b>
<b>Description of Achievement</b>	<p>This is a proxy measure of the fishing capacity with the intent that the number of vessels should not increase so as to curb the trend of resource degradation.</p> <p>In the industrial segment, the number of vessel is measured with reference to the number of fishing licenses in annual equivalent. In the artisanal segment, the number of vessels will be calculated based on the number of registered boats and it includes the dormant capacity.</p>					

	<p>The number of fishing vessels includes foreign vessels.</p> <p>The indicator will be considered achieved (= “Yes”) if the fleet size is at or below the following values:</p> <ul style="list-style-type: none"> <li>• 7,661 artisanal vessels and 261 coastal vessels as indicated in the registry of the <i>Direction de la Pêche Artisanale et Côtière</i> (DPAC), and</li> <li>• 245 industrial vessels as indicated in the registry of the <i>Direction de la Pêche Industrielle</i> (DPI).</li> </ul> <p>The DLI is not scalable.</p>
<b>Verification Protocol</b>	<p>Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission.</p> <p>Data source: For artisanal vessels and coastal vessels, the information can be verified in the registry of the <i>Direction de la Pêche Artisanale et Côtière</i> (DPAC), and for industrial vessels, the information can be verified in the registry of the <i>Direction de la Pêche Industrielle</i> (DPI).</p> <p>Procedure: The indicator will be considered achieved (= “Yes”) if the fleet capacity is at or below 7,661 artisanal vessels, 261 coastal vessels, and 245 industrial vessels.</p>

<b>DLI 4: Share of fishing vessels registered (IR Indicator 1.2)</b>						
<b>Year</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total (US\$)</b>
<b>Target</b>	100% of Industrial, 60 % of Coastal, and 0% of Artisanal fleet is registered	100% of Industrial, 70 % of Coastal, and 0% of Artisanal fleet is registered	100% of Industrial, 80 % of Coastal, and 25% of Artisanal fleet is registered	100% of Industrial, 85 % of Coastal, and 50% of Artisanal fleet is registered	100% of Industrial, 90 % of Coastal, and 90% of Artisanal fleet is registered	N/A
<b>DLI Value (US\$)</b>	30,000	30,000	30,000	30,000	30,000	<b>150,000</b>
<b>Description of Achievement</b>	<p>The achievement of the DLI target will be measured by verifying the percentage of registered vessels in industrial, coastal and artisanal segments of the fishing fleet.</p> <p>Although the artisanal and coastal vessels are already registered, Mauritania will develop a new secured registration system with an unforgeable identification device.</p> <p>The DLI is not scalable.</p>					
<b>Verification Protocol</b>	<p>Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission.</p> <p>Data source: There are two sources for data verification. The first is located at the <i>Direction de l'Aménagement et de la Recherche Océanographique</i> (DARO), which manages the registry information for both DPI (for the industrial segment) and DPAC (for the coastal and artisanal segments). The second is located at the <i>Direction de la Marine Marchande</i> (DMM) which keeps track of the registration of the country’s fishing fleet.</p> <p>Procedure: The DLI will be considered achieved if the percentage of registered vessels is at or above the targeted percentage values.</p>					

<b>DLI 5: 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” (IR Indicator 1.7)</b>						
<b>Year</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total (US\$)</b>
<b>Target</b>	0	0	1	2	3	N/A
<b>DLI Value (US\$)</b>	0	0	83,334	83,333	83,333	250,000
<b>Description of Achievement</b>	<p>This indicator is based on the observation of the process leading to the distribution of the shares of total annual catch (TAC) in the octopus fishery. Total allowable catch measure is used to ensure stock sustainability without undermining the renewal potential of the stock.</p> <p>The target value of “0”, “1”, “2”, or “3” will be established in the following way:</p> <ul style="list-style-type: none"> <li>• Target value “0” means that the total allowable catch is distributed in non-participatory, non-transparent, and non-scientific manner.</li> <li>• Target value “1”, “2”, or “3” is achieved by the cumulative value of one point each earned if the total</li> </ul>					

	<p>allowable catch is distributed in a participatory, transparent, or scientific manner, respectively.</p> <ul style="list-style-type: none"> <li>The maximum score is “3” which is earned if the total allowable catch is distributed in a participatory, transparent, and scientific manner.</li> </ul> <p>The following definitions apply:</p> <ul style="list-style-type: none"> <li>Participatory: Annual publication of results of consultations that include a large number of players and vulnerable populations leading to the distribution of TAC</li> <li>Transparent: Publication of allocation criteria and data based on which TAC distribution will be made.</li> <li>Scientific: The distribution should be consistent with biological and economic sustainability adjusted depending on resource availability.</li> </ul> <p>The DLI is not scalable.</p>
<b>Verification Protocol</b>	<p>Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission.</p> <p>Data source: The value will be assessed by examining the annual report of the <i>Institut Mauritanien de Recherche Océanographique et sur les Pêches</i> (IMROP), and for which conclusions are validated by the <i>Conseil Consultatif National pour l'Aménagement et le Développement des Pêcheries</i> (CCNAD), as documented the minutes of their annual meeting.</p> <p>Procedure: the total annual catch distribution will be assessed against the three parameters of Participatory, Transparent, and Scientific, as per the definitions provided above.</p>

6. For Guinea, the DLI fund totals US\$700,000, distributed by year and by indicator as follows:

<b>DLI 1: Number of Reliable fisheries management data regularly available (IR Indicator 1.1)</b>						
<b>Year</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total (US\$)</b>
<b>Target</b>	1 out of 6 variables are made available	2 out of 6 variables are made available	3 out of 6 variables are made available	4 out of 6 variables are made available	5 out of 6 variables are made available	N/A
<b>DLI Value (US\$)</b>	28,000	28,000	28,000	28,000	28,000	<b>140,000</b>
<b>Description of Achievement</b>	<p>The achievement of the DLI target will be measured by assessing the number of reliable fisheries data that is made available.</p> <p>The of fisheries variables that will be made available include:</p> <ol style="list-style-type: none"> <li>List of valid fishing licenses from all segments (monthly)</li> <li>List of infractions in artisanal and coastal segments (annually)</li> <li>List of infractions in industrial segment (monthly)</li> <li>Fees from licenses (every trimester)</li> <li>Fees collected under fishing agreements (annually)</li> <li>Fees from infractions (annually)</li> </ol> <p>The DLI is not scalable.</p>					
<b>Verification Protocol</b>	<p>Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission.</p> <p>Data source: The independent entity will verify the achievement of this DLI by reviewing the annual report of the <i>Observatoire National des Pêches</i> (ONP) to assess whether the fisheries data was made available.</p> <p>Procedure: The methodology used to assess the availability is a simple count of the number of the six variables that are made available.</p>					

<b>DLI 2: Share of fisheries management data published regularly and made publicly accessible (PDO Indicator 1)</b>						
<b>Year</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total (US\$)</b>

<b>Target</b>	16% of fisheries management data published regularly and made publicly accessible	33% of fisheries management data published regularly and made publicly accessible	50% of fisheries management data published regularly and made publicly accessible	66% of fisheries management data published regularly and made publicly accessible	83% of fisheries management data published regularly and made publicly accessible	N/A
<b>DLI Value (US\$)</b>	42,000	42,000	42,000	42,000	42,000	<b>210,000</b>
<b>Description of Achievement</b>	<p>The achievement of the DLI target will be measured by the degree of fisheries management data that are made publicly accessible so as to improve transparency in the governance of fisheries.</p> <p>Six variables constitute the fisheries management data that are expected to be made accessible:</p> <ol style="list-style-type: none"> <li>1. List of valid vessel licenses in industrial segment (monthly)</li> <li>2. List of artisanal fishing boats (annually)</li> <li>3. List of infractions in industrial segment (monthly)</li> <li>4. Fees from licenses (every trimester)</li> <li>5. Fees collected under fishing agreements (annually)</li> <li>6. Fees from infractions (annually)</li> </ol> <p>The DLI is not scalable.</p>					
<b>Verification Protocol</b>	<p>Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission.</p> <p>Data source: The information will be available in the annual statistical reports of the <i>Observatoire National des Pêches</i> (ONP) as well as in the accounts from the agency responsible for fisheries revenue management in the Ministry of Finance.</p> <p>Procedure: The methodology to compute the target value is as follows: Calculation by division of number of accessible fisheries management variables in annual equivalent by defined total number of variables (6) x 100. For example, each monthly data will be recorded by 1/12. If this variable is published monthly during the year, its value will be 1. If this variable is published regularly for 6 months, its value will be 0.5.</p>					

<b>DLI 3: Number of fishing vessels operating in the exclusive economic zones should not exceed the ceiling established for each segment (PDO Indicator 3)</b>						
<b>Year</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total (US\$)</b>
<b>Target</b>	“Yes”: number does not exceed the ceiling of 10,000 artisanal vessels (expressed in normalized value), and 85 industrial vessels	“Yes”: number does not exceed the ceiling of 10,000 artisanal vessels (expressed in normalized value), and 85 industrial vessels	“Yes”: number does not exceed the ceiling of 10,000 artisanal vessels (expressed in normalized value), and 85 industrial vessels	“Yes”: number does not exceed the ceiling of 10,000 artisanal vessels (derived from the register), and 85 industrial vessels	“Yes”: number does not exceed the ceiling of 10,000 artisanal vessels (derived from the register), and 85 industrial vessels	N/A
<b>DLI Value (US\$)</b>	28,000	28,000	28,000	28,000	28,000	<b>140,000</b>
<b>Description of Achievement</b>	<p>This is a proxy measure of the fishing capacity with the intent that the number of vessels should not increase so as to curb the trend of resource degradation.</p> <p>The number of fishing vessels includes foreign vessels.</p> <p>In the industrial segment, the number of vessel is measured with reference to the number of fishing licenses in annual equivalent.</p> <p>In the artisanal segment, measurement of the number of vessels will be based on the census in year 1; on the basis of the census update in years 2 and 3 and then on the basis the number of registered vessels in years 4 and 5.</p> <p>The indicator will be considered achieved (= “Yes”) if the fleet size is at or below the following values:</p> <ul style="list-style-type: none"> <li>• In year 1, 2, and 3, a normalized value 10,000 reflecting the combined capacity of artisanal vessels of small and large model will be used. In year 4 and 5, the ceiling will be derived from registered artisanal vessels.</li> <li>• A maximum number of 85 industrial vessels having licenses as per the DNPM</li> </ul> <p>The DLI is not scalable.</p>					

<b>Verification Protocol</b>	<p>Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission.</p> <p>Data source: The information will be made available in the annual report of the <i>Direction Nationale de la Pêche Maritime</i> (DNPM) as part of the annual reporting of the Ministry of Fisheries and Aquaculture.</p> <p>Procedure: The indicator will be considered achieved (= “Yes”) if the fleet capacity is at or below a normative value to 1,000 artisanal vessels, and 85 industrial vessels.</p>
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#### DLI 4: Share of fishing vessels registered (IR Indicator 1.2)

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Total (US\$)
<b>Target</b>	100% of Industrial, and 0% of Artisanal fleet is registered	100% of Industrial, and 30% of Artisanal fleet is registered	100% of Industrial, and 80% of Artisanal fleet is registered	100% of Industrial, and 100% of Artisanal fleet is registered	100% of Industrial, and 100% of Artisanal fleet is registered	N/A
<b>DLI Value (US\$)</b>	22,750	30,625	46,375	22,750	17,500	<b>140,000</b>
<b>Description of Achievement</b>	<p>The achievement of the DLI target will be measured by verifying the percentage of registered vessels in industrial and artisanal segments of the fishing fleet.</p> <p>In the artisanal segment, a census of the artisanal segment will be necessary to calculate this indicator in the first year. In the subsequent years the percentage will be calculated by administrative updating and on site verification at the landing sites.</p> <p>The DLI is not scalable.</p>					
<b>Verification Protocol</b>	<p>Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission.</p> <p>Data source: In the industrial segment, the registration of vessels can be verified at the registry of the <i>Agence de Navigation Maritime</i> (ANAM). The registration of the artisanal vessels can be verified at the <i>Centre National des Sciences Halieutiques de Boussoura</i> (CNSHB).</p> <p>Procedure: The DLI will be considered achieved if the percentage of registered vessels is at or above the targeted percentage values.</p>					

#### DLI 5: Satellite-based surveillance system for industrial fishing vessels by the national fisheries surveillance agency is functional (IR Indicator 2.1)

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Total (US\$)
<b>Target</b>	Surveillance system is functional 10 hours per day on average	Surveillance system is functional 14 hours per day on average	Surveillance system is functional 16 hours per day on average	Surveillance system is functional 20 hours per day on average	Surveillance system is functional 24 hours per day on average	N/A
<b>DLI Value (US\$)</b>	8,750	17,500	8,750	17,500	17,500	<b>70,000</b>
<b>Description of Achievement</b>	<p>This indicator is about ensuring that the surveillance system is functioning, so that informed surveillance action can be made. The goal is to bring the national surveillance center operational 24 hours per day by end of project.</p> <p>The DLI is not scalable.</p>					
<b>Verification Protocol</b>	<p>Verification Entity: The achievement of DLIs will be verified on an annual basis by an independent entity recruited by the Sub-Regional Fisheries Commission.</p> <p>Data source: Daily reports from surveillance patrol, available at the <i>Centre National de Surveillance et de Protection des Pêches</i> (CNSP).</p> <p>Procedure: The methodology used is the count of total number of hours of surveillance (on the sea, on land and from the air) in a year divided by 365. The value is calculated annually.</p>					



**Annex 5: Implementation Support Plan**  
**MAURITANIA AND GUINEA**  
**West Africa Regional Fisheries Program SOP-C1**

**Strategy and Approach for Implementation Support**

1. The results to be achieved by this SOP of the West Africa Regional Fisheries Program will be enhanced by robust implementation support. The World Bank will function as a partner working with Mauritania and Guinea, as well as the Sub-Regional Fisheries Commission (CSRP) and the other WARFP countries. As part of the implementation support, the Bank team will incorporate learning from other countries in West Africa and beyond (globally). The stronger the coordination among countries and institutions under this regional program, the better the transboundary and other marine resources will be managed, and the better the program will actually contribute to sustainable development, growth, and poverty reduction.
  
