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Report No: PAD00140

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A

PROPOSED GRANT
IN THE AMOUNT OF SDR 37.7 MILLION
(US$50 MILLION EQUIVALENT)

AND

CO-FINANCED BY A GRANT
IN THE AMOUNT OF US$5 MILLION
FROM THE GLOBAL PROGRAM FOR THE BLUE ECONOMY (PROBLUE) MULTI-DONOR TRUST FUND

TO THE

FEDERAL REPUBLIC OF SOMALIA

FOR A

SOMALI SUSTAINABLE FISHERIES DEVELOPMENT "BADMAAL" PROJECT

MAY 20, 2024

Environment, Natural Resources and the Blue Economy Global Practice
Eastern and Southern Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective February 29, 2024)

Currency Unit =	SDR
SDR 0.75 =	US$1
US$1.32 =	SDR 1

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Victoria Kwakwa
Regional Director:	Iain G. Shuker
Country Director:	Keith E. Hansen
Practice Manager:	Noreen Beg (Acting)
Task Team Leaders:	Julien Million, Stephen Ling

ABBREVIATIONS AND ACRONYMS

AIS	Automatic Identification System
BaU	Business as Usual
BRA	Banadir Regional Administration
CBS	Central Bank of Somalia
COAPM	Comprehensive Operations and Accounting Procedures Manual
CPF	Country Partnership Framework
DA	Designated Account
EAFS	External Assistance Fiduciary Section
EEZ	Exclusive Economic Zone
ESRS	Environmental and Social Review Summary
FAO	Food and Aquaculture Organization
FGS	Federal Government of Somalia
FI	Financial Intermediaries
FM	Financial Management
FMC	Fisheries Monitoring Center
FMDC	Fisheries Management and Development Council
FMP	Fisheries Master Plan
FMS	Federal Member State (s)
GBV	Gender Based Violence
GDP	Gross Domestic Product
GEEL	Growth, Enterprise, Employment & Livelihoods
GHG	Greenhouse gas
GRS	Grievance Redress Service
IDA	International Development Association
IOTC	Indian Ocean Tuna Commission
IPF	Investment Project Financing
IUU	Illegal Unregulated and Reported
M&E	Monitoring and Evaluation
MCS	Monitoring, Control and Surveillance
MFBE	Ministry of Fisheries and Blue Economy of the Federal Government of Somalia
MFD	Maximizing Finance for Development
MPA	Marine Protected Areas
MSMEs	Micro-Small-Medium Enterprises
NAPA	National Adaptation Program of Action
NBS	Nature Based Solution
NCCC	National Climate Change Committee
NDC	Nationally Determined Contributions
NPC	National Project Coordinator
NDP-9	Somalia Ninth National Development Plan
PA	Paris Alignment
PBC	Performance-Based Condition
PCE	Private Capital Enabling / Private Capital Enabled
PERSGA	Regional Organization for the Conservation of the Environment of the Red Sea and the Gulf of Aden
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PMU	Project Management Unit

PPA	Project Preparation Advance
PSMA	Port State Measures Agreement
RFMO	Regional Fisheries Management Organization
SCoA	Standard Chart of Accounts
SEAH	Sexual Exploitation, Abuse and Harassment
SFMIS	Somali Financial Management Information System
SoE	Statements of Expenditure
SPC	State Project Coordinator
SSTs	Sea Surface Temperatures
SWIOFC	Southwest Indian Ocean Fisheries Commission
UCS	Use of Country Systems
UNCLOS	United Nations Convention on the Law of the Sea
VMS	Vessel Monitoring System
WBG	World Bank Group

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DATASHEET

BASIC INFORMATION

Project Beneficiary(ies)	Operation Name		
Somalia	Somali Sustainable Fisheries Development Project - Badmaal		
Operation ID	Financing Instrument	Environmental and Social Risk Classification	
P178032	Investment Project Financing (IPF)	High	

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[✓] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[✓] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternative Procurement Arrangements (APA)	[ ] Hands-on Expanded Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
12-Jun-2024	30-Jun-2030
Bank/IFC Collaboration	
No	

Proposed Development Objective(s)

The Project Development Objective is to improve the capacity of targeted communities and authorities to benefit from and effectively manage selected fisheries

Components

Component Name	Cost (US$)
Increasing the Capacity of Dependent Communities to Benefit from Sustainable Marine Fisheries	27,085,000.00
Strengthening Marine Fisheries Governance and Management	20,060,000.00
Project Management Monitoring and Evaluation	7,855,000.00

Organizations

Borrower:	Federal Republic of Somalia
Implementing Agency:	Ministry of Fisheries and Blue Economy of the Federal Republic of Somalia

PROJECT FINANCING DATA (US$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)?	Yes
Is this project Private Capital Enabling (PCE)?	Yes

SUMMARY

Total Operation Cost	**55.00**
Total Financing	**55.00**
of which IBRD/IDA	**50.00**
Financing Gap	**0.00**

DETAILS

World Bank Group Financing

International Development Association (IDA)	50.00
IDA Grant	50.00

Non-World Bank Group Financing

Trust Funds	5.00
PROBLUE MDTF	5.00

IDA Resources (US$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
National Performance-Based Allocations (PBA)	0.00	50.00	0.00	0.00	50.00
Total	**0.00**	**50.00**	**0.00**	**0.00**	**50.00**

Expected Disbursements (US$, Millions)

WB Fiscal Year	2025	2026	2027	2028	2029	2030
Annual	12.50	17.00	12.50	5.50	4.00	1.50
Cumulative	12.50	29.50	42.00	47.50	51.50	53.00

PRACTICE AREA(S)

Practice Area (Lead)

Environment, Natural Resources & the Blue Economy

Contributing Practice Areas

CLIMATE

Climate Change and Disaster Screening

Yes, it has been screened and the results are discussed in the Operation Document

SYSTEMATIC OPERATIONS RISK- RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	Substantial

3. Sector Strategies and Policies	High
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	High
7. Environment and Social	High
8. Stakeholders	Substantial
9. Overall	High

POLICY COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

ENVIRONMENTAL AND SOCIAL

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	Relevant
ESS 10: Stakeholder Engagement and Information Disclosure	Relevant
ESS 2: Labor and Working Conditions	Relevant
ESS 3: Resource Efficiency and Pollution Prevention and Management	Relevant
ESS 4: Community Health and Safety	Relevant
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
ESS 8: Cultural Heritage	Relevant

ESS 9: Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

LEGAL

Legal Covenants

Sections and Description
Schedule 2, Section I.A.1(a). The Recipient shall designate by no later than one month after the Effective Date, and thereafter maintain throughout the period of Project implementation, the Director-General Technical Working Group (DG-TWG) to serve as the Project steering committee, with composition, terms of reference and resources satisfactory to the Association (the "Project Steering Committee" or "PSC"), which shall be: (i) chaired by the director general of the MFBE, and comprised among others, of the directors-general of fisheries of the FMS and Benadir Regional Administration (BRA); and (ii) vested with such powers, functions and competencies, acceptable to the Association as further detailed in the Project Operations Manual, as shall be required to, inter alia: (A) provide policy direction and guidance to the PMU for the implementation of the Project; and (B) review and approve the Annual Work Plans and Budgets and Project Reports.
Schedule 2, Section I.E(a). The Recipient shall prepare and furnish to the Association on an annual basis, by no later than October 31 of each year, the annual work plan and budget containing all activities proposed to be included in the Project during the following Fiscal Year, and a proposed financing plan (setting forth the proposed amounts and sources of financing) for expenditures required for such activities; provided that the Annual Work Plan and Budget for the first year of Project implementation shall be prepared and furnished to the Association, not later than one (1) month after the Effective Date;

Conditions

Type	Citation	Description	Financing Source
Effectiveness	Article V. Section 5.01 (a)	The Recipient has prepared and adopted the Project Operations Manual, in form and substance satisfactory to the Association.	IBRD/IDA
Effectiveness	Article V. Section 5.01 (b)	The PROBLUE Grant Agreement has been duly executed and delivered, and all conditions precedent to its effectiveness, or to the right of the Recipient to make withdrawals under it	IBRD/IDA

		(other than the effectiveness of this Agreement), have been fulfilled	
Effectiveness	Article V. Section 5.01	The Financing Agreement has been executed and delivered and all conditions precedent to its effectiveness or the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled	Trust Funds
Disbursement	Schedule 2. Section III.B.1(a)	No withdrawal shall be made for payments made prior to the Signature Date	IBRD/IDA
Disbursement	Schedule 2. Section III.B.1(b)	No withdrawal shall be made under Categories (1), (2) and (3) unless and until the Recipient has: (i) prepared, consulted upon, adopted and publicly disclosed the Environmental and Social Management Framework (including the Labor Management Procedures and the SEA/SH Prevention and Response Action Plan), Resettlement Policy Framework, Security Management Framework, Sectoral Environmental and Social Impact Assessment, and template Environmental and Social Management Plans, in form and substance satisfactory to the Association and (ii) established an accessible grievance mechanism for the Project, in form and	IBRD/IDA

		substance satisfactory to the Association	
Disbursement	Schedule. Section II.B.1(a)	No withdrawal shall be made for payments made prior to the Signature Date	Trust Funds
Disbursement	Schedule. Section II.B.1(b)	under Categories (1) and (2) unless and until the Recipient has: (i) prepared, consulted upon, adopted and publicly disclosed the Environmental and Social Management Framework (including the Labor Management Procedures and the SEA/SH Prevention and Response Action Plan), Resettlement Policy Framework, Security Management Framework, Sectoral Environmental and Social Impact Assessment, and template Environmental and Social Management Plans, in form and substance satisfactory to the Association; and (ii) established an accessible grievance mechanism for the Project, in form and substance satisfactory to the Bank	Trust Funds

I. STRATEGIC CONTEXT

A. Country Context

1. **After more than two decades of civil unrest, Somalia has taken steps towards stability, reconstruction, poverty reduction and inclusive growth**. The 2012 Provisional Constitution established the Federal Government of Somalia (FGS) consisting of currently five Federal Member States (FMS) and the capital, Mogadishu, is governed by the Banadir Regional Administration (BRA). Institution-building efforts and fiscal reforms are improving governance and placing the country on a stronger development trajectory. However, the FGS and FMS still face political contestation on core constitutional matters and resource distribution, and domestic revenue remains insufficient to fund expenditures on security and development needs. Limited presence of FGS and FMS agencies outside urban areas, conflict, insecurity, and humanitarian challenges including terrorist groups' attacks, mostly in Mogadishu and in southern Somalia, continue to constrain private sector investment and delivery of public services relief efforts affecting poverty and economic growth.

2. **Somalia is one of the poorest countries in the world with a per capita gross domestic product (GDP) estimated at US$592 in 2022, the seventh lowest in the world[1].** Growth is mainly consumption-driven, with fisheries having a minor role. Telecommunications and money transfer services are the key growth sectors enabled by large remittances and aid inflows. Governance and transparency should be strengthened to propel equitable private sector-driven growth. Public revenue generation remains an ongoing challenge, but annual domestic FGS revenue rose from US$143 million to US$263 million (2.3 percent of GDP) from 2017 to 2022[2]. Somalia reached the completion point of the Heavily Indebted Poor Countries (HIPC) Initiative in December 2023, with the country receiving US$4.5 billion in debt relief.

3. **Somalia is highly vulnerable to climate change and has faced persistent humanitarian crises for decades with associated resource depletion.** Throughout 2022 and for five consecutive seasons, low rainfall has exacerbated severe drought conditions in terms of severity, duration, and scale.[3] Somalia is a chronic food crop deficit country, dependent on remittances and humanitarian assistance to finance food consumption and imports Small urban and rural coastal communities are particularly prone to high levels of food insecurity due as they often face crises or emergencies throughout the year[4], living in harsh and isolated environments with poor sanitation, health, and educational services. In coastal areas, a lack of rain may impact the reproduction of some stocks, e.g., shrimp near river mouths, leading to economic and food security stress for some fishing communities.[5] Extreme weather events due to climate change will exacerbate these challenges, including in coastal areas. Climate impacts such as drought and flooding lead to failed crops and loss of livestock, exacerbating these challenges in coastal areas. Somalia's long coastline is home to valuable marine resources which can contribute to food security and economic growth. However, the fishery sector needs climate-resilient and sustainable management of offshore and in coastal areas.

4. **Piracy in Somalia has considerably reduced since 2012 but remains a potential threat.** Piracy in Somalia was initially linked to illegal fishing activities that emerged after the collapse of the central government in 1991.[6] In 2007, due

[1] World Bank: World Development Indicator (https://databank.worldbank.org/source/world-development-indicators, accessed April 7, 2024)
[2] World Bank, 2024. Somalia Country Partnership Framework FY24-28. Report Number 187254-SO), discussed by the Board on February 29, 2024.
[3] World Bank, 2023. Somalia Systematic Country Diagnostic Update: Accelerating the Building of Inclusive Institutions for Resilience and Jobs (https://openknowledge.worldbank.org/entities/publication/fc6ee8a6-be32-468c-b396-e94b7d202aad)
[4] Integrated Food Security Phase Classification (IPC). Somalia Acute Food Acute Food Insecurity Situation (https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1156834/?iso3=SOM)
[5] FAO, 2023. Addressing the hidden impact of the drought crisis among Somalia's fishing communities (https://www.fao.org/somalia/news/detail-events/ar/c/1646992/).
[6] World Bank. 2013. The Pirates of Somalia: Ending the Threat, Rebuilding a Nation. Washington, DC. https://openknowledge.worldbank.org/handle/10986/16518 .

to political instability, economic hardships, and the absence of effective governance in the region, armed groups took advantage of the lawlessness at sea, hijacking commercial vessels for ransom. The crisis rapidly expanded, peaked and triggered a response by the international community which deployed naval forces in the region and Somali Exclusive Economic Zone (EEZ) to patrol the waters off Somalia and deter pirate activities since 2008. These efforts, along with increased security measures by the shipping industry and improved local governance, contributed to a significant decline in piracy incidents by the mid-2010s. However, recent incidents in late 2023 and early 2024, fuel fears of piracy resurgence, and highlight the need to stabilize coastal communities through employment and economic growth.

5. **Gender inequality and Gender Based Violence (GBV) are prevalent in Somalia.** The recent World Bank Somalia Women's Empowerment Options Paper [7] note that GBV including Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) remains a challenge and is driven by pervasive insecurity, increased vulnerability and displacement. Studies suggest that about three-quarters of GBV/SEAH survivors are internally displaced persons; some of these survivors work in the fisheries sector.[8]

6. **Despite the challenges, several factors offer entry points for the fisheries sector to contribute to development and poverty alleviation**. These include a young population, rapid urbanization which can together create service sector jobs; rapid integration of ICT technologies and financial services for entrepreneurs, including in the fisheries sector, and present opportunities to "leapfrog" towards financial inclusion, e-government, and digital entrepreneurship. These opportunities can be linked to a vibrant private sector connected to a global diaspora network that considers fisheries as an economic growth area; and economic integration efforts in the broader Horn of Africa and Red Sea region and a productive marine ecosystem. These general development opportunities could also enable stronger management and micro-small-medium sized enterprises (MSME) development in the Somali fisheries sector.

B. Sectoral and Institutional Context

7. **Somalia's fisheries resources are extensive, productive and diverse.** Strong seasonal upwelling off Somalia's Indian Ocean coast provides one of the most productive marine ecosystems in the world with numerous fish and shellfish species, including valuable pelagic tuna resources. Conversely, its narrow continental shelf (Annex 5) limits shallow-water habitat and therefore the abundance of demersal species. Reliable data is scarce, but it is estimated that annual domestic catch is around 50,000 tons since 2010, while catches by foreign fleets are estimated to be around 100,000 tons.[9] Surveys in the 70s and 80s estimated potential production to be significantly higher, with the latest estimates at 600,000 and 835,000 tons. [10][11] Some demersal stocks (e.g., sharks, lobster, grouper, and snappers) may be showing signs of overexploitation, especially near urban centers where fishing activity and demand is higher.[12] Small pelagic resources are thought to be underutilized within Somali waters, although the large pelagic tuna stocks are assessed to be overfished at a regional level by the Indian Ocean Tuna Commission (IOTC).

[7] World Bank, 2023 Somalia Women's Empowerment Options Paper
[8] UNFPA. Overview of Gender-Based Violence Situation in Somalia - Advocacy Brief, 2022. URL: https://somalia.unfpa.org/en/publications/overview-gender-based-violence-situation-somalia-advocacy-brief-2022
[9] Around Us project, https://www.seaaroundus.org
[10] Adeso, 2015. Policy Paper: Improving Development and Management of Somalia's Marine Fisheries and Controlling Illegal, Unreported and Unregulated (IUU) Fishing
[11] Glaser SM, Roberts PM, Mazurek RH, Hurlburt KJ, and Kane-Hartnett L, 2015. Securing Somali Fisheries. Denver, CO: One Earth Future Foundation.
DOI: 10.18289/OEF.2015.001
[12] Growth, Enterprise, Employment and Livelihoods (GEEL), 2021. Lobster Survey Report

8. **Climate change directly impacts Somali fisheries, reducing fish stocks and changing the marine ecosystems on which they depend, through acidification, sea-level rise, higher water temperatures, and changes in ocean currents and circulation.**[13] A 2021 climate and fisheries analysis prepared for the project found that during the Southwest monsoon season when the Somali upwelling occurs, mean sea surface temperatures (SSTs) are projected to reach >28°C by 2030, >29°C by 2050 and >31°C by 2100. By the end of the century, the study projects that the Somali upwelling zone will become about 20 percent less productive overall. Furthermore, the vulnerability of the fisheries is based on cumulative effects of climate change, other drivers of change, and human responses. Where a fish stock is already heavily exploited or overexploited by unsustainable fishing practice, stress from climate-induced changes in ocean conditions or ecosystems may push the stock to a "tipping point," causing the total collapse of the stock. According to a World Bank study,[14] Somalia's socioecological risk of climate change to fisheries scores 'very high'. Declining productivity will be exacerbated if habitats and species are not sufficiently protected from fishing pressure. Additionally, Somalia's average mean surface air temperature is projected to increase by 1.9°C in 2040-2059 under a high emission scenario relative to historical reference data,[15] affecting the entire fishery value chain. Fishery infrastructure and livelihoods of fishing communities will also be impacted by high risk of flooding in the coastal areas of Somalia.[16] Climate vulnerability also extend to infrastructure and value chains. Higher ambient temperatures will increase the running and maintenance costs of buildings and equipment, while increased storm intensity and frequency risks damaging vessels and infrastructure, including post-harvest facilities. The impacts further risk increased food insecurity and lost livelihoods for coastal communities. The climate vulnerability of the Somali fisheries highlights the importance of long-term climate resilience of fisheries by maintaining robust fish stock and marine habitats and reducing non-climate stressors through development and implementation of climate-resilient fisheries' management, including capacity building of fishing communities, legal and regulatory framework for sustainable fisheries, monitoring control and surveillance to reduce unsustainable fishing practice, including illegal, unregulated and unreported (IUU)), fisher safety, climate-smart fishery infrastructure, and resilient value chains.

9. **The new 2023 Federal Fisheries Law establishes the basic division of responsibilities among FGS and FMS**. The Law divides fishing grounds into three zones:

- *Fisheries Restricted Zone (0-12nm):* constitutes the Territorial Sea of Somalia and is reserved exclusively for artisanal fishing and related activities by Somali citizens and Somali vessels of up to 12 meters in length overall, and management responsibility lies with the contiguous FMS;
- *Fisheries Protection Zone (12-24nm):* reserved exclusively for fishing and related activities by Somali citizens and Somali vessels of up to 24 meters in length overall. While the contiguous FMS will have the right to issue licenses for artisanal fishing vessels, other management responsibility lies with the FGS;
- *Fisheries Exclusive Economic Zone (24-200nm):* open to all fisheries and fleet under conditions defined by the Fisheries Law (2023) and where management responsibilities lie with the FGS.

10. **Illegal fishing has been rampant in Somali waters for decades with the value of the catch caught illegally estimated between US$100 and US$450 million annually**.[17] Most of the catch taken by foreign vessels has little to no benefit to the Somali economy. Although the great majority of Somali's demersal fishing grounds lies within 24nm, foreign vessels also compete with domestic fisheries for demersal resources along the narrow continental shelf. A fleet of industrial trawlers operate under non-transparent agreements with some FMS in violation of the Somali Fisheries Law,

[13] Federal Government of Somalia. 2022. Somalia's First Adaptation Communication to the UNFCCC.
[14] World Bank. 2019. Climate Change and Marine Fisheries in Africa: Assessing Vulnerability and Strengthening Adaptation Capacity.
[15] World Bank. 2024. Climate Change Knowledge Portal. https://climateknowledgeportal.worldbank.org/
[16] Global Facility for Disaster Reduction and Recovery (GFDRR). 2024. ThinkHazard! https://thinkhazard.org/en/
[17] Adeso, 2015. Illegal, Unreported and Unregulated (IUU) Fishing in the Territorial Waters of Somalia

greatly increasing the risk of overexploitation and marine habitat degradation and threatening the current and future potential of the domestic fisheries sector.

