

GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title

Integrated Management of Seascapes of the Kazakhstani part of the Caspian Sea and Land Resources of Adjacent Territories

Region	GEF Project ID
Kazakhstan	11524
Country(ies)	Type of Project
Kazakhstan	FSP
GEF Agency(ies):	GEF Agency ID
UNDP	9727
Executing Partner	Executing Partner Type
tbd	Government
GEF Focal Area (s)	Submission Date
Multi Focal Area	3/19/2024

Project Sector (CCM Only)

Mixed & Others

Taxonomy

International Waters, Focal Areas, Marine Protected Area, Large Marine Ecosystems, Pollution, Nutrient pollution from all sectors except wastewater, Fisheries, Areas Beyond National Jurisdiction, Climate Change, Climate Change Adaptation, Ecosystem-based Adaptation, Climate resilience, Livelihoods, Community-based adaptation, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, United Nations Framework Convention on Climate Change, Capacity Building Initiative for Transparency, Nationally Determined Contribution, Land Degradation, Land Degradation Neutrality, Land Productivity, Carbon stocks above or below ground, Biodiversity, Biomes, Wetlands, Rivers, Grasslands, Financial and Accounting, Conservation Finance, Species, Threatened Species, Invasive Alien Species, Protected Areas and Landscapes, Productive Landscapes, Coastal and Marine Protected Areas, Productive Seascapes, Terrestrial Protected Areas, Community Based Natural Resource Mngt, Mainstreaming, Infrastructure, Agriculture and agrobiodiversity, Extractive Industries, Tourism, Chemicals and Waste, Sound Management of chemicals and waste, Best Available Technology / Best Environmental Practices, Deploy innovative financial instruments, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Demonstrate innovative approache, Type of Engagement, Stakeholders, Partnership, Consultation, Participation, Information Dissemination, Communications, Education, Behavior change, Awareness Raising, Strategic Communications, Public Campaigns, Private Sector, Individuals/Entrepreneurs, Financial intermediaries and market facilitators, Large corporations, SMEs, Beneficiaries, Civil Society, Community Based Organization, Academia, Non-Governmental Organization, Local Communities, Gender Mainstreaming, Gender Equality, Gender-sensitive indicators, Women groups, Sex-disaggregated indicators, Gender results areas, Participation and leadership, Capacity Development, Access to benefits and services, Knowledge Generation and Exchange, Access and control over natural resources, Knowledge Exchange, Capacity, Knowledge and Research, Peer-to-Peer, North-South, Conference, Twinning, South-South, Field Visit, Exhibit, Indicators to measure change, Learning, Adaptive management, Theory of change, Innovation, Knowledge Generation, Workshop, Training, Professional Development, Seminar, Course, Master Classes, Enabling Activities, Targeted Research

Type of Trust Fund	Project Duration (Months)
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GET	72
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
7,270,000.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
690,650.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing
7,960,650.00	50,989,000.00
PPG Amount: (e)	PPG Agency Fee(s): (f)
200,000.00	19,000.00
PPG total amount: (e+f)	Total GEF Resources: (a+b+c+d+e+f)
219,000.00	8,179,650.00

Project Tags

CBIT: No NGI: No SGP: No Innovation: No

Project Summary

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

The project aims to promote an integrated ecosystem-based approach to conserve key species and habitats of the Caspian Sea and ensure sustainable economic development. The project provides a common strategic framework for promotion of a sustainable marine economy and a shift from a focus on the revenue generation and production systems to an ecological-centered vision of systems and wealth and well-being, and therefore on an integrated approach to conservation, economy, livelihoods, and jobs. To do so, it will support mainstreaming of activities and investments at sector and planning levels to sustain a marine economy with the integration of social and environmental actions and foster skills, tools, knowledge and technology transfer that enable the private and public sector to align agendas, incentives, priorities and investments planning of economic investments with long-term goals as well as sustainable marine economy approach and explore possibilities together for a marine-based production that boosts job creation and economic development. Through this integrated approach, the project aims to: (i) improve the management effectiveness of 1,694,290 hectares and 662,630 hectares of existing terrestrial and marine protected areas respectively and 46,969 hectares and 597,371 hectares of proposed terrestrial and marine protected areas respectively; (ii) improve management of 604,000 hectares and 59,737 hectares of terrestrial and marine habitats (outside PAs) respectively to benefit biodiversity; (iii) restore 6,000 hectares of pasture and degraded agricultural land and shallowing drawdown areas of the Caspian Sea; and (iv) directly benefit around 8,500 people through improved resource use and livelihood opportunities, agricultural management practices, and small scale enterprises and climate mitigation measures and capacity building efforts.

Indicative Project Overview

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Project Objective

The project objective is to promote an integrated ecosystem-based approach to conserve key species and habitats of the Caspian Sea and ensure sustainable economic development.

Project Components

Component 1: Strategic policy and planning to promote ecological integrity of the Caspian Sea landscapes and seascapes

3,800,000.00	26,600,000.00
GEF Project Financing (\$)	Co-financing (\$)
Technical Assistance	GET
Component Type	Trust Fund

Outcome:

Outcome 1: Promoting the ecological integrity of the Caspian Sea for biodiversity conservation and sustainable economic development integrated into policy, planning and management practices. This will be measured by:

- (i) Number of policy directives on conservation and sustainable use of Caspian Sea
- (ii) Number of sector-based technical guidelines on sustainable use of wetland resources developed for Caspian Sea
- (iii) Improved management effectiveness of 1,741,259 hectares and 1,260,000 hectares of existing and proposed terrestrial and marine protected areas respectively
- (iv) Monitoring system developed /upgraded protocols with standards, protocols and procedures to assess status of Caspian Sea ecological conditions for informed decision-making

Output:

Output 1.1: Improve the policy instruments, technical guidelines and institutional arrangements for marine spatial planning

Output 1.2: Integration of results of marine spatial planning into key economic development sectors

Output 1.3: Enhanced environmental monitoring of the Kazakhstani part of the Caspian Sea by responsible government entities to inform effectiveness of spatial land use/PA/KBA planning and management

Output 1.4:

Improved conservation and protection of globally important biodiversity in the Caspian Sea region through PA/conservation area expansion, PA and KBAs effective planning

Component 2: Sustainable management of land and water resources in the Caspian lowlands and western region of Kazakhstan

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
1,800,000.00	12,600,000.00

Outcome:

Outcome 2: Improved resilience/productivity of agricultural landscapes, habitat connectivity and flow of ecosystem services in productive landscapes in the Caspian lowland and western region of Kazakhstan. This will be measured by:

- (i) Improved management of 604,000 hectares and 60,000 hectares of terrestrial and marine habitats (outside PAs) hectares of terrestrial and marine habitats, respectively to benefit biodiversity
- (ii) 6,000 hectares of degraded agricultural and pastoral lands and shallowing areas of the Caspian Sea under sustainable land management
- (iii) Weighted vulnerability analysis completed to identify vulnerable areas and practical measures to control and manage degradation in the Caspian Sea environs
- (iv) At least 15 points increase in national capacity for Integrated management/ SLM as measured by UNDP capacity development scorecard

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(v) At least 8,500 persons (50% women) benefit from the project

Output:

Dutput 2.1: Territorial planning in the pilot districts to reduce anthropogenic pressures and impacts on the Caspian Sea ecosystems

Dutput 2.2 Resilience assessments of landscapes, habitats and land uses in coastal areas to land degradation and climate-induced risks to support lanning and development of practical guidelines for promoting/ mainstreaming SLM/BD in the agriculture, grazing and infrastructure sectors.

Jutput 2.3 Piloting SLM in the pilot districts

Output 2.4: Roll out of a comprehensive capacity building and research partnerships

Component 3: Financial incentives/instruments for sustainable natural resources management, alternative nature-friendly livelihood activities and engagement of private sector.

600,000.00	4,200,000.00
GEF Project Financing (\$)	Co-financing (\$)
Investment	GET
Component Type	Trust Fund

Outcome:

Nutcome 3: Improved financing and incentives for nature-positive practices in the Caspian Sea and adjacent territories. This will be measured y:

) At least 2-3 new nature-friendly financial instruments developed and tested in the project landscapes/seascapes

i) At least 20% increase in private-sector funding for nature-positive activities that focus on nature-based economic solutions

ii) At least 15 small- scale community enterprises supported through private public partnerships.

(iv) Improved capacity of district level to improve financial management as measured by capacity development scorecard

Output:

Output 3.1. Economic valuation of key ecosystem services of Caspian Sea assessed and informed to policy makers to enable informed decision-making to achieve more sustainable economic development

Output 3.2. Nature-based solutions for ecosystem restoration identified and implemented

Output 3.3: Diversified resilient livelihoods with communities to support ecosystem services provision, species and habitat recovery and the emergence of new blue/green business opportunities

Component 4: Knowledge management, awareness raising and gender mainstreaming

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
373,810.00	2,600,000.00
Outcome:	

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Jutcome 4: Upscaled awareness, information management and gender mainstreaming to enhance appreciation of the biodiversity and economic values. This will be measured by:

- i) At least 60% of sampled population aware of threats and benefits of nature-friendly activities as indicated by KAP survey
- ii) At least 10 good practices of nature-based solutions codified, adapted and disseminated
- (iii) At least 10 regional knowledge sharing events completed with Caspian Sea countries

Output:

Dutput 4.1: Education and awareness enhancement using a range of gender sensitive media tools for marine and coastal sustainable economic levelopment

Dutput 4.2: Documentation and dissemination of best practices to promote replication

Jutput 4.3.

Cooperation and exchange of information and learning, exchange visits and sharing information with other Caspian Sea countries

M&E

350,000.00	2,100,000.00
GEF Project Financing (\$)	Co-financing (\$)
Technical Assistance	GET
Component Type	Trust Fund

Outcome:

outcome 5: Enhanced monitoring for adaptive management. This will be measured by: (i) Adaptive management measures applied to adjust hanging needs.

