



The World Bank

Sustainable Fishery Development in Red Sea and Gulf of Aden (SFISH) (P178143)

Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 20-Apr-2022 | Report No: PIDA33493

**BASIC INFORMATION****A. Basic Project Data**

Country Middle East and North Africa	Project ID P178143	Project Name Sustainable Fishery Development in Red Sea and Gulf of Aden (SFISH)	Parent Project ID (if any)
Region MIDDLE EAST AND NORTH AFRICA	Estimated Appraisal Date 18-Apr-2022	Estimated Board Date 07-Jun-2022	Practice Area (Lead) Environment, Natural Resources & the Blue Economy
Financing Instrument Investment Project Financing	Borrower(s) United Nations Development Programme, Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden	Implementing Agency United Nations Development Programme, Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden	

Proposed Development Objective(s)

The Development Objective of the overall proposed program with series of projects (SOPs) is to promote regional cooperation for sustainable fishery management in the RSGA region and strengthen the fishery value chain in RSGA countries.

The Development Objective of this first project of the program is to strengthen mechanisms for regional collaborative management of fisheries in the RSGA region and improve the the fishery value chain in Yemen

Components

- Component 1: Strengthening regional collaboration in management of marine fisheries and aquaculture in the RSGA region
- Component 2: Improving Economic Opportunities, Food Security and Effective Management of Fishery Production in Yemen
- Component 3. Project Management, Monitoring and Evaluation and Reporting (including UN agency fee)

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**



Total Project Cost	45.00
Total Financing	45.00
of which IBRD/IDA	45.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	45.00
IDA Grant	45.00

Environmental and Social Risk Classification

Substantial

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Regional and Country Context

1. Over 240 million people live in the eight coastal states (i.e., Saudi Arabia, Egypt, Jordan, Eritrea, Yemen, Sudan, Djibouti and Somalia) of the Red Sea and the Gulf of Aden (RSGA) occupying around 6.4 million km². Their combined gross domestic product (GDP) is about \$1.2 trillion, with Saudi Arabia contributing more than 60 percent of that total.¹ The countries of the RSGA region share deep historical, cultural, and linguistic ties, but individually the countries are at very different stages of development² faced with different sets of political, social and economic challenges, and exhibiting varying levels of institutional capacity. The region has faced significant challenges in recent years due to wars, internal conflicts, and climate shocks. Poverty and inequality remain as significant challenges in the region, while trade and investment underperform as drivers of growth and job creation. Illegal actors have taken advantage of the power and economic vacuums prevailing in some parts of the region.³ Conflict in Yemen, persistent fragility in Somalia,

¹ Statistics according to latest data from data.worldbank.org [accessed October 18, 2021]

² <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>

³ Mbekeani, K. K., & Ncube, M. (2011). Economic Impact of Maritime Piracy. AfDB Africa Economic Brief, 2(11).



climate risk, fragility, and refugee influx in Djibouti, and tensions between political alliances in the Gulf contribute to a complicated geopolitical landscape in the region.⁴ Climate change is now exacerbating an already difficult situation across the region, leading to increased tension over natural resources. Successive shocks of different kinds have led to record numbers of displaced people and increased migration, mostly irregular, to Gulf countries.⁵

2. **Regional trade can be an important source of growth and poverty reduction, while ensuring shared natural resources linked to trade such as fish are managed sustainably and is key to promoting post-COVID19 recovery and jobs and economic transformation.** Intra-regional trade within Africa and Middle East and North Africa (MNA) region is the lowest among all the regions in the world, although have significant potential.⁶ There is also a strong demand from the Gulf for food products from the region, in particular fish and meat. Given the limited amount of arable land in the region and the impacts of water scarcity and climate vulnerabilities, land-based agriculture interventions have comparatively limited potential to contribute to growth. However, fisheries, if well-managed, have a high potential to become a key economic sector for the region and provide diversification needed in the food system, as demonstrated by pre-conflict Yemen.⁷
3. **Countries in the RSGA region have demonstrated commitment for regional integration.** To counter security and economic threats in the RSGA region and identify opportunities to overcome them, a task force of the Intergovernmental Authority on Development (IGAD) assessed a common position and response strategy in 2019, concluding that forming a regional council would benefit the region. In response to IGAD's recommendation, the foreign ministers of eight RSGA countries met and chartered a new regional body - the Council of the Red Sea and Gulf of Aden Countries - in January 2020, with the objective to enhance political, economic, and security cooperation within its membership. The council specifically expects to address threats and challenges facing the region and safeguard the security, environmental protection, and economic development of countries bordering the RGSA in close collaboration with Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA) especially in the management of coastal and marine natural capital.
4. **The poorest country in the MNA region, Yemen, had a GDP per capita of US\$631 and a population of 29.8 million in 2018.**⁸ The country has been under a devastating conflict since 2015 that has weakened institutions and caused the worst humanitarian crisis in the world.⁹ Twenty million people in the country need humanitarian assistance and 4 million (nearly 80 percent of whom are women and children) have been displaced.¹⁰ An estimated 40 percent of households have lost their primary income source, contributing to

⁴ https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Maritime%20Piracy_Maritime%20Piracy.pdf

⁵ Vertin, Z. (2019, December 19). Red Sea geopolitics: Six plotlines to watch. Brookings.