11. **In 2019, Somalia started mobilizing much-needed revenue from fisheries through the issuance of licenses**. Following a revenue sharing agreement reached between the FGS and FMS, international partners, including the World Bank, supported efforts by the FGS to establish a legal and transparent foreign fishing regime in Somali waters beyond 24nm. Starting in 2019, licenses were issued to 30 Chinese longliners targeting tuna and tuna-like species, generating to date approximately US$4 million in annual revenue, partly shared among the FGS and FMS. Somalia did not issue licenses between 2020 and 2023. The Ministry of Fisheries and Blue Economy of the Federal Government of Somalia (MFBE) issued 19 offshore licenses to Chinese tuna longliners in March 2024, generating US$1 million of revenue which was shared with the FMS.

12. **The domestic fishing sector is largely small-scale and primarily using gillnets, handlines and traps and targeting high-value species such as spiny lobster, sharks, and demersal and pelagic bony fish**. Approximately 122 fish landing sites have been identified along the Somali coast. Sectoral statistics are woefully outdated; estimates of the number of fishers range from 10,000 fishers to 30,000. In addition, total full and part-time fisheries related indirect employment was estimated to be 90,000 people.[18] Somali artisanal vessels are made of wood or glass reinforced plastic and 3 to 10 meters in length with an estimated 20 percent of this fleet being traditional 4-5 meters wooden *houris (canoes)*. Most artisanal vessels are single-day fishing trip vessels, with the larger *Volvo* vessels being capable of multi-day trips. A limited number of semi-industrial vessels, including *dhows*, are mostly operated by local investors. The domestic artisanal and semi-industrial fleets largely operate within 24 nm targeting demersal and large pelagic resources. The main fishing season for the domestic fleet extend during the northeast monsoon, between December and February, when sea conditions are calm. During the southwest monsoon, May to October, fishing activity from the domestic fleet is reduced due to strong and persistent winds and rough sea conditions, and climate change will make the monsoon seasons more unpredictable and potentially more damaging to infrastructure and fish production, further risking fisher incomes and livelihoods.

13. **Somalia participates in regional fisheries management activities through its membership of several Regional Fisheries Bodies (RFBs).** Somalia is a member of the Southwest Indian Ocean Fisheries Commission (SWIOFC), the Indian Ocean Tuna Commission (IOTC) and the Regional Organization for the Conservation of the Environment of the Red Sea & Gulf of Aden (PERSGA). Somalia compliance rate with IOTC Conservation and Management Measures decreased from 80 percent in 2015 to 16 percent in 2022[19] mostly due to a lack of reporting.

14. **Development of domestic fisheries value chains is limited by poor landing infrastructure, handling and processing facilities and equipment, and seasonal rough sea conditions.** Valuable spiny lobster export value chains are being developed, reaching Middle Eastern and Asian markets by air with scope for expansion with better infrastructure. Other potentially high-value seafood products are not as developed and are also constrained by lack or poor infrastructure. Improved infrastructure, fishing techniques and handling that incorporate designs, materials, practices, and siting to reduce climate change impacts, could reduce post-harvest losses (currently estimated at between 25 percent and 40 percent), especially in rural areas. Beyond large coastal cities, an active private sector has invested in fishing, cold storage, and processing. However, they struggle to provide larger-scale core investments in landing and cold-storage infrastructure. Improvement and development to critical infrastructure, a clearer legal framework and better knowledge of stock and production potential, would facilitate further private investment.

[18] Lovatelli, Alessandro. 1996. EC Rehabilitation Program for Somalia: Artisanal Fisheries. Final Report. European Commission Somalia Unit, Nairobi.
[19] IOTC, 2022. Summary Report on the level of compliance. IOTC-2023-CoC20-03[E]

15. **Somalia's marine fisheries could make important contributions to local livelihoods, food supply, exports, and public revenue generation.** In 2012, fisheries' contribution to GDP was roughly estimated to be around 2 percent. In 2018, the World Bank estimated that around 4 percent of employed people worked in fishing**.** Development agencies estimate that export earnings, all of which originate from domestic small-scale landings, range from US$15-20 million, predominantly from lobster. Limited recent offshore fishing licensing represented around 1 percent of public revenue. However, given the possibilities for license fee collection from offshore international vessels, sustainable increase of domestic production, improved handling and access to higher value markets, and revenue collection along the enhanced value chains, the potential for increasing the economic contribution of Somali fisheries, as well as making a significant contribution to food security, is considered to be substantial.

16. **Weak governance and the lack of management systems threaten the sustainable exploitation of fish stocks, but initial steps are being taken.** The 2023 Fisheries Law provides some initial clarity on the respective fisheries management mandates of FGS and FMS, but efforts to promote cooperation between them is needed, to develop the implementing regulations, and build capacity to enable authorities and local communities to put measures into practice. The MFBE has a broad mandate to provide an enabling environment for the promotion of sustainable development of the fisheries sector yet lacks the capacity to execute many of its basic functions. Facilities, equipment and trained staff are lacking for policy development and implementation, data collection and analysis, monitoring and surveillance to prevent IUU fishing, and promoting safety at sea. Capacity building is also needed for FGS to fully participate in regional cooperation and management mechanisms, in particular, the SWIOFC, IOTC and PERSGA. Each of the five FMS has a ministry in charge of fisheries and the BRA has a fisheries department, all with emerging capacity (human and technical) that needs to be enhanced to support more complex management and planning.

17. **Reinforcing Monitoring, Control and Surveillance (MCS), including enforcement and prosecution capacity, is a key priority to reduce illegal fishing activity.** Somali authorities have no patrolling assets, limited surveillance capacity or enforcement ability in their maritime waters. In 2017, Somali authorities in the FGS and FMS were equipped with and trained on a Vessel Monitoring System (VMS) to track licensed vessels through satellite devices. This enabled the creation of a first Fisheries Monitoring Center (FMC) at the MFBE. Access to other sources of information, *e.g.,* Automatic Identification System (AIS) was secured for the FMC which was also supported with Technical Assistance in monitoring and surveillance. Somalia is also a party to the Food and Agricultural Organization of the United Nations (FAO) Port State Measures Agreement (PSMA), the first legally binding international instrument that specifically targets IUU fishing, and the 2023 Fisheries Law contains provisions for implementing this agreement.

18. **In the Somali fisheries sector, gender roles are distinct**. Men primarily engage in fishing, international trade of high-value species and some domestic distribution, while women engage in processing, local markets, wholesale and retail, and restaurants, occupy few decision-making positions and have lower earning potential.[20] However, there are a few exceptions where women own boats, particularly in the state of Puntland, and women's groups are emerging in the sector with two co-managed fisheries that have women in the executive group. Women are also under-represented in pilot fisheries co-management arrangements as well as in public fisheries institutions. In all fisheries ministries, federal and states, there are only three women in decision-making roles (one in the FGS and two in the FMS), the proportion of women in professional positions is very low, and few women are afforded training opportunities to improve their skills' base. The participation of women in the sector varies among FMS, with women being more involved in economic activities, including fisheries, in northern FMS and less in the southern areas. The participation of the youth, i.e., young men and women between 15 and 24 years old, in the sector is limited, although there is interest especially for internally displaced youth. Lack of access to finance, resources and training, along with cultural pressures, are major barriers to women and youth participation, which constrain the full development of the sector. There are also opportunities to significantly scale

[20] Alder, 2023. Somali Fisheries Gender Assessment and Strategy

up female and youth participation and benefits from handling and processing fish through targeted training, resource access and the formation of new cooperatives or associations.

19. **There is an active private sector, which has invested in fishing, cold storage, fish collection, and processing, but currently it mostly only operates in the vicinity of large coastal cities and has yet to capture the full potential of domestic and high-value export markets.** Spiny lobster has emerging value chains which are profitable enough to cover cold chain and collection costs. However other seafood products, caught by local fishers do not have access to or cannot afford sufficient cold storage facilities limiting fishers' access to international, sizeable but less lucrative regional markets and growing domestic markets. Expanding city populations are driving increases in domestic demand for seafood, particularly in Mogadishu, Garowe and Hargeisa. In rural areas, post-harvest losses are high due to inadequate infrastructure and processing systems, limited human capacity, and under-developed value-chains. Since overall food supply remains uncertain due to annually variable distribution and levels of rainfall and associated pests such as locusts, fisheries managed for sustainability could make a significant contribution to food security. For further development of the private sector, proper landing facilities and efficient and clean cold-chain infrastructures are needed to reduce losses and maintain quality. In addition, better knowledge about the stock would guide investment in the sector that would be further incentivized by management and a sound legal framework.

C. Relevance to Higher Level Objectives

20. **The project contributes to the World Bank's mission to extreme poverty and boost shared prosperity on a livable planet**. The project is aligned with the World Bank Group (WBG) Country Partnership Framework (CPF) for the Federal Republic of Somalia for the Period FY24 – 28 (Report Number 187254-SO), discussed by the Board on February 29, 2024, in particular, CPF High Level Objectives (HLO) 3 *Greater resilience to climatic and other shocks* which aims to increase the resilience of urban and rural populations in the context of extreme vulnerability to climate change; straining infrastructure; persistent drought and floods undermining rural livelihoods and food security. The project also contributes to the cross-cutting foundational HLO *Macroeconomic stability and governance foundations*, in particular objective 0.1 *Increase the effectiveness, transparency, and accountability of institutions*, and HLO 1 *Inclusive, private sector-led job creation and economic growth*, in particular Objective 1.2 *Increase access to infrastructure, energy, and digital services*. The project is also aligned with the 2023 SCD Update, supporting in particular HLO 3 *Improved Household Resilience to Shocks* and contributing to foundational HLO 2: *Improved Access to and Quality of Services through Better Economic Governance*; and HLO *5: Enhanced Private Sector for Better Jobs*. It also directly contributes to the new World Bank Group Strategy for Fragility, Conflict and Violence (FCV) 2020-2025 pillars of engagement – pillar 1 prevention and pillar 3 transition out of fragility. The project contributes to the overall engagement of the World Bank in Somalia, with strong links to other operations. It fully supports intergovernmental dialogue between the FGS and the FMS and federalism building. It complements other investments including the Somali Crisis Recovery Project (SCRP, P173315), The Somalia – Horn of Africa Infrastructure Integration Project (P173119) which have activities associated to the fisheries sector. The project is also supported by the Somalia Recurrent Cost and Reform Financing Project (RCRF) and the latest Development Policy Operation (DPO) series which included prior actions and triggers linked to the set-up of an offshore licensing system for revenue generation, the adoption of the 2023Fisheries Law and adoption of the first regulations under the new law.

21. **The project is consistent with the country's Nationally Determined Contribution (NDC).**[21] In the latest NDC Somalia has committed to 30 percent emission reductions against the business-as-usual scenario by 2030. On adaptation, it aims to enhance adaptive capacity, strengthen resilience, and reduce vulnerability to climate change through mainstreaming climate adaptation into sustainable development. The project contributes to the NDC by promoting energy

[21] Somalia. 2021. National Determined Contributions (https://climate-laws.org/documents/somalia-s-updated-ndc_2cbf?id=somalia-s-updated-ndc_8ef8)

efficiency infrastructure, technologies and fishing and fish processing practices as described in the Project's Climate Change co-benefits section (Annex 2) and Paris Alignment Assessment for the project. The project's operational design includes lower-carbon alternatives such as investments in energy-efficient systems and does not hinder transition to lower-carbon alternatives or lead to carbon lock-in risk in the future. The project is also consistent with the National Adaptation Program of Action (NAPA)[22] by supporting the siting and construction of infrastructure to be climate proofed, building climate resilience and adaptive fisheries management measures at national, state and local levels, ensuring communities consider climate and nature based solutions (NBS) in co-management of marine resources, and working with key actors to consider climate in value chain improvement efforts, and supporting research to improve fisheries. In addition, the project is aligned with the WBG Climate Change Action Plan 2021–2025. The project contributes to UN Sustainable Development Goal (SDG) 14 by improving fisheries sustainability and access to resources and markets for small scale fishers. The project is also aligned with the 2023 Somalia Country Private Sector Diagnostic, in particular its Recommendation 3: *Improve growth and productivity of selected value chains*.

22. **The project aligns with the World Bank Group's corporate objectives for Maximizing Finance for Development (MFD), including Private Capital Enabling (PCE), by developing an enabling framework to leverage private capital for fisheries investments**. The Somali private sector has begun investing in the sector, including through the diaspora. Investments in processing and exports have faced multiple constraints that inhibit maximizing value. The project's integrated investments in infrastructure, strengthening governance, policy development and capacity-building among fishers and value chain MSMEs will address some of the binding constraints that prevent private investment and provide further incentives for investment, including for MSMEs. The project will create integrated models of improved fishing practices, strengthened value chains and enhanced product quality in selected communities, which is expected to attract direct private investment. The proposed infrastructure will be supporting fishing processing, retail and trade activities, and stimulate the development of associated private activities e.g., boat/ engine/ fishing gear repair, cold chain equipment maintenance, *etc*. Furthermore, strengthening the legal and regulatory framework, and providing information on the status of the stocks will create a healthy environment for informed investment by the private sector. The project will also support direct advisory services to the private sector to enhance their business processes and ensure they are empowered to operate collectively at a commercial level, and benefit from sector growth.

23. **The project will contribute to the Somalia National Development Plan (NDP-9) 2020-2024**[23]. The Economic Development Pillar of this plan aims to build "a more diverse and competitive economy capable of taking advantage of emerging regional trade opportunities [as] the best route to broadening growth and mobilizing revenue in the medium to long term". The NDP-9 highlights the opportunities provided by the fisheries sector under this pillar which the project will help realize. It will also support thematic pillar 2 ("Promoting Trade and Market Integration") and thematic pillar 4 ("Reinforcing Resilience") of the 2020 Africa Regional Integration and Cooperation Assistance Strategy Update for FY21–FY23.

24. **The project aligns with the World Bank Group Gender Strategy (2024-2030) with a focus on elevating human capital, enabling economic opportunities, and engaging women as leaders**. The project is also aligned with the Women in the Maritime Strategy endorsed by the MFBE and with the Regional Gender Action Plan for Eastern and Southern Africa (ESA) (FY24–FY28)[24].

[22] Federal Republic of Somalia, 2013. National Adaptation Programme of Action on Climate Change (https://unfccc.int/resource/docs/napa/som01.pdf)
[23] Somalia National Development Plan 2020 to 2024: The Path to a Just, Stable and Prosperous Somalia (https://mop.gov.so/wp-content/uploads/2022/07/Somali-National-Development-Plan-9-2020-2024.pdf)
[24] Available at https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099720003042421894/idu1e951cc1f1da4b1450618f67145956c62edae

25. **The project aligns with the Blue Economy for Resilient Africa Program (BE4RAP) announced at the United Nations Framework Convention on Climate Change's annual Conference of the Parties (COP27).** In particular, the project contributes to the two pillars related to blue food and blue jobs and support Somalia in managing its fisheries resources as public goods.

26. **The project aligns with and supports the implementation of the Fisheries Master Plan for the Federal Republic of Somalia recently developed with support of the FAO and endorsed by the Fisheries Management and Development Council (FMDC) in February 2024.** The Fisheries Masterplan is an overall strategy that aims to address urgent needs, identify priorities and build a business case for intervention. The plan specifically provides guidance on the policy and legal framework, fisheries management, including stock assessment, fisheries value-chains, supporting infrastructure as well as hygiene standards and certification, fisheries compliance and Monitoring Control and Surveillance (MCS), blue economy development and overall capacity building. The project will also support the implementation of FAO's Code of Conduct for Responsible Fisheries[25] and the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication[26].

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

27. The Project Development Objective is to improve the capacity of targeted communities and authorities to benefit from and effectively manage selected fisheries**.**

PDO Level Indicators

a) Climate informed fisheries management plans formulated, and implemented (Number)
b) FMDC meetings (Number)
c) Fishing communities with improved capacity to benefit (Number)
d) Project beneficiaries (direct) (Number)
e) Reduction in food loss and waste in targeted value chains (Percentage)

B. Project Components

28. **The project implementation area will include the Internal Waters (IW), Territorial Sea (TS) and Exclusive Economic Zone (EEZ) of the Federal Republic of Somalia,** including the following specifications: no project activities, including activities associated to i) Monitoring, Control and Surveillance and the implementation of the MCS strategy, ii) fisheries data collection, or iii) fisheries improvement or development activities, will be conducted in the maritime area south of the parallel 1° 39' 44.0" South and in the maritime area northwest of the line defined by the list of coordinates in Annex 4. Based on previous collaboration agreements, the project will include activities and investment in all five FMS as well as in Mogadishu. No activities are foreseen in Somaliland at this stage, although this could be discussed in the future.

[25]FAO, 1995. Code of Conduct for Responsible Fisheries (https://www.fao.org/fishery/en/code)
[26] FAO, 2015. Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (http://www.fao.org/3/i4356en/i4356en.pdf)

29. **To maximize impact and benefits, all community activities-under Component 1 and Component 2 will be delivered as a package in selected communities.** Through preparatory activities, two potential sites per FMS have been identified for investment as well as Mogadishu.[27] For each of the selected communities, support, including planning, investment and associated capacity building, etc. will be provided on, (a) fisheries infrastructure development and operationalization, (b) value-chain improvements, and (c) co-management of fisheries resources, including participatory MCS. National systems such as i) data collection, and ii) fisheries and vessels registration and licensing will also be piloted and introduced first in these selected communities.

30. **Component 1. Increasing the Capacity of Dependent Communities to Benefit from Sustainable Marine Fisheries (US$27,085,000 IDA equivalent).** This component aims to establish or improve small-scale fisheries sustainable infrastructure that is climate resilient,[28] and financially viable and value chains with primary beneficiaries being fishers, fish workers and their communities including cooperatives and MSMEs.[29]

31. *Sub-component 1.1 Climate-resilient fisheries infrastructure (US$22,575,000 IDA equivalent)*. This sub-component will support identification, planning and construction of climate-resilient[30] and gender-responsive small-scale fishing infrastructure at a minimum of 12 sites in consultation with selected communities and stakeholders. These investments are designed to enable private sector investments in catching, processing and transporting seafood as well as associated activities, e.g., boat building, repair, and equipment maintenance (engines, fishing gear, cold-chain equipment, etc.). They will be confirmed before grant effectiveness and preparatory studies will start during the early stage of the project. Investments have been identified and confirmed during preparation for Jazeera in South-West and Warsheik in Hirshabelle. For these two sites, preparatory studies will start before effectiveness. Identification and planning support will include the preparation of feasibility studies, technical designs that consider climate change and the needs of men, women and youth, environment and social instruments and infrastructure management/business plans. Plans will define management options for the infrastructure, e.g., community managed, PPPs, etc. Possible infrastructure includes cold stores fitted with energy-efficient power supply, ice-production facilities, storage facilities, as well as processing facilities, all of which are critical for handling fish catch in increasingly warmer climate; jetties to protect navigation channels from coastal flooding; and local markets (which reduce fish loss and waste compared to exports) to lay the foundation for private sector investment. This sub-component will also support capacity building to manage, operate and maintain the infrastructure considering climate change, including financial sustainability to manage increasing operating costs under projected warmer air temperature. For Mogadishu, given the limited land availability in the two traditional landing sites, Hamarweyne and Lido, a new investment in another area of the city will imply a drastic change for fishers, processors and consumers. The project will therefore support a medium and long-term vision and investment plan that takes climate change considerations, including feasibility studies, socio-economic and environmental assessments, with potentially preliminary infrastructure.

32. *Sub-component 1.2. Improving fishing, handling, processing, and marketing techniques to enhance quality and value-addition (US$4,510,000 IDA equivalent).* This sub-component will support screening and assessment of various value chains associated with targeted communities and the formulation of climate-resilient improvement plans for up to six fish value chains that support fisheries at each selected infrastructure sites. Value chain improvement plans take climate change considerations to improve and diversify fish supply, species, and products to adapt to changing fisheries due to

[27] Jubbaland: Calanley and Kibora sites in Kismayo; Southwest: Jazeera, Barawaa and Merca; Hirshabelle: Ceel Macaan and Warsheik; Galmudug: Ceel Hur and Hobyo; Puntland: Garaad and Bargaal as well as Mogadishu in Banadir.
[28] Climate resilience infrastructure considers design, construction and materials that reduce the impacts of climate change such as locating above 1 in a 100-year tidal surge, planting vegetation to reduce solar radiation, insulation, cold stores running on solar energy and other such measures.
[29] Unless otherwise indicated, activities in all components aim to be gender-responsive to address the gender barriers described in the I.B Sector Context section. Further details of gender efforts are provided below in IV. PROJECT APPRAISAL SUMMARY, Part C.
[30] Climate resilience infrastructure considers design, construction and materials that reduce the impacts of climate change.

climate change; financial management in preparation for disruptions caused by climate impact; and investment plans for climate-smart equipment and infrastructure. The development of these plans will start and aim to be completed within the first half of the project. This will be done in consultation with beneficiary communities and stakeholders, so the benefits are economically and socially sustainable and climate resilient. Support for implementation of value chain improvement plans include awareness raising, capacity building, training, and advice (technical including climate change impacts and business) based on needs assessments, including financial skills to address gender barriers and to realize new business opportunities. The sub-component will also support strengthening or establishing sectoral organizations, including cooperatives and associations, and improving labor conditions and promoting women into leadership roles through capacity building and mentoring. For selected sites, beneficiaries (fishers, processors, and related businesses) will be supported to transition to climate-informed fishing and processing practices including safety-at-sea,[31] new low-carbon technologies and equipment with awareness raising, training, and provision of advisory services as well as organizing communities. This subcomponent aims to reduce fish losses from weather-related impacts, improve product quality and develop new products and improve access to appropriate equipment and training. Additional support will be provided for promoting and marketing seafood products based on value chain improvement plans and market studies, and in consultation with potential beneficiaries.