(ii)MTR evaluation recommendations addressed effectively

Output:

Output 5.1: M&E system supports project impact assessment including gender and youth mainstreaming

Component Balances

Project Components	GEF Project Financing (\$)	
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Component 1: Strategic policy and planning to promote ecological integrity of the Caspian Sea landscapes and seascapes	3,800,000.00	26,600,000.00
Component 2: Sustainable management of land and water resources in the Caspian lowlands and western region of Kazakhstan	1,800,000.00	12,600,000.00
Component 3: Financial incentives/instruments for sustainable natural resources management, alternative nature-friendly livelihood activities and engagement of private sector.	600,000.00	4,200,000.00
Component 4: Knowledge management, awareness raising and gender mainstreaming	373,810.00	2,600,000.00
M&E	350,000.00	2,100,000.00
Subtotal	6,923,810.00	48,100,000.00
Project Management Cost	346,190.00	2,889,000.00
Total Project Cost (\$)	7,270,000.00	50,989,000.00

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

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

The Caspian Sea is the largest inland body of water in the world by area and accounts for 40 to 44% of the total lacustrine waters of the world. The coastlines of the Caspian Sea are shared by Azerbaijan, Iran, Kazakhstan, Russia, and Turkmenistan and has a length of about 1,200 km, a width from west to east from 195 to 435 km, which has no connection with the ocean, but has all the features of a sea. According to the bottom topography and hydrological features, the Caspian Sea is divided into three parts: northern, middle and southern. The northern shallow part occupies 80,000 000 km². The area of the entire sea is about 371,000 km², the volume of water is about 78,000 km², the average depth is up to 208 m. Characteristic features of the climate: the predominance of anticyclones, dry winds, sudden changes in air temperature. The long-term average air temperature in July - August over the entire Caspian Sea is 24-26° C, on average 200 mm of precipitation falls over the reservoir. The waters of the Caspian Sea are relatively poor in sodium and chlorine ions, rich in calcium and sulfates. In terms of salinity, the Caspian Sea belongs to the mesohaline zone, where the salinity of the water ranges from 3 to 15-16%. The presence of biogenic elements in the water favorably affects the development of phyto- and zooplankton in the Northern Caspian. A significant role in the deep part of the Northern Caspian is played by the processes of regeneration of biogenic elements, the rate of which is greatly influenced by temperature, water circulation, wind regime, mineral phosphorus and silicic acid.

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Throughout its history, the Caspian Sea has been a very important source of biological resources. They make up a single ecosystem and is the result of the interplay of many natural and man-made factors—the flow of fresh water into the sea, the hydrological and hydro-chemical regimes of the sea, feeding productivity, natural and artificial reproduction of fish and the toxicological situation and fishing in the region. The Caspian Sea is important as a region for the seasonal migration, molting and hibernation of birds which fly there from almost the whole territory. Roughly 10–12 million birds find a temporary habitat in the region on their annual migrations. About 3–3.5 million birds winter on the Caspian, settling in wetlands on river deltas. Most of these wetlands are nature reserves and included in the list of wetlands of international importance. The Caspian also preserves the only marine mammal of northern origin, the Caspian Seal (*Phoco caspica*). In recent decades the population of the Caspian seal has been in a poor state because of reproduction crisis: according to recent estimates the population is now only 420 000 head. However, the most important of the Caspian's biological resources is its fish stocks—about 123 fish species and subspecies. Their composition has been determined by the historical evolution of the sea: isolated from the other oceans of the world, it incorporates species originating in both the north and the south (the Mediterranean).

Plankton and benthos play a huge role in the life of fish living in the Northern Caspian. 449 species and varieties of algae, 315 species and subspecies of zooplankton and 306 species of these animals were found in the Caspian Sea, of which 414 species of algae and 216 species of zooplankton are found in the Northern Caspian. At present, the fish fauna of the Caspian Sea and the mouths of the rivers flowing into it is represented by 123 species and subspecies of which 45% are endemic. About 40 species are of commercial importance, but the main fishery is about 25. At the same time, the most important of the Caspian fish are sturgeons. Another wildlife of the Caspian Sea with river mouths is represented by aquatic and semi-aquatic mammals - 8 species, including the Caspian seal and migratory birds - 110 species (18 rare). The Caspian is biologically unique because, together with the rivers that flow into it—first and foremost the Volga—it contains the world geno-fund of the sturgeon and is the world's only repository of a diversity of species of sturgeon. It includes six species and one subspecies—the great sturgeon, *Acipenser nudiventris* (the spiny sturgeon), the sterlet, the Russian sturgeon, the Persian sturgeon, the North Caspian stellate sturgeon, and the South Kura stellate sturgeon. Until recently catches of sturgeon in the Caspian Sea accounted for up to 82 per cent of total world catches. In order to preserve and restore the biological resources of the Northern Caspian in the context of the development of oil and gas fields, an integrated ecosystem approach is required, linking the development of the oil and gas complex with the strengthening of environmental measures that preserve the natural habitat.

The Republic of Kazakhstan became a party to the Convention to Combat Desertification in 1997 after its ratification. The Convention to Combat Desertification puts forward a qualitatively new approach to the management of dryland ecosystems, the central element of which is national, subregional and regional action programs. These programs of action should be aimed at eliminating the main causes of desertification and drought, and at identifying measures to prevent and eradicate these phenomena. The Republic of Kazakhstan signed the UN Convention on Biological Diversity in 1992 after its ratification in 1994 and in 1998 completed the development of an excellent National Environmental Action Plan (NEAP) in which biodiversity was an important component.

Key threats and Drivers to management of the Caspian Sea:

There are a number of threats, that vary across the Caspian Sea leading to ecosystem degradation impacting terrestrial, freshwater and marine ecosystems and the key species that occupy these ecosystems, including the Caspian Seal, sturgeon and migratory birds and other species that occupy the area. As a consequence, many of the species that occupy the Caspian Sea are in decline and are particularly vulnerable to a variety of threats. Drivers and threats continue to result in significant loss of biodiversity, marine degradation, diminished ecosystem services, livelihoods, and the natural ecosystems that support socio-economic development, human well-being and global environmental benefits. Caspian Sea biodiversity loss is considered to be largely due to (i) high level of poaching; (ii) unsustainable fishing; (iii) pollution from oil and gas extraction, oil radio-active waste and land-based sources of pollution; and (iv) climate change that is causing increased evaporation resulting in the drop of water levels in the Caspian Sea.

<u>Degradation of Catchments of the Caspian Sea</u>: The ecology of the Caspian Sea depends to a great extent on the state of the

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environment in its catchment area. That area in turn abounds in environmental problems which are the result of the economic orientation of each region in the Caspian basin—of the sea itself, of the coastal territories and of the rivers that flow into the sea. Among these problems are: (a) the quantitative and qualitative depletion of natural resources (including bio-resources) involved in economic cycles; (b) the degradation of natural and man-made ecosystems; (c) the deteriorating living conditions and health of the population; (d) pollution of the marine environment; and (e) the degradation of water ecosystems. The major sources of pollution in the Caspian are pollutants flowing in with river waters (overland run-off); the disposal of untreated industrial and agricultural waste water, and municipal and domestic effluent from cities and settlements in the coastal zone; sea and river navigation; oil and gas production on land and in the shelf zone; oil transport by sea. In particular, the coastal landscape is damaged by water-level fluctuations (on both storm and decadal scales), earthquakes and climate change. Some of the man-made causes are destruction of coastal vegetation, regulation of river flows, urban and industrial development, aquaculture and agricultural expansion, and land and sea-based pollution (the latter discussed in the next section).

<u>Sea and adjacent coastal land pollution</u> due to operations of oil companies. The intensive oil and gas development in the Caspian region has caused serious water, air and land pollution problems, natural resources depletion, harm to wildlife and plant life, ecosystem disturbance, desertification and loss of biological and landscape diversity. Oil spills, waste from onshore industrial and municipal sites and chemicals, untreated sewage and trash carried in from rivers are major causes of land and water pollution. About 1 million cubic meters (264 million gallons) of untreated industrial wastewater is dumped into the Caspian each year, according to the <u>Pars Times</u>. Huge amount of pollutants enters the reservoir at a time. These are petroleum hydrocarbons, heavy metals, phenols, synthetic surfactants, organochlorine pesticides, cumulative poly-toxicosis of the Caspian seal caused by sea pollution, etc.

Overfishing: Overfishing, exacerbated by illegal, unreported, and unregulated (IUU) fishing, is a serious threat to the conservation of the Caspian sturgeon populations, exposing them to the brink of extinction. This indicates the importance of investigating the causes and eliminating the consequences of the occurrence of IUU fishing. Commercial sturgeon fishing in the Caspian Sea has historically been the most important part of the region's fisheries by producing about 90% of the world's wild caviar. The critical condition of the Caspian Sea sturgeon populations, the continuing scale of poaching and illegal fishing, placing sturgeons on the brink of extinction, together with the lack of information about the drivers of the occurrence of illegal fishing.

<u>Spread of invasive species:</u> Exotic species are of considerable concern for the Caspian Sea, and dozens of species have been introduced both naturally and artificially. The accidental introduction of the comb jelly (*Mnemiopsis leidyi*) threatens the stability of the Caspian ecosystem. According to scientists, in the Middle Caspian, comb jelly was recorded along the entire coast of Kazakhstan and Turkmenistan over depths of 20 to 170 m at a temperature of 24.6-26.60⁰ C and a salinity of 11-13‰. In some years in the Northern Caspian, the number of zooplankton decreased by 5.3 times, the biomass by 6 times, and the most significant was the decrease in the number of the Copepoda group. Direct effects of *Mnemiopsis leidyi* could include reduction in fish stocks, with consequent effects on human livelihoods, food sources for the local populace, and food sources for the Caspian seal and the sturgeon[1]¹. Rectification of this problem will require short-term action against *Mnemiopsis leidyi*, and in the longer term, regional agreements on mechanisms to control future invasive species will be required.