2. The World Bank as an honest and neutral broker can contribute timely and independently by providing analysis and expertise to the ongoing regional dialogue on the management of the marine resources, drawing from experiences throughout its global portfolio of fisheries support.
  
3. In order to provide robust implementation support, the following team and skills as described in Table 1 would be required. **Additional technical specialists, as needed**, will enhance the quality of implementation, drawing upon global experiences, for example in fisheries policy and legal reform and fisheries infrastructure.

Table 1: Summary of necessary implementation support

Title	Focus	Skills Needed	Number of Staff Weeks per year
Regional Team Leader	<ul style="list-style-type: none"> <li>• Support coherence in approach and Bank support across program</li> <li>• Liaise with participating countries, regional organizations and development partners to support implementation of the West Africa Regional Fisheries Program</li> <li>• Support exchanges and lessons learned and communication</li> <li>• Provide overall regional vision</li> <li>• Preparation of new project either as a new entry or as a second phase in the WARFP</li> </ul>	Strong natural resource management expertise	6

Co- Team Leader based in Dakar	<ul style="list-style-type: none"> <li>• Close day-to-day support and supervision to ensure that the operations are on track to achieve the objective, and compliance with the financing agreements</li> </ul>	Strong fisheries policy and economics expertise	18
Financial management specialist	<ul style="list-style-type: none"> <li>• Provide real-time guidance as needed to the project, as well as frequent monitoring and supervision throughout participating countries</li> </ul>	World Bank financial management specialist	N/A
Procurement specialist	<ul style="list-style-type: none"> <li>• Provide real-time guidance as needed to the project, as well as frequent monitoring and supervision</li> </ul>	World Bank procurement specialist	N/A
Social safeguards specialist, based in Dakar	<ul style="list-style-type: none"> <li>• Providing annual reviews of compliance with the Safeguards Instruments</li> </ul>	Strong knowledge in World Bank's social safeguards	3
Environmental safeguards specialist, based in Dakar	<ul style="list-style-type: none"> <li>• Providing annual reviews of compliance with the Safeguards Instruments</li> </ul>	Strong knowledge in World Bank's environmental safeguards	3
Fisheries policy and legal reform specialists	<ul style="list-style-type: none"> <li>• To enhance quality of implementation and draw upon global experiences in fisheries policy and legal reform</li> </ul>	Strong knowledge and experience in fisheries policy and legal reform	20
Fisheries infrastructure specialist	<ul style="list-style-type: none"> <li>• To enhance quality of implementation and draw upon global experiences in fisheries infrastructure</li> </ul>	Strong knowledge and experience in fisheries infrastructure	10
Additional technical specialists as needed	<ul style="list-style-type: none"> <li>• To enhance quality of implementation and draw upon global experiences, as necessary.</li> </ul>	To be determined	15

**Annex 6: Economic & Financial Analysis**  
**MAURITANIA AND GUINEA**  
**West Africa Regional Fisheries Program SOP-C1**

**A. Program Overview**

1. As described earlier in this PAD, the overall objective of the West Africa Regional Fisheries Program is to sustainably increase the overall wealth generated by the exploitation of the marine fisheries resources of West Africa and the proportion of that wealth captured by West African countries. The PDO for this project is to improve governance and management of targeted fisheries and improve handling of landed catch at selected sites.

2. The proposed investment is divided into four components (see Annex 2 for details):

- Component 1: good governance and sustainable management of the fisheries
- Component 2: reduction of illegal, unreported and unregulated (IUU) fishing
- Component 3: increasing the contribution of the fish resources to the local economy
- Component 4: project management, monitoring and evaluation, and regional coordination

3. Although it is not generally well understood, improving the management of marine resources can substantially contribute to the economy of coastal nations. Much of the fish resources around the world have deteriorated through intensive fishing activities of the past decades. Lack of management and virtually open access regime observed in the management of marine resources in many developing coastal nations are a serious cause of allowing resource degradation as well as depletion of the opportunity to sustainably extract benefit or rent from the resources they are endowed with. If fisheries management reform packages, such as envisaged in this project, were appropriately and effectively applied around the globe, the world economy would benefit from sustainable wealth of the oceans. World Bank (2009) estimated that at the global level, gains from such reforms would be in the order of US\$50-100 billion *annually*. The project's intended development impact is clear.

4. However, the scale and effectiveness of such activities intended to improve the management of global fisheries have been limited due to limitations in the resources allocated to achieve this ambitious objective. It is envisaged that, once the conditions are met, the private sector would play a leading role in making the industries surrounding marine resources sustainably profitable, contributing to the national and global economy. However, in the initial phase of transition from unmanaged, open-access regime to an environment with proper management system in place, the public sector must commit decisive and responsible involvement. Thus, strong, long-term support must be provided to the committed public sector actors responsible for the management of marine resources of coastal nations. And the World Bank is in a unique and ideal position for providing such support, implicitly and explicitly coordinating across programs of bilateral donors and leveraging much-needed additional resources.

**B. Overview of Program Costs and Benefits**

5. Table 1 summarizes the estimated project costs, by component and by country.

Table 1. Estimated Program Cost (US\$ million, in present value)

	<b>Component 1</b>	<b>Component 2</b>	<b>Component 3</b>	<b>Component 4</b>	<b>Total</b>
<b>Mauritania</b>	7.93	0.00	7.24	4.88	20.05
<b>Guinea</b>	2.47	3.02	2.24	2.27	10.00
<b>Total</b>	10.40	3.02	9.48	7.15	30.05

6. There is a range of benefits that can be generated from the four components of investments, including:

- Increased profitability of the fisheries sector and higher economic returns from the seafood value chain;
- Poverty reduction in coastal fishing communities;
- Increased food security and food safety; and
- Improved marine ecosystem health.

7. Some of these are monetary benefits that can be directly quantified (e.g. revenue, profits, rents) and others are non-monetary benefits that are less easily quantified (e.g. food security, food safety, ecosystem health). While only monetary benefits are included in the estimates of project benefits in this analysis, many of the non-monetary benefits also likely will contribute to economic development. For example, improved marine ecosystem health likely will improve fish stocks and harvests and increase incomes through related industry such as marine tourism. Furthermore, because of the trans-boundary nature of the fisheries resources in the region, interventions and activities in the fisheries sector in Mauritania and Guinea likely will have significant positive spillover effects on neighboring countries. The overall benefits from this program, therefore, are likely to be greater than the estimated monetary value of the benefits presented in this analysis.

8. Conceptual expected benefits for each component are summarized in Table 2. Note that outcomes of components 1 and 2 are closely interrelated as activities to define and promote 'good' and 'legal' practices in component 1 facilitate detection and control of illegal activities in component 2. Improving the reporting and regulation of fishing activities is also an important objective of component 1. Note also that, because a large number of activities are to be simultaneously implemented and have overlapping relationships, expected benefits cannot be isolated as a function of each activity but can be analyzed with respect to their expected overall outcomes.

Table 2. Expected Program Benefit by Component

Component	Expected Benefit
<p><i>Component 1:</i> Good governance and sustainable management of the fisheries</p> <p><i>Component 2:</i> Reduction of IUU fishing</p>	<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 and improved catch per unit effort through reduced excess fishing effort and illegal effort</li> <li>• Increased (legal) ex-vessel revenues</li> <li>• Improved technical efficiency and lower fishing costs</li> <li>• Increased profits and rents throughout value chain</li>   <li>• Rebuilt overfished stocks and increased harvests</li> <li>• Improved wildlife habitats, biodiversity and overall marine ecosystem health</li> </ul>
<p><i>Component 3:</i> Increasing the contribution of the fish resources to the local economy</p>	<ul style="list-style-type: none"> <li>• Reduced losses from fish spoilage</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> <li>• Greater foreign exchange earnings from increased fish exports</li> <li>• Increased tax revenue from increased fish exports</li> </ul>
<p><i>Component 4:</i> Coordination, monitoring and evaluation and project management</p>	<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>

### C. Valuation of Project Benefits

9. For each of the two countries in SOP C1, project benefits are quantitatively estimated.

#### Mauritania

10. As detailed in Annex 2, the planned activities in the area of governance reform (component 1) in Mauritania focus on the octopus fishery and artisanal and coastal segment of the industry, while the infrastructure investment (component 3) will focus on the rehabilitation of the fish market in Nouakchott. As can be seen from the fact that the fish market investment component includes a support for data collection as an important activity, statistics that would be useful for

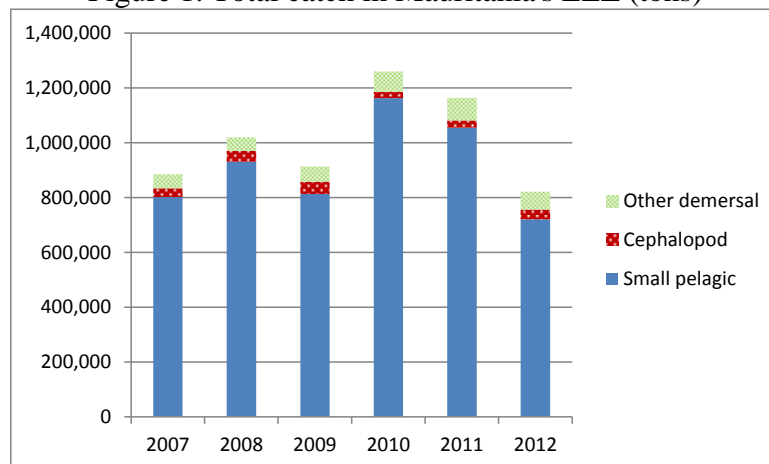
this analysis are currently unavailable. Therefore, this analysis focuses on estimating the benefit of governance reform in the octopus fishery in the industrial and artisanal and coastal segments. As a result, the estimated benefit here likely will represent an approximation of the lower bound of the overall benefit from the project activities to be implemented in Mauritania.

*The performance of fisheries and the state of fish resources in Mauritania*

11. Mauritania's Exclusive Economic Zone (EEZ) is ranked among the most productive fishing waters in the world. The fisheries sector provides jobs to 36,100 people, of which 88 percent is for activities related to artisanal fishing. Employment in the fisheries sector accounts only for 3 percent of the national employment, but this figure masks wide local variations: for example, the fisheries sector accounts for 29 percent of the total employment in Nouadhibou, the area of the Tax Free Zone that was established in 2013. The estimated value of primary production in 2011 was US\$179 million in marine artisanal fishing and US\$563 million in marine industrial fishing – a total of US\$742 million, contributing 3.4 percent to the overall GDP. Mauritania's fisheries sector is export oriented with 90 percent of production being exported. Fish exports importantly contribute to foreign exchange earnings: during the period of 2008-11, the fish export accounted for 20-27 percent of the total export in value (excluding oil).

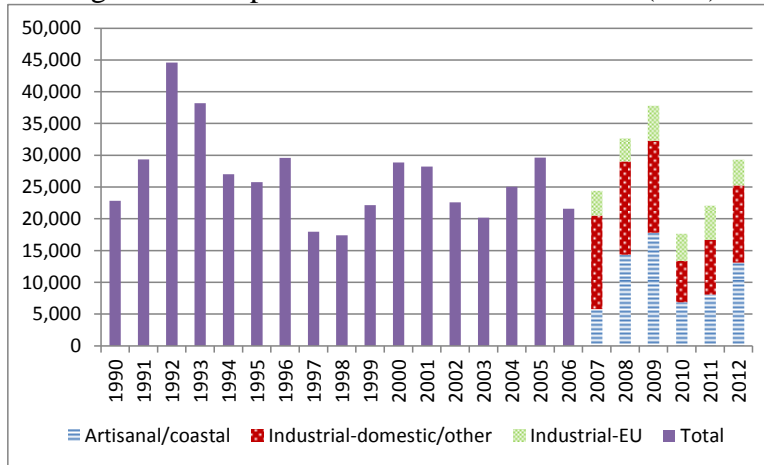
12. Figure 1 illustrates the level and composition of total catch in Mauritania's EEZ in recent years. Clearly, small pelagic fish dominate the catch volume. Octopus and squid are important cephalopod species, while "other demersal" include shrimp and finfish species. Octopus is the single most important species in terms of value of catch. For example, the average export price of octopus in 2012 was US\$8,235/ton, while the export price was US\$2,245/ton for cephalopods in general and US\$665/ton for pelagic fish.

Figure 1. Total catch in Mauritania's EEZ (tons)



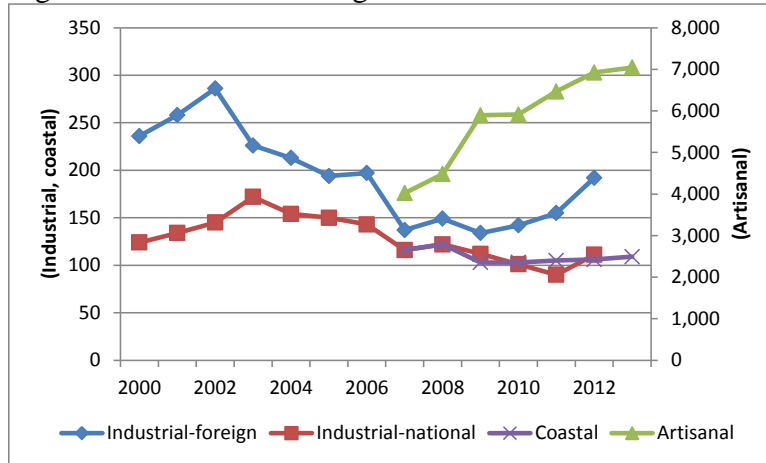
13. Figure 2 depicts the evolution of octopus catch between 1990 and 2012. The historical octopus catch exhibits considerable fluctuations. From 2007 and on, information on catch by industry segment is available. During these years, the industrial segment accounted for 53-76 percent of the total catch, of which catch by EU vessels represented 20-40 percent. Artisanal and coastal segment accounted for 24-47 percent of the total octopus catch.