33. **Component 2: Strengthening Marine Fisheries Governance and Management (US$15,060,000 IDA equivalent, US$5 million PROBLUE).** This component will set the foundation for long-term climate resilient Somali fisheries that are managed for sustainability by investing in fisheries governance as laid out in the 2023 Fisheries Law.[32] .The main beneficiaries will be FGS and FMS fisheries ministries, fishers, fish workers and their communities, as well as investors.

34. *Sub-component 2.1: Laying a foundation for effective, transparent, and equitable fisheries resource governance and management (US$11,020,000 IDA equivalent; US$3,720,000 PROBLUE).* This sub-component will support marine fisheries governance and management by providing technical assistance and operational support to the Fisheries Management Development Council (FMDC) and its meetings, as well as legal and technical support to FGS and FMS fisheries ministries to develop harmonized legal and regulatory frameworks to implement the 2023 Fisheries law and support sustainable development of the sector, including through private sector investment. In the early stage of implementation, the project will support the finalization and adoption of the Fisheries Policy, revisions of the FMS Fisheries Law for harmonization with the 2023 Fisheries Law33, adoption of regulations on licensing and MCS by FMS, on inspection and quality assurance. The project will further support the adoption of complementary regulations according to Article 158 of the 2023 Fisheries law. Building on these initial advances, this sub-component will produce and support initial implementation of ecosystem-based and climate-informed management plans, in a fully consultative and participatory manner, for selected fisheries shared among FMS and the FGS. The project is creating a foundation for sustainable fisheries management, enhancing robust fish stock and long-term resilience of marine ecosystems and addressing gender barriers such as access to resources and training, so that future interventions in the sector can be transformative. The project's stakeholder engagement plan and the terms of reference for the preparation and implementation of management plans will ensure the active participation of women. A national system for fisher and vessel registration will be established to help formalize and enable transparency and investment in the sector. Initial investments will be made to build capacity and make FGS and FMS ministry staff and offices functional. Other public and research institutions will also be strengthened, including support for effective enforcement and prosecution of illegal fishing operations which can significantly compromise the sustainable fisheries management; generation and data analysis for decision-making, and improvement of food safety standards to contribute to domestic food security and exports. The component will also pilot

[31] Safety-at-sea is a climate adaptation measure against extreme weather events. See International Fund for Agricultural Development. 2015. How to do Fisheries, aquaculture and climate change: Guidance for adaptation and mitigation.
[32] https://mfbe.gov.so/laws/
[33] The 2023 Fisheries Law was adopted at the federal level and FMS fisheries laws need to be revised to be consistent and aligned with it.

the establishment of formal co-management systems[34] in 12 selected communities benefiting from Component 1 investments, while accounting for capacity constraints and cultural and social factors, including development and implementation of co-management agreements with consideration of potential climate impacts. These activities will build the capacity of men, women and youth in targeted fishing communities, to participate in managing the resources they depend on. Applied research to improve existing or identify potential new fisheries will also be supported.

35. *Sub-component 2.2: Developing a comprehensive Monitoring Control and Surveillance (MCS) system to fight IUU fishing in Somali waters (US$3,740,000 IDA equivalent).*[35] As described earlier, the challenges posed by climate change to Somali fisheries require urgent reduction in overfishing and excess capacity to maintain robust fish stock and build long-term resilience of marine ecosystems. This sub-component will support the implementation of the MCS strategy recently developed with assistance from the WBG to promote sustainable fisheries management, including investments in: i) the development and implementation of a National Plan of Action to prevent, deter and eliminate Illegal, Unreported and Unregulated Fishing (NPOA-IUU) with a focus on I – Illegal and also U - Unregulated, ii) the upgrading and decentralization of the Fisheries Monitoring Center with equipment, services, technical assistance, standard operating procedures (e.g. SOPs for satellite monitoring such as Vessel Monitoring System (VMS) and Automatic Identification System (AIS)), iii) boarding and inspection of vessels, iv) fisheries observers, v) evidences chain-of-custody, etc. and, vi) associated training). This sub-component will also finance and build capacity for offshore patrols at sea in the EEZ by the FGS, through the chartering of patrol vessels, and capacity building in inspection, and risk assessment. For coastal surveillance in territorial waters by FMS, the sub-component will support with energy efficient equipment such as 4-stroke versus 2-stroke engines, including small patrol boats, to be used exclusively for fisheries enforcement. While the project will support and provide assets, equipment and training exclusively to the ministries in charge of fisheries, collaboration may be sought with the maritime polices who are benefiting from training by partners (e.g., United Nations Office on Drugs and Crime, European Union Capacity Building Mission in Somalia) on at-sea patrolling, boarding procedures, operating and maintenance of patrol vessels, given that these skills are limited within fisheries ministries. Any patrol, onshore, coastal or offshore, at sea, on land or in air, will be led by fisheries authorities.

36. *Sub-component 2.3: Fisheries Statistics and Stock Assessments (US$1,280,000 PROBLUE).* The project will support research on the likely impacts that climate change may have on fish populations and marine ecosystems and provide technical assistance to enable adaptive management of fishery resources over the next five to twenty years.[36] This sub-component will support the development and deployment of, and begin to institutionalize, tools and systems to generate, analyze and disseminate information essential for effective fisheries management. In particular, this subcomponent will support: i) the development and implementation of a national harmonized and decentralized system for the collection of fish catch statistics and related data by FGS and FMS ministries, universities and community members, ii) technical assistance and capacity-building for both men and women, to determine the state of selected stocks and provide management advice, iii) the design of an integrated fisheries' information management system, accessible by relevant FGS and FMS agencies, to collect, store and analyze fisheries related data to inform the management of targeted fish stocks. The system will build on modern technologies (e.g., mobile technologies) while remaining tailored to the needs and capacity in Somalia.

37. *Sub-component 2.4: Strategic studies on fisheries development and blue economy (US$300,000 IDA equivalent).* This subcomponent will support a set of analytical and strategic studies for long term development of the fisheries sector

[34] A process of management in which government shares power with resource users, with each given specific rights and responsibilities relating to information and decision-making (OECD (1996), Synthesis report for the study on the economic aspects of the management of marine living resources. AGR/FI(96)12)

[35] To cease IUU fishing is a climate adaptation measure included in Somalia's National Adaptation Programme of Action on Climate Change (2013).

[36] Research for improved fisheries management is identified among the adaptation options for Somalia in its NAPA (2013).

in the changing fisheries environment and the broader blue economy in Somalia, the precise scope of which will be determined during the early stages of the project.

38. The PROBLUE Multi Donor Trust Fund will provide a US$5 million grant to the project specifically for activities under Component 2, specifically 2.1 and 2.3 as described above, to be implemented by the Ministries in charge of fisheries in the FGS and FMS. These activities will include a) meetings of the FMDC, b) the strengthening of all policy, legal and regulatory frameworks at FGS and FMS levels, c) the development and initiation of implementation of all management plans, 4) the development of registrations systems for fishers, vessels and licenses, d) development and implementation of strategies and reforms for gender empowerment, e) the development and implementation of a Fisheries Information Management System and f) the determination of the status of priority stocks.

39. **Component 3: Project Management Monitoring and Evaluation (US$7,855,000 IDA equivalent)** This component will ensure effective implementation of project activities and fiduciary management and effective monitoring and evaluation, and conformity with the World Bank Environmental and Social Framework (ESF). It will provide equipment, technical assistance, training, and incremental operating costs to the MFBE to strengthen its capacity to manage, implement, and monitor project activities. Specifically, support will include staffing and operation of a Project Management Unit (PMU) within the MFBE of the FGS, with representatives from the FMS ministries of fisheries; establishing adequate financial and procurement management systems; implementing an overall communication plan and grievance redress mechanism; monitoring and evaluation (M&E); preparing and implementing specific environmental and social instruments as per the ESF; coordinating with other ministries (e.g. Ministry of Environment and Energy) and the private sector; evaluation studies; and sharing knowledge and experience gained through the project related to fisheries management at the regional level.

Table 1.Project budget

Project Components	IDA (US$)	PROBLUE (US$)	Total
Component 1. Increasing the Capacity of Dependent Communities to Benefit from Sustainable Marine Fisheries			
1.1 *Climate-resilient fisheries infrastructure*	22,575,000	0	22,575,000
1.2 *Improving fishing, handling, processing, and marketing techniques to enhance quality and value-addition*	4,510,000	0	4,510,000
Total component budget	**27,085,000**	**0**	**27,085,000**
Component 2. Strengthening Marine Fisheries Governance and Management			
2.1 *Laying a foundation for effective, transparent, and equitable fisheries resource governance and management*	11,020,000	3,720,000	14,740,000
2.2 *Developing a comprehensive Monitoring Control and Surveillance (MCS)[37] system to fight IUU fishing in Somali waters*	3,740,000	0	3,740,000
2.3 *Fisheries Statistics and Stock Assessments*	0	1,280,000	1,280,000
2.4 *Strategic studies on fisheries development and blue economy*	300,000	0	300,000
Total component budget	**15,060,000**	**5,000,000**	**20,060,000**
Component 3. Project Management Monitoring and Evaluation			
Project management	7,855,000	0	7,855,000
Total component budget	7,855,000	0	7,855,000
TOTAL	**50,000,000**	**5,000,000**	**55,000,000**

[37] MCS to cease IUU fishing is a climate adaptation measure to promote sustainable fisheries management (IFAD, *op. cit.* P.14.) and included in Somalia's NAPA (2013).

C. Project Beneficiaries

40. **The project activities are expected to directly benefit people (estimated 165,000) in the 12 targeted communities along the Somali coast, in particular fishing and other associated households, as well as staff from national authorities.** For these targeted communities, fishing is essential to their livelihoods. These communities are fragile, located in areas with particularly high food insecurity and are vulnerable. Their livelihoods are highly dependent on natural resources, in particular fisheries' stocks and the ecosystems that support them. Within these communities, as well as in the rest of the country, the project is also expected to benefit businesses, in particular informal workers and MSMEs involved in the fisheries' value chains. The private sector will benefit from improved fishing and processing skills, as well as from enhanced cold-chains, which will reduce post-harvest losses and improve the products' quality. It will also benefit from improved fisheries management, supporting the rebuilding of stocks as well as their sustainability and guiding their investments. Finally, the project will also directly benefit public institutions involved in fisheries' management, in particular ministries of fisheries in the FGS and FMS (six in total) and the fisheries department of the BRA, as well as other ministries and institutions involved in the MCS.

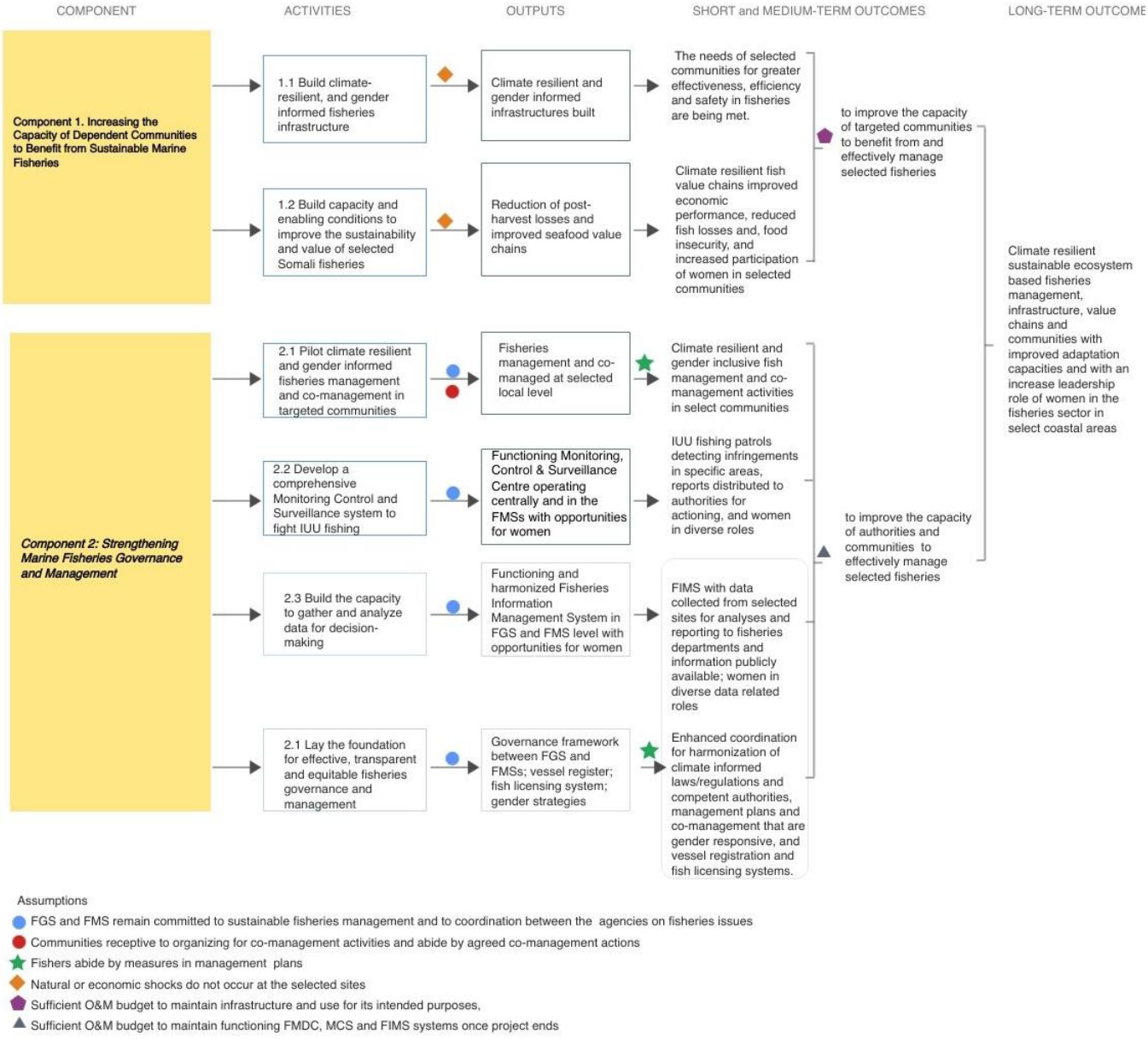
41. **The project aims to improve women's productivity and earnings in the fisheries sector, as well as their role in local decision making and institutional leadership.** To improve women's earnings, training and technical advice will be provided at convenient time and locations, and through other culturally appropriate modalities, to support the participation of women and women-owned businesses in value chain improvement activities under Subcomponent 1.2. In addition, the subcomponent will also provide training and mentorship to promote women's leadership in new and existing sectoral organizations (including cooperatives and business associations) and engage these organizations directly in the planning of value chain improvement activities. The impact of these measures will be measured through the indicator: *Share of targeted MSMEs benefitted from implementation of value chain improvement plans of which owned/led by women (target 20 percent).*

42. **Subcomponent 2.1 will establish a target for women's participation in fishery co-management arrangements, including in executive bodies to improve women's decision making and leadership in the sector.** This subcomponent will also support eligible women to participate in and lead fisheries' co-management arrangements and build capacity for women in leadership roles in relevant FGS and FMS fisheries ministries. The impact of these measures will be measured through the indicators: *Number of-management arrangements with at-least 10 percent women participation (target from 0 to 8);* and *Number of co-management arrangements of which at least one woman in an executive position in its governance body (target from 3 to 8)*. In addition, the indicator: *Share of direct beneficiaries that are women (target 30 percent)* will be used to measure the beneficial impact of the project on women.

D. Results Chain

43. **The Theory of Change is that if activities produce fit-for-purpose infrastructure, establish the effective management of fisheries, and strengthen fish value chains, while considering climate change impacts and gender aspects, in an intentionally linked and synergistic manner around targeted fishing communities, the project will have laid the foundation for sustainable fisheries and through a climate resilient perspective.** These interlinked activities (Figure 1) will in turn enhance livelihoods, food security and sustainable economic development nationally and in the targeted coastal communities in Somalia. The three areas of work will also seek to create opportunities for marginalized groups such as women, to participate and benefit from this development in the private and public dimensions of the fisheries sector.

Figure 1. Project's Theory of Change



E. Rationale for Bank Involvement and Role of Partners

44. **The project builds on previous success in the fisheries sector supported by the World Bank and other donors.** The Interim Revenue Sharing Agreement signed in 2018 by the FGS and FMS to license foreign vessels fishing in Somali waters and share the revenue represents a positive step in governance that extends beyond fisheries. The project is specifically designed to build on this past success to begin to institutionalize and then strengthen federal fisheries governance across all FMS. Fisheries also represent a sector with significant economic growth potential if fish stocks are managed sustainably and fish are landed in Somalia to expand nutrition, food security and value chains. The World Bank

is well positioned to invest in the institutional capacity needed for effective resource management at FGS and FMS levels as it invests in value-enhancing infrastructure and value chains in targeted communities across the country. The World Bank has also supported the development and adoption of a new Fisheries Law at the Federal level, including through the latest DPO Series.

45. **The World Bank has been at the forefront of supporting the management and development of the fisheries sector in the Southwest Indian Ocean region**. Since over 15 years, the World Bank invested in fisheries in the region through the implementation of several regional and national operations, (SWIOFish regional program in Comoros, Madagascar, Tanzania, Mozambique, Seychelles, Maldives; KEMFSED (Kenya); SFISH (Yemen); MozBio and MozNorte (Mozambique). In Somalia, the World Bank has supported the sector since 2017 and coordinating with other donors involved in fisheries. The World Bank's convening power is a critical asset to foster cooperation between various levels of governments, across sectors and donors.

46. **The project will support other fisheries intervention in Somalia and in the region.** The project will complement the Somalia Crisis Recovery Project (SCRP, P173315) activities through further support to SCRP fisheries activities to promote the sustainability of the investments and scale-up. Proactive coordination will also be promoted with the Horn of Africa Infrastructure Integration Project (P173119) and also the Transforming Fisheries Sector Management in South-West Indian Ocean Region and Maldives Project (TRANSFORM, P179242), in particular SWIOFC regional activities. The Global Program for the Blue Economy Multi-Donor Trust Fund (PROBLUE), administered by the World Bank, supported background analytical work that informed the project design and will co-finance its implementation. In particular, PROBLUE supported i) the preparation of a national Monitoring Control and Surveillance (MCS) Strategy which will be implemented through the project, ii) the identification of site for infrastructure development (on-going), iii) a review of fisheries governance and management arrangement in federal settings for presentation at the first meeting of the FMDC. More work is under preparation on the design of data collection system, governance arrangements for priority fisheries and on value-chains. This co-financing enables faster disbursement under the project. This project has been developed with extensive consultation with other development partners, including the EU, USAID, other bilateral aid agencies, the FAO, and a small number of NGOs, all members of the Fisheries Development Working Group with activities associated to fisheries in the country.

F. Lessons Learned and Reflected in the Project Design

47. **The design of the project draws on lessons learned from recently closed and ongoing fisheries projects as well as Somali projects with infrastructure elements**. The first key lesson in developing the fisheries sector requires interlinked investments in management, infrastructure and value chains for the same fisheries and locations. Linking these interventions can create synergies and optimize impacts instead of focusing primarily on management. The project will: a) strengthen management to send a positive signal to potential investors; b) strengthen MSMEs' economic and social performance; and c) establish or rehabilitate fishing infrastructure. The second is harnessing fisheries' growth potential and setting the sector on a sustainable pathway is a long-term process. For example, in Mozambique and in Pacific Islands Countries, the World Bank is investing in the sector through several consecutive regional or regional operations. The project focuses on setting the foundation for this process with stakeholder dialogue and capacity-building, recognizing the key role of fishing communities, and strengthening of FGS and FMS ministries. The third is compliance with management measures is more likely if ownership of these measures is ensured from the beneficiary communities and the private sector by involving them throughout the development of management plans and through co-management. This was shown in several World Bank projects supporting co-management, like the countries of the Western Africa Regional Fisheries Program (WARFP, P106063) and the South-West Indian Ocean Fisheries Governance and Shared Growth Program (SWIOFish, P132123, P153370, P155642).