Exacerbating climate change negative effects/increased climate variability and extreme weather events: Shallowing of the Caspian Sea. Fluctuations in the level of the Caspian Sea are mainly due to the ratio of the characteristics of the water balance, changing under the influence of anthropogenic climate change. From 2006 to 2020, the Caspian Sea experienced the least amount of precipitation. In addition, due to dry years in the Volga River basin, the inflow of water was the smallest. The Ministry of Ecology and Natural Resources believes that the main reason for the lack of water is climate warming, which has engulfed the entire northern hemisphere. Major sources influencing the Caspian Sea levels are the water flows of rivers emptying into the Caspian Sea, precipitation, and evaporation, with evaporation being considered as the main reason for a decline in water levels. Given that evaporation is contingent on temperature, adaptation rather than mitigation strategies will be critical for countries affected by these changes. Air and water temperatures, and, hence, evaporation levels, will continue to rise regardless of local efforts to reduce

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emissions. The case of the Caspian Sea is illustrative of the destructive effects of greenhouse gas emissions. Substantially lower water levels will create serious problems for the region, including threats to the Caspian's fishing industry and water infrastructure, as well as the food and energy security of littoral states.

<u>Drivers of environmental degradation</u>: The main problems of the country in the field of desertification include: 1) lack of rational organization of the territory, providing an ecologically and economically expedient location of lands and their internal arrangement; 2) manifestation of water and wind erosion, mudflows, flooding, swamping, secondary salinization, desiccation, compaction, pollution and clogging with industrial waste, chemicals; 3) significant fire hazard of forests; 4) decrease in fertility of arable lands, productivity of hayfields and pastures; 5) the presence of significant areas of land disturbed as a result of economic activity, the need to return them to secondary economic circulation (abandoned degraded lands potentially suited for agriculture), decreased land productivity due to pollution and overexploitation, decrease in crop yields and production, a decrease in livestock productivity; 6) lack of rational use of water resources, not widespread use of water-saving technologies in industrial, agricultural, and municipal sectors, lack of biodiversity and climate friendly agricultural practices.

Key Barriers to achieve global benefits

Barrier 1: Insufficient technical, financial and operational government/stakeholders capacities available to support the necessary process for expanding the protected area system of Kazakhstan in the Caspian Sea region and for effective management of the environment of the Caspian Sea. While, the country has a comprehensive law on environmental protection and on the use of natural resources, supported by provisions in tits constitution, there is a need for stronger enforcement of, and compliance with the existing laws and regulations which in themselves are sufficiently stringent. The monitoring and enforcement activities are also not yet fully carried out, perhaps due to the lack of capacity and investment in monitoring. Similarly for the same reasons, there is limited efforts in terms of assessing the health of the marine environment, strengthening pollution prevention (including land-based), monitoring and control, disaster prevention and response, improving fisheries protocols, improving biodiversity protocols, management of invasive alien species and others, all of which require enhanced technical, financial, capacities and operational support.

Barrier 2: Disintegrated and uncoordinated land use planning: v various categories of marine and land areas within the catchment areas are managed largely in isolation of each other by different entities without considering ecological and ecosystem integrity of the Caspian Sea. Sectoral approaches to land and marine use planning are largely applied in isolation of other policies (e.g. agriculture, fisheries, industrial, oil and gas, etc.) and practices thus leading often to resource use conflicts that result in unwanted environmental problems. This is because there is a lack of long-term operational intersectoral coordination on land/seascape planning and management for the Caspian Sea and its catchments leading to uncoordinated and piece -meal efforts to deal with the associated environmental problems. The lack of zoning of marine areas of the Caspian Sea, means that development and economic activities take place without must consideration of the environmental consequences. Inconsistent or conflicting policies and measures are often the root cause of the problem. Institutional deficiencies and sectoral interests can also bring about ineffective spatial planning, environmentally aggressive subsidies, insufficient control procedures, inadequate EIA practices, and agricultural and development policies, all of which have been identified as root causes in the Caspian Sea and its environs.

Barrier 3: Poor or absent financial/economic incentives for biodiversity conservation. Deconomic Transport Deconomic Incentives for biodiversity conservation. Deconomic Sea Contains Considerable oil and gas deposits and is rich in bioresources as well as offers remarkable opportunities for transport between the littoral countries. Due to the relative improvement in its financial and economic status in the last two decades due to the global rise in oil prices, increased oil and gas exploitation in the region was promoted. Yet unemployment rates remained generally high, and considerably higher among the women and hence the government's highest priority was to creation, health, and education than to environment protection. As a consequence there is now limited incentive for enhancing environmental protection and the necessary monitoring and enforcement activities to protect the environment. Integration of the development planning process and environmental protect still remains to be fully achieved. The country is not using economic incentives to promote environmental protection, particularly in

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the large oil and gas exploration sector. Further, donor based financial contributions to the region is also a major constraint. Thus a new paradigm change is required to enhance economic incentives to encourage the private investors, in particular those in the oil and gas exploration business to invest in more environmentally friendly practices and support conservation efforts thar would require government intervention in new policies and offer incentives to encourage a transformational change.

Barrier 4: Limitations in information. The Caspian Sea region suffers from severe limitations in available data and information both to decision makers and to informed members of the society. Considerable research and monitoring has been carried out in the past, but the data is often not comparable across the region, it is often insufficient, inaccurate or non-harmonized and not freely exchanged and shared among the responsible institutions. Further the lack of strong country commitment has not allowed the available information to be used in a coherent and comprehensive manner to address the environmental issues. Further, the use of whatever information that is available is often constrained by poor dissemination and access, non-user friendly formats and insufficient media attention to the environmental issues or lack of information technology for information exchange. This suboptimal availability of information can result in uncoordinated and unsubstantiated policies and measures, within the country and between the countries that abut the Caspian Sea

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Baseline

Under the baseline scenario, national and oblast sector and development institutions will continue to inadequately address biodiversity conservation and ecosystem services within the Caspian Sea ecosystem in decision-making (continuing the sector-based approach), with adverse implications for interconnectivity of sectors, systems and landscape/seascape inter-relationships. Sectoral and development planning is likely to continue in an exclusively sector-based manner and policy coherence and multi-sectoral governance mechanisms will be limited that does not adequately result in implementation of integrated nature-based solutions to address the drivers of environmental degradation within the Caspian Sea and its immediate environments. Policies and practices will continue to promote the capitalization of natural resources by powerful business interests (oil and gas) at the expense of the local communities and environment with likely little or no room for convergence of interests and compromise. Limited coordinated engagement between national, oblast, rayon and local stakeholders and regional Caspian Sea countries and institutions will prevent collective actions and developing regional partnerships that will further advance conservation, resilient and sustainable management of critical systems that are important for the maintenance of the Caspian Sea biodiversity and habitats. Agricultural and industrial activities in the coastal and riparian areas will continue to advance without adequate consideration to impacts on the marine ecosystems of the Caspian Sea. Insufficient recognition of the need for multi-sectoral and integrated planning and management of the Caspian Sea means that biodiversity and ecosystem services, and consequently populations and habitats of critical species (Caspian Seal, sturgeon and migratory birds) will continue to be degraded and lost.

To support the shift to a more transformative integrated and inclusive planning and management of Kazakhstan portion of the Caspian Sea, the project will help address the threats to the Caspian Sea, its biodiversity and habitats through a holistic and multidisciplinary spatial planning effort that will build on the current baseline and take into consideration lessons learned from previous projects. The baseline investments, initiatives, projects and commitments (see Table 1 below) are aligned with the National Biodiversity Strategy and Action Plan that proposes integration of the biodiversity concerns in economic and social development planning. It also aligned with the Caspian Seal Conservation Action Plan that calls for enhancement of regional cooperation, taking appropriate measures for the protection of key habitats and for ensuring the preservation of areas which are essential to the maintenance of the vital biological functions of seals (breeding, feeding, and rest), calls for the restoration of degraded habitats, prevention of hunting, improving public awareness, etc. It is also supportive of the Convention on the Conservation of Migratory Species of Wild Animals to halt and reverse the decline of migratory species and reduce pressure on critical habitats by management based on integrated approaches. It will be supportive of the outcomes of the Caspian Environment Program (CEP), a regional umbrella program aimed to halt the deterioration of environmental conditions of the Caspian Sea and to promote sustainable development in the area for the long-term benefit of the Caspian population. In this regard, the project will attempt to address the multiple environmental issues and various transnational measures to fight the imminent dangers towards the Caspian environment. It will abide by the recommendations of the Tehran Convention that serves as an overarching legal instrument laying down general requirements and the institutional mechanism for environmental protection in the Caspian Sea region and support the different protocols such as the: (i) Protocol Concerning Regional Preparedness, Response and Co-operation in Combating Oil Pollution Incidents ('Aktau Protocol'); (ii) Protocol on the Protection of the Caspian Sea against Pollution from Land based Sources and

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Activities ('Moscow Protocol'); (iii) Protocol for the Conservation of Biological Diversity ('Ashgabat Protocol') and (iv) Protocol on Environment Impact Assessment in a Transboundary Context. The framework treaty is based on a number of underlying principles including the precautionary principle, the polluter pays principle and the principle of access to and exchange of information. The two major areas of concern that will be addressed are (i) prevention, reduction and control of pollution, and (ii) protection, preservation and restoration of the marine environment. These efforts will be supported through various ongoing government schemes such as: Refer Table A.1 in Annex A for further details of national and state schemes that can provide co-financing for supporting proposed project activities.