Figure 2. Octopus catch in Mauritania's EEZ (tons)



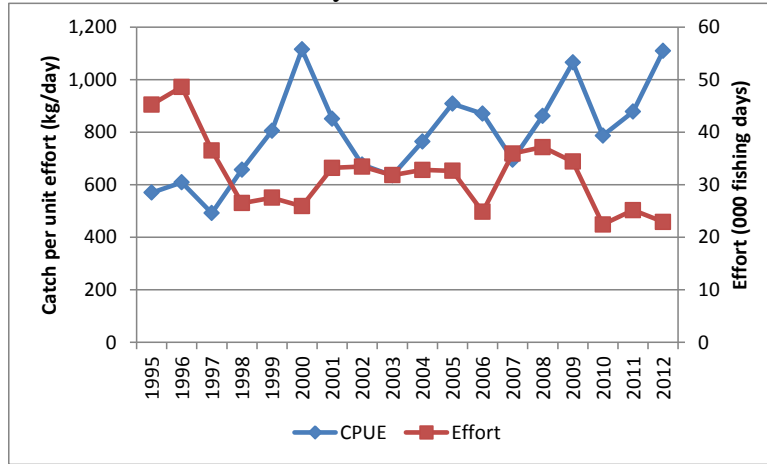
14. Figure 3 describes the total fishing capacity in Mauritania in terms of the number of fishing vessels and boats by industry segment. Information on fishing capacity specifically for octopus was not available. From the figure, the total number of fishing vessels in the industrial segment has been in a downward trend since early 2000s, with a recent upward trend in the number of foreign vessels. On the other hand, the number of coastal boats appears stable, while the number of artisanal boats has rapidly increased between 2007 and 2012, likely causing substantial pressure on the nearshore fish resources.

Figure 3. Number of fishing vessels and boats in Mauritania



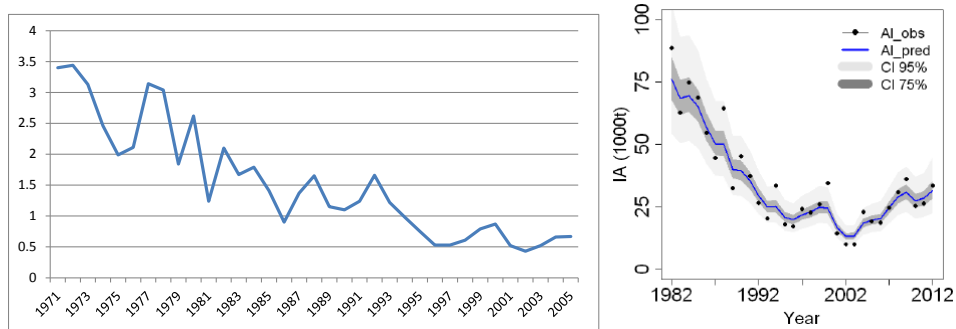
15. Proxy information on the total effort for octopus fishing was available. Figure 4 illustrates the dynamics of aggregate number of fishing days (as proxy of effort) and catch per unit effort (CPUE, per fishing day) for octopus. The octopus fishing effort appears to have exhibited an upward trend during the 2000s, but the effort seems to have declined in the early 2010s. Historical catch per fishing day shows oscillating patterns, with a general upward trend.

Figure 4. Fishing effort (number of fishing days) and catch per unit effort (CPUE) in the octopus fishery in Mauritania



16. Finally, from the two panels in Figure 5, we can discern a general indication of the octopus population dynamics in Mauritania's EEZ. The left panel suggest that the octopus stock appears to have declined steadily since the 1970s. But from the right panel, the stock appears to be on a recovery trend since the early 2000s, and it appears to have recovered to the level of the early 1990s by 2012.

Figure 5. Trend in the abundance index for octopus in Mauritania



*Scenario*

17. The project intends to influence the state of fish resources and benefits generated from the resources through a number of interrelated activities, targeted principally in the octopus fishery. Most directly, the project aims at controlling fishing capacity (the number and size of fishing vessels and boats) in both artisanal/coastal and industrial segments through activities in Subcomponent 1.2 and fishing effort (the rate at which the capacity is utilized) through those in Subcomponent 1.3. Accordingly, our economic analysis is based on how the project may affect total fishing effort and how such changes likely affect the catch and stock dynamics. In Mauritania, the octopus fishing effort will be controlled through the introduction of individual quotas in the industrial segment and octopus fishing licenses in the artisanal and coastal segment. Although the licenses will not specify allowable catch, license holders collectively will be subject to the quota for the artisanal and coastal segment. Given that the licenses will be issued

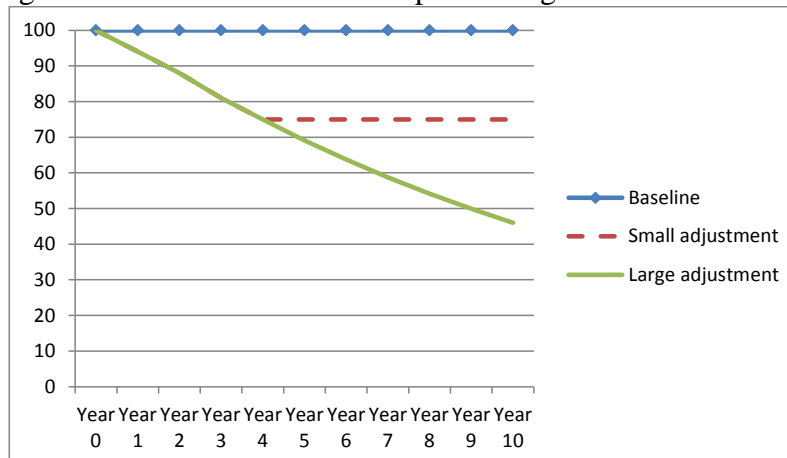


for a long period, behavior consistent with long-term interests is expected among the license holders to a certain extent.

18. The literature suggests that introduction of secure and exclusive fishing rights, in particular individual quotas, usually leads to a reduction in the number of vessels in operation as a result of exit of less efficient operators. Exit may be induced through administrative rules that influence the conditions for operation (e.g. gear type, condition of vessels/boats). Exit of inefficient operator may be accelerated when the fishing rights are transferable, which would allow consolidation of fishing rights among more efficient operators. In this project, individual quotas or fishing licenses will not be made transferable at least during the initial 10 years in order to prevent potentially excessive consolidation and concentration of fishing rights, which could threaten social sustainability of fisheries management.

19. In this analysis, we consider three scenarios of fishing effort – an aggregate fishing efforts of the artisanal/coastal and industrial segments. The fishing capacity in the octopus fishery is composed of heterogeneous vessels and boats, and the aggregation would reduce the precision of the analysis. However, due to the lack of disaggregate information on octopus fishing capacity or effort, the segments are combined in this analysis. The first scenario is the baseline scenario or the case without the project, where we assume that the total fishing effort would remain at the current level for the next 10 years. In the second scenario ("small adjustment" scenario), a rather sharp drop in the number of vessels is envisaged, particularly in connection with the renewal of the national industrial fishing fleet (retirement of aging vessels and construction of new vessels). In this scenario, we assume a 25 percent reduction in the initial 4 years. In the last scenario ("large adjustment" scenario), a continued adjustment in the fishing fleet is envisaged beyond the initial 4 years. Such continued adjustment was observed, for example, in New Zealand between 1984 and 1995 when individual transferable quotas were introduced. In this scenario, we assume a 54 percent reduction in the aggregate fishing effort in the course of 10 years. Figure 6 illustrates the assumed path of octopus fishing effort under the three scenarios.

Figure 6. Three scenarios of octopus fishing effort in Mauritania



*Assumptions and parameters used in the bioeconomic model*

20. Implications of the fishing effort scenarios on catch levels are simulated using a bioeconomic model. In particular, we use a Fox model that relates equilibrium effort-catch relationship (i.e. no increase or decrease in the population) such that:

$$Y = q * E * EXP \{ LN (B_{\infty}) - (q * E / K) \},$$

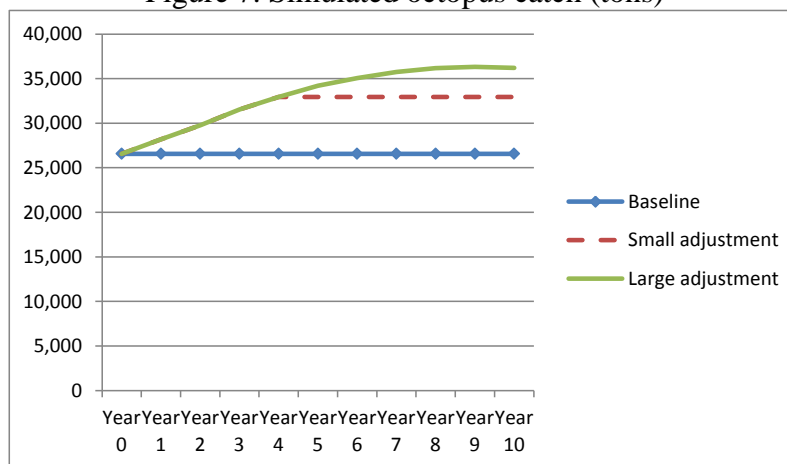
where  $Y$  stands for catch,  $q$  catchability coefficient,  $E$  fishing effort (normalized as in Figure 6),  $B_{\infty}$  carrying capacity, and  $K$  intrinsic population growth rate. The parameters used are  $K=8.58$ ,  $B_{\infty}=11,506$ ,  $q=0.172$ .

21. We use the observed average octopus export price of US\$8,235/ton as the constant output unit price for the entire analysis horizon of 10 years. To obtain an estimate of fishing cost, it was assumed that initially (year 0), at the effort level of 100, the fishery rent is completely dissipated. As a result, in year 0, the total fishing revenue is assumed US\$218.8 million (=US\$8,235/ton x 26,571 tons) and the total fishing cost is also assumed US\$218.8 million. (For reference, Mele (2014) estimates total fishing cost in Mauritania's octopus fishery at US\$283.0 million.) The base cost is linearly scaled according to the assumed effort level in each year under each scenario.

*Results*

22. Figure 7 illustrates the equilibrium octopus catch implied by the Fox model under each scenario. Under the baseline scenario, with constant effort and population equilibrium assumed, the catch would stay at the initial level of 26,571 tons throughout the analysis horizon. Under the small adjustment scenario, the assumed rapid reduction in the effort level during the initial 4 years is translated into a rapid increase in the catch; after the initial 4 years, the catch would remain at 32,944 tons for the rest of the period. Under the large adjustment scenario, the model suggests that the continued reduction in the fishing effort would result in further increase of octopus catch; by year 10, the equilibrium catch would reach 36,000 tons.

Figure 7. Simulated octopus catch (tons)



23. As seen in Table 3, larger catches than under the baseline scenario allow higher revenues under the other two scenarios. Cumulatively over the 10 years, the small adjustment and large

adjustment scenarios would result in gross revenue higher by 19 percent and 24 percent, respectively, than the value under the baseline scenario. Further, the effort reduction would lead to substantial reduction in fishing costs. The cost would be reduced by 19 percent under the small adjustment scenario and by 29 percent under the large adjustment scenario, relative to the baseline. As a result, the estimated benefit of project is substantial. Cumulatively (without discounting), the estimated gross benefit would be over US\$900 million under the small adjustment scenario and US\$1.28 billion under the large adjustment scenario.

Table 3. Simulated revenue, cost, and net revenue for the octopus fishery in Mauritania (US\$ million)

	Revenue			Cost			Net Revenue		
	Base	Small	Large	Base	Small	Large	Base	Small	Large
<b>Year 0</b>	218.8	218.8	218.8	218.8	218.8	218.8	-	-	-
<b>Year 1</b>	218.8	232.1	232.1	218.8	205.7	205.7	-	26.4	26.4
<b>Year 2</b>	218.8	245.1	245.1	218.8	192.6	192.6	-	52.5	52.5
<b>Year 3</b>	218.8	259.7	259.7	218.8	177.2	177.2	-	82.5	82.5
<b>Year 4</b>	218.8	271.3	271.3	218.8	164.1	164.1	-	107.2	107.2
<b>Year 5</b>	218.8	271.3	281.6	218.8	164.1	151.3	-	107.2	130.3
<b>Year 6</b>	218.8	271.3	288.8	218.8	164.1	139.4	-	107.2	149.4
<b>Year 7</b>	218.8	271.3	294.4	218.8	164.1	128.5	-	107.2	165.9
<b>Year 8</b>	218.8	271.3	298.0	218.8	164.1	118.5	-	107.2	179.5
<b>Year 9</b>	218.8	271.3	299.0	218.8	164.1	109.2	-	107.2	189.8
<b>Year 10</b>	218.8	271.3	298.1	218.8	164.1	100.7	-	107.2	197.5
<b>Cumulative Total</b>	2,407	2,854.8	2,986.9	2,407.0	1,943.1	1,706.0	-	911.7	1,280.9

24. Table 4 shows the discounted cumulative net revenue under the two scenarios of fishing effort reduction. Even with a discount rate at 20 percent, the cumulative net revenue over the initial 5 years is estimated at US\$201 million under the small adjustment scenario, which substantially exceeds the project cost.