48. **The project also draws from the operational experience of the World Bank and its partners with previous investment projects in the country.**[38] Key lessons include: (i) project design and implementation arrangements must be kept simple, transparent and use existing modalities where possible. Implementation is simple with a PMU in Mogadishu and small project implementation unit in each state with fiduciary responsibility at the FGS level, similarly to the SCRP and the Somalia Education for Human Capital Development project, and uses the External Assistance Fiduciary Section (EAFS) model for financial management and procurement, and Capacity Injection Manual (CIM) guidelines, similarly to all projects in Somalia; and (ii) engage FMS early to ensure implementation and flexibility for carrying out eventual changes, like the Biyoole and Barwaaqo projects. The FMS were engaged early to help ensure project activities and interventions have the needed buy-in and participation; and (iii) projects should ensure that preparation is sufficiently advanced to allow the borrower to start a substantial part of the project immediately after approval. The project has secured a project preparation advance (PPA) to prioritize preparation for infrastructure activities since July 2023. The PPA supported the MFBE for the preparation period of the project, as well as its readiness for implementation. In particular, the PPA is helping in establishing and equipping the PMU, kick-starting FGS-FMS coordination, and funding baseline surveys.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

49. **All project interventions will be carried out in a manner consistent with the Federal Fisheries Law of Somalia**. The project will be implemented by the MFBE of the FGS, with the ministries of fisheries in the FMS and in consultation with beneficiary communities.

50. **A project management unit (PMU) will be established within the MFBE**. This unit will be responsible for overall project implementation and coordination with stakeholders, including procurement and contract management, environmental and social issues, monitoring and evaluation, overall quality control of project activities and execution, and enabling effective communication among stakeholder agencies and beneficiary communities. The PMU will be led by a national project coordinator (NPC) who will report directly to the Minister of Fisheries and Blue Economy (or senior officer designated by the Minister), and the unit will include technical and administrative specialists including environmental, social development, procurement financial management, monitoring and evaluation and communication specialists. Throughout the project implementation, the PMU may also rely on highly specialized technical assistance and expertise on various technical or administrative aspects of the project to fill knowledge gaps and build capacity within the unit and the various ministries. The PMU Specialists will work closely with and support the technical, and administrative needs of FMS and targeted local fishing communities. Specialists will report to the PMU but within work plans agreed to with the relevant FMS fisheries ministries.

51. **Project implementation units (PIU) will be established within each FMS Ministry of Fisheries and be responsible for the coordination and implementation of project activities in fishing communities within each of the participating FMS**. The PIUs will be composed of a State Project Coordinator (SPC) and administrative staff as deemed necessary. The SPC will report to the State Minister of Fisheries (or other senior officer designated by the respective FMS minister of fisheries).

[38] Key projects include the Somalia Crisis Recovery Project (P176343), Horn of Africa Infrastructure Integration Project (P173119), Water for Agro-Pastoral Productivity and Resilience Project (P167826) and Somali Electricity Access Project (P165497)

52. **The Technical Working Group of the Director General (DG-TWG), composed of all Director General of fisheries from the FMGS and FMS will serve as Project Steering Committee (PSC) for the project**. With two meetings a year, the PSC will review project progress and endorse Annual Work Plan and Budget and Procurement Plan.

53. **The project will support other institutions and government agencies that establish formal partnerships, through memoranda of understandings, with the MFBE**. This support will facilitate implementation of project activities that fall outside of the core competencies of the MFBE. These include food safety, enforcement, scientific research, and education and may include such entities as the Food Safety and Quality Control Agency, Police and Navy, Research Institutes and Universities respectively.

B. Results Monitoring and Evaluation Arrangements

54. **The project will support regular monitoring, evaluation, learning and adaptation of project progress under Component 3**. Overall responsibility for M&E will be with the MFBE and the PMU. Project progress will be measured against the Results Framework, results indicators, and M&E arrangement across all sub-components. The PMU will hire an M&E specialist as a core part of the unit to manage monitoring, reporting and evaluation planned under the Project. The M&E officer will work closely with the FMS implementation teams to support monitoring and reporting of project outputs and outcomes. Through its Results Framework, the project will also report on PROBLUE results indicators as described in the Monitoring and Evaluation Plan. An M&E manual, part of the Project Implementation Manual, will detail the approach and tools, and clarify the M&E roles and responsibilities. The project will set aside funds for the implementation of the M&E framework, including regular field surveys.

55. **World Bank implementation support missions will be conducted at least every six months**. These missions will include reviewing progress in strengthening institutional capacity, financial viability, and technical reviews. Where possible, site visits will be made to provide effective monitoring of progress. Specific supervision is planned for the investment in coastal location, which could include third-party monitoring and/or use of the Geo-Enabling initiative for Monitoring and Supervision (GEMS) given the inaccessibility of some of the selected locations, in particular due to security concerns. The project will set aside funds for the implementation of the M&E framework, including regular field surveys.

56. **Project M&E will be instrumental in generating scientific information for evidence-based decision making and strengthening the fisheries sector statistics in the country**. During the first year of implementation, a fisheries data collection system will be developed to capture information on catches, effort, and other socio-economic information. This will be used to measure stock status and fishing efforts for selected fisheries for strengthened fisheries management decision making and to inform project activities for fisheries infrastructure and value chains. Stock assessments for priority species will be carried out twice during project implementation. This will build technical capacity in MFBE and FMS agencies for the broader application of scientific methodologies in the country's fisheries management systems.

C. Sustainability

57. **Somalia's commitment to the project is reflected in its recognition of the importance of its fishery resources to the country's sustainable development; both as a source of public revenue and as a basis for economic growth, jobs and food security**. The country's commitment is also reflected in efforts to modernize its fisheries legislation and attract private investments in the fishing sector. Interventions around fisheries governance, based on the ecosystem approach, including monitoring, control and surveillance will contribute significantly to the sustainable management of Somalia's fish resources. Fisheries infrastructure including value chain improvements will be based on comprehensive analytical work to ensure no investment results in unintended increases in fishing effort, catches or impacts on ecosystems. The

project will strengthen all units responsible for post-construction operation and maintenance at all levels including financial sustainability after the project ends.

58. **The project will contribute to public sector financial sustainability by improving the effectiveness of the public institutions and by increasing private sector rents**. In the long term, public finances will benefit from resources' rents and through new and more profitable enterprises entering or improving their economic performance. The project will enhance the capacity of relevant government institutions, targeted beneficiaries, and the private sector to take full ownership of the project's interventions and results.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

59. **The project will bring several non- quantifiable benefits, first the 2023 Fisheries Law passed that ensures zoning of fishing areas will reduce the incidence of IUU fishing, in particular by industrial trawlers which results in unfair competition with small-scale fisher folks and destruction of the fishery habitat.** Secondly, preliminary investment in the Mogadishu fishing port through carrying out pre-feasibility and social, environmental, and economic assessments provides an opportunity for future investors and partners, added to the fact that the country has a long coastline of approximately 3,300 km, that presents a good opportunity to increase business and investment in the sector. Thirdly, the gender responsive support to small-scale fishing entrepreneur through the development of infrastructure is expected to empower women entrepreneurs which will in turn reduce the high gender inequality in the country (0.776- a score near 1 means high inequality).

60. **Investing in the fisheries sector has a positive net present value of US$184.3 million and internal rate of return (IRR) of 82 percent after 10 years when income from licenses and value from fish exports are included.** Sensitivity analysis further shows that an increase in resource rent from 3.7 percent to 10 percent will increase the net present value to US$519.5 million, given a discount rate of 15 percent. The benefits associated with the project can largely be categorized as: (a) income from licenses, (b) increase in the value fish exports, (c) attraction of private investments to the fisheries sub-sector, and (d) improvement in the livelihoods of the Somalia fishers, fish workers and their communities, as well as entrepreneurs. Due to lack of data, only benefits from (a) and (b) are included.

61. **Activities proposed under the project are typically financed by governments.** Public investment in small-scale fisheries community infrastructure and value-chain improvement will support the enabling environment for private sector investment. Additional interventions in coordination between FGS and FMS, institutional, policy, legal and regulatory reforms, determination of the status of the stocks and improved management of these public goods can only happen through government expenditures.

62. **The operation is aligned with the goals of the Paris Agreement on both mitigation and adaptation.**

63. **Assessment and reduction of mitigation risks:** the project is consistent with the country's strategies on climate change and does not hinder the achievement of national climate goals and commitments outlined in strategic documents. It is aligned with the Paris Agreement's mitigation goals. Activities in the two main components supports mitigation measures. Most project activities are considered to have a negligible impact on greenhouse gas (GHG) emissions and are not likely to have an adverse effect on the country's GHG emission targets. Some activities have mitigation potential, including climate smart infrastructure and equipment for the fishing sector and across value chains, fuel reducing fishing

practices and reduction in food loss and waste. While the project supports the construction or renovation of physical infrastructure, these physical interventions will not pose major, irreversible impacts on GHG emissions, given their nature and relatively small scale. For infrastructures, which currently do not have lower-carbon alternatives suitable for Somalia's situation, but are necessary to achieve the PDO, the project design incorporates some decarbonization pathways such as using solar energy where possible and low or zero carbon practices and equipment where available which reduce the residual risk to low risk. Governance and management of fisheries supported by the project also offers opportunities for carbon sequestration through improved stocks status and improved fishing practices.

64. **Assessment and reduction of adaptation risks:** The project is supporting adaptation and resilience-enhancing measures across the fishing sector, with a particular focus on strengthening small-scale fishing communities' capacity to manage marine resources and develop value chains sustainably given the impending climate change impacts, with additional attention to gender. The adaptive capacity in coastal fishing communities vulnerable to climate impacts will be strengthened through supporting climate resilient management for sustainable fisheries, which includes co-management activities that will contribute to climate resilience and disaster risk planning with a focus on gender. Capacity building to strengthen value chains will include planning for the impacts of climate change on fish supplies and processing operations. Other activities for resilience building include improving fishers' disaster preparedness that considers gender needs, safety-at-sea measures for fishers, and the collection of data and information to better inform decision making. The project will support the design and construction of climate-resilient fishing infrastructure and the improvement of climate resilient fish value chains in coastal fishing communities, both activities have capacity building which will include improving climate change awareness, adaptation, and disaster risk planning.

B. Fiduciary

(i) Financial Management

65. **The Financial Management (FM) arrangements will be mainstreamed into the country's established FM policies and systems in line with arrangements for Use of Country Systems (UCS**). The project's financial transactions will be processed through the Somali Financial Management Information System (SFMIS) which will also be used to generate periodic financial reports. Project internal control arrangements will be based on the government's Comprehensive Operations and Accounting Procedures Manual (COAPM). To mitigate the risk of potential diversion of funds and unsupported payments, contractors, consultants and suppliers will be paid through the direct payment method and payment requests will be supported by adequate documentation including evidence of outputs and deliverables. In addition, proper due diligence will be conducted in the recruitment of consultants in line with regular procurement procedures to mitigate the risk of recruitment irregularities and double dipping. The project FM capacity will be supported by the External Assistance Fiduciary Section (EAFS) in the Office of the Accountant General to enhance segregation of functions and build capacity for full Use of Country Systems. External audit of the project will be conducted by the Office of the Auditor General with necessary capacity support from an external audit agent. The main fiduciary risks relate to challenges of monitoring and supervision of planned construction of base infrastructure (including processing facilities and technologies) under component 1 to enable private sector investment in facilities (e.g., cold store and ice plant). This will be mitigated by the recruitment of a firm to supervise the construction of the project infrastructure. Further support is planned for supervision of the identified works and capacity building for operating and maintaining the infrastructure including financial sustainability. The project will also consider the use of remote monitoring and supervision mechanisms including the Geo-Enabling Initiative for Monitoring and Supervision (GEMS) tool to monitor project activities and outputs in hard-to-reach areas and Kobo toolbox for data collection, integration and analysis. GEMS can be used as a platform to combine all relevant data, for remote supervision, real-time environment and social monitoring, and portfolio mapping for coordination across projects and partners.

66. **The project will follow the Statement of Expenditure (SoE) method of disbursements.** A designated account (DA) will be opened for the project at the Central Bank of Somalia (CBS) where funds from the World Bank will be deposited and payments made for project activities. An initial advance will be made to the DA based on submission of withdrawal application to the World Bank accompanied by a six-month cash forecast. Subsequent disbursements to the DA will be based on submission of withdrawal application accompanied by a Statement of Expenditures (SoE) incurred. As much as possible, consultants, contractors and suppliers will be paid through the direct payment method to mitigate the fiduciary risks associated with holding funds in the DA.

(ii) Procurement

67. **Procurement Procedures:** Procurement will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers for Procurement of Goods, Works, Non-consulting Services and Consulting Services dated July 2016 and revised in September 2023 (Procurement Regulations); the Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, revised July 1, 2016; and the provisions stipulated in the Financing Agreement.

68. **Project Procurement Strategy for Development (PPSD) and the Procurement Plan (PP).** The Ministry of Fisheries and Blue Economy (MFBE) has prepared a PPSD and PP for the first 18 months with a focus on key procurement activities to select the optimum fit-for-purpose method and market approach. The PPSD includes a summary on procurement risk, mitigation measures, an action plan, and procurement implementation support and supervision plan. The PPSD along with the initial PP for the first 18 months have been finalized as per the requirement of Procurement Regulations. The PP will be updated in agreement with the World Bank, at least annually, or as required, to reflect changes in the procurement arrangement which might be required due to a change in requirements, market conditions, procurement environment and so on.

69. **Procurement Implementation Arrangements.** Implementation will be by the MFBE of the Federal Government of Somalia which will serve as the main implementing agency at the Federal level. The Ministry has limited procurement capacity and previous experience with World Bank financed operations. To mitigate the risk, a Project Management Unit (PMU) will be established and housed within MFBE. PMU capacity will be strengthened by recruiting consultants including a Project Coordinator, Financial Management Specialist, Procurement Specialist among others. The PMU will be responsible for project implementation including procurement implementation, management, and oversight. In the proposed arrangements, the Project Procurement Specialist in the PMU will work alongside the relevant government staff in the MFBE for knowledge and skills transfer to enable them to gradually take over the project's activities. In this regard, MFBE will nominate procurement personnel (counterpart staff) for skill transfer during project implementation. Also, the implementing agency procurement capacity will be enhanced through on-the job training, Hands-on Extended Implementation Support (HEIS) and mentoring by the World Bank's Procurement Team during the project implementation. In addition, designated procurement staff will be encouraged to register and undertake professional procurement courses. Project Implementation Units (PIUs), established in the FMS Ministry of Fisheries, will be led by a State Project Coordinator (SPC) with dual reporting lines to the Project Coordinator and the DG of the respective FMS fisheries ministries. The PIU and FMS Ministries of fisheries will be responsible for the coordination and implementation of project activities in FMS, in particular in fishing communities, and will be involved in procurement activities.

70. **Procurement Capacity and Risk Assessment.** The procurement capacity assessment was conducted at MFBE, the implementing agency. The objectives of the assessment were: (a) to evaluate the management capability of the implementing agency to effectively carry out the procurement processes; (b) to assess the adequacy of the systems that are in place to administer procurement; (c) to assess the quality and effectiveness of the Procurement arrangements when

putting Procurement procedures into practice; (d) to assess the procurement process and market readiness; (e) to develop an action plan to be implemented as part of the project in order to address the deficiencies detected by the assessment aimed at minimizing the risks identified; and (f) to propose procurement supervision plans for the World Bank considering the relative strengths and weaknesses and risks revealed by the assessment. The assessment found that (i) the Implementing Agency does not have previous experience with World Bank financed operations (ii) the national procurement law is not fully operational; (iii) there is weak capacity of bidders/suppliers – bidders are not familiar with bidding procedures of public procurement. Thus, sometimes bids submitted are of poor quality and with unintentional deficiencies that end up being rejected; (iv) the inadequate experience in contract management; (v) this being a fragile environment, the market is unstable and sometimes suffers from limited interest from international contractors/consultants or high price bids/proposals because of country security risk and this sometimes leads to low response to published tenders and also the market is impacted by fraud and corruption risk (including collusion and outside interference in contracting process; (vi) lack of adequate complaint handling mechanism (there is no standardized complaint handling system in place known to the bidding community to review and resolve complaint/disputes at appropriate stages of the procurement cycle; and (vii) weak legal and financial institutions (commercial Banks and Insurance agencies) are not well established.

71. **Proposed mitigation measures** include (a) establishment of PMU with a dedicated Procurement Specialist with relevant and adequate qualifications and experience acceptable to the World Bank and ensuring that the Project Operations Manual (POM) includes a well described procurement management process, (b) training of the project implementing agency staff by the World Bank on the Procurement Regulations; (c) on high-risk procurement activities, but below prior review threshold, the procurement prior review will be continued with justification, (d) enhance the oversight and supervision of procurement activities, (e) creating awareness among the government, private sector, and other stakeholders on the key issues regarding integrity in procurement and financial management; (f) supporting procurement reforms; (g) encourage international firms to have joint ventures with local firms due to insecurity; (h) establishment of an effective complaint handling system known to the bidding community to review and resolve complaints and (i) the Client may request HEIS throughout the project duration to directly assist project procurement activities for large, complex and high-risk contracts.

72. **Risk Assessment:** Based on the above, the risk for procurement is considered “High.” The risk is reduced to a residual rating of “Substantial” in view of the mitigation measures proposed.

73. **Systematic tracking of exchanges in procurement (STEP).** The World Bank’s STEP system will be used to prepare, clear, and update PPs and conduct all procurement transactions for the project. Staff of the PMU will be trained in using STEP.

C. Legal Operational Policies

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

D. Environmental and Social

74. **The project's potential environmental risks and impacts are related to relatively small-scale infrastructure and capacity building investments in the fisheries sector in Somalia**. The project's overall Environmental and Social Risk rating is 'High.' Environmental risks are rated as 'Substantial' and relate to risks and impacts associated with civil works, contamination of aquatic systems and water quality due to organic waste and wastewater, oil leakage from fishing vessels, hazardous materials, and chemicals during the operation of these facilities. The project is not expected to generate a large volume of hazardous waste during construction and operation. The implementing agencies (IAs) have weak capacities and limited knowledge and experience in applying ESF during subproject implementation and preparation, posing additional risks. However, this will be mitigated by the implementation of a program for ESF capacity building which is described in some detail in the project's Environmental and Social Commitment Plan (ESCP). Social risks are rated 'High.' The project will also need to consider potential tensions between and within communities overfishing rights and access to new public infrastructure. Beyond these specific inclusion and conflict risk, the project will have to carefully treat any land needs and consequent resettlement questions for small-scale community infrastructure, even though strong consultations with beneficiary communities and the small-scale investments may be expected to reduce the risk level. The applicability of ESS7 will be clarified during subproject preparation. Questions on security of project workers and beneficiaries have been addressed in the draft Security Management Framework, which has been submitted formally to the World Bank for review and clearance.

75. **The proposed investments will be located in existing Somali fishing communities, with a first set in 12 locations identified with the FGS and FMS during preparation.**[27] Modification of habitats are not expected to have adverse impacts on critical natural habitats or forests, archaeological or historical sites. While the project may lead to increased community-based, small-scale fishing, improvement of the fisheries' regulatory framework should overall reduce overfishing risks. The main adverse environmental risks and impacts during construction would be associated with the critical small-scale fisheries infrastructure construction or rehabilitation with the potential for marine works interference with coastal processes causing erosion or accretion. There are risks of temporary waterway and road traffic disturbance, and possible water quality degradation and impacts to aquatic species. These risks and impacts are mostly temporary, predictable, and reversible or avoidable by careful design work. Due to ongoing conflict and terrorism, security risks are widespread in Somalia. Security issues need to be carefully assessed and managed in selected locations for interventions as well as in Mogadishu and in FMS capitals. There are a range of contextual risks of operating in conflict zones like Somalia with complex social contexts, and effective and inclusive community consultations and meaningful stakeholder engagement remains challenging.

76. **The SEA/SH risk, rated as substantial, relates to Component 1 (which involves small-scale fisheries value chains)**. The project induce risks of GBV/SEAH can persist due to social and structural inequalities that create vulnerable conditions such as lack of access to fisheries resources, dangers of trafficking targeting women and girls offering the promise of work, food and/or fish products. Also, shifting social and power dynamics regarding fisheries roles may limit women's ability to fully participate in the economic opportunities and decision-making by exposing many of them to various forms of GBV, including harassment, particularly when securing licenses or other related business permits along the coastlines. The contextual risks for GBV (including SEA/SH) are generally high in Somalia. The SEA/SH prevention and response action plan has been prepared as part of the ESMF.

77. **Technical assistance in Components 1 and 2 will be gender-responsive** by: (i) raising awareness of the prospective, collaborative and complementary roles of men and women; (ii) identifying the capacity building needs to realize these roles in the fisheries sector; (iii) mainstreaming women in policy leadership; and capitalizing on their technical expertise to integrate women in the management, enforcement, and research activities. To mitigate the risk of

interventions exacerbating gender inequalities, GBV and SEAH, the project will seek a) equal participation of men and women where possible; b) to ensure women's voice will be heard in meetings and women's representation on committees and c) to ensure firms designing infrastructure facilities will explicitly include the needs of men and women based on best practices and the inputs of both groups. The project activities will incorporate gender considerations throughout. These include recommendations in the World Bank Gender Action Plan, the recently FGS-endorsed Women in Maritime Sector Action Plan and the Gendered Fisheries Development in Somalia Report. Actions include gender consideration in feasibility studies, infrastructure designs, capacity building and training including GBV, value chain improvement plans and the provision of equipment. Where pertinent, analytical and diagnostic studies will include gender and broader social inclusion aspects. The client is encouraged to ensure gender responsiveness in hiring of PMU and PIU staffing through awareness raising and targeted gender participation (interviewers and interviewees) in recruitment processes and management activities.