Table 1: Some key current investments in the Caspian Sea

Plans/Projects	Objectives	Activities complementary to GEF 8 Project
The Trans-	TITR, also known as the Middle Corridor, is an initiative that connects	This large-scale initiative is a big test for balancing
Caspian International Transport Route (TITR)	the rail freight networks of China and the European Union via Central Asia, the Caucasus, Turkey, and Eastern Europe. For Kazakhstan, the TITR provides expanded access to global markets, facilitating the sale of oil and other commodities.	economic development with ecological preservation by ensuring the Caspian Sea's biodiversity is safeguarded alongside infrastructure expansion.
Digital Hub in the Mangistau region[2] ² (2022-2025)	The United Kingdom is investing 151 billion tenge in the creation of the Caspian Digital Hub. This project involves laying fiber optic links along the Caspian Sea floor and establishing an underwater cable. Additionally, two data centers in Aktau and Baku will be constructed. The initiative aims to establish a communication channel for data transfer between Europe and Asia via Azerbaijan and Kazakhstan. The Caspian Digital Hub is expected to foster an open information society in the Eurasian region	This project's spatial data capabilities support better planning, management, and conservation strategies. Additionally, it facilitates the collection of valuable scientific data, contributing to research efforts and informing conservation planning. The enhanced communication infrastructure fosters collaboration among stakeholders involved in the management of protected areas, conservation, etc.
Construction of a New Gas Processing Plant in Zhanaozen[3] ³ (2021-2025)	The company 'KazMunayGas,' in collaboration with 'KazGPZ,' is undertaking an investment project to construct a new gas processing plant in the city of Zhanaozen in the Mangystau region. The plant is designed to process 900 million cubic meters of associated petroleum and natural gas. The total cost of the investment project, led by 'KazMunayGas' and 'KazGPZ,' amounts to 167.6 billion tenge.	The positive impact on socio-economic conditions in the region will manifest through the enhancement of the economic and industrial potential. This includes the creation of new job opportunities, the utilization of Kazakhstani materials and equipment, a rise in the population's income. These outcomes align with the objectives of the GEF 8 Project, fostering regional development and social well-being.
Wholesale and distribution center in Aktau (2021- 2024)	In Aktau, construction is currently underway for the wholesale and distribution center 'Aktau WDC,' with a total cost of 3.5 billion tenge. The facility includes a dry warehouse with a capacity of 24,000 tons and climate-controlled storage for 54,000 tons, enabling simultaneous storage of substantial product volumes, including 20,000 tons of vegetables. The center is expected to open in 2024, doubling the vegetable storage capacity in the region. This expansion aims to stabilize prices and empower consumers to purchase products directly from producers.	The project will contribute to the growth and sustainability of SMEs in the region, fostering the development of value-added supply chains.
Food security development concept (planned)	As part of the food security development concept until 2026 in the Mangystau region, 48 projects are planned with investments totaling 138.8 billion tenge, aiming to create 3,291 new jobs. The conceptual framework includes the construction of a dairy factory, a wholesale distribution center, a communal market, and a greenhouse complex.	The project will contribute to the growth and sustainability of SMEs in the region, fostering the development of value-added supply chains.

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Eurasian supply chain center in Aktau (2021-2024) The project with China as the project investor, comes with a total project cost of 8,400 million tenge and involves creating a multimodal supply chain connecting China with the Caspian region, linking it to the Lianyungang Port. The initiative aims to establish new trade routes for the delivery and circulation of goods between the Caspian region, eastern China, and East Asia.

The project will contribute to the growth and sustainability of SMEs in the region, fostering the development of value-added supply chains.

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Resilience to future changes in drivers

Given the above discussion of threats, drivers and baseline factors, the probability of further loss and degradation of the Caspian Sea and its biodiversity and ecological functions will remain **high**. The PIF team has developed simple narratives that explore potential future changes in key drivers beyond the project's scope. These narratives are not centered on varying degrees of integrated landscape/coastal and wetland management, which the project already addresses, instead, they focus on external factors. Key narratives are outlined below, which are now supporting the proposed project in better assessing its resilience to external factors and uncertainties:

External Driver 1 – Uncertainty of external influences related to land and wetland uses: The potential of worsening economic conditions and the challenging global political environment can fundamentally alter Kazakhstan's economic outlook in the future. This can put pressure of critical marine and coastal areas, in particular those areas that are already in the forefront of the economic progress, in particular in the oil and gas sectors. The pressure on these ecosystems may escalate, causing higher loss of critical corridors and habitat locations for key species and their habitats. Better integration of ecosystem service valuation and cost benefit analysis as well as integrated spatial planning will/could reduce the threat level of this driver and the materialization of the risk it poses. The project through the work done in Component 1 (enabling framework to promote ecological integrity of the Kazakhstan part of the Caspian Sea for biodiversity conservation and sustainable economic development) and Component 3 (seeking financial incentives/ instruments for sustainable natural resources management, alternative nature-friendly livelihood activities and engagement of private sector) will support an integrated effort to manage these threats. The viability of these activities will be further assessed at PPG stage to develop a robust policy, institutional and financial framework on the basis of which and effective measures will be instituted to improve conservation and sustainable management of the Caspian Sea and adjacent coastal and terrestrial areas.

External Driver 2 - Inability to accurately predict the future climate situation: This scenario envisions a future where climate change effects intensify beyond current projections. Unprecedented climate variations can also increase droughts, flooding, erosion and landslides reducing the productive potential of the land, thereby potentially re-directing government investments and priorities away from conservation action. In unprecedented situations, the shallower "shelves" of the northern and eastern Caspian are major food supplies for fish and birds, yet the entire northern and eastern shelves will transform in dry barren lands. This will devastate fish species, the Caspian Seal and a richness of mollusks and crustaceans species unique to the sea. These Caspian inhabitants have already suffered badly in the past century from pollution, poaching and invasive species. About 99% of Caspian seal pups are raised on the winter ice of the north Caspian. Yet, both the winter ice and indeed the whole north Caspian Sea will disappear. Remaining biodiversity hotspots in depths between 50 -150 meters are likely to be affected as rivers dump nutrients into the deeper central basins combined with rising temperatures. This will decrease oxygen levels and developing ecological dead zones could affect the remaining refuges of Caspian species. However, the project due to its nature of interventions in the areas of biodiversity, sustainable resource use and governance can produce results (within the context of Kazakhstan) that enhance the resilience of wetland and coastal ecosystems to climate change but also provide Kazakhstan with mechanisms that can be utilized even within the context of severe climate impacts. Nevertheless, a much larger regional concerted effort (beyond the scope of the project) would be required to make a significant impact to address this issue. At PPG stage, further assessment will be undertaken of potential future climate projections and risks to help design management intervention to manage and mitigate these risks, including specific actions that can be taken with the Kazakhstan context to minimize this risk,

External Driver 3 — Ineffective international collaborations along the Caspian Sea: International cooperation for the conservation of Caspian Sea can take many forms. Although the Caspian Environment Program provides a platform for collaboration that is further enhanced by the Tehran Convention and protocols emanating for this program, there are always overlapping interest of member countries, in particular in relation to oil and gas exploration and fisheries, that needs to be addressed before real progress can be made. In addition, differing national legislation complicates things and the differing political agendas that needs to be considered when developing areas of cooperation. Some nations have no relevant legislation, which can hinder progress in achieving collective regional action. Given so, the challenge beyond Kazakhstan, is the need to ensure effective international cooperation across all of the range countries and in particular to agree on a framework and process for bringing together these different groups and the structures and mechanisms involved to protect and preserve the Caspian Sea, its biodiversity and their habitats. In this scenario, international policies and collaborations must collectively prioritize conservation outcomes to ensure the maintenance of the viability of the entire Sea. The project's alignment with such initiatives enhances its impact, but also necessitates careful coordination of actions across the entire range and also to effectively leverage external resources effectively. More work will be done during the PPG stage to catch up on the developments in particular in relation to decisions regarding the Caspian Sea and generate and maintain specific links across the neighboring countries.

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- [1] Transboundary diagnostic analysis for the Caspian Sea (Volume 1)
- [2] https://invest.gov.kz/media-center/press-releases/mangistauskaya-oblast-stanet-tsifrovym-khabom-investory-iz-velikobritanii-zainteresovany-v-razvitii-/
- [3] https://www.kmg.kz/en/company/projects/all/stroitelstvo-novogo-gazopererabatyvayushchego-zavoda-v-g-zhanaozen/?ELEMENT_CODE=stroitelstvo-novogo-gazopererabatyvayushchego-zavoda-v-g-zhanaozen

B. PROJECT DESCRIPTION

Project description

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

The GEF alternative scenario based on the above-referenced plausible changes in key external drivers, which are outside the scope/control of the project, suggests that a 'Project-Based reality' (with project intervention) that supports transformative changes brought by interventions that focus on a broader inter-sectoral and integrated planning approach across the Kazakhstani part of the Caspian Sea would likely lead to a measured, but tangible outcome. This approach will likely promote a gradual shift to innovative approaches to integrated landscape/seascape management, that collectively include protected areas, coastal and marine systems, riparian and floodplains and intervening upstream terrestrial production areas that are commensurate with sound ecological principles In this situation, key aquatic wetlands and coastal habitats that are critical to migratory species and birds may likely be conserved, not only within protected areas, but in intervening aquatic habitats that are used by these species. During the PPG stage the project will work to incorporate robustly in its design exactly the augmentation of these above-mentioned dimensions.

Th above-proposed approach seeks to identify and take necessary actions to transform systems to achieve the project objective to support: 'an integrated ecosystem-based approach to conserve key species and habitats in the Caspian Sea to ensure sustainable economic development without compromising on the ecological values associated with the Caspian Sea'. Since the economy of the Caspian Sea is based on fisheries and exploitative industries, the project's vision is to make a transformational change in incorporating the value of ecosystems and biological resources into decision-making related to these sectors and and deploying innovative nature-based solutions across the Caspian Sea and its immediate catchment to achieve sustainable development and MEA goals. Moreover, the integration of biodiversity conservation and ecological principles in economic development planning and decision-making in the four landscapes will contribute to the protection and restoration of ecosystems and the preservation of ecosystems, by reducing key threats and impacts on the biological resources of the Caspian Sea and enhance ecosystem services and improve local revenues. To achieve these goals, the project will ensure that economic and social development plans are undertaken in an integrated and coordinated manner that engages all sectors and ensure that such development plans and strategies integrate biodiversity, climate risks, ecosystem services and local economic outcomes.. Through this approach, the project will identify what is needed to prevent further degradation of natural resources and ecosystems to buffer future climate risks associated with ecosystem productivity loss posed to the Caspian Sea. to The project will also leverage existing investments and catalyze innovative financial instruments and mechanisms through pilots to promote higher level of financial sustainability in the future.

Theory of change considerations:

The Theory of Change is presented in Figure 1. The basic assumptions underlying the project's feasibility is indicative of the potential to reverse, or at least, not accelerate the ongoing process of environmental degradation in the Caspian Sea. It is also premised on the commitment of the key stakeholders (including, in particular big extractive industry) to actions in achieving this overall objective through the potential and sustainable uses of the Caspian Seas productive economic resources. Best management practices, new and innovative technologies, improved and sustainable production systems, and financial solutions are factors that will help catalyze change and bring about a more nature-positive development scenario. To achieve this transformational change, the project's logical pathways are discussed below: The project's logical pathways are summarized below:

- If oil and gas companies are incentivized and involved in conservation planning processes that concern them, then there will be increased trust and buy-in to the implementation of sustainable resource use practices and to marine spatial planning overall.
- if participatory approaches are used for planning, local knowledge, data and best practices are incorporated it would lead to improved marine, coastal and adjacent landscape planning.
- If land use and development plans in adjacent basin areas are improved in this regard, then broader /seascape planning will lead to integration with other sectoral fisheries, agriculture, oil and gas and coastal developments.