<https://www.brookings.edu/research/red-sea-geopolitics-six-plotlines-to-watch/>

⁶ World Bank 2021, "Horn of Africa Regional Economic Memorandum."

⁷ The COVID-19 crisis also provides an opportunity for some of the RSGA countries to gain from the effective realization of the African Continental Free Trade Area, the largest free trade area in the world in terms of the number of participating countries since the formation of the World Trade Organization.

⁸ World Bank 2021, "Horn of Africa Regional Economic Memorandum."

⁹ World Bank. 2021. Macro Poverty Outlook, October.

⁹ <https://news.un.org/en/story/2019/02/1032811>

¹⁰ <https://www.unrefugees.org/emergencies/yemen/>



an increase in poverty to 75 percent of the population in 2019. The real GDP contracted by 39 percent compared to the pre-conflict situation,¹¹ and the economy has contracted further due to the COVID-19 pandemic, cyclones, and flooding in 2020 and 2021.¹² Beyond these tragic human costs, the conflict has severely affected the country's food security, damaged critical infrastructure, and reduced access to basic services.¹³ The conflict has also caused multiple disease outbreaks and malnutrition. Despite the ongoing crisis, humanitarian assistance has declined since 2020.¹⁴

5. **Food insecurity, a chronic problem in Yemen, has increased to unprecedented levels.** According to the Integrated Phase Classification (IPC), a total of 16.1 million people, or 54 percent of the country's population were estimated to be acutely food insecure (IPC Phase 3 and above for the population in the coastal zone) in the first half of 2021, despite the presence of the ongoing humanitarian food assistance.¹⁵ Conflict, high food prices, depreciation of local currency, and disrupted livelihoods are considered the major drivers of acute food insecurity and this could be further compounded by the recent Ukrainian war.
6. **Yemen is highly vulnerable to climate change-related phenomena.** Yemen's Third National Communication to the United Nations Framework Convention on Climate Change (UNFCCC) identified its coastal zone (the coastal Tihama plain, 30-60km wide along the RSGA) as one of the most vulnerable areas to climate change.¹⁶ This vulnerability is likely to exacerbate other pressures on livelihoods, the economy, and the environment in the future.¹⁷
7. **The COVID-19 pandemic continues its spread in the region, further compounding economic and supply chain pressures and food security due to pandemic prevention measures.** There has been an unprecedented decline in the flow of remittances to Yemen, a vital source of money for the population because of the COVID-19 pandemic, which in turn has affected household income and consumption, both directly and indirectly.^{18,19} The socioeconomic impact of the crisis is particularly devastating as the pandemic has contributed to worsening the already precarious living conditions of vulnerable households with job loss, price shocks, and other adverse factors. Movement restrictions in Yemen due to COVID-19, in addition to the on-going conflict and high input costs, continue to negatively impact supply chains and trade. Access to fish has decreased across the country as a result of compounding organizational and technical difficulties including increased fuel prices, limiting transportation and the destruction of fishing vessels and cooling and storage facilities. As a result, fish prices have increased impacting both livelihoods and food security.

¹¹ <https://www.worldbank.org/en/country/yemen/publication/economic-update-april-2019>

¹² World Bank. (2021, April 2). Yemen's Economic Update—April 2021. World Bank.

<https://www.worldbank.org/en/country/yemen/publication/economic-update-april-2021>

¹³ For example, over 60 percent of population has limited or no access to safe drinking water, sanitation and hygiene; while the number of sewage systems breakdowns has increased.

¹⁴ FAO. 2021. GIEWS Country Brief Yemen. March 10. <https://www.fao.org/giews/countrybrief/country.jsp?code=YEM>

¹⁵ IPC. (2021). Yemen: Acute Food Insecurity Situation October—December 2020 and Projection for January—June 2021. IPC Global Platform. <http://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1152947/?iso3=YEM>

¹⁶ https://unfccc.int/sites/default/files/resource/3490581_Yemen-NC3-2-Yemen_TNC_2018_Final.pdf

¹⁷ Sieghart, L., M. Betre and J. Mizener. Strengthening Conflict Sensitive Approaches to Climate Change in MENA. The World Bank.