78. **To mitigate these environmental and social risks, the project has prepared and disclosed the Environmental and Social Commitment Plan and the Stakeholder Engagement Plan (SEP), both disclosed in-country on April 2, 2024**.[39] The project has held consultations in the country, including meetings with stakeholders in December 2023 and February 2024, which were organized by the Ministry of Fisheries in Mogadishu, where substantial amount of input into efficacy of the project's environmental and social risks mitigation measures were received and incorporated into the project design. The project has also prepared other ESF instruments, including a draft Environmental and Social Management Framework (ESMF), which will be reviewed and cleared by the World Bank before disbursement of funds for Component 2. To effectively manage marine resources through an ecosystem approach, the ESMF will ensure the conservation of marine resources sustainability and the resilience of related ecosystems. Capacity building on the ESMF and inclusion of local fishing communities in fisheries management will ensure resilience and sustainability. The technical support to MFBE (FGS) to strengthen its capacity to manage, implement, and monitor project activities, will also support local community resilience and sustainability efforts. The development of well-informed social risk management instruments and grievance redress mechanism is expected to ensure a smooth flow of project implementation with minimal interruptions at the community level where implementation of infrastructure activities takes place. The project has also prepared a draft Sexual Exploitation, Abuse and Harassment (SEAH) Prevention and Response Action Plan, a draft Labor Management Procedures (LMP), a draft Security Management Framework, and a draft Resettlement Policy Framework (RPF), all of which are now under review by the World Bank and shall be disclosed after clearance. During implementation, sub-project specific Environmental and Social Impact Assessments, and Environmental and Social Management Plans will be developed as needed and proportional to the site risk level, consulted upon, and disclosed prior to commencement of civil works. Based on the Project Security Management Framework, these site-specific instruments will also contain site-specific security management plans as relevant and appropriate for the respective geographic area.

V. GRIEVANCE REDRESS SERVICES

79. **Grievance Redress**. Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, because of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank

[39] Available on the MFBE website at https://mfbe.gov.so/badmaal-project/

Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's Grievance Redress Service (GRS), visit http://www.worldbank.org/GRS. For information on how to submit complaints to the Bank's Accountability Mechanism, visit *https://accountability.worldbank.org*.

VI. KEY RISKS

80. **The overall risk for of the project is considered High.**

81. **The political and governance risk is High.** Division of roles and responsibilities between the FGS and FMS is not yet fully anchored in the policy, legal and regulatory frameworks, although progress has been made in the Fisheries Law and the operationalization of the FMDC. The FGS's ability to effectively lead, coordinate and provide guidance is yet to be established, risking limited participation of the FMS in the project. The project will support the FMDC as a platform for policy dialogue and decisions on fisheries governance. This will secure regular interactions and consultations with the FGS and FMS and reduce the risk of not engaging. The first FMDC meetings took place in November 2023 and February 2024 and will meet on a quarterly basis. Political pressure may interfere with some activities. The project will base its work on an assessment of stakeholder needs and will document criteria for prioritization of investments. In addition, the Inter-Governmental Fiscal Federalism Forum support high-level dialogue on cooperation and collaboration between the FGS and the FMS, including with regards to revenue generation, and the Financial Governance Committee provides high-level dialogue forum for dialogue on strategic financial governance issues and will also support risk mitigation through their oversight.

82. **The macroeconomic risk is Substantial.** The increasing capacity of the government to respond to external shocks on the nascent formal economy remains relatively weak. Since agriculture, including fisheries, is the economy mainstay, climate shocks could lower output including fish production, damage coastal infrastructure, exacerbate water stress, and displace people. Successive droughts and heavy rains, such as those in 2017 and 2019 and worsening drought conditions since 2020, have taken a large toll on the country and on coastal infrastructure which is significantly degraded or no longer functional in many locations. This adds to the humanitarian challenges. Despite challenges from COVID-19, the protracted election process, severe drought conditions, and rising global food and energy prices, GDP continued to increase in 2020, 2021 and 2022. The persistent cycle of shocks increases Somalis' vulnerability to future shocks as there is limited public and private insurance and access to finance. Furthermore, economic activity especially to expand the fisheries sector is likely to continue to be exposed to significant risks related to insecurity in Mogadishu and south-central Somalia. The project activities are fully financed by grants, which mitigates the risk of counterpart funding. In addition, the project will support the strengthening of disaster risk management (DRM) and support revenue generation through fisheries which will contribute to the reduction of medium-term macroeconomic risks.

83. **The sector strategies and policies risk is High.** The strategic framework for the development of Somali fisheries (Fisheries Master Plan, 2023) is recent and still needs to be implemented. A new Fisheries Law was adopted in March 2023, and provides the basis for governance arrangements but needs to be harmonized between the FGS and FMS. The sustainable development of the Somali fisheries sector has been hampered by IUU fishing, primarily Illegal and Unregulated, many of which are authorized, licensed, and even flagged by the Somali administration, in violation of the law. These activities seem to be largely influenced by politically connected individuals, both in the FGS and FMS. Other constraints stem from weak capacity and low resource availability for fisheries management by the FGS and FMS. The project will manage this risk by supporting the FMDC for dialogue and coordination on policy decisions and cohesive national management approaches. In addition, the project will promote increased transparency in the sector. The project will also convene dialogues, both formal and informal, to organize key stakeholders around key issues that could impact

the success of the project. Given that continued fishing by unlawfully licensed vessels would result in significant ecological and economic harm to the sector and undermine efforts to achieve the PDO, investment and activities could be stopped at the request of the FGS or the World Bank if there is proof that the FMS or the FGS have issued licenses in contravention of the provisions of the federal fisheries law.

84. **The technical design of the project risk is Substantial.** Inherent in all fisheries operations is a tension between the need to focus on the sustainability of fishing operations and the poverty reduction goals, which call for the generation of revenue for targeted beneficiaries. The project aims to address this tension by focusing on the two parallel but complementary components. The first component aims to build the capacity of fishing communities to benefit from improved fisheries management, while the second component lay a strong foundation of a system for fisheries governance that will require considerable investment at the institutional and technical levels. An important risk mitigation measure is the intent to increase the value as well reduce post-harvest losses, or to ensure that fishermen fish better rather than necessarily more. The complementarity of the two components is also important as none can bear fruits without the others. To manage expectations of the beneficiaries, the project is designed to ensure that concrete results are achieved shortly after implementation, whereas the ramp up in technical and institutional capacity building will be spread throughout the duration of the project.

85. **Institutional capacity for implementation and sustainability risk is High.** In addition to challenges linked to the clear roles and responsibilities of FGS and FMS stakeholders, capacity at all implementation levels is still emerging. A capacity assessment will be undertaken to identify capacity building activities required to support the sector. To sustainably build capacity of the institutions involved, to the extent possible, project activities will include capacity building and mentoring providing a basis for “learning-by-doing”, in particular for the staff of the ministries in charge of fisheries at FGS and FMS levels. Relationships with existing non-government actors and private sector organizations, will be established to support and complement the work of the FGS and FM and qualified service-providers will be engaged to supplement and build government capacity.

86. **Fiduciary risks are High.** The financial management and procurement environment in Somalia remain challenging with potential for mismanagement, fraud, lack of transparency and corruption. Although anticorruption and public-sector regulations are in place, problems persist, contributing to low levels of trust in government institutions. At the national level, weak and fragmented FM and procurement frameworks are compounded by inadequate institutional and human capacities. Within the fisheries sector, the ministries in charge at FGS and FMS also have emerging financial management capacity. For the project, FM and procurement responsibilities will be centralized in the MFBE, with no procurement and FM undertaken at state levels. In addition, Financial Management will be done in accordance with the government’s Comprehensive Operations and Accounting Procedures Manual (COAPM) and Project Operations Manual (POM). Project FM arrangements will be mainstreamed into country systems and supported by the EAFS unit of the Accountant General’s Office. World Bank’s FM supervision will be essential, and mitigation measures for fiduciary issues (e.g., strict fiduciary control mechanisms, application of World Bank FM and procurement rules) will be built into the project design.

87. **Environmental and social risks are High.** The project environmental and social risks and impacts relate to relatively small-scale infrastructure and capacity building investments in the fisheries sector in Somalia; overall expecting positive development impacts in a very challenging context. Some project activities, i.e., infrastructure construction and rehabilitation could pose temporary negative risks and impacts. Risks of pollution related to the generation of dust, waste, and wastewater could impact communities and coastal ecosystem. Project activities may cause soil erosion and land subsidence during the construction of priority small-scale infrastructure facilities. Other risks include possible disruption of waterway traffic and traffic disturbances due to transportation of materials for infrastructure upgrades. On the social side, the project will have the potential to provide alternative livelihood options, through fishing, processing and other

fisheries services for people, including for people engaged in activities related to conflict, violence, and piracy; as such the project needs to consider risks from backlashes when leaving their previous livelihoods. The project will also need to consider potential tensions between communities over fishing rights and access to new public infrastructure. In addition, Somalia entails significant GBV risks and the project-specific risk is considered substantial. GBV service provision remains low as compared to the need and geographical landscape in Somalia. The project is designed to have positive environmental and social impacts, directly targeting fishing communities and the resources they exploit. The project will be implemented in fragile areas affected by poverty, drought, and conflict. Given that the design and location of the infrastructure may not be fully identified during preparation, a framework approach to managing environment and social standards is used. Overall, Somalia presents a unique and challenging security risk environment. Project implementation will be undertaken in coastal areas, where threats from terrorist groups such as Al-Shabaab exist against Somali and international partners. A Security Management Framework (SMF) has been formulated to address this risk. This will be the first project funded by the World Bank that will be implemented by the Ministry of Fisheries, an entity whose administrative structures have only been established in the last few years. As a result, capacity within the Ministry remains generally low in relation to the management of environmental and social risks and will need to be strengthened significantly in the course of project implementation.

88. **Stakeholder risk is Substantial.** The project will engage a large and diverse array of stakeholders including government officials at the federal and state level, fishing communities, universities, private sector, international partners etc. Tensions and frictions between the various groups can be strong and can evolve quickly. To promote ownership of the project by this diverse group, project design will include a comprehensive stakeholder engagement plan. This plan will include stakeholder identification and analysis, plans for engagement (e.g., type, regularity, etc.), communication activities and grievance redress mechanisms. This plan will clearly outline both the initial and ongoing process by which stakeholders will be engaged to ensure the design of the project aligns with stakeholders' current and ongoing needs. The CMU and partners will be canvased to ensure all stakeholders are invited to participate in relevant consultations and presentations. The project will use various lines of communication and engagement opportunities to communicate and coordinate with stakeholders/partners.

VII. RESULTS FRAMEWORK AND MONITORING

PDO Indicators by PDO Outcomes

Baseline	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Closing Period
Climate informed fisheries management plans formulated, and implemented (Number)							
Climate informed fisheries management plans formulated and implemented (Number)							
Apr/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029		Jun/2030
2	3	11	17	20	20		20
➢Of which Co-management plans in place and operational (Number)							
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029		Jun/2030
2	2	7	11	14	14		14
FMDC meetings (Number)							
Nov/2023	Jun/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
1	3	7	11	15	19	23	26
Fishing communities with improved capacity to benefit (Number)							
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029		Jun/2030
0	2	8	12	12	12		12
➢Of which at least 25% of beneficiaries are women (Number)							
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029		Jun/2030
0	1	4	6	6	6		6
Project Beneficiaries (direct) (Number)							
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029		Jun/2032
0	10000	35000	100000	125000	145000		165000
➢of which are women (Percentage)							
0	2	5	12	20	25		30
➢of which are Blue economy practitioners with an enhanced capacity to advance inclusion of women (Number)							
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029		Jun/2030
0	0	50	100	200	250		360
Reduction of food loss and waste in targeted value chains (Percentage)							
Jan/2024	Jun/2027						Jun/2030

0	2						5

Intermediate Indicators by Components

Baseline	Period 1	Period 2	Period 3	Period 4	Period 5	Closing Period
Increasing the Capacity of Dependent Communities to Benefit from Sustainable Marine Fisheries						
Climate resilient infrastructure built or rehabilitated and operational (Number)						
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
0	2	8	13	14	15	15
Targeted MSMEs benefitting from implementation of value chain improvement plans (Number)						
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
0	5	15	40	70	100	100
➢Share of targeted MSMEs benefitted from implementation of value chain improvement plans of which owned/led by women (Percentage)						
0	0	6	10	17	20	20
Value (USD/kg) increases from improved handling from fisheries under improved management (Percentage)						
Jun/2024	Jun/2027					Jun/2030
0	5					10
Strengthening Marine Fisheries Governance and Management						
Fish stocks with their status determined (Number)						
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
0	1	2	3	4	5	6
Co-management arrangements with at-least 10% women participation (Number)						
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
0	0	2	4	6	6	8
➢Of which at least one woman in an executive position in its governance body (Number)						
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
0	0	2	4	6	6	8
Patrol days (Number)						
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
0	50	100	200	400	500	760
Registers of fishers, fishing vessels and licences developed and operational (Number)						
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
0	0	1	3	3	3	3
Fisheries policies, legal and regulatory texts adopted at FGS and FMS levels (Number)						

Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
0	2	6	12	18	25	34
Large scale industrial fishing vessels observed conducting serious Illegal activities during patrols (Percentage)						
Dec/2023	Jun/2027					Jun/2030
No data	10					20
Revenue generated from licensing fees annually (Amount(USD))						
Jan/2024	Jun/2025	Jun/2026	Jun/2027	Jun/2028	Jun/2029	Jun/2030
1,000,000	1,000,000	1,500,000	1,500,000	2,000,000	2,500,000	3,000,000
Project Management Monitoring and Evaluation						
Beneficiaries with rating 'Satisfied' or above on project interventions (Percentage)						
Jan/2024	Jun/2027					Jun/2030
No data	35					80

Monitoring & Evaluation Plan: PDO Indicators by PDO Outcomes

Climate-informed fisheries management plans formulated and implemented (Number) • Of which Co-management plans in place and operational (Number)	
Description	This indicator will measure the number of climate-informed fisheries management plans that are formulated and implemented, including co-management plans, which include measures that can be adapted to climate driven changes in fish populations or their ecosystems (e.g. seasonal closure, spatial closures, catch limits, etc.). These plans enable fishers and other stakeholders to adapt to or withstand fluctuations stemming from climate change (e.g. warming waters). Implementation is the regular actions being taken by officials, fishers, and other value chain actors consistent with fisheries management plans. Two co-management agreements are currently in place in Somalia. The project will support the development and implementation of six fisheries management plans for selected fisheries at FGS and FMS levels, and 12 associated co-management plans. Fisheries co-management is a partnership arrangement in which a community of local resource users (fishers) and government, with other stakeholders, share the responsibility and authority for the management of a fishery. Implementation of management plans will be measured by: - Management plans, including effective* management measures, developed in a participatory manner, adopted at FGS and/or FMS level - Stakeholders' awareness raised on adopted management measures - Initiation of enforcement activities for adopted management measures Implementation of co-management plans will be measured by: - Agreement between authorities and communities, according to the law, in place - Meeting of co-management committees are least twice a year - Local registry of vessels, fishers and gear in place ** Effective means that measures should be well informed through available science and aimed at resources sustainability* This indicator will inform PROBLUE Indicator C.8 *Fisheries under sustainable management (number)* and B.16. *Policies, regulations, strategies, and/or plans informed by PROBLUE (number).* This indicator will inform the World Bank Group Scorecard result indicator *Millions of hectares of terrestrial and aquatic areas under enhanced conservation and management* which will be tracked by the Client through the measurement of the areas covered by the management plans.
Frequency	Annually
Data source	Progress reports
Methodology for Data Collection	MFBE regular reporting and release of approved management plan
Responsibility for Data Collection	MFBE and relevant FMS
FMDC meetings (Number)	
Description	This indicator measures the level of regular policy dialogue and coordination on fisheries governance and development which will benefit FGS and FMS. The FMDC is a highlevel plateform set up by the 2023 federal fisheries law, which membership includes the Fisheries Minister of the FGS (Chair) and all Fisheries Ministers from te FMS. FMDC meetings will be concluded by official *communiqué* which will describe agreed actions for implementation by the FGS and FMS. The law mandates the FMDC to meet on a quarterly basis.
Frequency	Quarterly
Data source	FMDC *communiqués* and progress reports
Methodology for Data Collection	MFBE regular reporting

Responsibility for Data Collection	MFBE
Fishing communities with improved capacity to benefit (Number) • Of which at least 25% of beneficiaries are women (Number)	
Description	At each selected location, for the benefit of the local fishing community, households involved in fishing and associated activities, this indicator will measure the improvement of the capacity to sustainably benefit through the provision of a combination of inputs from the project including a) fisheries infrastructure, b) value-chain improvements, c) improved ownership through co-management and d) associated capacity building activities. This indicator will also measure the level at which women participating or who want to enter the sector are benefitting from project interventions.
Frequency	Annually
Data source	Surveys, reporting from infrastructure and/or co-management governance body
Methodology for Data Collection	MFBE regular reporting
Responsibility for Data Collection	MFBE
Beneficiaries (Number), of which are women(Percentage), and of which are Blue Economy practioners (Number)	
Description	This indicator measures the number of people who directly benefit from project activities including capacity building, training, equipment, participation in co-management, and from the establishment and operation of infrastructure. Beneficiaries will include community members as well as staff from fisheries authorities, including fisheries staff with PROBLUE funded gender training This will inform PROBLUE Indicator C.1 *Beneficiaries (number), of which women (%), and of which from disadvantaged groups (%) and* PROBLUE indicator B.20 Blue economy practitioners with an enhanced capacity to advance inclusion of women / persons from disadvantaged groups
Frequency	Annually
Data source	Workshop and training participants list, membership lists, and infrastrucuture user surveys; Progress reporting
Methodology for Data Collection	MFBE and FMS MoF regular reporting
Responsibility for Data Collection	MFBE and FMS MoF
Reduction of food loss and waste in targetted value chains (Percentage)	
Description	This indicator measure the decrease (by weight) in the level of fish loss and waste for targetted value chains from catch to distribution in Somalia. Methodology is based on FAO's Food Loss and Waste Assessment guidance. This indicator will also be a proxy to inform poverty and food insecurity, since reducing food loss and waste results in more fish to sell and buy which increases incomes, food security, climate change resilience, and fish of better quality and nutritional value. It also informs efficiency in fishing to reduce overexploitation and maintain robust fish stock and resilience of marine ecosystem. While reports estimates FL&W is estimated to range between 25% and 40%, a study has been launched under the PPA to determine the baseline. The study will be repeated at mid-term and towards the end of the project to measure reductoin. It is expected that the project will contribute to a reudction of five percent from the initial level of FL&W.
Frequency	Baseline survey in year 1; mid-term and at closing
Data source	Consultants' reports on Food Loss and Waste and progress reports
Methodology for Data Collection	MFBE reporting
Responsibility for Data Collection	MFBE

Monitoring & Evaluation Plan: Intermediate Results Indicators by Components

Monitoring & Evaluation Plan: Intermediate Results Indicators by Components	
Component: Increasing the capacity of dependent communities to benefit from sustainable marine fisheries	
Climate informed infrastructure built or rehabilitated and operational (Number)	
Description	This indicator measures the number of built or rehabilitated climate-informed infrastructure investments (landing sites, cold stores, markets, jetties, etc.) that are operational. Operationalization will be supported by implementation of a business plan and the adoption of a management structure. Climate resilient infrastructure has elements/measures that are adapted to or can withstand fluctuations stemming from climate change (e.g. storm surges, sea level rise, and flooding). It is expected that the project will support the construction of 12 small-scale fisheries infrastructure facilities, and three more complex infrastructure facilities for landing such as jetties.
Frequency	Anually
Data source	Progress reporting
Methodology for Data Collection	MFBE and FMS MoF regular reporting
Responsibility for Data Collection	MFBE
Targeted MSMEs benefitting from implementation of value chain improvement plans (Number) • Share of targeted MSMEs benefitted from implementation of value chain improvement plans of which owned/led by women (%)	
Description	This indicator measures MSMEs (formal and informal) conducting commercial activities that are provided with training, capacity building including financial information, equipment and market analyses aligned to value chain improvement plans (or similar). Iimplementation is the regular actions being taken by officials, fishers, and other value chain actors consistent with value chain improvement plans. This indicator will reflect Private Capital Enabled (PCE).
Frequency	Annually
Data source	Progress reporting
Methodology for Data Collection	MFBE and FMS MoF regular reporting
Responsibility for Data Collection	MFBE
Value (USD/Kg) increases from from improved handling from fisheries under improved management (Percentage)	
Description	This indicator will measure the increase in the value (inflation adjusted), i.e. sale price, of fish handled by beneficiaries of capacity building, training, equipment, participation in co-management and from the establishment and operation of infrastructure and implementation of value chain improvement plans, where the supply stems from fisheries under improved management (fishing activities and related stocks).
Frequency	Survey at mid and at closing.
Data source	Survey of beneficiaries at targetted infrastructure
Methodology for Data Collection	MFBE
Responsibility for Data Collection	MFBE
Component 2. Strengthening climate resilient marine fisheries goverance and management	
Fish stocks with their status determined (Number)	
Description	This indicator measures the number of targeted fish stocks for which their status has been determined using qualitative, quantitative or semi-quantitative methods at least once during the course of the project. As fisheries data and statistics remain scare, data-poor methods are likely to be used. Stock is as defined in the Fisheries Law. This indicator is aligned with the World Bank Group Scorecard following indicator: *Proportion of fish stocks within biologically sustainable levels.*
Frequency	Annually
Data source	Progress reporting