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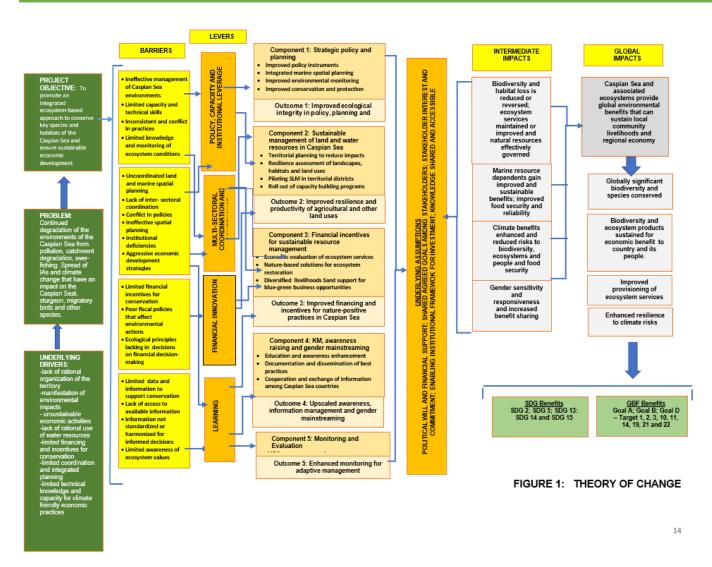
- if stakeholders begin to understand the important role that ecosystem services can play in their lives, they will likely see the benefits of improving their capacity and having tools and technologies to better conserve globally significant biodiversity across the Caspian Sea and its upstream terrestrial areas.
- if community members have increased capacity and awareness to pursue monitoring and enforcement activities including livelihood options that are conservation-friendly, this will lead to better ownership and management of resources and increase in income.
- Overall, if there is improved marine resource conservation and rayon/district level planning; improved management of coastal wetlands and riparian areas and their resources; increased capacity among communities; and operationalization of the integrated plans and other sectoral management plans; then this will lead to less degraded marine, coastal and terrestrial landscapes.
- These results will also lead to improved self-enforcement, which together with conservation-friendly livelihood options, will help alleviate the need to exploit natural resources, reducing behaviors such as illegal killing, over-harvest, poor agricultural and fisheries practices, and conversion of wetlands to other use.
- If these threats are reduced, then the Caspian Sea quality, integrity and biodiversity will be conserved, allowing the continued use of these areas for key species and conservation of globally important biodiversity.
- If the Caspian Sea biodiversity is conserved, the ecosystem services will be maintained, this will lead to improved security, wellbeing and livelihoods for surrounding communities and economic development.
- Within Kazakhstan and the region, if the project is implemented as planned it will become a model for management that can be successfully scaled-up to other parts of the country as well as regionally with the Caspian Sea countries.

Based on the theory of change and in response to the identified barriers, key outputs were identified consistently applying six system transformation levers of the GEF-8: policy and capacity, coordination with parallel initiatives[1]4, multi-sectoral governance, financial leverage, innovation and learning. The transformation levers also helped to thematically cluster program outputs into five inter-linked and interdependent components. In particular, the outputs and outcome of Component 1 apply the levers of policy, planning, monitoring and multistakeholder dialogues and are thus important in setting the enabling conditions to improve the likelihood of success of components 2, 3 and 4. This sets a route to arrive at an agreed framework under which functional governance, policies, institutions and regulations can be managed to promote an integrated and inclusive approach to planning and management of the Kazakhstani part of the Caspian Sea and its immediate catchment. It will also support a strengthened monitoring and reporting system that tracks the conditions of the ecosystem and ensure that this information is effectively used for improved management. This entire effort will be backed-up by a comprehensive program to enhance institutional and stakeholder capacities on the use of spatial planning tools to support and promote conservation, sustainable resource use, restoration of ecosystem services, climate-resilience and sustainable economic investments. The outputs and outcomes of Components 2 and 3 will operate in an integrated manner, delivering together the innovative and transformation change on the ground. In this respect, Component 2 is ensuring that there is non-duplication, but rather complementarity with parallel/ongoing initiatives. This features a pathway that is dependent on the demonstration of appropriate and validated nature-based solutions to resource use that will be based on the premise that if stakeholders (private enterprise and local communities) receive adequate benefits from environmentally positive practices, it will result in behavioral changes that encourage sustainable resource use. Component 3 primarily hinges on the transformation levers of financial leverage that is critical to provide the financing to ensure the sustainability of the outcomes of component 2. This is premised on the assessment of financing needs and development of appropriate financial solutions to sustain investments in the Caspian Sea environments that would require the active participation of the private sector, as a means to supplement the limited financing available through the public sector. The pathway of component 4 proposes that if the knowledge, data and information from previous initiatives from GEF and other development partners are synthesized and shared together with good practices resulting from the implementation of this project, it will catalyze its widespread adoption, scaling up and replication for greater impact and long-term sustainability, while also raising the profile of the marine and coastal ecosystems amongst sector entities, private sector partners and the public nationally, regionally and globally. Component 5 supports monitoring protocols to track progress towards meeting planned environmental and socio-economic benefits from the project and to provide for adaptive management for any adjustments to changing needs

[1] Such as the projects in the baseline section for component 3 of the proposed as well as e.g. BIOFIN for component 2

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Project Objective and Components:

The project objective is to promote an integrated ecosystem-based approach to conserve key species and habitats of the Caspian Sea and ensure sustainable economic development.

COMPONENT 1: STRATEGIC POLICY AND PLANNING TO PROMOTE ECOLOGICAL INTEGRITY OF THE CASPIAN SEA LANDSCAPES AND SEASCAPES

(Total cost: USD 30,400,000; GEF project grant requested: USD 3,800,000, Co-financing: USD 26,600,000)

Outcome 1: Promoting the ecological integrity of the Caspian Sea for biodiversity conservation and sustainable economic development integrated into policy, planning and management practices

The Framework Convention for the Protection of the Marine Environment of the Caspian Sea" (Tehran Convention), signed by five Caspian states (Tehran, 4 November 2003) and ratified by the Republic of Kazakhstan on December 13, 2005 provides the main instrument for regulating the

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protection of the marine environment of the Caspian Sea from pollution, including the protection, conservation, restoration, sustainable and rational use of its biological resources. However, the effectiveness of this framework, within the Kazakhstan context is constrained by the following factors:

- The legal and planning policies for the management and development of marine space is not synchronized, not comprehensive enough and does not really encourage the different sectors to reach out to one another;
- Some overlaps and contradictions in the management and use of marine space in the development of oil and natural gas industries and other sectors using this space is not conducive to sustainable management of the marine space, biodiversity and the environment and the landscape adjacent to it;
- Waste and pollution management in marine and adjacent economic development, especially in seaports, shipbuilding, coastal economic zones reduces resources, ecosystem resilience and investment efficiency;
- Human resources, technology, infrastructure, and financial capacity related to the sustainable management of the marine space is limited and weak;
- Unequal development among coastal localities has profound influence on the condition of the marine space;
- The relation between the status of the marine ecosystems and economic development (in general) tend to not to be fully recognized; and
- Current status of coastal urban and agricultural development lacks connectivity and integrated management mechanism that lead to unsustainable development.

The Land Code of Kazakhstan of 2003 and amendments therein, require that zoning is carried out for various uses, but this is not actively practiced. The sustainable management of the Caspian Sea is thus constrained by the lack of zoning of the marine area (and adjacent surrounding land area) according to the degree of stability and vulnerability, which makes it less possible to determine safe levels of industrial and recreational impact, slows down the processes of reducing risks to biological diversity and ecosystem health. The assessment of the marine space involves the study of the ecological state, carrying out ecological zoning, which is a reasonable zoning of the water area with a different regime of economic and environmental activities (development of deposits and transportation of hydrocarbon raw materials, navigation, protection of places where fish and seals congregate, allocation of an ecological corridor to ensure their migration routes and etc.). Detailed studies will be necessary to determining the state of ecosystems and biodiversity hotspots. Marine spatial planning (MSP) would serve as an important tool to help planners and developers to balance the different competing interests in the marine space, in particular to ensure that fisheries, tourism, oil and mineral exploitation, navigation and other economic uses are in consonance with good ecological and environmental practices and principles that would also benefit local community economy and livelihood needs. Governments, stakeholders, communities and all relevant parties will be able to design of marine spatial plans and help those in decision-making roles, including policy-makers, planners, local authorities and government officials at the local, national, regional and global level. It will help to integrate terrestrial, coastal and marine planning, including land-sea interactions and integrated multi-level governance. It will also help balance the integrated management of land, water and living resources to promote sustainable economic use in an equitable way. Planning the marine seascape will enable development and environmental sectors to coordinate and facilitate negotiation in order to solve resource use conflicts as well as avoid future ones.