Table 4. Discounted cumulative net revenue for Mauritania octopus fishery (US\$ million)

	Discount rate		
	5%	10%	20%
<b>Small adjustment scenario</b>			
Cumulative 5 years	316.2	269.1	201.0
Cumulative 10 years	679.8	521.4	329.8
<b>Large adjustment scenario</b>			
Cumulative 5 years	334.3	283.5	210.3
Cumulative 10 years	928.7	693.3	417.0

25. Caveats for the estimates here are the following. First, the bioeconomic model used in the analysis assumes equilibrium of the octopus population, and as a result, an instantaneous adjustment in the stock to a new equilibrium is assumed for a given change in effort level. This assumption may lead to overestimation of the catch levels achieved through effort reduction in the short run. Second, uncertainty regarding the fishing cost makes the *levels* of net revenue

uncertain. However, relative to the results under the baseline scenario, the superiority of the net revenue under the two other scenarios is clear. Overall, the benefit from this project likely far exceeds the project cost.

## Guinea

26. The economic analysis for Guinea suffers from a lack of detailed and reliable data. In particular, statistics on the values (price, cost) of industry activities were unavailable for the analysis. The two main sources of information used in the analysis are:

- FAO report "The Value of African Fisheries," which provides values for gross revenue, gross value added, and employment in the fisheries sector of Guinea in year 2010; and
- A technical note on the state of fisheries resources by the Ministry of Fishery and Aquaculture, the Republic of Guinea, which contains time series data from 1995 on the catch levels, fishing capacity (the number of boats), and total number of fishing days for the two segments (artisanal and industrial), as well as the evolution of the stocks in terms of abundance index for different fish species.

27. Using the available information, a simple bioeconomic model was constructed for fish resources in Guinea's EEZ, by aggregating all species and treating it as a single stock and a single fishery. Using the model, future annual fisheries rents are simulated under two scenarios based on (1) the observed trend in fishing effort and (2) the expected control over the fishing effort achieved through the implementation of fisheries governance and management reform supported by WARFP. Given the uncertainty of project activities in component 3 (which deals with the post-harvest sector), the analysis focuses on the resource management and the harvest sector, i.e. the activities of components 1 and 2. As a result, the estimated benefit here is expected to be lower than the overall benefit of the project activities to be implemented in Guinea.

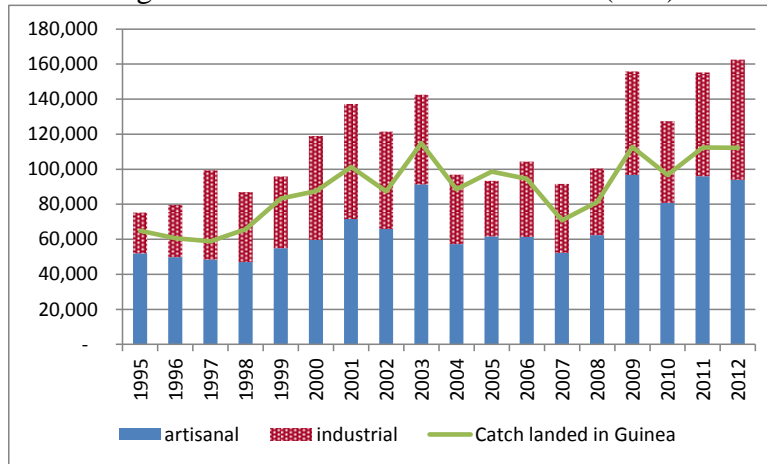
### *The performance of fisheries and the state of fishery resources in Guinea*

28. According to the FAO report, the fisheries and aquaculture sector in Guinea provided jobs to 64,691 people in 2010 (the total population was 10 million). Sixty-two percent of the jobs were in the fishing sector, while 38 percent were in the processing sector. Ninety-eight percent of the processing jobs were taken by women, while 82 percent of the fishing jobs were taken by male fishers. Among the fishing jobs, 43 percent are in the marine artisanal fishing, 39 percent in inland fishing, 15 percent in aquaculture, and 4 percent in marine industrial fishing. The value of primary production in 2010 was US\$152 million in marine artisanal fishing, US\$34 million in marine industrial fishing, and US\$29 million in inland fishing – a total of US\$215 million. Taking into account the cost of fishing, the value added of this sector was US\$148 million, contributing 3 percent to the overall GDP and representing 12 percent of agriculture GDP. The value added of post-harvest, fish processing sector in 2010 was US\$39 million, contributing 0.7 percent to the overall GDP and representing 3 percent of agriculture GDP.

29. Figure 8 illustrates the evolution of total catches in Guinea's EEZ between 1995 and 2012. The total catch level appears to be in a general upward trend. The artisanal segment on average

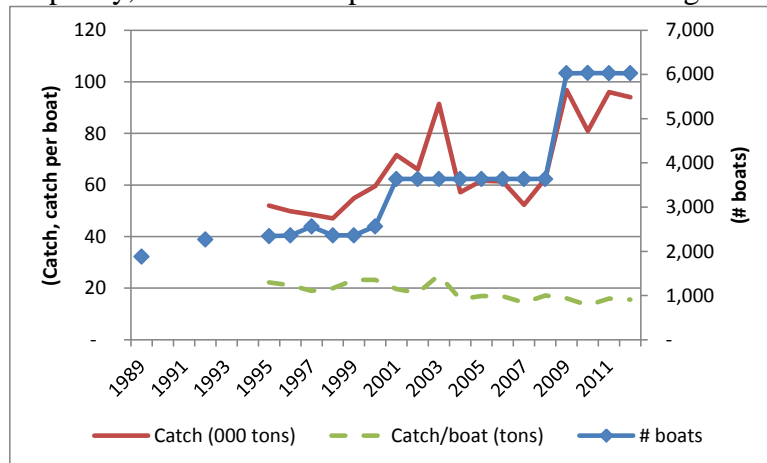
has accounted for 60 percent of the total catch. The figure also depicts the levels of the landings in Guinea. As the official statistics indicate that all artisanal catches are landed domestically, the difference between the total catches and the total landings supposedly represents the catches by foreign industrial fleets that are landed elsewhere. According to the official statistics, of the 81 vessels that were licensed to operate in the Guinea's EEZ in 2012, only 5 were Guinean.

Figure 8. Total catch in Guinea's EEZ (tons)



30. Figure 9 depicts for the artisanal segment of the industry in Guinea the evolution of the number of boats or *pirogues*, the total catch level and the average catch per boat. The recent increase in the total catch level is explained in part by the increase in the number of boats. The average catch per boat appears to be in a declining trend and so does the average number of days of operation per boat (not shown in graph; from 142 days on average in 1995-97 to 111 days in 2010-12).

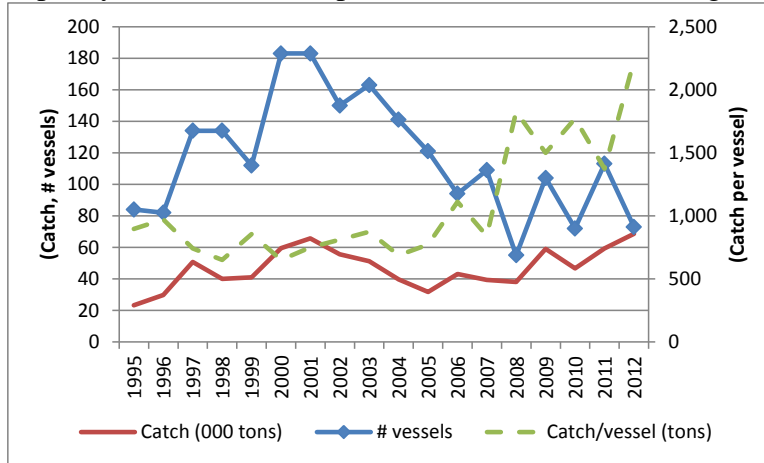
Figure 9. Capacity, catch and catch per boat in the artisanal segment in Guinea



31. On the other hand, in the industrial segment, the number of vessels has declined during the 2000s and appears to have stabilized around 80-100 vessels, while the total catch shows an upward trend. This implies a substantial increase in the catch per vessel in the recent years. The

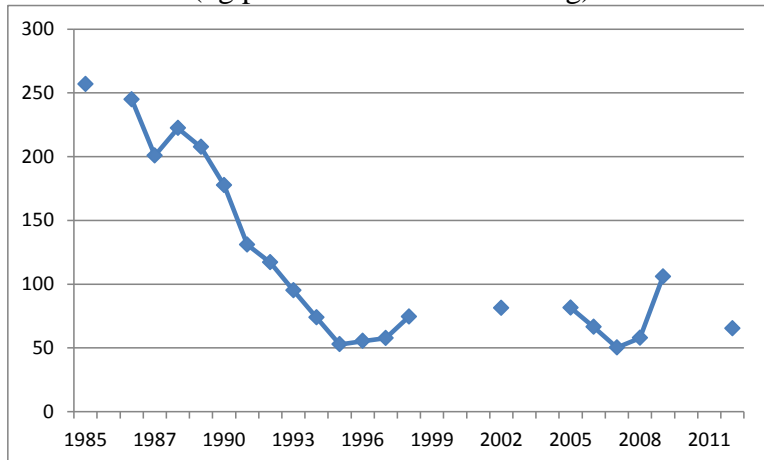
increase in average catch per vessel has occurred in a context of declining trend in the average number of days of operation per boat each year.

Figure 10. Capacity, catch and catch per vessel in the industrial segment in Guinea



32. Finally, as illustrated in Figure 11, the aggregate abundance index of 20 major coastal species has substantially declined in the 1980s and 1990s: from more than 250 kg per 30 minutes of trawling in 1985 to 50 kg in 1995. The abundance index remained less than 70 kg in 2012.

Figure 11. Aggregate abundance index for 20 major coastal species in Guinea (kg per 30 minutes of trawling)



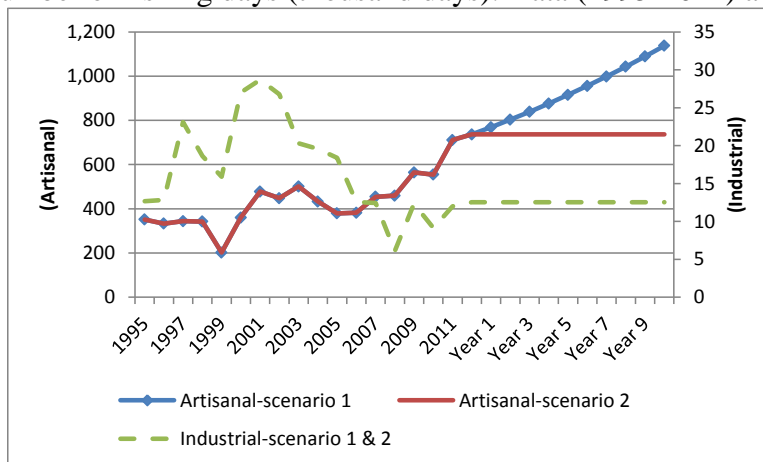
*Scenarios*

33. The project intends to influence the state of fish resources and benefits generated from the resources through a number of interrelated activities. Most directly, the project aims at controlling fishing capacity (the number and size of fishing vessels and boats) in both artisanal and industrial segments through activities in Subcomponent 1.2 and fishing effort (the rate at which the capacity is utilized) through those in Subcomponent 1.3. Accordingly, our economic analysis is based on how the project may affect total fishing effort and how such changes likely affect the catch and stock dynamics. In Guinea, time series statistics exist for total number of

fishing days separately for artisanal and industrial segments. The total number of days of operation in the artisanal segment is in an increasing trend: the total fishing days increased from 351 thousand days in 1995 to 736 thousand days in 2012. On the other hand the number in the industrial segment fluctuates around 12 thousand days since 2006.

34. In this analysis, we consider two scenarios. The first is the baseline scenario or the case without the project. In this scenario, we assume that total fishing effort, approximated with total number of days of operation, would evolve based on the observed trend. For the artisanal segment, based on the average annual growth rate of fishing days between 1995 and 2012 of 4.45 percent, we assume the fishing effort to evolve as indicated with the blue line in Figure 12. For the industrial segment we assume that the number of fishing days would stay stable at the 2012 level (green line). The second scenario simulates the intended outcome of the project, namely non-increase of the fishing capacity. Accordingly, in the second scenario, we assume the number of days of operation both for artisanal and industrial segments would stay at the 2012 levels (red and green lines).

Figure 12. Number of fishing days (thousand days): Data (1995-2012) and assumption



35. No information about the extent of IUU fishing was available, and fishing capacity or effort by IUU fishing is not considered in this analysis. However, with the success of surveillance activities in Component 2, it is expected that the number of days of (illegal) operations under scenario 2 would be reduced for both the artisanal and industrial segments. Therefore, the benefit estimated here represents an approximation of the lower bound.

*Assumptions and parameters used in the bioeconomic model*

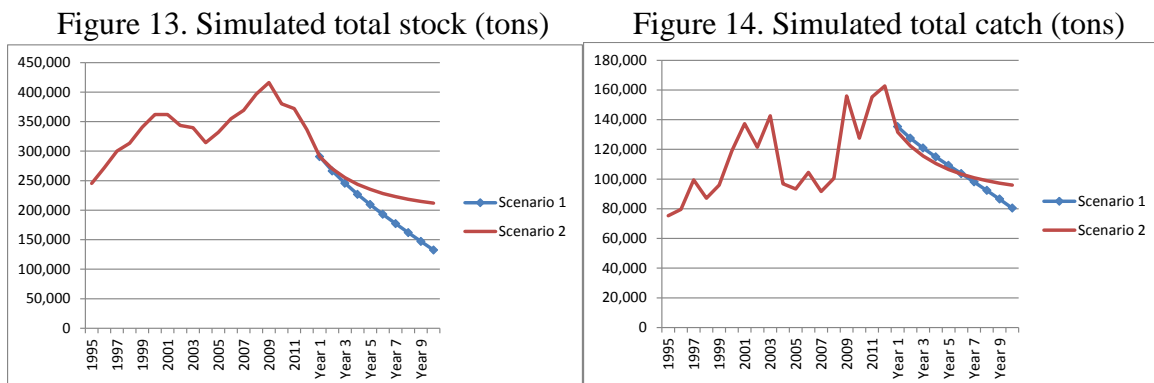
36. Implications of the assumed fishing effort scenarios on catch levels and stock dynamics are simulated using a bioeconomic model. Given the lack of detailed data, a simple Schaefer (logistic) model, as it appears in World Bank (2009), was parameterized. The parameterization was carried out such that the simulated stock dynamics are consistent with the evolution of abundance index for the period between 1995 and 2012 (i.e. a slight upward trend), while the simulated stock level in 2012 is close to the estimated stock level of 336 thousand tons. The carrying capacity is assumed at 800 thousand tons and maximum sustainable yield (MSY) at 120 thousand tons. As discussed in the scenario section, harvest by the two segments is simulated

based on the assumed number of days of operation. While the schooling parameter is assumed at unity, the catchability coefficients are internally estimated for artisanal and industrial segments so as to minimize the sum of squared differences between the simulated and observed catch levels for the 2004-12 period for the artisanal segment and for the 2008-12 period for the industrial segment. The estimated catchability coefficients are 0.0004 for artisanal and 0.014 for industrial segments, respectively.