Methodology for Data Collection	MFBE regular reporting
Responsibility for Data Collection	MFBE
Co-management arrangements with at least 10% women participation , of whichat least one woman is in an executive position in its governance body (Number)	
Description	This indicator measures the level of meaningful participation and uptake of leadership roles by females involved in fisheries co-management committees. Committee members have a decision-making role. This will inform PROBLUE Indicator C.2. *People participating in planning and decision-making on the Blue Economy (number), of which women (%), of which women in decision-making roles (%)*
Frequency	Annually
Data source	Progress reporting
Methodology for Data Collection	MFBE and FMS MoF regular reporting
Responsibility for Data Collection	MFBE
Patrol days (Number)	
Description	This indicator measures the annual number of days of offshore and coastal surveillance activities (at least 6 hours of surveillance) each year. Surveilance activities can be conducted from shore, sea or air.
Frequency	Annually
Data source	Progress reporting
Methodology for Data Collection	MFBE and FMS MoF regular reporting
Responsibility for Data Collection	MFBE
Registers of fishers, fishing vessels and licences developed and operational (Number)	
Description	This indicator measures the development and operationalisation of three registers for fisher, fishing vessels and licensing servicing the FGS and all FMS. Operationalization refers to activities underway to populate or update the registers consistent with the project Fisheries Information Management System manuals/guides.
Frequency	Semi-Annually
Data source	Progress reporting
Methodology for Data Collection	MFBE regular reporting
Responsibility for Data Collection	MFBE
Fisheries policies, legal and regulatory texts adopted at FGS and/or FMS levels (Number)	
Description	This indicator measures developed or updated FGS and FMS fisheries policies, laws and regulations to implement the 2023 Fisheries Act. This will inform PROBLUE Indicator B.16 *Policies, regulations, strategies, and/or plans informed by PROBLUE (number)*
Frequency	Annually
Data source	Observations and MFBE and FMS progress reporting
Methodology for Data Collection	MFBE regular reporting
Responsibility for Data Collection	MFBE
Large scale industrial fishing vessels observed conducting serious Illegal activities during patrols (Percentage)	
Description	This indicator measures the level of serious illegal activities related to fishing vessels (licensed or unlicensed) and their operations detected by inspections, air surveillance, offshore patrols or coastal patrol efforts in Somali waters. This will be measured as a percentage of the observation of large-scale industrial fishing vessels observed during patrols. An illegal activity is serious when its fine level is 5 or higher as described in the First Schedule of the Fisheries Law. Large-scale industrial fishing vessels includes domestic and foreign vessels requiring a license to fish outside of the 24 nm boundary for Somali waters as described in the Fisheries Law. A vessel, observed to be conducting more than one illegal activity in the same observation will only be counted once. This indicator is expressed as vessels with illegal activities/all vessels observed over one year.

	As there was no patrolling activity before the project, there is no data for baseline
Frequency	Annually
Data source	Patrol reports and progress reports
Methodology for Data Collection	MFBE regular reporting
Responsibility for Data Collection	MFBE and relevant FMS
Revenue generated from licensing fees annually (USD) (Amount (USD))	
Description	This indicator measures the total revenue generated from fees paid for licences for foreign vessels to fish in Somalia's EEZas described in the Fisheries Law (2023). Under this indicator, licenses should be published on the MFBE website which will inform PROBLUE Indicator C.10 on public disclosure of key fisheries-related information
Frequency	Annually
Data source	Receipt issued for licenses
Methodology for Data Collection	Review by the Ministry of Finance and the Financial Goernance Committee
Responsibility for Data Collection	MFBE
Project Management	
Beneficiaries with rating 'Satisfied' or above on project interventions (Percentage)	
Description	This indicator measures the share of the target population expressing satisfaction with the provided project interventions
Frequency	Mid-term and at closing
Data source	Surveys
Methodology for Data Collection	Surveys
Responsibility for Data Collection	MFBE

ANNEX 1: Implementation Arrangements and Support Plan

1. **The Ministry of Fisheries and Blue Economy of the Federal Government of Somalia (MFBE) will serve as the main coordinating implementor for the project.** It will work closely with Ministries in charge of fisheries in all Federal Member States of the Federal Republic of Somalia (FMS), the fisheries department of the Banadir Regional Administration (BRA). MFBE will be responsible for coordination of activities, overseeing overall implementation and ensure harmonization of processes development under the project. FMS will be in charge of supporting implementation of activities on the ground in targeted communities, ensuring consultations are properly conducted. While the MFBE will serve as the leading ministries, other ministries also play a role in fisheries governance and management, including the Ministry of Ports and Maritime Transport, the Ministry of Justice.

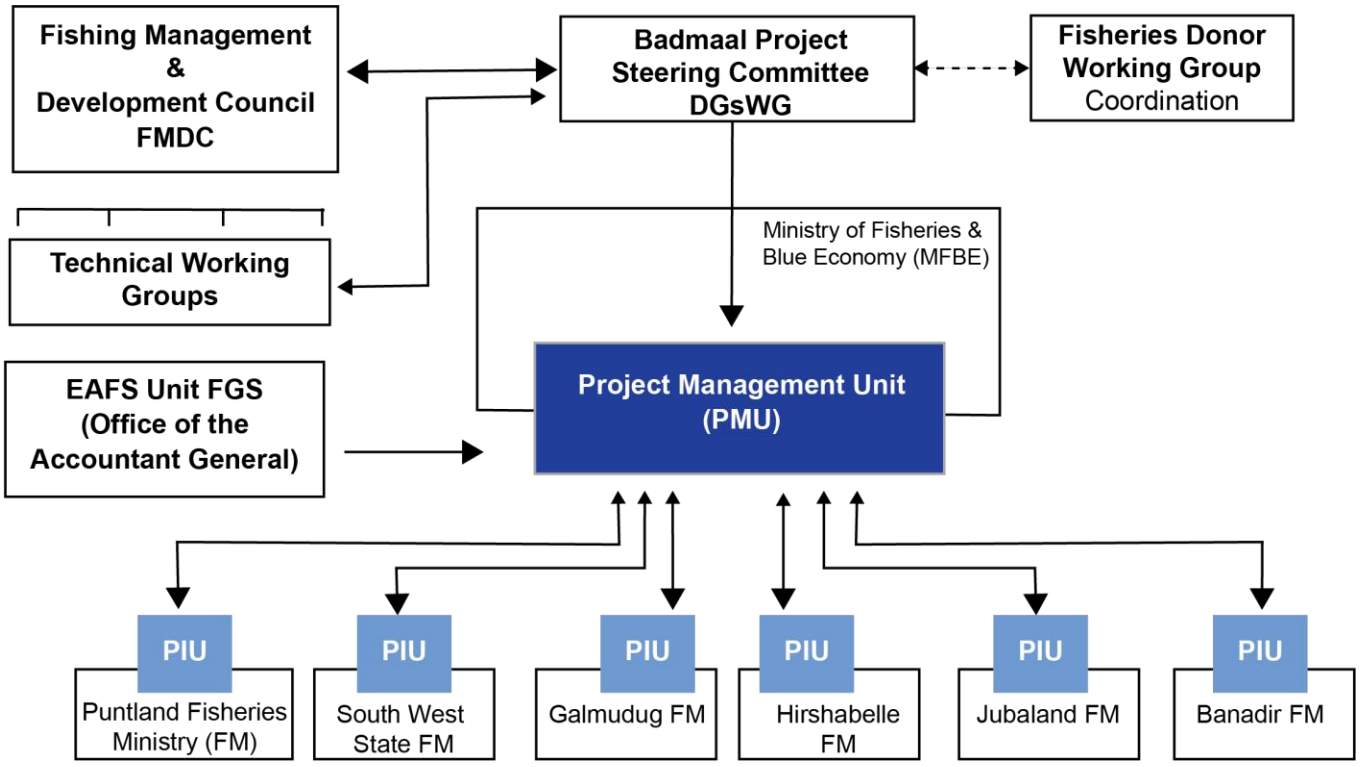
2. **A Project Management Unit (PMU) will be established within the MFBE.** The PMU will handle all procurement, financial and ESF responsibilities of the project (Table A1.1). The PMU will work closely with the FMS and the BRA to identify the needs, develop ToRs and specifications, and relevant representatives of these institutions will be actively engaged in procurement activities. The PMU structure will be adapted to the needs and activities of the project if necessary, during implementation. Lean Project Implementation Units (PIU) will be established in FMS' Ministries of fisheries to coordinate the implementation of the activities at State level.

Table A1.1. PMU and PIUs Composition

MFBE PMU	FMS & BRA PIUs
1 Coordinator 1 Environmental Specialist 1 Social Development Specialist 1 Procurement Specialist 1 Financial Management Specialist 1 M&E Specialist 1 Communication Specialist (part time)	1 State Coordinator

3. **The Director General Technical Working Group will serve as the Project Steering Committee and will meet ordinarily twice a year**. The Steering Committee will be chaired by the DG of the MFBE and include all other DG of fisheries of the FMS and of the BRA (Figure A1.1). The PMU will play the role of secretariat, without a voting right. Representatives of other Ministries or of stakeholder groups may participate as observers, without a voting right. The Steering Committee will review and provide guidance on annual work plans and budgets, as well as on other strategic issues related to the project. The Steering Committee will also report to the Fisheries Management and Development Council (FMDC) which is constituted by all the Minister of fisheries of the FGS and the Ministers of fisheries of the FMS. Additional details on the functioning of the Steering Committee will be included in the Implementation Manual.

Figure A1.1: Project Structures



4. **Coordination with partners and parallel initiatives.** Partnerships will be key to implementing project activities such as MCS, co-management and value chain improvements, and engaging the private sector. Other initiatives in the fishing sector are supported by development partners, e.g., FAO, EU and USAID. A donors coordination group which the World Bank is a member of meets regularly. Participation in this group ensures that duplication of effort is avoided and opportunities for the project to scale up and build on successful activities are promoted. Where possible, the government will be encouraged to use and scale up existing contracting and partnership arrangements with relevant development partners, UN agencies and civil society organizations.

Implementation Support Plan

5. **The objective of implementation support is to assist relevant counterparts in the effective implementation of the project, in accordance with World Bank policies and procedures.** To achieve this in an efficient manner, implementation support must be adaptive, focusing on key risks and risk mitigation measures identified. The World Bank has put in place a task team comprising a diverse skill mix. Skill sets required for continuous effective implementation support include, among others, project management, fisheries management, community development, fisheries infrastructure/engineering, value chain improvement planning, legal, private sector finance, M&E, procurement, financial management, communication and information and communication technologies.

6. **The implementation support strategy leverages the following key instruments to review progress and address implementation challenges and opportunities, among others:**

(a) **M&E of progress toward the PDO.** The TTLs will coordinate and oversee project implementation support, ensuring regular communication with the MFBE, deployment of resources to address any project implementation challenges, and monitoring of the project's progress toward the PDO;

(b) **Implementation support mission.** The World Bank will conduct semi-annual Implementation Support Missions. These will aim to assess the quality and pace of implementation, providing recommendations towards addressing bottlenecks and the effective achievement of the PDO. This will entail: (i) reviewing implementation progress by component (including the level of implementation of recommendations made by prior missions), including institutional development aspects; (ii) proposing and agreeing on solutions to implementation problems; (iii) reviewing the action and disbursement plans, and updating relevant forecasts; (iv) reviewing the project's fiduciary aspects, including regarding financial management and procurement; (v) verifying compliance of project activities with the fiduciary agreement and the World Bank's environmental and social framework; and (vi) reviewing M&E systems and the respective results within the context of targets set within the results framework.

(c) **Mid-term review (MTR).** An MTR will be carried out midway in the implementation phase. It will include a comprehensive assessment of the progress in achieving the project objectives as laid out in the results framework. The MTR will also serve as a platform for adjusting Project design considering challenges and emerging opportunities.

(d) **Other reviews.** As needed, the World Bank and Government counterparts will consider the need for additional analytical, advisory, knowledge sharing activities and/or third-party reviews. Such reviews may be planned for over and above the semi-annual implementation support missions.

(e) **Implementation completion.** At the end of the implementation for the project, the Government of Somalia and the World Bank will carry out separate implementation completion and results reviews to assess the success of the project and draw lessons from its implementation.

(f) **Technical Assistance.** Implementation support will include specialized technical support from the World Bank, as well as potentially from the FAO through the WB-FAO Cooperation Program under which FAO can provide technical support to World Bank projects.

7. **As the need arises, implementation support missions may be complemented by dedicated visits by individual specialists to follow up on specific thematic issues.** The team will maintain consultants to provide technical support the PMU, PIUs and participating agencies.

8. **Financial Management and Procurement teams of the World Bank will closely supervise the program's fiduciary management.** They will participate in the country implementation support missions and facilitate capacity building for the relevant staff of the PMU.

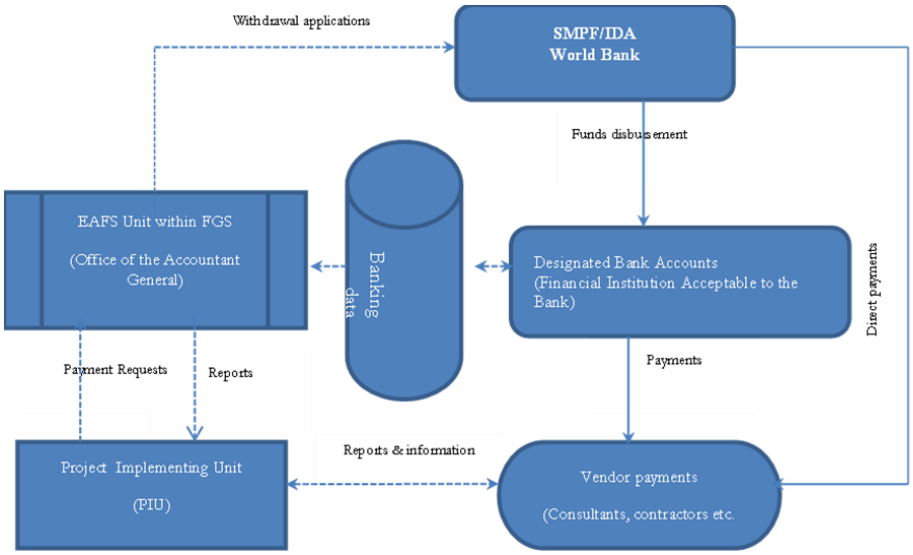
9. **On procurement, the World Bank will provide implementation support to the Recipient through, procurement training to program staff and relevant implementing agencies.** Implementation support missions will be geared toward: (i) reviewing and updating procurement documents; (ii) providing detailed guidance on the World Bank's Procurement Regulations; and (iii) monitoring procurement progress against the detailed Procurement Plan.

10. **The World Bank specialists in social and environmental aspects will support the adequate implementation of the ESF.** Each year, they will conduct supervision of the program's ESF activities, participate in meetings to discuss findings, and draft action plans to improve implementation.

11. **The project FM arrangements will be mainstreamed in the Accountant General's office in line with the arrangements Use of Country Systems (UCS).** The project accounting capacity will be headed by a consultant financial management specialist (FMS) at the PMU in coordination with the various finance officers in each of the PIUs. The team will be responsible for efficiency in payment processing, accurate recording and timely financial reporting through the Somalia Financial Management Information System (SFMIS). The project FM capacity will be supported by the External Assistance Fiduciary Section (EAFS) in the Office of the Accountant General to enhance segregation of functions and build capacity for full Use of Country Systems.

12. **The project will follow the Statements of Expenditure (SoE) method of disbursements**. A designated account (DA) will be opened for the project at the Central Bank of Somalia (CBS) where funds from the World Bank will be deposited and payments made for project activities (Figure A1.2). An initial advance will be made to the DA based on submission of withdrawal application to the Bank for an amount not to exceed the ceiling indicted in the Disbursement and Financial Information Letter (DFIL). Subsequent disbursements to the DA will be based on submission of withdrawal application accompanied by a Statement of Expenditures (SoE) incurred. As much as possible, consultants, contractors and suppliers will be paid through the direct payment method to mitigate the fiduciary risks associated with holding funds in the DA.

Figure A1.2. Overview of project funds flow mechanism



13. **The project budget will be detailed in line with the Government Standard Chart of Accounts (SCoA) and mapped onto the Financial Management Information System.** The budgeting process will follow the Government calendar. The work plans, cash flow projections and budget will include the figures for the year analyzed by months and quarters. The cash budget for each month and quarter will reflect the detailed specifications for project activities, schedules (including Procurement Plan), and expenditure on project activities scheduled respectively for the quarter. The annual work plans, budget and the cash forecast will be submitted to the Bank for review and clearance before the final estimates are incorporated in the proposed annual appropriations which will be approved by parliament by December 31 every year. Budgetary control will be affected through the budget module in the SFMIS and quarterly interim financial reports submitted to the Bank.

14. **The EAFS in consultation with the PIU will ensure that requests for funds commitments/withdrawals, invoices and payment requests are consistent with signed contracts before processing and release of funds/payments**. They will also monitor and report on the utilization of project funds, including the fiduciary standards and the reliability of the FM systems. A Project Fixed Assets Register will be prepared, regularly updated, and physical verification of assets routinely carried out by the EAFS. These Fixed Assets Register (FAR) in SFMIS will reflect details of suppliers; description and location of goods; original costs; disposal of assets; assets reference (identification) numbers; serial or registration numbers; dates of purchase; assets additions; condition of assets; assets' useful life and residual value. The project will also maintain up to date register of contracts and related disbursements, imprest accounts and advances.

15. **The project internal control procedures and processes will be outlined in the Project Operations Manual (POM), COAPM and the EAFS Manual**. The PIU will initiate all transactions through payment requests to the EAFS for approval, prepare the withdrawal applications to World Bank and monitor outstanding balances of suppliers, consultants and contractors. Upon receipt, the Bank will channel the funds to the designated account or make direct payment to the vendor, consultant or contractor. The FGS Ministry of Finance (MOF) internal audit department will carry out annual internal audit of the project to strengthen internal controls. The main fiduciary risks relate to challenges of monitoring and supervision of planned construction of base infrastructure, (including processing facilities and technologies) under Component 1 to enable private sector investment in facilities (e.g., cold store and ice plant). This will be mitigated by the recruitment of a Supervising Engineer/firm to oversee the construction of the project infrastructure. Further a Monitoring Agent will be engaged to conduct independent monitoring of the project activities and report to the government and the World Bank. Further support is planned for supervision of the identified works and capacity building for operating and maintaining the infrastructure including financial sustainability. The project will also consider the use of remote monitoring and supervision mechanisms including the Geo-Enabling Initiative for Monitoring and Supervision (GEMS) tool to monitor project activities and outputs in hard-to-reach areas and Kobo toolbox for data collection, integration, and analysis. GEMS can be used as a platform to combine all relevant data, for remote supervision, real-time ESF monitoring, and portfolio mapping for coordination across projects and partners.

16. **The EAFS and the PIU will prepare Interim Unaudited Financial Reports (IFRs) and submit to the World Bank not later than 45 days after the end of the quarter.** These reports will provide accountability for previous disbursements and basis for subsequent withdrawals. The quarterly financial reports shall provide details on all funds received under the project as a whole as well as counterpart funds received under the project (if any). The reports will include a statement showing: period and cumulative inflows by sources and outflows by main expenditure classifications (components/sub-components); beginning and ending cash balances of the project; and supporting schedules comparing actual and planned expenditures. Expenditures would be classified by component and by activities. The PIU will also prepare annual financial statements for the project which will be submitted for external audit within 3 months after the financial year end. External audit of the project financial statements will be conducted by the FGS Auditor General with necessary technical capacity support.

17. **The FGS Office of the Auditor General (OAG) is responsible to carry out independent audit of all public resources at the Federal Government of Somalia (FGS).** As such, the OAG will carry out annual audit of the SFBEP activities. The project will allocate adequate funds to support the engagement of an external audit technical assistance to work with the staff of the respective Offices of the Auditor General. The Accountant General will be required to submit the project financial statements for the previous financial year to the OAG by 30 April annually. Subsequently, the Auditor General is expected to conduct the Financial Audit and submit to World Bank, the final Financial Audit Report and Management Letter by 30 June every year.