Output 1.1 Improve the policy instruments, technical guidelines and institutional arrangements for marine spatial planning

Output 1.1, will help support the (i) development (update) of policy and technical guiding documents for supporting the implementation of marine spatial planning. This will particularly include improvement of legal and regulatory mechanisms for implementation of Marine Spatial Planning, synchronization of policies and laws for improvement of effectiveness and efficiency of management and use of marine resources and promotion of mobilization of resources for sustainable development of marine economy in consonance with environmental protection and response to climate change; issue of regulations and management criteria for each type of sea area according to the planning, procedures/guidelines for improved integration of marine spatial planning solutions into relevant local/sectoral development planning approaches. It will also undertake a (ii) stakeholder mapping of government and non-government stakeholders involved in the marine sectors to define institutional arrangements and coordination processes. These will in particular include, but not limited to sectors related to fisheries, tourism, industry, defense, trade, petroleum, inland waterways, natural resources, environment, finance, coastal and marine construction, energy, science and technology, NGOs, local communities, women organizations, small business sectors, etc. (iii) undertake baseline mapping of the marine space and adjacent land to support the MSP process, including synchronization of data at sector and administrative levels (data types and characteristics); and ensure compatibility of data/maps at scale and sector levels; (iv) development of directives, criteria and procedures for evaluating the effectiveness of implementation of MSP and integration of marine spatial planning with other area or sector based planning; and (v) develop a marine spatial plan for the marine space and adjacent land area that would serve as the basis for zoning of marine space for different conservation and development activities, and ensuring each type of economic development activity is carried out in consonance with good conservation and environmental practice. This encompasses activities such as hydrocarbon mining and transportation, shipping, protection of

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areas where fish and seals congregate, and identification of an ecological corridor to facilitate their migration. The Marine Spatial Plan (MSP) will serve as the basis for defining the activities to be supported under the project.

Output 1.2: Integration of results of marine spatial planning into key economic development sectors

The promotion of a sustainable marine economy requires a shift from a focus on the revenue generation and production systems to an ecologicalcentered vision of systems and wealth (including natural wealth) and well-being, and therefore on an integrated approach to conservation, economy, livelihoods, and jobs. However to promote this concept, the results of the marine spatial planning conducted under Output 1.1, needs to effectively be integrated into sector and development planning systems in the Caspian Sea to promote sustainable economic development opportunities (e.g. tourism, fisheries, oil and gas, marine aquaculture, energy, etc.). To do so, this output will support the following indicative activities: (i) review existing sector and private and public planning systems to identify entry points for integration of marine assets into these strategies and plans in the Caspian Sea: (ii) support the mainstreaming of activities and investments at sector and planning levels to sustain a marine economy with the integration of social and environmental actions; (iii) foster skills, tools, knowledge and technology transfer that enable the private and public sector to align agendas, incentives, priorities and investments planning of economic investments with long-term goals as well as sustainable marine economy approach and explore possibilities together for a marine-based production that boosts job creation and economic development. This will also need the skills to navigate the trade-offs, externalities and impacts of marine-based sustainable production and consumption; (iv) commensurate with the integration, it would also need to identify and develop a smart set of fiscal incentives that will boost the transition towards sustainable business models, including making the best use of industry revenues and existing development finance. In particular, this output will focus on the strategies, plans and guidelines to ensure that oil and natural gas development, fisheries, tourism, mining, navigation and other economic development activities are planned and managed within a set of agreed parameters to meet acceptable environmental standards.

Output 1.3: Enhanced environmental monitoring of the Kazakhstani part of the Caspian Sea by responsible government entities to inform effectiveness of spatial land use/PA/KBA planning and management

This output will provide incremental support to the recently established Kazakh Research Institute of the Caspian Sea to focus on environmental monitoring and research in the Kazakh sector of the Caspian Sea to preserve and regenerate its natural resources, fostering collaboration with research institutes and organizations of the Caspian states. The Institute will be responsible for development of a systematic monitoring of the ecological state of the ecosystems of the Caspian Sea and its coastal areas based on the existing monitoring observation network. In particular, it will focus on the study of such problems as the lowering of the sea level, mass mortality of fish and seals, preservation of the Caspian seal population, protection of coastal and marine biodiversity as well as to cooperate with the Caspian littoral states. The Institute will present independent information about the Caspian Sea ecosystem which will help state and local executive bodies take comprehensive measures as well as fulfill international and national liabilities for preserving the Caspian Sea. The Institute will be responsible for development of a systematic monitoring of the ecological state of the ecosystems of the Caspian Sea and its coastal areas based on the existing monitoring observation network. In particular, it will focus on the study of such problems as the lowering of the sea level, mass mortality of fish and seals, preservation of the Caspian seal population, protection of coastal and marine biodiversity as well as to cooperate with the Caspian littoral states. The Institute will present independent information about the Caspian Sea ecosystem which will help state and local executive bodies take comprehensive measures as well as fulfill international and national liabilities for preserving the Caspian Sea.

The aim of project support to the Kazakh Research Institute of the Caspian Sea is to ensure on the long-term that economic development is commensurate with the protection and maintenance of the health of the marine environment. It would help assess changes in the marine and adjacent land conditions so as to provide for adaptive management. This framework will define measures to improve institutional coordination and protocols for monitoring and enforcement, a capacity development plan for enhancing national and sub-national capacity for implementation of the monitoring framework and a manual and guidelines for establishing and implementation of monitoring system at local level. This output will include the following indicative activities: (i) review the use of existing biodiversity, marine degradation, invasive species and threat monitoring methods, information use and capacities across the relevant entities to assess usefulness of data and information collection methods, (ii) based on the reviews to help the Kazakh Research Institute of the Caspian Sea create a unified information and analytical system for collecting, processing, evaluating, analyzing, visualizing and storing information on the state of the environment. Such a system using GIS and remote sensing technology will allow access current measures to protect and manage the marine space and develop/update measures to enhance and protect the natural environment, to conserve biological species, to optimize nature management, etc. In addition, it is necessary to ensure that sturgeon spawners are accounted for in spawning, clarify the ways of their migration and feeding by using electronic chips. Genotyping of sturgeon fish and drawing up a genetic passport to confirm the origin of sturgeon fish (natural or artificially grown) will create a basis for the export of their products or the export of individuals in a live form, as well as for the sale of juveniles for stocking natural reservoirs. The intent is to develop a monitoring program for the Caspian seal and sturgeon, defining boundaries, and creating an ecological corridor along their migration routes. It will also help study the distribution of seal numbers in the Northern Caspian Sea during the reproduction period and assess population replenishment; (iii) training and capacity-building for staff of relevant agencies at Kazakh Research Institute of the Caspian Sea and provincial, district and local levels

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in effective data collection, verification, monitoring and management, and benefits of conservation- planning with support of the enhanced systems; (iv) support development of monitoring protocols to help in monitoring and assessing changes in ocean condition, resources and biodiversity and support enhanced laboratory facilities and capabilities for assessing causes of decrease in Caspian Sea populations, establishing stationary points near main locations of seal aggregation and support for rehabilitation and emergency assistance to injured seals; and (v) develop and test an improved index on seas governance for ensuring the application of integrated marine resource management.

Output 1.4: Improved conservation and protection of globally important biodiversity in the Caspian Sea through PA/conservation areas' expansion, PA and KBAs effective planning

Improved management of five existing terrestrial Protected Areas (PAs): Akzhayik State Nature Rezervat (111,500 ha), Karakiya-Karakolsky (137,500 ha), Novinsky Nature Zakazniks (45,000 ha), Aktau-Buzachinsky State Nature Sanctuary (170,000 ha), Kenderli-Kayasanskaya State nature Reserved Zone (1,230,290 ha) and of a proposed PA in the form of a State Nature Reservat in the Floodplain of the Zhaiyk River (46,969 ha). It would also ensure improved management of the existing marine protected area of Northern Caspian Sea State Nature Reserved Zone (662,630 ha) and proposed Seal Island State Nature Reserve (427,538.09 ha), Prorva 1 State Nature Reserve (86,232.27 ha) and Prorvo 2 State Nature Reserve (83,600.51 ha) as well seeking to establish linkages within these terrestrial PAs through KBAs and HCVFs (refer Annex C: Map). In accordance with the Decree of the Council of Ministers of the Kazakh SSR dated April 30, 1974 No. 252 and the Law of the Republic of Kazakhstan 'On Protected Areas', the northern part of the Caspian Sea was declared a protected area as a reserve for the creation of protected areas in the future with the status of a legal entity. Within the framework of the "UNDP-GEF Project on the conservation of wetlands in the delta of the Zhaiyk River with the adjacent coast of the Caspian Sea", in 2009, the Akzhaiyk State Nature Reserve was established on an area of 111,500 hectares. According to the instructions of the President of the Republic of Kazakhstan, work has begun in 2021 to prepare the necessary justification for the creation of a state natural reserve to preserve the population of the Caspian Seal, sturgeon and other rare species. At present, a draft Natural Scientific Justification (NSS) for the creation of a state natural reserve has been developed, and a feasibility study (FS) will be developed at the second stage. By the Decree of the Government of the Republic of Kazakhstan dated November 9, 2020, the Caspian Seal is included in the List of rare and endangered animal species. Proposed activities will include: (i) Technical support to the Committee on the creation of the new Nature Reserves in the Caspian Sea, including collection of baseline information on species, ecosystems, threats and management opportunities; development of a participatory five-year Management Plan; procurement of equipment for effective protection/conservation; development and implementation of a monitoring system for populations of seals, sturgeon species and their habitats in the reserve; monitoring of diseases of the Caspian seal for the purposes of prevention and control, invasive species monitoring and management (ii) In terms of existing protected areas, evaluate the existing baseline situation and the current status of PAs located in the coastal zone of the Caspian Sea to identify gaps and opportunities for improved PA management and protection; (iii) support gender-sensitive training and capacity building of staff of existing and proposed PAs to promote improved management; and (iv) assessing feasibility for establishment of eco-corridors that is aimed at preserving the migration routes of Caspian seals.

COMPONENT 2: SUSTAINABLE MANAGEMENT OF LAND AND WATER RESOURCES IN THE CASPIAN LOWLANDS AND WESTERN REGION OF KAZAKHSTAN

(Total Cost: USD 14,400,000; GEF project grant requested: USD 1,800,000; Co-financing: USD 12,600,000)

Sea level fluctuations, subsequent negative changes in coastal terrestrial landscapes and ecosystems, agricultural lands, secondary salinization, chemical pollution and soil deflation, degradation of natural fodder lands and desertification are one of the main factors determining the ecological instability of the adjacent territories of the Caspian Sea. Pollution of water and coastal ecosystems has a negative impact on flora and fauna in the region. The health of the local population is endangered, and the socio-economic stability of the surrounding areas depends on it (time is needed to discuss with national and local partners). The storm surges can impact the marine environment negatively, especially in shallow waters which undergo changes caused by pollution processes as a result of washing off waste from various industries, insoluble waste, and flooding of absorbing sedimentation tanks. With storm surges of medium magnitude, the level of pollution increases by a factor of 30 or more. Storm surges not only increase marine pollution, they also cause serious environmental damage to coastal ecosystems.