37. For value parameters we rely on the information found in the FAO report. From the gross production values and total catch in 2010, the average unit value of catch is estimated at US\$2,227/ton. Further, from the value added ratios and the effort levels in 2010, the marginal costs of fishing are estimated at US\$192/day and US\$4,198/day for artisanal and industrial segments, respectively. These values are assumed constant throughout the 10-year analysis time horizon.

### Results

38. Figure 13 and Figure 14 depict the simulated dynamics of total stock and total catch, respectively, during the 1995-2012 period and for the subsequent 10 years. The model suffers from lack of data and other estimates with which to validate its results. However, the figures clearly illustrate the points the project wishes to make and the kind of outcomes it wishes to achieve. Under scenario 1 (no project), the fishing effort would continue to increase in the artisanal segment, which would continue to exercise pressure on the fish resources. On the other hand, under scenario 2 (with project), with a lower fishing effort than under scenario 2, the pressure on the stock would be reduced. Thus, Figure 13 shows a faster decline in the fish population under scenario 1. As seen in Figure 14 higher effort levels under scenario 1 would achieve higher catch during the initial 6 years. From year 7 and on, however, the stock under scenario 1 would have been so stressed that higher effort would result in lower catch than under scenario 2.



39. The benefit of reduced fishing effort can be seen more clearly in terms of simulated net revenue as tabulated in Table 5. The simulated revenue (unit price times catch) is higher under scenario 1 through year 6, while it is higher under scenario 2 from year 7 and on, reflecting the catch levels seen in Figure 14. The largest difference between the two scenarios is seen in the simulated fishing cost. While the cost under scenario 1 is assumed to continue to increase, the cost under scenario 2 is kept at the estimated 2012 level. As a result, the simulated net revenue



under two scenarios shows clear divergent paths. According to the simulation, the net revenue under scenario 2 would surpass that under scenario 1 as early as year 2. Simulated net revenue under scenario 1 would turn negative in year 6 and the loss would continue to grow. Net revenue under scenario 2 is also simulated to decline as the simulated stock and catch decline.

Table 5. Simulated revenue, cost, and net revenue in Guinea (US\$ million)

	Revenue		Cost		Net Revenue	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2	Scenario 1	Scenario 2
<b>Year 0</b>	362.3	362.3	193.9	193.9	168.5	168.5
<b>Year 1</b>	301.2	293.1	200.1	193.9	101.1	99.2
<b>Year 2</b>	283.9	272.3	206.7	193.9	77.2	78.5
<b>Year 3</b>	269.2	257.3	213.5	193.9	55.6	63.4
<b>Year 4</b>	255.9	245.9	220.7	193.9	35.2	52.1
<b>Year 5</b>	243.2	237.1	228.2	193.9	15.1	43.3
<b>Year 6</b>	230.8	230.2	236.0	193.9	-5.1	36.4
<b>Year 7</b>	218.4	224.7	244.1	193.9	-25.7	30.9
<b>Year 8</b>	205.7	220.2	252.6	193.9	-47.0	26.4
<b>Year 9</b>	192.6	216.6	261.5	193.9	-68.9	22.7
<b>Year 10</b>	179.1	213.6	270.8	193.9	-91.7	19.7
<b>Cumulative Total</b>	2,742.3	2,773.3	2,528.2	2,132.4	214.1	641.0

40. Table 6 shows the discounted cumulative net revenue under the two scenarios of fishing effort. Even with a discount rate at 20 percent, difference between the two scenarios of the cumulative net revenue over the initial 5 years is estimated at US\$23.3 million, which exceeds the project cost. The difference would grow with time: cumulatively after 10 years, the benefit of the project would be over US\$100 million (with discount rate at 20 percent).

Table 6. Discounted cumulative net revenue in Guinea (US\$ million)

	Discount rate		
	5%	10%	20%
<b>Scenario 1 (baseline)</b>			
Cumulative 5 years	423.5	399.3	361.5
Cumulative 10 years	268.8	296.7	313.5
<b>Scenario 2 (project)</b>			
Cumulative 5 years	465.6	433.6	384.8
Cumulative 10 years	559.3	499.5	419.3
<b>Scenario 2 minus Scenario 1</b>			
Cumulative 5 years	42.1	34.3	23.3
Cumulative 10 years	290.5	202.8	105.9

41. In conclusion, the control of fishing capacity and effort to keep them at the 2012 levels would bring about substantial net benefit over the situation expected under status quo. However, in order to accelerate stock recovery process and achieve maximum sustainable yield (MSY) or maximum economic yield (MEY), more drastic measures would be necessary. In fact, the same model suggests that Guinea's marine fisheries could achieve over \$180 million in potential

annual *sustainable* rents if the fishing effort was more drastically reduced and maintained at such a level.

## References

- Abbott, Joshua K. (2010). "Employment and Remuneration Effects of IFQs in the Bering Sea/Aleutian Islands Crab Fisheries." *Marine Resource Economics* 25.
- Anderson, T.; Leal, D. (1993). "Fishing for Property Rights to Fish." *Taking the Environment Seriously*. Rowman & Littlefield Publishers, Inc.
- Arnason, R. (2007). "Advances in Property Rights Based Fisheries Management: An Introduction." *Marine Resource Economics* 22: 335–346.
- Beddington, J.; Agnew, D.; Clark, C. (2007). "Current Problems in the Management of Marine Fisheries." *Science* 316 (5832): 1713–1716.
- Costello, C.; Gaines, Steven D.; Lynham, J. (2008). "Can Catch Shares Prevent Fisheries Collapse?" *Science* 321 (5896): 1678–1681.
- de Graaf, G. & Garibaldi, L. (2014). "The value of African fisheries." FAO Fisheries and Aquaculture. Circular. No. 1093. Rome, FAO. 76 pp.
- Dupont, Diane P., R. Quentin Grafton, James Kirkley, Dale Squires (2002). "Capacity utilization measures and excess capacity in multi-product privatized fisheries." *Resource and Energy Economics* 24: 193–210.
- Environmental Defense Fund (2008). *Catch Share Fisheries and Resources: Searchable Database*. Retrieved from <http://apps.edf.org/page.cfm?tagID=57622>
- Eythórsson, Einar (2000). "A decade of ITQ-management in Icelandic fisheries: consolidation without consensus." *Marine Policy* 24 (6).
- Grafton, R. Q. (1996). "ITQs: Theory and Practice." *Reviews in Fish Biology and Fisheries* 6: 5–20.
- Grafton, R. Q.; Squires, Dale; Fox, Kevin J. (2000). "Private Property and Economic Efficiency: A Study of a Common-Pool Resource." *The Journal of Law and Economics* 43(2): 679.
- Greboval, D. (Ed., 1999). "Managing fishing capacity: selected papers on underlying concepts and issues." FAO Fisheries Technical Paper 286. Food and Agriculture Organization of the United Nations.
- Hilborn, J. M., Orensanz, J. M. (Lobo) and Parma. A. M. (2005). "Institutions, incentives, and the future of fisheries." *Philosophical Transactions of the Royal Societies* (360): 47-57.
- Lemine Ould Tarbiya (2009). *TYOLOGIE DES METIERS DES PÊCHES ARTISANALE ET COTIERE EN MAURITANIE*, Réf. APAM/CSE/N04/009, 25 p.

McCay, B. J. (1995). "Social and Ecological Implications of ITQs: An Overview." *Oceans and Coastal Management* 28 (1–3): 3–22.

Mele, Gianluca. (2014). Mauritania: counting on natural wealth for a sustainable future. Policy Research working paper, no. WPS 6887. Washington, DC; World Bank Group.

Ministry of Fishery and Aquaculture of the Republic of Guinea (2013). *Note Technique sur l'Etat des Ressources Halieutique en Guinée*. Conakry, Guinea.

Newell, R. G., Sanchirico, J. N. and Kerr, S. (2002). "Fishing Quota Markets." Discussion Paper 2-20. Resources for the Future. Washington, D.C.

Newell, R. G.; Sanchirico, J. N.; Kerr, S. (2005). "Fishing quota markets." *Journal of Environmental Economics and Management* 49 (3): 437–462.

NOAA (2010). *NOAA Catch Share Policy*. National Oceanic and Atmospheric Administration.

Walden, J.B.; Kirkley, J.E.; Färe, R.; Logan, P. (2012). "Productivity change under an Individual Transferable Quota management system." *American Journal of Agricultural Economics* 94.

World Bank (2009). *The Sunken Billions*. World Bank, Washington, DC.

Yandle, Tracy, Christopher Dewees (2008). "Consolidation in Individual Transferable Quota Regime: Lessons from New Zealand 1986-1999." *Environmental Management*.

**Annex 7: Incremental Reasoning**  
**MAURITANIA AND GUINEA**  
**West Africa Regional Fisheries Program SOP-C1**

**I. Project Objectives**

1. The West Africa Regional Fisheries Program (WARFP) aims to sustainably increase the wealth generated for the region from the rich marine fish resources. The WARFP vision and activities are fully consistent with the stated goal of GEF's International Waters focal area: "The goal of the International Waters focal area is the promotion of collective management for transboundary water systems and subsequent implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services."
2. West African coastal nations are endowed with rich marine fish resources, notably large pelagic fish stocks such as tuna, small pelagics such as sardines, deepwater demersals, coastal shrimp, cephalopods and coastal demersal fish stocks such as croakers and groupers. Many of the fish stocks are shared across the coastal nations. These nations are also importantly connected to each other through regional (fishing) labor and seafood markets. Therefore, in order for the region to achieve full benefit of wealth generated from the regional waters, coordination is essential of management policies and practices throughout the seafood value chain, i.e. management of marine fish stocks, their extraction, utilization and distribution. Currently, these marine resources are not generating the maximum wealth for the region, due in large part to poor governance and management. The WARFP provides support to the coastal nations in the region to strengthen governance and management of fisheries, with a particular focus on controlling the fishing capacity and addressing the open-access nature of their fisheries.
3. WARFP, originally approved by the World Bank in 2009, is a multi-country, multi-phase series of projects (SOPs), with (up to) nine countries, from Mauritania to Ghana, eligible to join. The implementation began in 2010 with Cape Verde, Liberia, Senegal, and Sierra Leone as the first group of countries in the Program (SOP A1). Subsequently Guinea-Bissau and Ghana (SOP B1) joined the Program in 2011 and 2012, respectively, and in the SOP C1 Mauritania and Guinea are proposed as the 7th and the 8th country, respectively, to join the Program. The two countries are essential to achieving the broader regional objectives. Given the absence of physical borders in the oceanscape, improved governance and management in the waters of one country could lead to driving of undesired practices and outcomes into the waters of other neighboring countries that are less regulated. Therefore, a complete regional coverage is necessary to achieve a full benefit of the interventions at the regional level.
4. The development objective of the WARFP SOP-C1 (formerly APL-C1) is *to strengthen governance and management of targeted fisheries and improve handling of landed catch at selected sites*. Targeted fisheries for this phase include demersal (including cephalopod) and small pelagic fisheries by artisanal and industrial segments operating in the Economic Exclusive Zone (EEZ) of respective countries. Achieving this will sustainably contribute to poverty alleviation and the promotion of shared prosperity in these two countries that are so heavily dependent on fisheries for their economies and livelihoods of their populations, while contributing to regional and transboundary marine resource management.

5. A preliminary Incremental Costs Analysis (ICA) estimates that incremental costs at national levels (US\$7 million) would be eligible for GEF financing in Mauritania associated with focal area - Strategy for international waters OP-5.

## II. Rationale

6. The rationale to support a regional fisheries project in West Africa stems from the need to improve fisheries governance in all coastal states in West Africa. The WARFP has a number of transboundary fish resources that are shared between countries along the coast (from Mauritania to Ghana). As articulated in the GEF 5 International Waters Strategy, one of the four primary objectives is to “catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems while considering climatic variability and change.”

7. **Scope and costs:** The project will have a baseline budget of US\$12 million IDA in Mauritania inclusive of project components, regional coordination and supporting activities. For the purpose of this annex, co-financing includes US\$18.7 million by KfW Development Bank and GIZ in support of surveillance and other activities. An additional parallel co-financing is under preparation for a US\$7 million investment by the European Investment Bank. The French Development Agency (AFD) has also expressed interest in financing the Fish Market of Nouakchott. The specific project components include:

8. **Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries.** This component aims to build the capacity of the Government and stakeholders to develop and implement policies and systems that would ensure that the fish resources are used in a manner that is environmentally sustainable, socially equitable and economically profitable. The component contains four key subcomponents:

- Developing the legal and operational policy and strengthening the institutional capacity to enable sustainable management of fisheries resources (long-term agenda);
- Strengthening the vessel registration systems for accurate assessment and effective control of fishing capacity (short-term agenda);
- Introducing new fisheries management schemes in target fisheries, segments, or communities to align fishing capacity and effort to sustainable catch levels, which is pursued in parallel with development and implementation of fisheries management plans (medium-term agenda); and
- Strengthening the system of fisheries-related data collection, compilation and management, and dissemination and communication in a transparent manner (long-term agenda). This activity is also supported by GIZ through improved database management and the entry of fisheries in the Extractive Industries Transparency Initiative.