¹⁸ <https://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT?end=2019&locations=YE&start=1990&view=chart>

¹⁹ <https://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/134258/filename/134469.pdf>



Sectoral and Institutional Context

8. **Capture fisheries (and aquaculture) constitute one of the world's largest sources of animal protein and are crucial to global food security and nutrition.** Today, the importance of utilizing fisheries resources responsibly is widely recognized and prioritized by many regions and individual countries. Food and Agriculture Organization (FAO) in its most recent report on the State of World Fisheries and Aquaculture (2020)²⁰ highlights that the global fish production (through capture fisheries and aquaculture) is estimated to have reached about 179 million tons in 2018, with a total first sale value estimated at USD 401 billion with capture fisheries contributing to 96.4 million tons, an increase of 5.4 percent from the average of the previous three years. Global fish consumption has significantly increased from 5.2 kg per capita in 1961 to 19.4 kg in 2017, at an average annual rate of 2.4 percent. In low-income food-deficit countries such as Yemen, fish consumption has also increased from 4.0 kg in 1961 to 9.3 kg in 2017, at a stable annual rate of increase about 1.5 percent.
9. **The RSGA region is globally known for the uniqueness of its coastal and marine biodiversity, including its contribution to the fishery sector and its economic, historical, and social value to the MNA region.** Its ecosystems support a rich biological diversity with a high proportion of endemic species that also includes many important fish species, and the United Nations Educational, Scientific and Cultural Organization (UNESCO) has designated number of World Heritage Sites including Socotra Archipelago, Dungenab Bay, and Senganeeb Atoll. The Red Sea has been identified as a potential climate refuge for coral reefs, because of the relatively higher resilience of its corals compared to other parts of the world and RSGA also supports extensive seagrass beds and mangroves, which are critical fish breeding and feeding grounds. The Gulf of Aden has levels of biological productivity that are amongst the highest in the world.²¹ The flow of nutrient rich water from the Gulf of Aden into the Red Sea is primarily responsible for higher productivity in the southern part of the Red Sea and the Arabian Sea.
10. **Marine fishery, as a traditional economic activity, remains a main source of food and income for coastal communities in the region.** However, fluctuating trends are reported for several economically important fish species in the region, which are mainly linked to degradation of their essential coastal habitats. Other significant issues such as habitat destruction, overexploitation of marine resources and illegal, unreported and unregulated (IUU) fisheries; navigation risks and threats of hydrocarbon spills, pollution from urban, industrial and tourism hotspots; illegal disposal of pollutants by transiting vessels and the impacts of climate change to the long-term stability of these waters stem from the increase in the human population in the coastal areas and the rapid economic growth resulting in considerable pressure on the coastal and marine environments.²² Incomplete, outdated, unverified, or inaccessible fisheries data affect the capacity of countries to manage their marine fisheries efficiently and sustainably, as well as the ability for effective oversight and accountability. Effective capacities and systems for collecting information on the status and trends of capture fisheries, including IUU fisheries, environmental, socio-economic and climate change

²⁰ <https://www.fao.org/3/ca9229en/ca9229en.pdf>

²³ https://www.researchgate.net/publication/342779453_

²³ https://www.researchgate.net/publication/342779453_



aspects, are key to enable sound policies and decision-making for responsible fisheries management in the RSGA region.