Outcome 2: Improved resilience/productivity of agricultural landscapes, habitat connectivity and flow of ecosystem services in productive landscapes in the Caspian lowland and western region of Kazakhstan

This Outcome complements the MSP planning and activities supported under Component 1. The intent is to ensure that the assessments, tools and solutions developed under Output 1.1 gets integrated in the planning, decision-making and implementation process at landscape level (in the areas adjacent to the Caspian Sea). The overall expectation is that through this process, conservation, sustainable resource management and economic decisions and actions are integrated into land planning processes, and later scaled-up at regional levels to help populate a range of gender-supportive practices adjacent to the Caspian Sea. Through this effort, it is expected that a significant extent of productive lands would directly or indirectly benefit from improved biodiversity and natural resource friendly practices in key development sectors (agriculture, animal husbandry, irrigation, coastal development and tourism). The following activities are proposed under this Outcome:

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Output 2.1: Territorial planning in the pilot districts to reduce anthropogenic pressures and impacts on the Caspian Sea ecosystems

In places of their continuous distribution (Caspian lowland, Turgay depression, West Siberian lowland), processes of natural-anthropogenic desertification, especially wind erosion, are actively manifested. Extremely unstable to the manifestations of techno genesis are the areas of distribution of eolian sandy deposits (Kyzylkum, the Caspian lowland, the Aral region, the Southern Balkhash region).The main economic consequences of desertification/land degradation are a decrease in crop yields and production, a decrease in livestock productivity, a decrease in the export potential in agriculture, a decrease in the development of food and light industry, and a sharp decrease in tax revenues from the processing and agriculture sectors. The total amount of economic losses as a result of desertification in Kazakhstan is estimated at hundreds of billions of tenge. Proposed indicative activities would include the following: (i) mapping of the coastal landscape (adjacent to the Caspian Sea) within the pilot districts to provide information for long-term planning for different economic uses and development activities. The mapping of the biological, social and economic options will help identify, prioritize and inform on-the-ground actions in each target district to support naturepositive actions in forestry, agriculture, fisheries, tourism, aquaculture and other livelihood options. (ii) review of district and local level land use and/or development plans to identify entry points for promotion of more sustainable development actions. Reviews would identify the priority actions from existing plans that could contribute towards achieving LDN targets and response hierarchy (Avoid > Reduce > Reverse land degradation) including specifically targets for achieving land degradation neutrality; (iii) based on the mapping and review of development plans, make recommendations for elaboration of plans or management strategies/integration into existing development/investment plans) for defining sustainable management (or adjustment of existing activities to become more sustainable) options for the coastal districts adjacent to the Caspian Sea. Development of plans (or mainstreaming into existing plans) will necessitate open and active dialogue across multiple stakeholder groups (including women, youth and disadvantaged groups) to build a common understanding of priorities, co-benefits and resolve conflicting aspirations for each pilot district, target setting for biodiversity, ecosystem services and sustainable resource use. The priority conservation and sustainable natural resource and productive activities will be designed based on detailed and spatially-explicit baseline assessments (e.g., using the rapid biological, social and economic assessment methodology in Year 1 of the project. Over the long-term, the mapping and strategic planning exercises will provide information for long-term management of the different economic uses and development activities, facilitate permitting processes that meet nature-friendly norms, and help develop appropriate governance and enforcement systems to ensure that development in the coastal districts are sustainable and environmentally appropriate.; (iii) strengthen capacity and tools for implementation of these integrated plans

Output 2.2: Resilience assessments of landscapes, habitats and land uses in coastal areas to land degradation and climate-induced risks to support planning and development of practical guidelines for promoting/mainstreaming SLM/BD in the agriculture, grazing and infrastructure sectors.

This Output will address the lack or limited protocols for monitoring land, agriculture and grassland degradation and availability of practical guidelines to be used to promote SLM and biodiversity integration in key sectors, in particular agriculture, grazing and infrastructure, which are the three likely sectors to have the greatest impact on land degradation. This Output will support the following indicative activities: (i) Agriculture, grazing and coastal infrastructure sector reviews at State level. The review of agriculture, grazing and coastal infrastructure sectors in regard to existing practices and how they pertain to SLM and BD and to provide prioritized recommendations for strengthening each sectors capacity to support SLM and BD. Assessing other sectors would also be beneficial but these appear to be the three biggest users and therefore potential impactors of land and therefore should be minimally engaged, reviewed, supported and better regulated in a holistic manner towards minimizing further land impacts and as feasible reversing/restoring existing degradation. The reviews will identify key gaps and weaknesses in each sector in regard to SLM and BD and develop prioritized recommendations to address these barriers. There might include, but be not limited to the following: (a) Protocols: Protocols for monitoring the three LDN global indicators for assessing and monitoring LDN based on global best practices including identifying data sources, frequency of monitoring etc.; water testing protocols; protocol for earth moving, including checklist, permit conditions and land use application form; protocols for reducing the impact of sand dredging (e.g. requiring use of silt curtains); protocol for climate-proofed roads and banks which ensure critical hydrological flows in the freshwater/saltwater interface. (b) Guidelines: Coastal/beach strand rehabilitation guideline; riparian habitats management/rehabilitation guideline; wetland rehabilitation guideline, forest rehabilitation guideline; strengthened EIA guidelines including robust monitoring and evaluation. (c) Guidebooks: Guidebook for farmers and women on SLM traditional agriculture, grazing, agroforestry and climate-smart practices; Guidebook on SLM best practices in the infrastructure sector; (ii) Identify best practice materials (internal and external) to assist in addressing land degradation. (iii) Develop protocols for monitoring land degradation in agriculture, grazing and infrastructure sectors (vi) Develop guidelines for strengthening SLM/BD in agriculture, grazing and infrastructure sectors; (v) provide an inventory and assessment of degraded lands, scientific support for management and rational use of lands; and (vi) identify vulnerable ecosystems in need of restoration and developing restoration plans to enhance status of degraded marine and coastal lands, as well as restoration of wetlands, among other measures

Output 2.3: Piloting SLM in the pilot districts

The outcomes of Outputs 2.1 and 2.3 will provide the basis for piloting SLM activities in the pilot districts. The activities can range from restoration of degraded agricultural lands, pasture/grasslands restoration and management, use of water-saving technologies, wind erosion prevention, reclamation of industrially polluted lands, adaptation measures, aquaculture/hatcheries, etc. This output will demonstrate how sustainable

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nature-based economic development pathways in agriculture, pasture, aquaculture management and other economic development activities can be engaged by communities (including women and youth), improving livelihoods of men, women and youth. This output will focus on implementation of well-designed, climate-smart nature-based solutions to reduce and reverse land degradation across the demonstration districts. Under this output, smallholder farmers (including men, women, youth and vulnerable groups) will be supported to implement innovative agricultural practices to reverse on-going land degradation and rehabilitate degraded areas, increasing resilience to climate change through SLM/CSA towards achieving LDN, protecting ecosystem services and improving incomes through increasing crop and livestock yields. The project will provide technical support through firms/NGOs to work with local land owner and farmers, including women and vulnerable group to assess suitable farming systems and locations for interventions in each district. Traditional knowledge of sustainable land management systems will be integrated and promoted; targeted interventions will include composting, mulching, cover crops, reduced tillage, crop rotations, restoration of fallow periods, use of appropriate beneficial agroforestry systems and terracing to reduce soil erosion, all contributing to increasing soil organic matter content, fertility, water and nutrient management and improved livestock (poultry, piggery) systems, along with measures to reduce the threats to land degradation, including support for address risks posed by IAS. Some of the indicative activities under this output could include demonstration of the following activities: Restoration and rehabilitation of fertility of arable lands; On-farm water management; Improved cropping systems and diversification; Improved crop, tree and seed varieties; Introduction of shelter belts; Alternate furrow irrigation; Sloping land horticulture; Prevention of wind and water erosion of soils; water-saving irrigation technologies in the cultivation of agricultural crops; IAS prevention and management; Superficial and fundamental improvement of degraded pastures and grasslands; Electronic pasture management; Insurance scheme for animal husbandry; Technical and biological reclamation of disturbed lands by mining, to turn them into economic or recreational circulation, etc.

Output 2.4: Roll out of a comprehensive capacity building and research partnerships.

This output is intended to support a marine spatial planning system and implementation of sustainable practices for enhancing sustainable economic benefits of coastal and marine ecosystems, while protection critical biodiversity and ecosystem services. Informed by the spatial planning (Outputs 1.1 and 1.2) and planning and mainstreaming of conservation outcomes and sustainable resource management (in agriculture, grazing and coastal infrastructure) in Outputs 2.1 and 2.2, a targeted multi-sectoral institutional capacity needs assessment in science and technology capacity transfer across government and private sector will be carried out. From the needs assessment the existing constraints for promulgation and implementation of the marine planning instruments and implementation of nature-friendly resource use practice will be identified and targeted collaborative interventions of science and technology transfer will be identified at key leverage points. Tasks will likely involve capacity building in areas such as marine natural capital analysis, marine spatial/adaptation planning at the sectoral and local levels, localscale participatory maritime planning, climate change projection and impact assessment and economic assessment of resources as well as land use planning, sustainable resource use practice, use of sectoral environmental assessments. Indicative activities under this output will include: (i) national capacity needs assessment to specify existing gaps capacity cross government[1], non-government and private sector and propose targeted collaborative interventions of capacity transfer in science and technology. This would involve the identification of capacity needs for data and knowledge generation, collection, use and management; development and use of Decision Support Tools (DSTs); knowledge and application of key concepts such as land-sea interactions, integrating the ecosystem-based approach into planning and conducting strategic environmental assessments (SEAs); as well as developing institutional capacity for coordination and data sharing among different sectors, agencies and governance levels; (ii) based on the assessment above, support the development and undertaking of a comprehensive gender-supportive capacity building partnerships in identified scientific approaches, innovation, technology transfer and ICM, MSP, SLM, SEA etc. and establish processes for inward transfer of technology from other advanced countries where relevant. The focus will be to develop the capacities of key sectors and stakeholders needed to facilitate and support the planning process and those needed to take up the planning results, and/or implement the plan (e.g. government ministries and agencies, including politicians); (iii) institutionalize the training within an appropriate institution to develop and sustain institutional human capital for related planning aspects on marine and land-based economic development.