9. **Component 2: Reducing Illegal, Unreported and Unregulated (IUU) Fishing (Guinea only).** This component aims to reduce IUU fishing activities that threaten the sustainable management of fish resources by strengthening fisheries Monitoring, Control and Surveillance (MCS) systems. This activity is financed by KfW Development Bank in Mauritania.

10. **Component 3: Increasing Contribution of the Fish Resources to the Local Economy.** This component aims to increase the benefits derived from fish caught in the EEZs of the countries in particular by investing in infrastructure and institutional capacity that enable improved handling of landed fish and reduction of post-harvest losses. This activities is also supported by the GIZ through the planting of trees to stabilize the dune nearby the Fish Market.

11. **Component 4: Project Management, Monitoring and Evaluation, and Regional Coordination.** This component aims to support project implementation and regional coordination within the WARFP, ensuring that regular monitoring and evaluation is conducted and the results are fed back into decision making and project management.

12. In the absence of GEF assistance, support to component 1 would be considerably diminished.

Table 1: Project costs financing by expenditure account

	Mauritania	Additional Potential and Parallel Financing
<b>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</b>	<b>8.93</b>	
<i>IDA</i>	<i>1.00</i>	
<i>GEF</i>	<i>6.93</i>	
<i>GIZ</i>	<i>1.00</i>	
<b>Component 2: Reducing Illegal, Unreported and Unregulated (IUU) Fishing</b>	<b>16.70</b>	
<i>KfW</i>	<i>16.70</i>	
<b>Component 3: Increasing Contribution of the Fish Resources to the Local Economy</b>	<b>8.24</b>	
<i>IDA</i>	<i>6.87</i>	
<i>GEF</i>	<i>0.07</i>	
<i>Government</i>	<i>0.30</i>	
<i>GIZ</i>	<i>1.00</i>	
<i>European Investment Bank</i>		<i>7.00</i>
<i>French Development Agency</i>		<i>5.00</i>
<b>Component 4: Project Management, Monitoring and Evaluation, and Regional Coordination</b>	<b>4.88</b>	
<i>IDA</i>	<i>4.13</i>	
<i>Government</i>	<i>0.75</i>	
<b>Total</b>	<b>38.75</b>	<b>12.00</b>

### III. GEF Alternative

13. **Scope and costs:** 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, considerably diminishing the overall aims of the program – both in the country and regionally – given the interconnectedness of West African coastal waters. Although Component 4 includes regional coordination efforts, it is small in scale in Phase I. As explained in this PAD, the WARFP is structured such that each country can receive two to three phases of support, where the focuses of the first phase are on fisheries management improvement at the national level and the second and third phases on regional integration and value chain development. This is why much of the GEF support for SOP C1 in Mauritania is allocated to activities in Component 1, rather than Component 4.

14. In Mauritania, the total cost of the baseline scenario is estimated to be US\$31.75 million. The GEF alternative is estimated at US\$38.75 million. GEF would finance US\$7 million incremental costs to support national activities in Mauritania to start. Resources essential to comply with the GEF’s co-financing requirements and to support the complementary country-level actions that contribute directly to the outcomes would be financed through IDA and supplemented by a range of co-financing.

15. With the additional financial support by GEF, the envisaged scope of activities in Subcomponent 1.1 is much broader in Mauritania than in Guinea. More precisely, while, as described in Annex 2, Subcomponent 1.1 entails five sets of activities, the following four sets are only possible in Mauritania:

- (1) Revision of the national legal and regulatory framework governing rights and responsibilities of individuals and entities operating in the fisheries sector (from resource management and use to post-harvest value chain);
- (2) Close monitoring by CSRP of the first set of activities in each country to ensure harmonization of fisheries policies and regulatory frameworks at the regional level and mobilization of high level expertise to support the national reform process of fisheries policies, regulatory and institutional frameworks, as well as technical assistance to the country to support their negotiations for foreign fishing agreements;
- (3) Institutional reform of the ministry responsible for the fisheries sector and of other institutions that support the ministry for informed decision making and effective implementation of fisheries management policies; and
- (4) Coordination across diverse stakeholders for effective implementation of the strategic vision.

Table 2: Distribution of GEF Funding across Subcomponents in Mauritania (US\$ million)

<b>Subcomponent</b>	<b>Amount</b>
<b>Subcomponent 1.1:</b> Developing the legal and operational policy and strengthening the institutional capacity	1.60
<b>Subcomponent 1.2:</b> Control of fishing capacity	0.75
<b>Subcomponent 1.3:</b> Introducing new fisheries management schemes	4.58
<b>Subcomponent 3.1:</b> Civil society representation	0.07
<b>Total</b>	<b>7.00</b>



16. The possibility of implementing these additional activities in Mauritania will reinforce the effectiveness of other activities in Component 1, and thus increase the certainty for the benefits of Component 1 activities. The additional GEF funding in Mauritania also will enhance the benefits expected from activities of other components. Improvement in institutional capacity is essential to the effectiveness of surveillance activities (Component 2), co-financed by KfW Development Bank. The benefit of investment in rehabilitation of the Fish Market of Nouakchott (Component 3) will increase when the Market can secure fish transaction volumes sustainably, as a result of Component 1 activities.

17. The project and proposed regional component are fully consistent with the requirements of the GEF Strategic Partnership and International Waters envelope for co-financing.

18. **Benefits:** National and global benefits of both the baseline and GEF Alternative scenarios are presented below.

#### IV. Incremental cost matrix (Mauritania)

Cost Category	US\$ million	National Benefit	Global Benefit
<b>Component 1: Strengthening Good Governance and Sustainable Management of the Fisheries</b>			
Baseline	2.00	<ul style="list-style-type: none"> <li>• Development of some legal and operational policy and strengthening of institutional capacity to enable better management of fisheries</li> </ul>	
With 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>• Strengthening of 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>• Enhancement of other components of the project which are predicated on the successful implementation of this component</li> </ul>	<ul style="list-style-type: none"> <li>• Contribution to regional program, which has broader impact on Eastern Central Atlantic fisheries resources</li> <li>• Establishes precedence for international fishing fleets in developing country waters</li> </ul>
<b>Component 3: Increasing Contribution of the Fish Resources to the Local Economy</b>			
Baseline	8.17	<ul style="list-style-type: none"> <li>• Improvement of Fish Market of Nouakchott</li> </ul>	
With 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>	

Incremental	7.00		
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## **Annex 8: Environmental and Social Screening and Assessment Framework for Guinea**

### **West Africa Regional Fisheries Program SOP-C1**

#### **I. Objectives**

1. The Environmental and Social Screening and Assessment Framework (ESSAF) is consistent with Bank operational policies and procedures, investment operations subject to paragraph 12 of OP/BP 10.00, (Projects in situations of Urgent Need of Assistance or Capacity Constraints) and the guidance note for crises and emergency operations with regard to the application of Bank safeguard and disclosure policies. This ESSAF provides general policies, guidelines, codes of practice and procedures to be integrated into the implementation of West Africa Regional Fisheries Project (WARFP) financed by the World Bank in Guinea. This Framework has been developed to ensure compliance with the World Bank's safeguards policies during the implementation of the project. Its objective is to ensure that activities under the proposed investments will address the following issues:

- avoid or minimize environmental degradation as a result of either individual activity or their cumulative effects;
- not threaten human health;
- prevent land acquisition or compensate appropriately any loss of asset and/or livelihood; and
- enhance positive environmental and social outcomes.

#### **II. General Principles**

2. Recognizing the public health crisis that Guinea currently faces due to the severe Ebola outbreak and the related need to provide immediate assistance in an environment with exacerbated capacity constraints, while at the same time ensuring due diligence in managing potential environmental and social risks, the ESSAF is based on the following principles:

- The project is classified as Category B for Environmental Assessment (EA) purposes since potential adverse environmental impacts associated with its investments are generally moderate to small-scale and site-specific and relatively easy to mitigate.
- The proposed operation will finance the construction of fish landing and handling facilities in Koukoudé village in the prefecture of Boffa.
- Although the government has significantly narrowed down the area, the selection of exact site has not been finalized as the Ebola outbreak has prevented further field visits/studies. Thus, the detailed designs and exact location will be known only during implementation.
- To ensure effective application of the World Bank's safeguard policies, the ESSAF provides guidance on the approach to be taken during project implementation for the selection, screening, and design of subprojects and the planning of mitigation measures; category A activities will not be eligible for funding.
- Because the technical team has not been able to visit the exact site to confirm the proposal made by Guinea, the government will begin by preparing an Environmental and Social Management Framework (ESMF) during implementation. The ESMF will guide

the preparation of an Environmental and Social Impact Assessment (ESIA) once a site is chosen and the team has had an opportunity to visit the site.

- The project may finance the acquisition of land to facilitate the expansion of a fish landing site and associated fish handling and processing facilities. The government will prepare a Resettlement Policy Framework (RPF) during implementation, which will be consulted upon, validated by the Bank and disclosed in-country and at the InfoShop. The RPF will guide the preparation of a Resettlement Action Plan (RAP) once a site is chosen.
- The proposed emergency operation will finance feasibility and detailed design studies for the planned investments, which will include environmental assessments and social studies based on the ESSAF and in accordance with the World Bank safeguard policies.
- The safeguards instruments for the activities financed under this project will be subject to consultations with local communities or beneficiaries and consultations will be conducted to elicit the views of the male and female population.
- The initial safeguards instruments, namely ESMF and RPF, should be prepared, consulted upon and disclosed no later than four months after project effectiveness and ESIA and RAP should be prepared, consulted upon and disclosed before any works can commence. Depending on the severity of the crisis once the safeguards instruments are prepared, consultation and disclosure requirements may be simplified to meet the special needs of this operation. The full ESSAF will be disclosed in the relevant line ministries and other public places in Guinea and at the World Bank InfoShop.

### **III. Environmental and Social Screening and Assessment Framework**

**3.** The current ESSAF has been developed specifically for this proposed operation to ensure due diligence, to avoid causing harm, and to ensure consistent treatment of environmental and social issues during the implementation of project activities by the Government of the Republic of Guinea. The purpose of this Framework is also to assist the Project Implementation Unit (PIU) in screening all the project activities for their likely environmental and social impacts, ensuring that mitigation measures are incorporated into final design and that implementation compliance is met.

**4. OP 4.01 Environmental Assessment.** The civil works in this project will be in one site, in the village of Koukoudé in the prefecture of Boffa and will focus on the construction of artisanal fish landing and handling facilities.

**5.** As potential environment adverse impacts are expected to be moderate to small in scale, site specific and manageable, the proposed project is classified as EA Category B (partial assessment). Since paragraph 12 of OP 10.00 applies to Guinea under the WARFP, the requirement to carry out an Environmental and Social Management Plan (ESMP) and/or Environmental and Social Impact Assessment (ESIA) will be undertaken during project implementation. At the same time, prior to sub-project appraisal, the implementing agency will agree to apply the following minimum standards during implementation: Inclusion of standard Environmental Codes of Practice (ECOP) in the rehabilitation, improvement and construction bid documents of all subprojects; review and oversight of any major construction or rehabilitation works by specialists; implementation of environmentally and socially sound

options for waste management, provisions for adequate implementation budget, and satisfactory institutional arrangements for monitoring effective implementation.

**6. OP4.09 Pest Management.** The project activities will not include any pest management activities.

**7. OP 4.04: Natural Habitats.** This policy is triggered to prevent those activities which could induce direct or indirect significant impacts on natural habitat, fauna, flora, or biodiversity from being selected and financed by the project. The ESIA and/or ESMPs will include measures for avoiding or, if unavoidable, mitigating, impacts on fauna and flora in natural habitat areas. The project will not affect or involve critical natural habitats. The bidding documentation, of any activity which affects natural habitats, will set clear guidance for the avoidance or mitigation of any adverse impacts.

**8. OP 4.11 Physical Cultural Resources.** The general area considered for site location in Guinea is neither protected area nor known cultural heritage area. However, the project triggers OP 4.11 because the civil works will include digging and may lead to chance finds. Nevertheless, clear procedures will be required for identification, protection of cultural property from theft, and treatment of discovered artifacts, and will be included in standard bidding documents. Attachment 4 of the ESSAF includes provisions for chance finds.

**9. OP 4.37 Safety of Dams.** This policy is not triggered, as there will be no dam construction or rehabilitation or use of existing dams that will necessitate dam safety status report.

**10. OP 7.50 Projects on International Waterways.** The proposed project does not include any investments that would trigger this OP.

**11. OP 7.60 Projects in disputed areas.** This policy is not triggered because project intervention sites will not be within disputed areas.

**12. OP 4.12 Involuntary Resettlement.** The project may finance acquisition of land to facilitate the expansion of a fish landing site and associated fish handling facilities. Once the exact location of the site to be developed is known, a Resettlement Action Plan (RAP) will be prepared, consulted, finalized and disclosed before civil works can commence.

**13. OP 4.10 Indigenous Peoples.** There are no Indigenous Peoples in the project area.

#### **IV. Safeguard Screening and Mitigation**

**14.** The following guidelines, codes of practice and requirements will constitute the framework of reference for the selection, design, contracting, monitoring and evaluation of subprojects. So, the safeguard screening and mitigation process will include:

- A list of negative characteristics rendering a proposed activity ineligible for support (Attachment 1);

- A proposed checklist of likely environment and social impacts to be filled out for each subproject or group of activities (Attachment 2);
- Guidelines for land and asset acquisition, entitlements and compensation (Attachment 3);
- Procedures for the protection of cultural property, including the chance discovery of archaeological artifacts, unrecorded graveyards and burial sites, etc. (Attachment 4);
- Relevant elements of the codes of practice for the prevention and mitigation of potential environmental impacts (Attachment 5); and
- A sample Environmental Safeguards procedures for Inclusion in the Technical Specifications of Contracts (Attachment 6).