11. **The IUU fishing targeting high value species is a specific concern in the RSGA.²³** The IUU cover a range of activities including fishing without a license or out of season, harvesting prohibited species, using banned fishing gears, catching more fish than allowed, not reporting or misreporting catches and pirate fishing by industrial fleets especially in Yemeni, and Somali fishing grounds with variety of high value demersal and pelagic fish species, such as crustaceans, cephalopods, mollusks, sharks, rays, dolphins, and turtles. The IUU does not only take place by foreign fleets and there are reports of IUU by the regional countries on a much smaller scale. Some of these countries due to their conflict and fragility situations have very limited means to monitor, control, supervise, or protect their waters against intruders or prevent illegal activities of their own fleets. Their coast guards have limited capacity to carry out measures that could prevent the large and highly mechanized foreign unlicensed vessels from operating in their waters.
12. **Threats such as marine pollution, and depletion of living marine resources are of trans-boundary nature that necessitates regional cooperation to define their causes, effects and coordinated management actions.** Hence, PERSGA was initiated in 1974 in collaboration with the Arab League Educational, Cultural and Scientific Organization (ALECSO) and the support of United Nations Environment Program (UNEP) as one of its Regional Seas Programs. In 1982 the Program was underpinned by signing the Jeddah Convention, formally titled "Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment". The Jeddah Convention expresses in clear terms the commitment and the political will of the countries of the region to tackle the challenges in the marine and coastal environments of the RSGA through joint and coordinated efforts. The provisions of the Jeddah Convention aim at protection of coastal and marine environment from pollution and the rational management of living marine resources including fisheries. They came synchronized with the Articles of the United Nations Convention on the Law of Seas (1982), where Article 123 of this Convention called for cooperation among coastal countries, and to coordinate their efforts regarding rights and duties concerning marine environment and its uses. In accordance with Article III of the Jeddah Convention, the PERSGA²⁴ was established in 1995.
13. **Protection of the RSGA environments from pollution, and the rational management of their living natural resources are the focal objectives of the PERSGA mission and work.** It is an intergovernmental organization governed by a council of ministers responsible for environmental affairs in the seven PERSGA member states. The Ministerial Council meets every two years to approve technical and financial policies. While fisheries have been part of the mandate of PERSGA, the Protocol concerning Cooperation in Management of Fisheries and Mariculture in the Red Sea and Gulf of Aden (referred as Regional Fisheries Protocol hereafter) has been updated in consultation with the member countries and its signing and ratification are

²³ https://www.researchgate.net/publication/342779453_

²⁴ The World Bank has supported PERSGA through an intervention in the past, especially to build the technical capacity to deliver its mandates: Red Sea and Gulf of Aden Strategic Ecosystem Management GEF Project (P113794) closed in 2018.



yet to take place.^{25,26} There is currently no regional fisheries management organization or fishery commission covering the RSGA.²⁷

14. **Yemen is part of the seven countries that hold membership to PERSGA, and it is the first country to benefit from this Program on Sustainable Development of Fisheries (SFISH) in RSGA region.** Yemen has a long coastal band of 2,520 km with rich fish resources in the sea, benefiting from mountainous inputs and wadi slopes' deposits. The fisheries sector is one of the most promising economic sectors generating essential incomes for those engaged in the fishery value chain. Yet, fishery resources face overexploitation and poaching by international industrial fishing fleets. Yemen lies on the Red Sea, the Arabian Sea (including Gulf of Aden) and the Indian Ocean, which are noteworthy areas that provide fish which forms a significant component of coastal population's diet and livelihood. Fish wealth is a major renewable natural resource of Yemen as well as a primary national source of income. Prior to the conflict, more than 350 species of fish and other marine life in the territorial waters made Yemen a major fish producing country in MNA.²⁸ Moreover, a variety of ecosystems such as coral reefs and mangroves, support about 65 commercially important species including invertebrates (shrimp, lobsters, cuttlefish, sea cucumbers), pelagic species (yellowfin and longtail tuna, kingfish, queenfish, Indian mackerel, Indian oil sardines) and demersal species (groupers, emperors, jacks, bream).²⁹ The total fish catch was about 160,000 tons in 2015, mostly associated with artisanal fishing. The National Fisheries Strategy (2012-2025) indicates that the country's fisheries are at serious risk of depletion, due to lack of appropriate management to stabilize the valuable stocks especially in the coastal areas.
15. **The fishery sector provided job opportunities for more than half a million individuals,³⁰ which supported 1.7 million people, forming 18 percent of the coastal population prior to the conflict.**³¹ It contributed up to 3 percent of the country's GDP as the third most important agricultural sector and second primary source of export earnings before the conflict.³² Fisheries now contribute around 11.3 percent of the agricultural GDP, or around 1.7 percent of the overall GDP.³³ The sector supported the livelihood of about 3.2 percent of the population.³⁴ A workforce of 94,214 was directly employed, of which almost 75,000 were fishermen represented by 129 Fishery Associations. The fishermen and fishery associations have strong partnerships that facilitate production and sales flows. However, wholesalers, retailers and brokers are not aware of or

²⁵ <http://persga.org/jeddah-convention/>

²⁶ <https://www.unep.org/explore-topics/oceans-seas/what-we-do/working-regional-seas/regional-seas-programmes/red-sea-and>

²⁷ FAO Regional Office for the Near East and North Africa and the FAO Fisheries and Aquaculture Department, in collaboration with Egypt, Saudi Arabia, Sudan, convened a regional meeting in 2016 for the establishment of the Red Sea and Gulf of Aden Aquaculture and Fisheries Organization (RSGAFO). While the decision on the RSGAFO is still pending, the RSDA states have agreed to adopt a protocol to support the regional cooperation on fisheries and aquaculture under PERSGA.