18. **Fraud and Corruption:** Possibility of circumventing the internal control system with colluding practices as bribes, abuse of administrative positions, mis-procurement etc., is a critical issue and may include: (a) late submission of

supporting documents; (b) poor filing and records; (c) lack of system integration; (d) lack of budget discipline; (e) unauthorized commitment to suppliers, bypassing budget and expenses vetting procedures; and (f) unsecured safekeeping and transportation of funds. These are mitigated as follows: (i) specific aspects on corruption auditing would be included in the external audit TOR; (ii) FM Procedures (as part of the Implementation Manual) approved and in operation for the project; (iii) strong FM arrangements (including qualified Project Accountants in the EAFS, (iv) periodic IUFRs including budget execution and monitoring; and (v) measures to improve social accountability and transparency are built into the projects' design.

19. **Applicable procurement procedures.** Procurement will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers for Procurement of Goods, Works, Non-consulting Services and Consulting Services dated July 2016 and revised September 2023 (Procurement Regulations); the Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, revised July 1, 2016; and the provisions stipulated in the Financing Agreement.

20. **PPSD and PP.** The Implementing Agency has prepared a PPSD and a PP for the first 18 months (about 1 and a half years) that were reviewed and cleared by the World Bank. The PP sets out the selection methods to be followed by the Client during the project implementation period and includes the cost estimates, time schedules, the World Bank's review requirement, brief description of the activities/contracts and so on. The PP will be updated in agreement with the World Bank at least annually, or as required, to reflect the actual project implementation needs, but each update shall require World Bank approval.

21. **Systematic tracking of exchanges in procurement (STEP).** The World Bank's STEP system will be used to prepare, clear, and update PPs and conduct all procurement transactions for the project. Staff of the PMU will be trained in using STEP.

22. **Complaint Handling.** For the procurement-related complaints, the Project will follow the procedure prescribed in the Procurement Regulations (Section III para. 3.27 - 3.32).

23. **Main procurement activities:**

i) **Works**: Building Works for Rehabilitation and/or construction FMS facilities in 5No Lots, Building Works for Rehabilitation and/or construction FGS facilities, Construction of Jetties, Construction/Rehabilitation of landing sites, Construction/rehabilitation of fish markets.
ii) **Goods**: Fish processing plant equipment, Supply of Safety-at-Sea Equipment, Supply of Office Furniture and equipment for FMS and FGS, Procurement of Publicity Material, Equipment for enumerators, Supply of Small-boats for coastal patrols.
iii) **Non-consulting services**: Charter of vessel for patrol in the Exclusive Economic Zone (EEZ).
iv) **Consulting Services**: Consulting Service for Fisheries Infrastructure Development Plan, Consulting services for Feasibility studies, ESIA and technical design for complex infrastructure (incl. jetties), Provision of Construction Supervision services, Mid-Term Evaluation, Consulting Service for Drafting of labor standards for fishers and fish-workers, International TA on legal and regulatory matters for 36 months (renewable), Consultancy to develop Gender strategies in Fisheries Ministries and adoption of institutional policy reforms including gender at FGS and FMS, Provision of TA for Development of standards for export/import of fish and domestic market/trade, MCS Technical Assistant for 36 months (renewable), Development of SOPs for MCS, Development of database, FIMS and tools, incl. dashboard, TA for data collection, management and analysis for 36 months (renewable), State Coordinator for SW State 12 months (renewable), State Coordinator for Banaadir Administration 12 months

(renewable), State Coordinator for Jubbaland State 12 months (renewable), State Coordinator for Galmudug State 12 months (renewable), State Coordinator for Puntland State 12 months (renewable), State Coordinator for Hirshabelle State 12 months (renewable), Communication specialist for 36 months (renewable), International Project Management Support expert for 36 months (renewable).

24. **Procurement Implementation Arrangements.** Implementation will be by the MFBE of the Federal Government of Somalia which will serve as the main implementing agency at the Federal level. The Ministry has limited procurement capacity and previous experience with World Bank financed operations. To mitigate the risk, a Project Management Unit (PMU) will be established and housed within MFBE. PMU capacity will be strengthened by recruiting consultants including a Project Coordinator, Financial Management Specialist, Procurement Specialist among others. The PMU will be responsible for project implementation including procurement implementation, management, and oversight. In the proposed arrangements, the Project Procurement Specialist in the PMU will work alongside the relevant government staff in the MFBE for knowledge and skills transfer to enable them to gradually take over the project's activities. In this regard, MFBE will nominate procurement personnel (counterpart staff) for skill transfer during the Project implementation. Also, the implementing agency procurement capacity will be enhanced through on-the job training, HEIS and mentoring by the World Bank's Procurement Team during the Project implementation. In addition, designated procurement staff will be encouraged to register and undertake professional procurement courses. Project Implementation Units (PIUs), established in the FMS Ministry of Fisheries, will be led by a State Project Coordinator (SPC) with dual reporting lines to the Project Coordinator and the DG of the respective FMS fisheries ministries. The PIU and FMS Ministries of fisheries will be responsible for the coordination and implementation of project activities in FMS, in fishing communities, and will be involved in procurement activities.

25. **Procurement Capacity and Risk Assessment**. The procurement capacity assessment was conducted at MFBE, the implementing agency. The objectives of the assessment were: (a) to evaluate the management capability of the implementing agency to effectively carry out the procurement processes; (b) assess the adequacy of the systems that are in place to administer procurement; (c) assess the quality and effectiveness of the Procurement arrangements when putting Procurement procedures into practice; (d) assess the procurement process and market readiness; (e) to develop an action plan to be implemented as part of the Project in order to address the deficiencies detected by the assessment aimed at minimizing the risks identified; and (f) to propose procurement supervision plans for the Bank considering the relative strengths and weaknesses and risks revealed by the assessment. The assessment found that (i) that the Implementing Agency does not have previous experience with World Bank financed operations (ii) the national procurement law is not fully operational; (iii) weak capacity of bidders/suppliers – bidders are not familiar with bidding procedures of public procurement. Thus, sometimes bids submitted are of poor quality and with unintentional deficiencies that end up being rejected; (iv) inadequate experience in contract management; (v) this being a fragile environment, the market is unstable and sometimes suffers from limited interest from international contractors/consultants or high price bids/proposals because of country security risk and this sometimes leads to low response to published tenders and also the market is impacted by fraud and corruption risk (including collusion and outside interference in contracting process; and (vi) lack of adequate complaint handling mechanism (there is no standardized complaint handling system in place known to the bidding community to review and resolve complaint/disputes at appropriate stages of the procurement cycle; and (vii) weak legal and financial institutions (commercial Banks and Insurance agencies) are not well established.

26. **Proposed mitigation measures include**. (a) establishment of PMU with a dedicated Procurement Specialist with relevant and adequate qualifications and experience acceptable to the World Bank and ensuring that the Project Operations Manual (POM) includes a well described procurement management process, (b) training of the project implementing agency staff by the World Bank on the Procurement Regulations; (c) on high-risk procurement activities, but below prior review threshold, the procurement prior review will be continued with justification, (d) enhance the

oversight and supervision of procurement activities, (e) creating awareness among the government, private sector, and other stakeholders on the key issues regarding integrity in procurement and financial management; (f) supporting procurement reforms; (g) encourage international firms to have joint ventures with local firms due to insecurity; (h) establishment of an effective complaint handling system known to the bidding community to review and resolve complaints and (i) the Client may request Hands-on Extended Implementation Support (HEIS) throughout the project duration to directly assist project procurement activities for large, complex and high-risk contracts.

27. **Risk Assessment**: Based on the above, the risk for procurement is considered "High." The risk is reduced to a residual rating of "Substantial" in view of the mitigation measures proposed. The World Bank will periodically review the risk rating during the implementation of the project and update it appropriately.

28. **Procurement documents.** For international competitive procurement, the government shall use the World Bank's Standard Procurement Documents (SPDs). The SPDs are available on the World Bank external website: www.worldbank.org/procurement/standarddocuments. Since the government is in the process of finalizing its own Standard Bidding Documents, the project shall use the World Bank's SPDs customized to national standard and agreed with the World Bank when approaching the national market.

29. **Publication (advertising).** The government is required to prepare and submit to the World Bank a General Procurement Notice (GPN). The World Bank will arrange for its publication in the United Nations Development Business online (UNDB online) and the World Bank's external website. Specific Procurement Notices (SPNs) for all procurement under open international competitive procurement shall be published in at least one newspaper of national circulation in the borrower's country, or in the official gazette, or on a widely used website or electronic portal with free national and international access and in the UNDB online.

30. **Contract management capability and capacity.** The PMU will be responsible for overall implementation and management of awarded contracts in accordance with the agreed contractual obligations. The project will also rely heavily on consulting services to augment technical expertise. However, there is limited experience in developing Terms of Reference and managing consulting services of the nature envisaged in the project. Management of contracts will be done through the PMU focal persons and technical departments responsible for specific components/sub-component of the project. To ensure that quality, cost, and time are not compromised, and contractual provisions are enforced appropriately, supervision consultants shall be recruited for all the Works packages. Additionally, staff involved in project implementation will continuously attend procurement and contract management training/clinics to enhance their capacity. No contract has been identified to be complex and need to have a mandatory Contract Management Plan. However, the project will prepare simple contract monitoring sheets for each signed contract for easy monitoring and tracking of milestones.

ANNEX 2: Climate Co-Benefits Assessment

The project actions are in response to the vulnerability and impacts expected on the marine and coastal ecosystems of Somalia and the associated fisheries which include:

- **Warming and acidification of sea water, storm events, SLR** can affect the distribution and local abundance of fish stocks due to a) water outside of their oxygen or thermal tolerance (*e.g.* tuna/large pelagic moving further offshore or deeper, coastal stocks moving further South along the East African coast); b) coastal fisheries at risk of lower recruitment and productivity and fish community structures (*e.g.* coral reef fisheries) changes in primary productivity and c) habitat loss or damage resulting in reduced stocks productivity and reproduction. There is also a risk of invasive species moving in, resulting in competition and/displacement and less fish landed supplying the value chains. This increases coastal communities' vulnerability since they may capture and land less fish due to lack of appropriate vessels and technology or knowledge to fish further offshore, deeper, etc. resulting in lower incomes and higher food insecurity. Fishers may also lack the knowledge to catch other species which are not yet of commercial/ food security interest. Warming, acidification, storm events, and SLR together they risk disruption to supplying fish for selected value chains due to biological and ecosystems changes (discussed in Component 2).
- **Increasing ambient temperatures** impact where a) the running costs of infrastructure refrigeration, ice, cooling etc. results in increased GHG emissions and increased operating costs; and b) infrastructure materials sustainability is reduced with faster degradation in hotter weather (especially if combined with dust storms). These impacts increase operating costs for fishers (e.g. increase in cost of ice) and may increase the risk of a higher loss of fish or decreased fish quality resulting in lower incomes.
- **Increased storms with greater intensity/frequency and sea level rise (SLR) impact** where a) damage to fishing infrastructure and vessels affects communities by reducing access to resources leading to lower catches, lower incomes, and higher food insecurity. It also increases safety-at-sea risks during fishing and beach landing resulting in markets losses and higher food insecurity. In extreme cases, this could lead to displacement of stakeholder; and b) damages to post-harvest storing/processing/cold chain facilities results in less fish processed and available in markets and possibly higher food loss and waste that risks food insecurity and job losses and consequential markets losses and further risks to food insecurity;
- **Under all climate change scenarios, species distributions and local abundance will change and fisheries management needs to adapt to and mitigate these changes.** Effective fisheries management builds healthy fish stocks (e.g. biomass, including spawning biomass, above sustainable levels, higher genetic diversity, etc.) therefore increasing their resilience, as well as the resilience of the coastal communities depending on these stocks, to climate change impacts. Fisheries management is the best tool available to adapt and mitigate climate change impacts. Where, when and how fishers exploit the resource, which would change overtime due to climate change, will be considered in management, including co-management. Decisions along with management measures will strengthen resilience of the ecosystem that supports the fisheries as well as resilience within the fish populations (stocks). Certain gear, *e.g.* bottom trawls, disrupt the ecosystem (e.g. trawling damages bottom structures and fauna, and suspends sediments in the water column) and reduce biodiversity thus lowering ecosystem and stock resilience. Restricting such gears will strengthen resilience and will support both adaptation as well as a mitigation (as it reduces fuel use and sediment disruptions). Nature-based solutions such as spatial closures of fishing activities (*i.e.* fish refugia) are used for stocks to recover and be healthier, especially where they protect fish in the early stages of their life cycle and build resilience to fishing pressure by allowing more fish to mature and spill-over to neighboring areas.

Table A2.1: Climate adaptation and mitigation measures, by climate subcomponent and value of subcomponent.

	Project actions to reduce vulnerability and build resilience	
Project Components Subcomponents/Activities	CC adaptation to reduce vulnerability	CC mitigation
1.1 Climate-resilient fisheries infrastructure a) Identify viable options for climate-resilient small-scale fisheries infrastructure at selected sites b) Prep studies for climate-resilient small-scale fisheries infrastructure c) Construction of infrastructure including mitigation and adaptation materials and equipment d) Operation of infrastructure including maintenance of NBS and lower GHG emitting equipment	Selection criteria for the climate-resilient infrastructure include adaptation considerations such as siting of structures, appropriate materials[40] (e.g. above 1-in-100-year flooding or above buffer zone for cyclone resistance), use of NBS (e.g. tree planting to reduce wind impact and reduce solar radiation) as well as coastal protection works such as dune rehabilitation/planning; community resilience by protecting assets (e.g. boats, engines, fishing gear, etc.) and a safe-haven during storms where homes are vulnerable to storm damage[41]. Capacity building for beneficiaries will also include climate change awareness and means to adapt to impacts.	Design of infrastructure will include latest low energy and low GHG technologies (Lower Global Warming Potential (GWP) and Montreal Protocol compliant technologies (e.g. solar lighting, solar powered cold-store and ice-machine, cold-store insulation, with R rating of 30 for roof and 45 for walls/roof[42,43]); materials (e.g. windows, insulation) used in construction will also be [44] energy efficient and appropriate for local conditions such as at project sites; →*CCB eligible: 9.1: Energy efficiency, on-site, renewable energy, CO2 emission reduction, and carbon sinks in buildings*. Equipment in the buildings will be certified for energy efficiency (e.g. EnergyStar)[45] →*CCB eligible: 9.5: New or replacement standalone energy efficient appliances or equipment*

[40] Literature indicates climate proofing buildings adds from 15% if use concrete frame (more cyclone resistant) rather than a wood one (https://www.accuweather.com/en/weather-news/why-hurricane-resistant-homes-arent-constructed-bought-more-frequently/329268#:~:text=The%20reality%20is%20that%20we,market%20demand%2C%E2%80%9D%20he%20said. To double the cost and an additional 15% running costs (https://www.bigrentz.com/blog/hurricane-proof-buildings)

[41] Simad University. Rising Tides: How Climate Change Threatens Somalia's Coastlines (https://ice.simad.edu.so/2023/12/30/rising-tides-how-climate-change-threatens-somalias-coastlin/#:~:text=In%20addition%20to%20their%20many,are%20exacerbated%20by%20climate%20change)

[42] Atlas Molded Products - Everything You Need to Know About Cold Storage Insulation (https://www.atlasmoldedproducts.com/blog/cold-storage-insulation#:~:text=For%20example%2C%20if%20the%20facility,value%20of%2045%20is%20needed).

[43] Previous experience shows that the cost of supplying renewable energy to the proposed infrastructures (e.g. solar panels for cold-store) can cost up to 50% of the overall infrastructure cost.

[44] the project will allocate 25% of costs for energy efficient materials (e.g. windows where double pane energy efficient windows are twice the price of single pane (https://www.forbes.com/home-improvement/windows/double-pane-window-cost/)

[45] currently in Somalia there are no energy certification standards or regulations requiring star rated equipment and all equipment will be imported, the equipment procurement will include meeting star ratings from other countries as appropriate.

		Use of NBS, (e.g. tree planting to help with reduce ambient temperature[46], and sand-dams for the provision of fresh water around infrastructure especially related to cold chain, processing and retailing/ marketing) → *CB eligible: 9.1: Energy efficiency, on-site, renewable energy, CO_2 emission reduction, and carbon sinks in buildings*. Training of beneficiaries to include best practices in low-carbon facilities operation and maintenance, use of the GHG reduction technologies and NBS →*CCB eligible: 12.13 Capacity building and information dissemination.*
1.2 Improve fishing, handling, processing, and marketing techniques to enhance quality and value-addition a) Identify priority value chains b) Climate-informed value chain analysis and improvement plans c) Implementation of value chain improvement plans d) Advisory services to private sector e) Organizing fishing communities f) improvement of safety-at-sea g) Communication/Awareness	Capacity building/training to improve economic benefit from fish value chains that include improved energy efficient handling/practices, equipment, packaging, new markets, and other measures that can adapt to fish supply disruptions due to climate change impacts (e.g. storms or long-term distribution changes so that supply for processing is consistent). Capacity building will include i) identifying options and encouraging stakeholders to access diverse sources as well as species for supply and markets for products and ii) managing finances for disruptions in production. Capacity building to improve product and diversify products will increase revenues in the sector, build economic resilience and contribute to economic resilience of coastal communities without necessarily reducing fish stocks. Fishing and fish processing are often part of a multi-sectoral livelihood and food security strategy, so that when climate change impacts crops and other food production systems, fisheries are still productive. Provision of equipment, e.g. refrigerated/insulated vehicles, will reduce food loss and support fish products transport to greater distances for improved food and nutrition security.	The training and capacity building activities (activities c to g) will include climate change awareness and best fishing and handling practices, including operations to reduce fuel consumption and fish loss (activities c to f) → *CCB eligible: 12.13 Capacity building and information dissemination*. This subcomponent includes upgrading or introduction of Lower Global Warming Potential (GWP) and Montreal Protocol compliant technologies (e.g. cooling) and equipment (e.g. food processors) to reduce GHG emissions (activity c). Where possible, the equipment will be powered by renewable energy sources (e.g. solar) and use NBS (as noted above in 1.1.) to further reduce energy demands. The delivery of equipment such as fish drying racks, solar fridges will be complimented by TA to effectively use/maintain it. These measures

[46] Literature search indicates up to 47% reduction in energy demand in residential setting, but depends on where trees planted and species used (United States Environmental Protection Agency. Lower Building Energy Demands, https://www.epa.gov/green-infrastructure/lower-building-energy-demands).

	Training on safety-at-sea will reduce risks against weather events exacerbated by climate change (e.g. storms); disaster risk planning will reduce risks and increase preparedness against storms/flooding and other climate related events. This includes raising awareness on and encouraging the transitioning from timber to fiber glass for small fishing vessels which reduces the use of wood and tree cutting while also being safter in storm conditions that are exacerbated by climate change.[47]	will reduce fish loss and waste and ultimately reduce decomposing fish which emit GHG. For Somalia, GHG emissions linked to Fish Loss and waste could be around 67,500 and 96,430 t of CO_2e annually[48]. For example, drying rack can halve the losses in fish processing.[49] → *CCB eligible: 9.5: End-use energy efficiency; 5.9* ***reduce food losses or waste*** *or promote lower-carbon diets; 12.10 TA to deploy low carbon technologies and measures.* Equipment will be energy starred/certified where possible →*CCB eligible: 9.5: New or replacement standalone energy efficient appliances or equipment*
2.1: Laying a foundation for effective, transparent, and equitable fisheries resource governance a) FMDC established and operational b) Strengthen and harmonize legal and reg frameworks c) Develop and implement fisheries management plans	This subcomponent is intended to ensure better governance and management of fisheries and providing regulatory frameworks for implementation. Fisheries management is the most effective tool to adapt and mitigate climate change impacts on fish stocks. The project will support inclusion of climate considerations, including through capacity building for fisheries authorities and community	Improved fisheries management will increase resource efficiencies including reducing fish waste and resulting reduced fish decomposition[48]. Better fisheries management potentially reduces emission of 13.2 $MtCO_2e$ per year from overfishing[50]. → *CCB eligible; 5.9* ***reduce food losses or waste*** *or promote lower-carbon diets*

[47] Fishermen along the coast of Somalia traditionally use local forestry material to build the hulls of their houris (dhows), this contributes to denuding a significant number of trees from dwindling indigenous hardwood forests. The project will raise awareness among the fishing communities of the benefits of transitioning to climate-smart fiberglass hulls for artisanal fishing vessels to reduce the destruction of natural stands of indigenous coastal hardwood forests. Larger fiberglass boats are already manufactured in Somalia, last longer than wooden houris further reducing the demand for harvesting the trees, and are safer to operate. The Somalia Fisheries Master Plan (2023) estimates there are approximately 100,000 vessels of which 20% are *houris*.