## **V. Responsibilities for Safeguard Screening and Mitigation**

**15.** Implementation capacity is weak in Guinea and will be supplemented by a technical team embedded in the Ministry's monitoring and implementation unit, with oversight provided by a multi-stakeholder national steering committee. In addition, the regional structure mandated with supporting the management of marine fish resources, *the Commission Sous-Régionale des Pêches* (CSR), will help coordinate and supervise compliance with safeguard policies.

## **VI. Capacity Building and Monitoring of Safeguard Framework Implementation**

**16.** As part of the capacity building to be provided for implementation of the proposed operation, the PIU's environmental and social focal point will receive training on the Bank's safeguards policies implementation requirements and on the ESSAF's application from the Bank's safeguards specialists. During supervision, the project team will assess the implementation of the ESSAF, including the preparation and implementation of the safeguards instruments (such as ESIA's and RAPs). The project team may recommend additional strengthening if required.

## **VII. Consultation and Disclosure**

**17.** This ESSAF will be shared with the relevant key ministries (Fisheries, Environment, Finance, etc.), Participating Local Governments, concerned nongovernmental organizations and development partners of the Republic of Guinea involved in the WARFP. Communities will be consulted on the ESSAF during project implementation. It will be disclosed in country and at the World Bank's InfoShop.

**List of Negative Subproject Attributes**

Subprojects with any of the attributes listed below will be ineligible for support under the proposed West Africa Regional Fisheries Project in Guinea.

<b>Attributes of Ineligible Subprojects</b>	
<b>GENERAL CHARACTERISTICS</b>	
<b>Natural habitats and Forests</b>	<ul style="list-style-type: none"> <li>Concerning significant conversion or degradation of critical natural habitats (protected areas, wetlands, etc) and forest ecosystems.</li> </ul>
	Damages on cultural property, including but not limited to, any activities that affect the following sites: <ul style="list-style-type: none"> <li>Archaeological and historical sites; and</li> <li>Religious monuments, structures and cemeteries.</li> </ul>
<b>Drinking Water Supply</b>	New or expansion of piped water schemes to serve 10,000 or more households
<b>Sanitation</b>	New wastewater treatment plants to serve 10,000 or more households.
<b>Solid Waste</b>	New disposal site or significant expansion of an existing disposal site.
<b>Irrigation</b>	New irrigation and drainage schemes.
<b>Dams</b>	Construction of dams more than 5 meters high. Rehabilitation of dams more than 15 meters high.
<b>Power</b>	New power generating capacity of more than 10 MW.
<b>Income Generating Activities</b>	Activities involving the use of fuelwood, including trees and bush. Activities involving the use of hazardous substances.

**Checklist of Possible Environmental and Social Impacts of Activities**

**I. Activity Related Issues**

No	ISSUES	YES	NO	Comments
<b>A.</b>	<b>Zoning and Land Use Planning</b>			
1.	Will the subproject affect land use zoning and planning or conflict with prevalent land use patterns?			
2.	Will the subproject involve significant land disturbance or site clearance?			
3.	Will the subproject land be subject to potential encroachment by urban or industrial use or located in an area intended for urban or industrial development?			
<b>B.</b>	<b>Utilities and Facilities</b>			
4.	Will the activity require the setting up of ancillary production facilities?			
5.	Will the activity require significant levels of accommodation or service amenities to support the workforce during construction (e.g., contractor will need more than 20 workers)?			
<b>C</b>	<b>Water and Soil Contamination</b>			
6.	Will the activity require large amounts of raw materials or construction materials?			
7.	Will the activity generate large amounts of residual wastes, construction material waste or cause soil erosion?			
8.	Will the activity result in potential soil or water contamination (e.g., from oil, grease and fuel from equipment yards)?			
9.	Will the activity lead to contamination of ground and surface waters by herbicides for vegetation control and chemicals (e.g., calcium chloride) for dust control?			
10.	Will the activity lead to an increase in suspended sediments in streams affected by road cut erosion, decline in water quality and increased sedimentation downstream?			
11.	Will the activity involve the use of chemicals or solvents?			
12.	Will the activity lead to the destruction of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards?			



13.	Will the activity lead to the creation of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors?			
<b>D.</b>	<b>Noise and Air Pollution Hazardous Substances</b>			
14.	Will the activity increase the levels of harmful air emissions?			
15.	Will the subproject increase ambient noise levels?			
16.	Will the activity involve the storage, handling or transport of hazardous substances?			
<b>E.</b>	<b>Fauna and Flora</b>			
18.	Will the activity involve the disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes)?			
19.	Will the activity lead to the destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development?			
20.	Will the activity lead to the disruption/destruction of wildlife through interruption of migratory routes, disturbance of wildlife habitats, and noise-related problems?			
<b>F.</b>	<b>Destruction/Disruption of Land and Vegetation</b>			
21.	Will the activity lead to unplanned use of the infrastructure being developed?			
22.	Will the activity lead to long-term or semi-permanent destruction of soils in cleared areas not suited for agriculture?			
23.	Will the activity lead to the interruption of subsoil and overland drainage patterns (in areas of cuts and fills)?			
24.	Will the activity lead to landslides, slumps, slips and other mass movements in road cuts?			
25.	Will the activity lead to erosion of lands below the roadbed receiving concentrated outflow carried by covered or open drains?			
26.	Will the activity lead to long-term or semi-permanent destruction of soils in cleared areas not suited for agriculture?			
27.	Will the activity lead to health hazards and interference of plant growth adjacent to roads by dust raised and blown by vehicles?			
<b>G.</b>	<b>Cultural Property</b>			
28.	Will the activity have an impact on archaeological or historical sites, including historic urban areas?			
29.	Will the activity have an impact on religious monuments, structures and/or cemeteries?			
30.	Have Chance Finds procedures been prepared for use			

	in the activity?			
<b>H.</b>	<b>Expropriation and Social Disturbance</b>			
31.	Will the activity involve land expropriation or demolition of existing structures?			
32.	Will the activity lead to induced settlements by workers and others causing social and economic disruption?			
33.	Will the activity lead to environmental and social disturbance by construction camps?			

## II. Site Characteristics

No.	ISSUES	YES	NO	Comments
1.	Is the activity located in an area with designated natural reserves?			
2.	Is the activity located in an area with unique natural features?			
3.	Is the activity located in an area with endangered or conservation-worthy ecosystems, fauna or flora?			
4.	Is the activity located in an area falling within 500 meters of national forests, protected areas, wilderness areas, wetlands, biodiversity, critical habitats, or sites of historical or cultural importance?			
5.	Is the activity located in an area which would create a barrier for the movement of conservation-worthy wildlife or livestock?			
6.	Is the activity located close to groundwater sources, surface water bodies, water courses or wetlands?			
7.	Is the activity located in an area with designated cultural properties such as archaeological, historical and/or religious sites?			
8.	Is the activity in an area with religious monuments, structures and/or cemeteries?			
9.	Is the activity in a polluted or contaminated area?			
10.	Is the activity located in an area of high visual and landscape quality?			
11.	Is the activity located in an area susceptible to landslides or erosion?			
12.	Is the activity located in an area of seismic faults?			
13.	Is the activity located in a densely populated area?			
14.	Is the activity located on prime agricultural land?			
15.	Is the activity located in an area of tourist importance?			
16.	Is the activity located near a waste dump?			
17.	Does the activity have access to potable water?			
18.	Is the activity located far (1-2 kms ) from accessible			

	roads?			
19.	Is the activity located in an area with a wastewater network?			
20.	Is the activity located in the urban plan of the city?			
21.	Is the activity located outside the land use plan?			

Recommendation:

- Ineligible activity:
- Change activity site:
- Conduct a simple ESIA (category B):
- No ESIA required. Apply following measures:
  - xxxx (measure, period/timeline, who ?)
  - yyyy (measure, period/timeline, who ?)
  - zzzz (measure, period/timeline, who ?)

Signed by (West Africa Regional Fisheries Project designated person):

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Signed by Project Manager:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Approved by \_\_\_\_\_ on (date and signature)

Copied to:

- xx
- yy

**Guidelines for Land and Asset Acquisition, Entitlements and Compensation**

**I. Objectives**

1. Resettlement and private land acquisition will be avoided or kept to a minimum, and will be carried out in accordance with these guidelines. Activity proposals that would require demolishing houses or acquiring productive land should be carefully reviewed to minimize or avoid their impacts through alternative alignments. Proposals that require more than minor expansion along rights of way should be carefully reviewed. No land or asset acquisition may take place outside of these guidelines. A format for Land Acquisition Assessment Data Sheet is attached as Attachment 3(i).
2. These guidelines provide principles and instructions to compensate negatively affected persons to ensure that they will be assisted to improve, or at least to restore, their living standards, income earning or production capacity to pre-project levels regardless of their land tenure status.

**II. Categorization**

3. Based on the number of persons that may be affected by the activity, Project Affected People (PAPs) and the magnitude of impacts, activities will be categorized as follows:
  - (a) activities that will affect more than 200 PAPs due to land acquisition and/or physical relocation and where a full Resettlement Action Plan (RAP) must be produced. These will be prepared prior to activity implementation.
  - (b) activities that will affect less than 200 persons require the following documentation: (i) a land acquisition assessment, (ii) the minutes or record of consultations which assess the compensation claimed and agreement reached, and (iii) a record of the receipt of the compensation, or voluntary donation, by those affected (see below).
  - (c) activities that are not expected to have any land acquisition or any other significant adverse social impacts; on the contrary, significant positive social impact and improved livelihoods are expected from such interventions.

**III. Eligibility**

4. PAPs are identified as persons whose livelihood is directly affected by the project due to acquisition of the land owned or used by them. PAPs deemed eligible for compensation are:
  - (a) those who have formal legal rights to land, water resources or structures/buildings, including recognized customary and traditional rights;

(b) those who do not have such formal legal rights but have a claim to usufruct rights rooted in customary law; and

(c) those whose claim to land and water resources or building/structures do not fall within (a) and (b) above, are eligible to resettlement assistance to restore their livelihood.

#### **IV. Compensation Principles**

5. The project implementation agencies will ensure timely provision of the following means of compensation to affected peoples:

(a) Project affected peoples losing access to a portion of their land or other productive assets with the remaining assets being economically viable are entitled to compensation at a replacement cost for that portion of land or assets lost to them. Compensation for the lost assets will be made according to the following principles:

- (i) replacement land with an equally productive plot, cash or other equivalent productive assets;
- (ii) materials and assistance to fully replace solid structures that will be demolished;
- (iii) replacement of damaged or lost crops and trees, at market value;
- (iv) other acceptable in-kind compensation;
- (v) in case of cash compensation, the delivery of compensation should be made in public, i.e., at the Community Meeting; and
- (vi) in case of physical relocation, provision of civic infrastructure at the resettlement sites.

(a) Project affected peoples losing access to a portion of their land or other economic assets rendering the remainder economically non-viable will have the options of compensation for the entire asset by provision of alternative land, cash or equivalent productive asset, according to the principles in (a) i-iv above.

#### **V. Consultation Process**

6. The PIU will ensure that all occupants of land and owners of assets located in a proposed activity area are consulted. Community meetings will be held in each affected district and village to inform the local population of their rights to compensation and options available in accordance with these Guidelines. The Minutes of the community meetings shall reflect the discussions held; agreements reached, and include details of the agreement, based on the format provided in Attachment 3(ii).

7. The PIU shall provide a copy of the Minutes to affected people and confirm in discussions with each of them, their requests and preferences for compensation, agreements reached, and any eventual complaint. Copies will be recorded in the posted project documentation and be available for inspection during supervision.

## **VI. Activity Approval**

8. In the event that an activity involves acquisition against compensation, the PIU shall:
  - (a) not approve the activity unless satisfactory compensation has been agreed with the affected person; and
  - (b) not allow works to start until the compensation has been delivered in a satisfactory manner to the affected persons.

## **VII. Complaints and Grievances**

9. Initially, all complaints should be registered by the PIU, which shall establish a register of resettlement/compensation related grievances and disputes mechanism. The Feedback and Grievance Redress Mechanism being established for the project will facilitate this. The existence and conditions of access to this register (where, when, how) shall be widely disseminated within the community/town as part of the consultation undertaken for the activity in general. A committee of knowledgeable persons, experienced in the subject area, shall be constituted at a local level as a Committee to handle first instance dispute/grievances. This group of mediators attempting amicable mediation/litigation in first instance will consist of the following members: (i) Mayor; (ii) Legal advisor; (iii) Local Representative within the elected Council; (iv) Head of Community Based Organization; and (v) Community leaders. This mediation committee will be set up at local level by the implementation agency on an “as-needed” (i.e. it will be established when a dispute arises in a given community).

10. When a grievance/dispute is recorded as per above-mentioned registration procedures, the mediation committee will be established, and mediation meetings will be organized with interested parties. Minutes of meetings will be recorded. The existence of this first instance mechanism will be widely disseminated to the affected people as part of the consultation undertaken for the sub-project in general. It is important that these mediation committees be set up as soon as RAP preparation starts. Disputes documented e.g. through socio-economic surveys should be dealt with by appropriate mediation mechanisms which must be available to cater for claims, disputes and grievances at this early stage. A template form for claims should be developed and these forms be collated on a quarterly basis into a database held at project level.

## **VIII. Verification**

11. The Mediation Meeting Minutes, including agreements of compensation and evidence of compensation made shall be provided to the Municipality/district, to the supervising engineers, who will maintain a record hereof, and to auditors and socio-economic monitors when they undertake reviews and post-project assessment. This process shall be specified in all relevant project documents, including details of the relevant authority for complaints at the municipal/district or implementing agency level.