²⁸ Ellaya, M. 2019. Fishing during the war? The impact of war on Yemeni fisheries. Published by Fisheries Conflicts: Case Studies (<https://ucsdonline.maps.arcgis.com/apps/MapSeries/index.html?appid=1d694c00fecc42759f6605837c386354>)

²⁹ Ministry of Fish Wealth. 2012. National Fisheries Strategy (2012-2025).

³⁰ Artisanal fishing dominated the sector, directly supporting the livelihoods of about 667,000 people (Alabsi and Komatsu, 2014).

³¹ Ministry of Fish Wealth. 2017. Guide of Fishery Investment. p. 14.

³² Alabsi N. and T. Komatsu. 2014. Characterization of fisheries management in Yemen: A case study of a developing country's management regime. Marine Policy 50: 89-95

³³ IFC (2022). *Fisheries Value Chain in Yemen*, Draft Report.

³⁴ National Fisheries Strategy (2012-2025), Ministry of Wealth, 2012



open to joint ventures or partnerships. Most businesses in the fishery sector are individual fishermen who use their own or privately rented boats. Artisanal fishers currently operate in about 31,190 fishing boats and account for over 90 percent of total production.³⁵ While there is no state-owned fishing fleet, there are both state-owned and private docks and fish landing facilities. Private sector firms employed about 18,000 workers primarily in domestic wholesale and retail trade and fish exports.³⁶

16. **Fish is a key staple of the Yemeni diet, particularly of the coastal communities and food represents 60 to 70 percent of poor households' consumption expenditures.** Fish contributes to poverty alleviation, food, and nutritional security primarily in the coastal governorates of Hajjah, Taiz, Hudaydah, Aden, Lahj, Abyan, Shabwah, Hadramawt and Mahrah³⁷, and in other parts of the country, such as Sana'a. Food prices, including fish prices have continued to increase because of continued deterioration of the value of the currency and COVID-19 pandemic impacts, in addition to the on-going conflict. This increase in fish prices (combined with lower incomes of coastal communities relying on fisheries) makes fish unaffordable for many people.
17. **The conflict has caused severe damage to the entire fishery value chain.** It has taken the lives of many fishermen, destroyed fishing boats, landing sites, and storage and processing facilities, disrupted electricity that in turn has severely affected ice-production and cold-supply chain leading to deterioration of product maintenance and quality, limited fishermen's access to the sea, increased fuel prices affecting boat operation, disrupted transportation networks that heavily affected access to critical input supplies and fish product distribution networks both for domestic and export markets. Overall, the entire fish supply chain has been massively destroyed. The situation has also aggravated following cyclones. As a result, for example, only about 50 percent of fishermen in the Red Sea are believed to be still working in the sector.³⁸ Job opportunities and fish production have declined considerably along the coast, particularly in Hudaydah, Taiz and Hajjah governorates, which became war zones. Traditional fishing decreased by about 75 percent in the governorates of Taiz and Hudaydah.³⁹ This led to migration of people away from the coast in search of survival opportunities.⁴⁰ Yet, due to the severe humanitarian crisis affecting some parts of the country, the coastal population is gradually returning to fishing for survival. In addition, during the conflict, retailers, restaurants and street vendors have been the most affected in the fishery value chain. With fishery outlets and restaurants closing, trade decreased by more than half leading to almost half of the workers being laid off or suspended. The fishery associations have also faced large losses due to the cessation of fish exports.
18. **Climate change is altering physical properties such as salinity, temperature, and pH levels in the marine environment which can lead to adverse impacts on marine biodiversity and fisheries.** For example, there is increasing evidence that coral reefs in the northern part of the Gulf of Aden are being damaged by unusual marine conditions, and coral bleaching and mortality events, attributing to higher sea water temperatures,

³⁵ IFC (2022). *Fisheries Value Chain in Yemen*, Draft Report.

³⁶ World Bank (2022). *Yemen Private Sector Assessment Report*, Draft, Yemen Financial and Private Sector TA.

³⁷ See Ellaya (2019), cited above.

³⁸ LSE Middle East Centre. 2018. The Impact of the War in Yemen on Artisanal Fishing of the Red Sea. LSE Middle East Centre.

³⁹ "Severe Food Insecurity Widespread in Yemen," Food and Agriculture Organization, JUNE 21, 2016.