[48] FAO estimated 3.6 Gt CO_2e emitted from Food Loss & Waste in 2007 (FAO, 2014. Food wastage footprint & Climate Change - https://www.fao.org/3/bb144e/bb144e.pdf) of which seafood loss/waste accounted for 5%, *i.e.* 0.18 Gt CO_2e). Marine fish production in 2007 was 80 Mt in 2007 (FAO Statistics), with 35% food loss and waste globally (FAO, 2022. The State of World Fisheries and Aquaculture 2022), *i.e.* 28 Mt in 2007). With an estimated production of fish of 30,000 t per year in Somalia (FAO Statistics, https://www.fao.org/fishery/statistics-query/en/capture/capture_quantity), and based on an estimated domestic food loss and waste between 25-40%, emission from fish loss and waste would be between 48,000 to 77,000 t of CO_2e.

[49] FAO Technologies and Practices for Small Agricultural Producers - Construction of raised drying racks for fish? The experience from Burundi (https://www.doc-developpement-durable.org/file/Elevages/aquaculture&peche&pisciculture/sechoirs/TECA%20-%20Construction%20of%20raised%20drying%20racks%20for%20fish%20–%20the%20experience%20from%20Burundi%20-%202014-12-12.pdf) Drying racks are likely interventions in this project.

[50] The High-Level Panel Oceans (HLP) noted that reduction in fuel use intensity from rebuilding depleted wild stocks has the potential to mitigate 0.24–0.92 Gt/year of CO_2e by 2030. In the case of Somalia, this component has the potential to prevent CO_2e from entering the atmosphere - FAO estimates world marine fish production is 78.8 Mt in 2020, and 34% was overfished (or 26.86 Mt). Using HLP mid-point of .58 Gt, not overfishing a Mt of fish has potential to mitigate 0.021 Gt annually. With a fishery production potential estimated at 0.6 Mt, preventing overfishing through effective management would prevent emission of 13.2 $MtCO_2e$/year. (https://oceanpanel.org/wp-content/uploads/2023/09/Full-Report_Ocean-Climate-Solutions-Update-1.pdf)

d) Capacity strengthening of fisheries institutions to manage fisheries e) Strengthening associated public institutions for enforcement f) Co-management pilots g) Research	organizations, to build ecosystem and stock resilience to climate change. Management plans, including co-management, will include management measures such as spatial and/or temporal closures, size limits, bag limits, gear restrictions, NBS such as fish refugia) to adapt and mitigate climate change impacts on fish stocks, and dependent communities. The growth of sustainable fisheries resilient to climate change will be strengthened through effective management that prevents overfishing. It is important that threats, such as overfishing and IUU fishing, to fish stock already stressed by other climate change impacts such as elevated sea temperatures, are prevented. This will build[54] resilience of the fish supplies to climate impacts and help to ensure the combined threats do not lead to the "tipping point" noted above (see para 8 page 10). Training in this subcomponent will include awareness raising on climate change impacts and relevant adaptation measures for management in the fisheries sector. This includes raising awareness among small-scale fishers on transitioning from timber to safer fiberglass boats, which have less risk of storm damage exacerbated by climate change and using less fuel and cheaper to maintain.	This subcomponent includes rehabilitating fisheries public institutional infrastructure including climate smart buildings and energy efficiency certified equipment (e.g. Energy Star) as well solar powered buildings (sub-activity d and f) which will incorporate energy efficient, Lower Global Warming Potential (GWP) and Montreal Protocol compliant materials and technologies as described in 1.1.1[40]. → *CCB eligible: 9.1: Energy efficiency, on-site, renewable energy, CO2 emission reduction, and carbon sinks in buildings*. This component also includes providing capacity building and training on GHG emissions and their reduction and TA to the private sector and community groups for an improved understanding of impacts of climate change and ways to mitigate impacts including reducing GHG emissions by transitioning to more fuel-efficient technologies (e.g. engines), equipment and practices → *CCB eligible: 12.13 Capacity building and information dissemination; 12.10 TA to deploy low carbon technologies and measures*. Equipment in the buildings will be certified for energy efficiency (e.g. energy star) (2.1(d and f) where feasible. →*CCB eligible: 9.5: New or replacement standalone energy efficient appliances or equipment*
2.2. Developing a comprehensive Monitoring Control and Surveillance (MCS) system to fight IUU fishing in Somali waters a) development and implementation of a National Plan of Action b) Enhance Fisheries Monitoring	Warmer water due to climate change results in fish shifting to different areas, including illegal ones or into areas of different jurisdiction, that some fishers may access. The proposed MCS system and information centers are part of the strategy to build long-term climate resilience of fish stock and marine ecosystems. MCS is key to managing the threats of	Effective MCS is key to supporting mitigation efforts by ensuring more fish are available in domestic markets and when combined with shifting diets to ocean-based proteins (Component 1.2 developing new markets), this can

Center c) Capacity building of offshore patrols	IUU fishing and for ensuring management measures are complied with as noted in 2.1 above. These measures help to keep fish abundance high enough to be resilient to climate change impacts and to avoid combined threats reaching a tipping point for the fisheries (see para 8. Page 10). It will inform management plans as well through awareness raising and communication improve compliance and consequently building fishers adaptation capacities to climate driven changes in fisheries.	result in mitigation potential of 0.24–0.84 Gt of CO_2e per year in 2030[51],[52] →*CCB eligible; 5.9 reduce food losses or waste or* ***promote lower-carbon diets****.* Effective MCS operations will reduce illegal bottom trawling in Somalia, a fishing practices highly energy intensive (bottom trawling use more fuel than other fishing practices (2.8 times on average[53]) and highly degrade marine habitats. Eliminating illegal bottom trawling reduces fuel use and CO_2e emissions by the fishing fleet operating in. In addition reduces in GHG emissions since trawling, which degrades the sea floor, releasing carbon and hampering its storage in marine sediments. Elimination of trawling activities will increase carbon storage in marine sediments. → *CCB eligible: 5.9 Projects that reduce food losses or waste or promote lower carbon diets* *5.7 Projects that reduce GHG emissions from the degradation of marine ecosystems or other water-based ecosystems* *5.8 Projects that reduce CO_2e intensity in fisheries or aquaculture.*
2.4 Strategic studies on fisheries development and blue economy	Studies will include the impact of climate change on fisheries and fish distributions in Somalia waters, as well as the economic and political implications for the sector in light of changing fish distributions and abundances and how to best adapt to these impeding impacts	Studies on lower carbon and energy efficient fishing technologies, equipment and practices will enable decision makers and communities to better understand the potential management measures to take to mitigate to climate change impacts in the fisheries sector → *CCB eligible:*

[51] S. Widjaja, T. Long, H. Wirajuda, *et al*. 2020. Illegal, Unreported and Unregulated Fishing and Associated Drivers. Washington, DC: World Resources Institute (https://oceanpanel.org/wp-content/uploads/2022/05/Illegal-Unreported-and-Unregulated-Fishing-and-Associated-Drivers.pdf).

[52] Hoegh-Guldberg, O. 2019. The Ocean as a Solution to Climate Change: Five Opportunities for Action. Washington, DC: World Resources Institute; https://oceanpanel.org/wp-content/uploads/2023/09/Full-Report_Ocean-Climate-Solutions-Update-1.pdf

[53]Clark and Tilman, 2017. Comparative analysis of environmental impacts of agricultural production systems, agricultural input efficiency, and food choice. (https://iopscience.iop.org/article/10.1088/1748-9326/aa6cd5/meta)

		12.13 Capacity building and information dissemination;

ANNEX 3: Economic and Financial Analysis

Quantifiable Benefits

1. **Investing in the fisheries sector has a positive net present value of US$184.3 million and IRR of 82 percent when income from licenses and value from fish exports are included.** The benefits associated with the project can largely be categorized as (a) income from licenses (b) increase in the value fish exports (c) attraction of private investments to the fisheries sub-sector and (d) improvement in the livelihoods of the Somalia fishers, fish workers and their communities, as well as entrepreneurs. Due to lack of data, only benefits from (a) and (b) are included.

Assumptions

1) The benefits are calculated for a period of 10 years assuming that the infrastructure in place has a full- life of 10 years.
2) The discount rate is 15 percent.
3) Income from licenses grows at an average annual rate of 47 percent[54].
4) Fish exported from Somalia to the rest of the world[55] was obtained from Trademap and an annual growth rate of 7 percent was obtained from the years 2020-2022.

Table A3.1: Cost Benefit Analysis

		Benefits - License fee at 3.7% of resource rent (USD)	Fish Exports from Somalia to the world using mirror data (USD)	Total Benefits (USD)
0	2023			(55,000,000)
1	2024	2,269	41,557,730	41,559,999
2	2025	3,344	44,466,771	44,470,116
3	2026	4,929	47,579,445	47,584,374
4	2027	7,263	50,910,006	50,917,270
5	2028	10,704	54,473,707	54,484,411
6	2029	15,774	58,286,866	58,302,640
7	2030	23,246	62,366,947	62,390,193
8	2031	34,258	66,732,633	66,766,891
9	2032	50,485	71,403,917	71,454,402
10	2033	74,399	76,402,192	76,476,590
	NPV @ 15%			**184,309,047**
	IRR 82%			

[54] Ministry of Fisheries and Marine Resources (2021) "Somalia Longline Tuna Fishery Catch, Effort and Resource Rent" Report
[55] HS Code 03: Fish and crustaceans, mollusks and other aquatic invertebrates

2. Sensitivity analysis further shows that an increase in resource rent from 3.7 percent to 10 percent will increase the net present value to US$519.5 million.

Non-quantifiable benefits

3. **Somalia has a very long coastline of approximately 3,300 km, which presents a good business to increase fishing business opportunities with the increased support from the World Bank.** Currently, the fishing industry contributes approximately 2 percent of the country's total GDP, with only 0.3 percent of the entire Somali population dependent on fishing as their principal livelihood. At present, the annual production of fisheries ranges between 25,000-30,000 metric tons per year. The opportunity by the Bank to capitalize the sector through provision of infrastructure. The construction of facilities such as cold storage and accompanying infrastructure will ensure that the production of fish in the Somalia increases which will in turn increase the sector's contribution to GDP.

4. **Preliminary investment in the Mogadishu fishing port through carrying out pre-feasibility and social, environmental, and economic assessments provides an opportunity for future investors.** Feasibility studies, technical designs and economic assessments have the advantage of providing potential investors with investment opportunities in the sector. Secondly, investment in infrastructure to support selected sites constructing (e.g. cold store) and equipping (e.g. ice plant) of infrastructure, provision of supervision support for the identified works and capacity building for operating and maintaining the infrastructure, will attract investors who will either use the existing infrastructure or even improve them for greater output production.

5. **Improved governance and management of Somali marine fisheries and blue economy provides a series of qualitative benefits that will ensure small scale and Somali-flagged vessels gain from the fishing sector**. The New Fisheries Law passed in 2023 divides the fishing grounds into three zones: 0-12nm (Small scale fishers), 12-24 nm (Somali-Flagged and owned vessels) and 24-200 nm (Foreign vessels), this zoning, will reduce the incidence of Illegal, Unreported and Illegal (IUU) fishing by industrial trawlers which has negative effects on the marine habitats and also compete with artisanal and small-scale fisher folks who therefore unable to fish due to lack of equipment compared to those of foreign vessels. Secondly, capacity building in Vessel Monitoring System (VMS) to track licensed vessels through satellite devices will result in reduced IUU fishing, and this in turn would reduce 'leakages' in the economy from revenue lost due to illegal fishing without license in Somalia. Continued technical support to the Fisheries Monitoring Center (FMC) at the Ministry of Fisheries and Blue Economy of the FGS, will ensure proper tracking of fishing activities in the Somali waters, thus reducing IUU, as well as exports to other countries resulting in proper reporting. Lastly, the support of the implementation of a national harmonized and decentralized collection of fish catches statistics and other data for fisheries by FGS and FMS ministries as well as the development of national system of registering fishers and vessels that will facilitate access to information for effective fishery management will ensure provision of timely fishery-related advice for effective decision-making. It will further enable transparency, which will attract investments in the sector.

6. **The effective management of marine resources through ecosystem the environmental and social management framework (ESMF) will ensure the conservation of marine resources sustainability and the resilience of related ecosystems.** The initial project activities such as construction of small-scale fisheries infrastructure is likely to have an initial negative impact of causing erosion, traffic disturbance and water quality degradation. However, the implementation of the environmental and social risks management framework is expected to mitigate the challenges that are likely to arise. This framework will include the capacity building of all implementing agencies on the ESMF and inclusion of local fishing communities in the development of marine resources management arrangements, to ensure resilience and sustainability.

7. ***A gender responsive support to*** **small-scale fishing entrepreneur through the development of infrastructure is expected to empower women and therefore supporting SDG 5 (Improving Gender Equality).** Gender equality and women empowerment remains a major challenge in Somalia, and according to UNDP Somalia[56], the country has a score of 0.776 (a maximum score of 1 denotes complete inequality) and ranks 4th last. Women still face barriers related to access to education, employment and political participation, which are key ingredients for women empowerment. Very few women are engaged in the private sector and particularly in the fisheries sub-sector. Most recent data indicates that women are underrepresented in government and decision-making bodies, for example in women's representation in the House of the people remains low at 24 percent in 2016, despite a commitment quota of 30 percent.

8. Even though women of Somalia are currently engaged in selling fish of low-income earning potential, a gendered support to small scale fishing entrepreneurs through the construction of infrastructure, such as cold stores, ice-production facilities, storage facilities, jetties and markets will result in reduction in post-harvest losses experienced due to lack of infrastructure within the fisheries value chain. Capacity building which included financial skills for women to access finance and to realize new business opportunities, is important since women tend to lack the financial resources to purchase equipment for cold storage that is required in fisheries production, storage and marketing, this limits them to selling fish with low-income potential, however, with this project, it is expected that women will gain through increased participation in the fisheries sector and also trading in high value fish products.

9. **The provision of technical support to MFBE (FGS) to strengthen its capacity to manage, implement, and monitor project activities, is expected to increase the project absorption capacity.** Effective and efficient planning and coordination of the project activities will ensure the successful implementation of the project, to reduce the risks associated with delayed utilization of funds and low absorption rates. Some of the key inputs from the project that will ensure increased project absorption include the recruitment of staff and operationalization of project management unit (PMU), establishing adequate financial and procurement management systems and monitoring and evaluation (M&E). The development of well-informed social safeguard instruments and grievance redress mechanism are expected to ensure a smooth flow of project implementation with minimal interruptions at the community level where implementation of infrastructure activities takes place. In addition, the implementation of the project through the Ministry Fisheries limits the bureaucracy associated with multi agency decision-making and implementation framework, having a PMU in Mogadishu and small project implementation unit in each state with fiduciary responsibility at the FGS level will reduce bottlenecks and slowing down of project implementation.

[56] https://www.undp.org/somalia/genderequality

ANNEX 4: Provisional median/equidistance line between Somali and Yemen

UNCLOS (Articles 15 & 74) specifies the use of median/equidistance lines to separate neighboring coastal States where no established maritime boundary exists. They denote a provisional maritime division and would not prejudice the rights of a coastal State in negotiating its maritime limits. Currently, Somalia and the Republic of Yemen do not share a legally established maritime boundary, hence the use of a provisional equidistance line between the two.

This Annex includes the coordinates of a provisional equidistance boundary, calculated based on contributing points from coastlines of each party. NGA Prototype Global Shoreline was used as input coastline data for processing in Caris Limits and Boundaries module, the UN-recognized software for spatial analyses related to UNCLOS.

Table A4.1 coordinates for Somalia EEZ

Point	Long_DD	Lat_DD	Long_DMS	Lat_DMS
1	54.44289975	8.95154094	54° 26′ 34.439″″ E	8° 57′ 5.547″″ N
2	53.98127418	9.46598454	53° 58′ 52.587″″ E	9° 27′ 57.544″″ N
3	53.91191954	9.54336672	53° 54′ 42.910″″ E	9° 32′ 36.120″″ N
4	53.11354137	10.43657685	53° 6′ 48.749″″ E	10° 26′ 11.677″″ N
5	53.11305736	10.43711650	53° 6′ 47.007″″ E	10° 26′ 13.619″″ N
6	53.08580361	10.46750848	53° 5′ 8.893″″ E	10° 28′ 3.031″″ N
7	53.04996168	10.50651270	53° 2′ 59.862″″ E	10° 30′ 23.446″″ N
8	53.04667942	10.50966409	53° 2′ 48.046″″ E	10° 30′ 34.791″″ N
9	52.66268736	10.87754100	52° 39′ 45.674″″ E	10° 52′ 39.148″″ N
10	52.48900348	10.97333402	52° 29′ 20.413″″ E	10° 58′ 24.002″″ N
11	52.47436818	10.98136756	52° 28′ 27.725″″ E	10° 58′ 52.923″″ N
12	52.35328118	11.04456895	52° 21′ 11.812″″ E	11° 2′ 40.448″″ N
13	52.30653795	11.06823407	52° 18′ 23.537″″ E	11° 4′ 5.643″″ N
14	52.29103819	11.07643743	52° 17′ 27.737″″ E	11° 4′ 35.175″″ N
15	52.24216694	11.10226479	52° 14′ 31.801″″ E	11° 6′ 8.153″″ N
16	52.20650689	11.14081426	52° 12′ 23.425″″ E	11° 8′ 26.931″″ N
17	52.11923606	11.23524012	52° 7′ 9.250″″ E	11° 14′ 6.864″″ N
18	52.06607370	11.28967973	52° 3′ 57.865″″ E	11° 17′ 22.847″″ N
19	52.05953710	11.29632571	52° 3′ 34.334″″ E	11° 17′ 46.773″″ N
20	52.02561608	11.36337794	52° 1′ 32.218″″ E	11° 21′ 48.161″″ N
21	51.96434542	11.48580012	51° 57′ 51.644″″ E	11° 29′ 8.880″″ N
22	51.93943261	11.52929646	51° 56′ 21.957″″ E	11° 31′ 45.467″″ N
23	51.92479555	11.55457713	51° 55′ 29.264″″ E	11° 33′ 16.478″″ N
24	51.90245707	11.59284067	51° 54′ 8.845″″ E	11° 35′ 34.226″″ N
25	51.89059978	11.61112748	51° 53′ 26.159″″ E	11° 36′ 40.059″″ N
26	51.86112372	11.66933534	51° 51′ 40.045″″ E	11° 40′ 9.607″″ N
27	51.81192631	11.76931196	51° 48′ 42.935″″ E	11° 46′ 9.523″″ N
28	51.81074409	11.77172107	51° 48′ 38.679″″ E	11° 46′ 18.196″″ N
29	51.77767774	11.83372814	51° 46′ 39.640″″ E	11° 50′ 1.421″″ N
30	51.74567987	11.89488735	51° 44′ 44.448″″ E	11° 53′ 41.594″″ N
31	51.70060133	11.98142034	51° 42′ 2.165″″ E	11° 58′ 53.113″″ N
32	51.69318564	11.99554881	51° 41′ 35.468″″ E	11° 59′ 43.976″″ N
33	51.68977168	12.00201310	51° 41′ 23.178″″ E	12° 0′ 7.247″″ N
34	51.67770356	12.02498894	51° 40′ 39.733″″ E	12° 1′ 29.960″″ N
35	51.67424205	12.03158372	51° 40′ 27.271″″ E	12° 1′ 53.701″″ N
36	51.59358960	12.18513619	51° 35′ 36.923″″ E	12° 11′ 6.490″″ N
37	51.57095900	12.22877563	51° 34′ 15.452″″ E	12° 13′ 43.592″″ N
38	51.57029952	12.23005857	51° 34′ 13.078″″ E	12° 13′ 48.211″″ N
39	51.55895267	12.25210111	51° 33′ 32.230″″ E	12° 15′ 7.564″″ N
40	51.51575854	12.33452977	51° 30′ 56.731″″ E	12° 20′ 4.307″″ N
41	51.43889725	12.48276503	51° 26′ 20.030″″ E	12° 28′ 57.954″″ N
42	51.39456978	12.56833809	51° 23′ 40.451″″ E	12° 34′ 6.017″″ N
43	51.39414159	12.56915881	51° 23′ 38.910″″ E	12° 34′ 8.972″″ N
44	51.38376257	12.58357758	51° 23′ 1.545″″ E	12° 35′ 0.879″″ N
45	51.30029382	12.72391704	51° 18′ 1.058″″ E	12° 43′ 26.101″″ N
46	51.26315913	12.80373504	51° 15′ 47.373″″ E	12° 48′ 13.446″″ N
47	51.23502509	12.86608947	51° 14′ 6.090″″ E	12° 51′ 57.922″″ N
48	51.21499149	12.92290628	51° 12′ 53.969″″ E	12° 55′ 22.463″″ N
49	51.16740134	13.05873146	51° 10′ 2.645″″ E	13° 3′ 31.433″″ N
50	51.10911660	13.22340921	51° 6′ 32.820″″ E	13° 13′ 24.273″″ N
51	51.03691178	13.42763843	51° 2′ 12.882″″ E	13° 25′ 39.498″″ N
52	51.00428429	13.51987167	51° 0′ 15.423″″ E	13° 31′ 11.538″″ N

ANNEX 5: Map of Somalia