**Annex 8 - Attachment 3(i)**

Land Acquisition Assessment Data Sheet  
**(To be used to record information on all land to be acquired)**

1. Quantities of land/structures/other assets required:
2. Date to be acquired:
3. Locations:
4. Owners:
5. Current uses:
6. Users:
  - Number of Customary Claimants:
  - Number of Squatters:
  - Number of Encroachers:
  - Number of Owners:
  - Number of Tenants:
  - Others (specify): \_\_\_\_\_ Number: \_\_\_\_\_
7. How land/structures/other assets will be acquired (identify one):
  - Donation
  - Purchase
8. Transfer of Title:
  - Ensure these lands/structures/other assets are free of claims or encumbrances.
  - Written proof must be obtained (notarized or witnessed statements) for the voluntary donation, or acceptance of the prices paid from those affected, together with proof of title being vested in the community, or guarantee of public access, by the title-holder.
9. Describe grievance mechanisms available:

**Schedule of  
Compensation of Asset Requisition**

<b>Summary of Affected Unit/Item</b>	<b>Units to be Compensated</b>	<b>Agreed Compensation</b>
a. Agricultural land (m <sup>2</sup> ):	_____	_____
b. Houses/structures to be demolished (units/m <sup>2</sup> ):	_____	_____
c. Type of structure to be demolished (e.g. mud, brick, cement block, etc.)	_____	Not Applicable.
d. Trees or crops affected:	_____	_____
e. Water sources affected:	_____	_____

Signatures of local community representatives, Sheikh/Head of Tribe:

Include record of any complaints raised by affected persons:

Map attached (showing affected areas and replacement areas):



### **Protection of Cultural Property**

1. Cultural property include monuments, structures, works of art, or sites of significance points of view, and are defined as sites and structures having archaeological, historical, architectural, or religious significance, and natural sites with cultural values. This includes cemeteries, graveyards and graves.

2. The initial phase of the proposed project poses limited risks of damaging cultural property since activities will largely consist of rehabilitation of existing roads and minor public works for rehabilitation of school and health buildings, irrigation systems, water and sanitation, markets and small bridges. Other than those activities, there are on-farm productivity, post-harvest handling, storage and processing. Further, the list of negative activity attributes, which would make an activity ineligible for support (Attachment 1), includes any activity that would adversely impact cultural property. Nevertheless, the following procedures for identification, protection from theft, and treatment of discovered artifacts should be followed and included in standard bidding documents as provided in Attachment 6.

### **Chance Find Procedures**

3. Chance find procedures will be used as follows:

- (a) Stop the construction activities in the area of the chance find;
- (b) Delineate the discovered site or area;
- (c) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the Ministry of Culture take over;
- (d) Notify the supervisory Engineer who in turn will notify the responsible local authorities and the Ministry of Culture immediately (within 24 hours or less);
- (e) Responsible local authorities and the Ministry of Culture would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists of the Ministry of Culture (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
- (f) Decisions on how to handle the finding shall be taken by the responsible authorities and the Ministry in charge of Cultural Heritage and Archeology. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
- (g) Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Ministry of Cultural heritage; and
- (h) Construction work could resume only after permission is given from the responsible local authorities and the Ministry of Culture concerning safeguard of the heritage.

**4.** These procedures must be referred to as standard provisions in construction contracts, when applicable, and as proposed in section 1.5 of Attachment 6. During project supervision, the Site Engineer shall monitor the above regulations relating to the treatment of any chance find encountered are observed.

**5.** Relevant findings will be recorded in World Bank Implementation Status and Results Reports (ISR) and Implementation Completion and Results Reports (ICRs) will assess the overall effectiveness of the project's cultural property mitigation, management, and activities, as appropriate.

**Codes of Practice for Prevention and Mitigation of Environmental Impacts**

Potential Impacts	Prevention and Mitigation Measures
<p>Disruption of drainage:</p> <ul style="list-style-type: none"> <li>• Hampers free drainage, causes stagnant pools of water.</li> <li>• Increased sediments into ponds, streams and rivers due to erosion from road tops and sides.</li> <li>• Increased run-off and flooding.</li> </ul>	<ul style="list-style-type: none"> <li>• Design to provide adequate drainage and to minimize changes in flows, not limited to the road reserve.</li> <li>• Provision of energy dissipaters, cascades, steps, and checks dams.</li> <li>• Provision of sufficient number of cross drains.</li> <li>• Balancing of cut and fill.</li> <li>• Re-vegetation to protect susceptible soil surfaces.</li> <li>• Rehabilitation of borrow areas.</li> </ul>
<p>Erosion:</p> <ul style="list-style-type: none"> <li>• Erosion of land downhill from the road bed, or in borrows areas.</li> <li>• Landslides, slips or slumps.</li> <li>• Bank failure of the borrow pit.</li> </ul>	<ul style="list-style-type: none"> <li>• Design to prevent soil erosion and maintain slope stability.</li> <li>• Construction in the dry season.</li> <li>• Protection of soil surfaces during construction.</li> <li>• Physical stabilization of erodible surfaces through turfing, planting a wide range of vegetation, and creating slope breaks.</li> <li>• Rehabilitation and re-grading of borrow pits and material collection sites.</li> </ul>
<p>Loss of vegetation.</p>	<ul style="list-style-type: none"> <li>• Balancing of cut and fill.</li> <li>• Revegetation to protect susceptible soil surfaces.</li> <li>• Minimize loss of natural vegetation during construction.</li> <li>• Revegetation and replanting to compensate any loss of plant cover or tree felling.</li> </ul>
<p>Loss of access.</p>	<ul style="list-style-type: none"> <li>• Design to include accessibility to road sides in case roadbed is raised.</li> <li>• Alternative alignments to avoid bisecting villages by road widening.</li> </ul>

Potential Impacts	Prevention and Mitigation Measures
<p>Impacts during construction:</p> <ul style="list-style-type: none"> <li>• Fuelwood collection.</li> <li>• Disease due to lack of sanitation.</li> <li>• Introduction of hazardous wastes.</li> <li>• Groundwater contamination (oil, grease).</li> <li>• Accidents during construction.</li> <li>• Potential impacts to cultural property.</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of fuel at work camps to prevent cutting of firewood.</li> <li>• Provision of sanitation at work camps.</li> <li>• Removal of work camp waste, proper disposal of oil, bitumen and other hazardous wastes.</li> <li>• Management of construction period worker health and safety.</li> <li>• Use archaeological chance find procedures and coordinate with appropriate agencies.</li> </ul>
<ul style="list-style-type: none"> <li>• Increased migration from nearby cities.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide comprehensive community participation in planning, and Migration issue to be resolved through local conflict resolution system.</li> </ul>

**Safeguards Procedures for Inclusion in the Technical Specifications of Contracts**

**I. General**

1. The Contractor and his employees shall adhere to the mitigation measures set down and take all other measures required by the Engineer to prevent harm, and to minimize the impact of his operations on the environment.
2. The Contractor shall not be permitted to unnecessarily strip clear the right of way. The Contractor shall only clear the minimum width for construction and diversion roads should not be constructed alongside the existing road.
3. Remedial actions which cannot be effectively carried out during construction should be carried out on completion of each Section of the road (earthworks, pavement and drainage) and before issuance of the Taking Over Certificate:
  - (a) these sections should be landscaped and any necessary remedial works should be undertaken without delay, including grassing and reforestation;
  - (b) water courses should be cleared of debris and drains and culverts checked for clear flow paths; and
  - (c) borrow pits should be dressed as fish ponds, or drained and made safe, as agreed with the land owner.
4. The Contractor shall limit construction works to between 6 am and 7 pm if it is to be carried out in or near residential areas.
5. The Contractor shall avoid the use of heavy or noisy equipment in specified areas at night, or in sensitive areas such as near a hospital.
6. To prevent dust pollution during dry periods, the Contractor shall carry out regular watering of earth and gravel haul roads and shall cover material haulage trucks with tarpaulins to prevent spillage.

**II. Transport**

7. The Contractor shall use selected routes to the project site, as agreed with the Engineer, and appropriately sized vehicles suitable to the class of road, and shall restrict loads to prevent damage to roads and bridges used for transportation purposes. The Contractor shall be held responsible for any damage caused to the roads and bridges due to the transportation of excessive loads, and shall be required to repair such damage to the approval of the Engineer.

8. The Contractor shall not use any vehicles, either on or off road with grossly excessive, exhaust or noise emissions. In any built up areas, noise mufflers shall be installed and maintained in good condition on all motorized equipment under the control of the Contractor.

9. Adequate traffic control measures shall be maintained by the Contractor throughout the duration of the Contract and such measures shall be subject to prior approval of the Engineer.

### **III. Workforce**

10. The Contractor should whenever possible locally recruit the majority of the workforce and shall provide appropriate training as necessary.

11. The Contractor shall install and maintain a temporary septic tank system for any residential labor camp and without causing pollution of nearby watercourses.

12. The Contractor shall establish a method and system for storing and disposing of all solid wastes generated by the labor camp and/or base camp.

13. The Contractor shall not allow the use of fuel wood for cooking or heating in any labor camp or base camp and provide alternate facilities using other fuels.

14. The Contractor shall ensure that site offices, depots, asphalt plants and workshops are located in appropriate areas as approved by the Engineer and not within 500 meters of existing residential settlements and not within 1,000 meters for asphalt plants.

15. The Contractor shall ensure that site offices, depots and particularly storage areas for diesel fuel and bitumen and asphalt plants are not located within 500 meters of watercourses, and are operated so that no pollutants enter watercourses, either overland or through groundwater seepage, especially during periods of rain. This will require lubricants to be recycled and a ditch to be constructed around the area with an approved settling pond/oil trap at the outlet.

16. The contractor shall not use fuel wood as a means of heating during the processing or preparation of any materials forming part of the Works.

### **IV. Quarries and Borrow Pits**

17. Operation of a new borrow area, on land, in a river, or in an existing area, shall be subject to prior approval of the Engineer, and the operation shall cease if so instructed by the Engineer. Borrow pits shall be prohibited where they might interfere with the natural or designed drainage patterns. River locations shall be prohibited if they might undermine or damage the river banks, or carry too much fine material downstream.

18. The Contractor shall ensure that all borrow pits used are left in a trim and tidy condition with stable side slopes, and are drained ensuring that no stagnant water bodies are created which could breed mosquitoes.

19. Rock or gravel taken from a river shall be far enough removed to limit the depth of material removed to one-tenth of the width of the river at any one location, and not to disrupt the river flow, or damage or undermine the river banks.

20. The location of crushing plants shall be subject to the approval of the Engineer, and not be close to environmentally sensitive areas or to existing residential settlements, and shall be operated with approved fitted dust control devices.

## **V. Earthworks**

21. Earthworks shall be properly controlled, especially during the rainy season.

22. The Contractor shall maintain stable cut and fill slopes at all times and cause the least possible disturbance to areas outside the prescribed limits of the work.

23. The Contractor shall complete cut and fill operations to final cross-sections at any one location as soon as possible and preferably in one continuous operation to avoid partially completed earthworks, especially during the rainy season.

24. In order to protect any cut or fill slopes from erosion, in accordance with the drawings, cut off drains and toe-drains shall be provided at the top and bottom of slopes and be planted with grass or other plant cover. Cut off drains should be provided above high cuts to minimize water runoff and slope erosion.

25. Any excavated cut or unsuitable material shall be disposed of in designated tipping areas as agreed to by the Engineer.

26. Tips should not be located where they can cause future slides, interfere with agricultural land or any other properties, or cause soil from the dump to be washed into any watercourse. Drains may need to be dug within and around the tips, as directed by the Engineer.

## **VI. Historical and Archeological Sites**

27. If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:

- a. Stop the construction activities in the area of the chance find.
- b. Delineate the discovered site or area.
- c. Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the Ministry of Culture take over.
- d. Notify the supervisory Engineer who in turn will notify the responsible local authorities and the Ministry of Culture immediately (less than 24 hours).
- e. Contact the responsible local authorities and the Ministry of Culture who would be in charge of protecting and preserving the site before deciding on the proper

procedures to be carried out. This would require a preliminary evaluation of the findings to be performed by the archeologists of the Ministry of Culture (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage, including the aesthetic, historic, scientific or research, social and economic values.

- f. Ensure that decisions on how to handle the finding be taken by the responsible authorities and the Ministry of Culture. This could include changes in the layout (such as when the finding is an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage.
- g. Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Ministry of Culture; and
- h. Construction work will resume only after authorization is given by the responsible local authorities and the Ministry of Culture concerning the safeguard of the heritage.

## **VII. Disposal of Construction and Vehicle Waste**

28. Debris generated due to the dismantling of the existing structures shall be suitably reused, to the extent feasible, in the proposed construction (e.g. as fill materials for embankments). The disposal of remaining debris shall be carried out only at sites identified and approved by the project engineer. The contractor should ensure that these sites (a) are not located within designated forest areas; (b) do not impact natural drainage courses; and (c) do not impact endangered/rare flora. Under no circumstances shall the contractor dispose of any material in environmentally sensitive areas.

29. In the event any debris or silt from the sites is deposited on adjacent land, the Contractor shall immediately remove such, debris or silt and restore the affected area to its original state to the satisfaction of the Supervisor/Engineer.

30. Bentonite slurry or similar debris generated from pile driving or other construction activities shall be disposed of to avoid overflow into the surface water bodies or form mud puddles in the area.

31. All arrangements for transportation during construction including provision, maintenance, dismantling and clearing debris, where necessary, will be considered incidental to the work and should be planned and implemented by the contractor as approved and directed by the Engineer.

32. Vehicle/machinery and equipment operations, maintenance and refueling shall be carried out to avoid spillage of fuels and lubricants and ground contamination. An oil interceptor will be provided for wash down and refueling areas. Fuel storage shall be located in proper bounded areas.

33. All spills and collected petroleum products shall be disposed of in accordance with standard environmental procedures/guidelines. Fuel storage and refilling areas shall be located



at least 300m from all cross drainage structures and important water bodies or as directed by the Engineer.

# Annex 9: Map of West Africa Regional Fisheries Program

## MAURITANIA AND GUINEA West Africa Regional Fisheries Program SOP-C1