⁴⁰ Moreover, these conflict-related problems are exacerbated by other factors: climate change, which threatens seriously the livelihoods and infrastructure on the coastal zone; fishing irrespective of the restrictions declared by the MFW; and marine pollution caused by spilling oil, dumping sewage and discarding undesired species in the sea.



have been more frequent in the Gulf of Aden.⁴¹ Warmer water temperatures and acidifying oceans can also threaten the artisanal and commercial fisheries on which many coastal communities depend through a disruption of the migration patterns of pelagic fishes and through adverse physiological impacts on marine algae and seagrass beds. Therefore, actions to build climate resilience of the fisheries and related systems will contribute to an increased food security.

19. **Overall, the fishery sector remains vital for supporting job creation, livelihoods, and food security in Yemen.** Today, Yemen exports fish to almost 34 countries (down from 50 countries prior to the conflict) including neighboring markets, but also European and Asian markets, and the value of fish exports was US\$74 million in 2018⁴² (which is sharply down from US\$289 million in 2013). Yemen is a major regional fish producer, accounting for more than 50% of fish production and exports across the RSGA. The sector still provides a main source of food security, earnings, and employment for Yemenis living along the southern coast, including in 50 localities along the Gulf of Aden and the Arabian Sea. There are 70,000 small-scale fishermen in this southern coastline, and fisheries is often the sole source of income for coastal communities.⁴³
20. **However, the size of fishery remains limited and contribution of the sector to the total economy still modest because of limited capacity across the fisheries value chain in Yemen,** including low quality of products, low productivity, insufficient availability of inputs and post-harvest losses exacerbated by inadequate marketing systems, low human resource capacity, lack of infrastructure, deficient access to modern technologies in fishing and processing the production, and challenges to access finance and markets. About two-thirds of fishing businesses do not have any access to loans or grants. Though the fishery sector has high competition, the value chain actors focus on volume rather than product differentiation and value-addition. As most fish is sold unprocessed, over 80% of the jobs are concentrated in the upstream of the value chain.⁴⁴
21. **Although engaging in the country under the current context is subject to multiple risks, the risk of inaction is exponentially greater for the survival of Yemeni citizens.** Over 20 million people, about two-thirds of Yemen's population, is dependent on humanitarian aid.⁴⁵ The United Nations Office for Coordination of Humanitarian Affairs' (UNOCHA's) Yemen Humanitarian Response Plan remains only half-funded, and by September 2021, several humanitarian response sectors have received less than 15 percent of needed funds.⁴⁶ This alarming situation means that several millions of people will be at even higher risks of famine and death. This calls for an urgent need of action to develop new ways to improve food security, nutrition and livelihoods for the Yemenis at risk in a more sustainable manner. The proposed project aims to address this gap by investing in the fisheries sector, through re-engagement, in improving the fish value chain. The importance of enhanced institutional and governance capacity, technology transfer and capacity building in

⁴¹ https://unfccc.int/sites/default/files/resource/3490581_Yemen-NC3-2-Yemen_TNC_2018_Final.pdf

⁴² https://pdf.usaid.gov/pdf_docs/PA00WFZJ.pdf

⁴³ https://pdf.usaid.gov/pdf_docs/PA00WFZJ.pdf

⁴⁴ A synthesis Report on Micro, Small and Medium Enterprises in Yemen with Potential COVID-19 Impact Analysis, UNDP, 27 May 2020.

⁴⁵ UN OCHA. (2021). Yemen Humanitarian Update (Issue 8). <https://reliefweb.int/report/yemen/yemen-humanitarian-update-issue-8-august-2021-enar>

⁴⁶ Ibid.



science-based but practical and context specific effective management practices and controlling of fishing effort that do not impair resource productivity underpins the proposed operation. In addition, by incorporating key elements of sustainable fishery and scaling up the use of innovative technologies, the program aims to make a first step towards a sustainable blue economy in the region. Supporting private sector recovery in an FCV context through interventions in the fishery value chain contributes not only to enhancing food security, but such interventions can also address some of the drivers of fragility by i) creating jobs, ii) improving households' income/livelihoods, thereby leading to better health and human capital outcomes, and iii) keeping the youth away from conflict-related activities. In addition, the regional approach of seeking regional cooperation to address transboundary challenges will add positive benefits to the country fishery programs.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

22. The Development Objective of the overall proposed program with series of projects (SOPs) is to promote regional cooperation for sustainable fishery management in the RSGA region and strengthen the fishery value chain in RSGA countries.
23. The Development Objective of this first project of the program is to strengthen mechanisms for regional collaborative management of fisheries in the RSGA region and improve the the fishery value chain in Yemen

Key Results

24. The progress towards the achievement of the PDO will be measured by the following outcome indicators:

Outcome 1: Mechanism for collaborative management of fishery strengthened for RSGA region

- Regional mechanism for collaborative management of fisheries in the RSGA region adopted by at least four PERSGA member states.

Outcome 2: Fishery value chain strengthened in Yemen

- 13,000 benefiters with job focused interventions of which 1,600 are women.
- Sixty percent of the beneficiary households experienced at least ten percent increase in their per capita household income from the baseline situation.
- Two sub-national climate informed participatory fishery management plans implemented.

D. Project Description

25. Project includes three components:
26. **Component 1: Strengthening regional collaboration in management of marine fisheries and aquaculture in the RSGA region (*approximately US\$3.5 million*)**. This component will aim to strengthen and sustain



regional collaboration through support to science-based management of fisheries in the RSGA, development of a regional platform for coordination of policies, legislation, management plans and measures for responsible fisheries and aquaculture and use of ecosystems approaches, and support to regional level capacity building and technical assistance program on management of living marine resources responding to both anthropogenic and climate induced changes.

27. **Component 2: Improving Economic Opportunities, Food Security and Effective Management of Fishery Production in Yemen.** This component includes two sub-components which will be implemented by United Nation Development Program (UNDP).
28. **Sub-component 2.1. Improving the resilience of the fishery value chain for sustained livelihoods.** The first sub-component primarily aims to support actions to improve fishery production and quality by reducing post-harvest losses and improving climate resilience and access to markets, thus contributing to restoring fishery sector related livelihoods and create economic opportunities. It will also promote interaction and networks between fishers, micro and small fish processors, wholesalers, and retailers to improve access to markets in targeted coastal areas.
29. **Sub-component 2.2. Governance systems and knowledge developed for effective management and climate resilience of fisheries.** This sub-component aims at developing local governance systems and knowledge to effectively manage fisheries and ensure climate resilience that aligns with the fishery sector strategy of Yemen and Component 1 and will contribute to the implementation of the principles of Regional Fisheries Protocol for the RSGA.
30. **Component 3. Project Management, Monitoring and Evaluation and Reporting.** This will include two sub-components:
 31. **Sub-component 3.1. Project management, monitoring and evaluation and reporting by PERSGA.** This includes technical assistance, training, operating costs, and goods for PERSGA for management of the regional activities ensuring technical, fiduciary, environmental and social, parameters. This will support ongoing communication activities to raise awareness about the SFISH Program and implementation progress, will ensure effective engagement of stakeholders at the RSGA level and develop and maintain a grievance mechanism (GM). A Program Coordination Committee will be set up for the technical teams of PERSGA, UNDP and other implementing entities of the countries that would participate in the future. It will be chaired by the head of Project Coordination Unite (PCU) of PERSGA to ensure coordination of joint activities, monitor and report on the contribution of country activities to regional objectives, and knowledge management.
 32. **Sub-component 3.2. Project management, monitoring and evaluation and reporting by UNDP.** This includes technical assistance, training, operating costs, and goods for UNDP for national implementation in Yemen ensuring technical, fiduciary, environmental and social, parameters. This will support ongoing communication activities to raise awareness about the project and implementation progress and to ensure effective citizen engagement. This sub-component will develop, conduct, and manage country-level monitoring and evaluation of investments, share information and results throughout the region. This will also finance the monitoring and evaluation (M&E) system and Management Information System (MIS), and a third-party monitoring (TPM) mechanism and establish and maintain a GM. The M&E is expected to be



strengthened by using the Geo-Enabling initiative for Monitoring and Supervision (GEMS)⁴⁷ for real time data collection and reporting and feed into the M&E and MIS systems as appropriate. This also includes UNDP general management costs.

Legal Operational Policies

Triggered?

Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts

33. The project will generate environmental and social risks and impacts related to construction works, such as dust emissions, debris, noise and other solid waste generation, social annoyance and community safety risks due to traffic increase, unsafe construction sites and other standard risks and impacts of construction. Other key environmental and social risks associated to the project relate to labor and community health and safety, including the propagation and exposure to COVID-19, labor conditions, elite capture and the exclusion of vulnerable and disadvantaged groups and individuals, risks associated with sexual exploitation and abuse and sexual harassment, security of project workers and beneficiaries in Yemen, including the risk of explosion of a remnant of war (ERW). During the operation phase, the main issues of concern are those associated with fish processing activities. The environmental concerns primarily include issues related to solid waste and by-products, wastewater, water consumption and management, energy consumption. Workers might also be exposed to OHS risks and hazards that are specific to this industry during operation phase. Occupational health and safety issues of concern during this phase primarily include workers, exposure to physical and biological hazards, and cold, noise and vibration.
34. To address these risks, the project prepared Environment and Social Commitment Plans for PERSGA and UNDP, a Stakeholder Engagement Plan (SEP) for activities at the regional level and an Environmental and Social Management Framework (ESMF), Labor Management Procedures (LMP), a Stakeholder Engagement Plan (SEP) and a Security Management Plan (SMP) and a Gender Action Plan (GAP) for activities in Yemen. These instruments are expected to be adopted and disclosed prior to end of appraisal.

E. Implementation

Institutional and Implementation Arrangements

35. **PERSGA will be responsible for implementing the regional Component 1 and the supporting sub-component 3.1, which primarily includes technical assistance, training, goods and related services and operational costs.** PERSGA has previously been supported by the World Bank including building its

⁴⁷ The GEMS method enables project teams to use open-source tools for in-field collection of structured digital data that automatically feeds into a centralized M&E system and Management Information System (MIS). GEMS will also allow for establishing a digital platform for remote supervision, real-time environmental and social monitoring, and portfolio mapping for coordination with other relevant operations in the region.



operational and technical capacity related to coordination of actions by the member states in the management of coastal and marine environment of the RSGA and building the technical capacity. PERSGA will be responsible for fiduciary, ensuring relevant environmental and social aspects and monitoring, evaluation, and reporting requirements. PERSGA will ensure timely project management and coordinate with the World Bank task team during trouble shooting. The terms of references for various activities and related technical outputs will be reviewed by the World Bank for their technical quality. PERSGA will lead a Coordination Committee with the technical team of UNDP.

36. **UNDP will manage the Component 2 related to investments in Yemen and sub-component 3.2.** UNDP is the UN's development arm, and it is committed to supporting the peacebuilding and enhanced local governance in Yemen while delivering development initiatives to ensure sustained livelihoods and income generation. UNDP has successfully partnered with the World Bank in implementing the Yemen Emergency Crisis Response Project (YECRP) and Yemen Food Security Response and Resilience Project (YFSRRP). UNDP is also working closely with local partners and institutions to undertake training for beneficiaries. UNDP also have wider field presence at the regional and governorate level, hence the ability to quickly mobilize the beneficiaries and deliver the project activities. Based on the past and on-going experience, UNDP is fully familiar of the Bank's fiduciary and environmental and social requirements. UNDP also has experience establishing M&E systems and utilization to ensure proper project management and accountability and using a TPM agent to monitor project implementation. UNDP has a good collaboration with FAO, which is essential, to link the on-going fishery stock assessment and diagnostic under the YFSRRP.
37. **The UNDP country team in Yemen will coordinate all relevant activities at the sub-national level, supported by the regional office staff who will monitor the activities in different governorates.** It will be responsible for the technical implementation of the Component 2 and Sub-component 3.2 and coordinating with PERSGA on activities related to Sub-component 2.2 and fishery management capacity building. UNDP will be responsible for the Component 2 related fiduciary, environmental, and social aspects, monitoring and reporting. UNDP will ensure fiduciary and technical accountability of the implementing partner organizations and ensure appropriate training and capacity building of the staff of the implementing partner organizations where necessary. UNDP will set up a PCU based in Sana'a within 30 days of project effectiveness, and technical staff deployed in its Aden sub-office and other decentralized hubs to ensure day-to-day project management, including all fiduciary, environmental, and social aspects, and monitoring and reporting. UNDP country team will be also backstopped by dedicated teams of technical experts at regional and Headquarters' level adopting Level 3 fast-track procedures established due to the emergency situation in Yemen.
38. **UNDP will lead the implementation of the sub-component 2.2 directly and will ensure the delivery of sub-component 2.1 through the PWP, and SMEPS.** The PWP will implement infrastructure-related works through selected locally sourced contractors and create employment opportunities for the beneficiary communities. The SMEPS will manage the micro grants to fishery sector beneficiaries to develop their small businesses identified through beneficiary selection criteria developed jointly by the UNDP and SMEPS and consulted with relevant stakeholders. For specialized training where necessary, UNDP will hire expert consultants and link with private sector to design and deliver the training.
39. **PERSGA and UNDP will prepare POMs for their respective project components/sub-components and will be finalized and adopted by project effectiveness.** PERSGA and UNDP will prepare budgeted Annual Work Plans (AWPs) and detailed procurement plans with the no objections from the World Bank. The first



budgeted AWP will be prepared no later than two months after project effectiveness. Each AWP will highlight the activities to be implemented for the subsequent 12 months by component and sub-component with intended results, timeline, budgets and planned procurement and non-procurement activities. It will also identify issues and implementation bottlenecks and relevant remedial actions and outline key responsibilities. This will be used to regularly monitor activities of each component, evaluate progress and discuss corrective actions or changes as needed together with the World Bank.

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