COMPONENT 3: FINANCIAL INCENTIVES/INSTRUMENTS FOR SUSTAINABLE NATURAL RESOURCE MANAGEMENT, ALTERNATIVE NATURE-FRIENDLY LIVELIHOOD ACTIVITIES AND ENGAGEMENT OF PRIVATE SECTOR

(Total Cost: USD 4,800,000; GEF project grant requested: USD 600,000; Co-financing: USD 4,200,000)

Economic mechanisms/financial incentives are also needed to maintain ecosystems and preserve their valuable properties and biodiversity. One of them is the economic valuation of ecosystem services, aimed at determining the value and obtaining by society of economic benefits from natural resources, including biological ones. The results of the economic valuation of ecosystem services, being the basis of the ecosystem approach to natural resource management, can be used in making managerial decisions (linked to integrated spatial planning). The second direction is the implementation of the mechanism of offset/compensation measures for the loss of biodiversity with the participation of nature users in the Caspian Sea. Offset/compensation measures for biodiversity loss are regulated by the new Environmental Code of the Republic of Kazakhstan, signed by the President of the Republic of Kazakhstan in early 2021.

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Outcome 3: Improved financing and incentives for nature-positive practices in the Caspian Sea and adjacent territories

Building on the findings of BIOFIN analysis for Kazakhstan, there are a number of innovative financial instruments that can be piloted to test their viability in the Caspian Sea. As part of this process, the GEF project will attempt to mobilize potential sources of financing for conservation activities. Potential scalable financial solutions (e.g. corporate social responsibility, ecological fiscal transfers, sustainable standards and labeling, ecolobels, ecotourism, augmentation of public budgetary support, diaspora savings and investment, revenue from environmental penalties and PES based on tourism) can be used for filling the funding gap, recognizing that public financing has been and will likely remain the mainstay of biodiversity finance in Kazakhstan. However, within the limited funds available for public financing, higher weightage would be placed on public-private or private-private partnerships that would contribute towards sustainable use of biodiversity. The project will support a very targeted, but limited biodiversity funding gap analysis for the pilot area to identify local biodiversity finance requirements to help identify the relevant public and private sector institutions and programs that can effectively support conservation and sustainable use of biodiversity. The aim is to identify a few financing mechanisms for testing to enhance current funding for conservation. This Component will have four outputs.

Output 3.1: Economic valuation of key ecosystem services of Caspian Sea assessed and informed to policy makers to enable informed decision-making to achieve more sustainable economic development

The opportunities for development of a blue/green economy will be explored for the part of the Caspian Sea within Kazakhstan. This will draw on economic valuation experiences from other countries to (i) identify and test an appropriate, but standardized methodology to assess the current state of economic value of coastal and marine ecosystems, and identify future economic potentials for a sustainable blue/green economy in the project area as well as potential avenues for growth. Existing development plans and investment plans will be reviewed covering both public and private sector. While assessing the current state of the economic activity, this assessment will take into consideration the current financial, social, environmental and economic constraints to achieving more sustainable and environmentally friendly economic benefits. This will help identify potential growth potentials and recommendation to achieve these growth outcomes. The end result of this Output will be a report identifying best practices and financial resource requirements for equitable and inclusive benefit sharing that will maximize ecosystem protection for blue/green economy benefits. This work will identify sustainable economic growth potential in the region that will be taken into consideration in the resource gap assessment. (ii) based on the above, this output will support a preliminary resource gap assessment for Caspian Sea project area. The solutions will use four strategic approaches, namely: (a) avoidance of future expenditures by employing strategic biodiversity investments and policy changes to generate conservation outcomes; (b) deliver better cost-effective conservation outcomes; (c) generate sustainable revenues targeted towards conservation; and (d) realign expenditures to reduce negative impacts and improve nature-positive outcomes. In particular, this assessment will seek options for the following mechanisms: (i) Offset measures/compensation mechanism; (ii) Local budget funds (environmental payments) directed towards biodi

Output 3.2: Nature-based solutions for ecosystem restoration identified and implemented

The marine and adjacent ecosystems are life-support system for species and local communities, living in the coastal belt, providing a wide range of coastal, marine and intertidal values. Many of these communities, including men, women and youth are dependent for the livelihoods and well-being on the ecosystem services. The ecosystems have provided fishes, marine products and other benefits for generations. They also provides habitats to support fisheries, attenuates pollution, carbon sequestration, recreational opportunities and coastal protection. In order to continue receiving benefits from these systems in the future, it is imperative to look at ways of protecting and improving its health and ecosystem goods and services to overcome the current drop in yields. It is thus necessary to help maintain first, and then improve the ecosystem goods and services provided by these ecosystems. This will require: (i) **identification of vulnerable ecosystems** that need rehabilitation; (ii) **development of restoration plans** for improving protection, rehabilitation of degraded marine and coastal stands, rehabilitation of marshes, etc. through public-private partnership, that will be explored during the PPG stage; (iii) **promote Private-Public Partnership (PPP) models** for restoration and rehabilitation, protection and management and waste and pollution treatment and management.; (iv) develop guidelines and protocols for PPP models and MOAs for pilots partnerships to be implemented in terms of support for community based innovative nature-based solutions for ecosystem protection and restoration, domestic and agricultural waste management, resilient livelihoods and strengthened marine-coastal connectivity; (v) monitoring, reporting and enforcement rules, responsibilities for conservation, sustainable use and harvesting agreed and defined in the community MOAs; and (v) community training and skills development for management of MOAs.

Output 3.3: Diversified resilient livelihoods with communities to support ecosystem services provision, species and habitat recovery and the emergence of new blue/green business opportunities

Output 3.3 will demonstrate how diversification into blue/green (nature-based) livelihoods can support the emergence of new business opportunities (e.g. sustainable agriculture, fisheries, ecotourism, etc.), while at the same time contribute to ecosystem services provision and species and habitat recovery. During the PPG phase opportunities for accelerating new green-based businesses and resilient green livelihood

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options were discussed with communities. During project implementation, these will be prioritized for each pilot district based on local context and opportunities. A strong focus will be given to women and youth as drivers of change and community participation in development, with the aim of strengthening their morale and leadership role. Sustainable financing mechanisms to incentivize green livelihoods aligned with the blue/green economy strategy developed under Output 3.1 will be established. Training, capacity development and market/value chain assessments to support green business development will be provided. The project will support the design and implement interventions to pilot and scale-up products and services having commercial potential, promote credit, marketing and cooperative agreements.. As part of this effort the project will support: (i) capacity building of stakeholders in the value chain: (ii) provision of limited low cost infrastructure in collaboration with national, provincial and private sector institutions to provide producers and service providers with both technical and infrastructure (small processing, storage and marketing facilities); (iii) provide market support to allow producers and service providers to gain maximum value for their goods and services; (iv) promote Public-Private Partnerships to support blue/green businesses with relevant regulations and policies for such partnerships; and (v) identify and support sustainability financing mechanisms as incentives for promoting blue/green enterprises.

COMPONENT 4: KNOWLEDGE MANAGEMENT, AWARENESS RAISING AND GENDER MAINSTREAMING

(Total Cost: USD 2,973,810; GEF project grant requested: USD 373,810; Co-financing: USD 2,600,000)

The objective of this component is to improve the quality and availability of marine learning and knowledge to inform policy and decision-making processes in Kazakhstan. This will be primarily accomplished through the development of a publicly available web-based platform that consolidates existing data from relevant Government entities and eventually could include data from NGOs, the private sector, and communities. This component will specifically support the analysis of existing data and protocols for its strengthened management and functions. During PPG stage, a gender assessment and mainstreaming action plan will be developed that would identify specific actions to ensure that women, youth and disadvantaged groups are directly involved in decisions related to project design and implementation, participate in benefit sharing activities related to fisheries, land management, sustainable resource use, livelihood enhancement and potential value chain activities. The gender action plan will specifically include budgets for training, capacity and skills development and promotion of investments for women, youth and disadvantaged groups. Gender data gaps will be identified and addressed through this component to enhance the understanding and improvement of gender inclusion in coastal and marine management and benefits. This component will also support Kazakhstan in improving its capacity and outreach for communicating and managing knowledge on coastal and marine issues. Communications and knowledge management are likely the key gaps that hinders the broad uptake of sustainable coastal and marine management. Therefore, this component will specifically support a communications and knowledge management strategy, the dissemination of relevant information and lessons learned.

Outcome 4: Upscaled awareness, information management and gender mainstreaming to enhance appreciation of the biodiversity and economic values

This output will seek to improve awareness and communication and ensure that the Project's innovative practices, lessons and knowledge generated are identified, documented and disseminated under Output 4.1 that will contribute to learning and facilitate replication and scaling up in other parts of the country. This Component will also support an effective M&E system that adheres to GEF requirements, enables effective monitoring and evaluation of project progress and impact, and that is inclusive of the needs of women and opportunities to strengthen gender mainstreaming through project activities. This Component will have three outputs.

Output 4.1: Education and awareness enhancement using a range of gender-sensitive media tools for marine and coastal sustainable economic development

In order to ensure awareness and enhance understanding of ocean biodiversity and its sustainable economic potential among range of stakeholders, a gender-sensitive communication strategy will be developed to implement integrated plan to mainstream biodiversity in coastal and marine development activities. <mark>Given that women and disadvantaged groups are among the first to experience the devastating impact of</mark> natural resource degradation and climate change, the awareness and communication strategy will be specifically directed at women and disadvantaged groups to encourage them to equally and actively engage in the conservation process, and in particular to take responsibility for engaging in project planning and investment as they can play critical roles as primary land managers and resource users. Through education, awareness and evidence-based community activities, the project intends to ensure that women, youth and disadvantageous groups to continue to advance women's rights and empower succeeding women, youth and disadvantaged groups to be full and equal participants in society and change agents for biodiversity. Special action will be targeted towards youth and women, so that they become aware of biodiversity conservation actions and take an active role in the conservation and management of the coastal and marine ecosystems in the eastern coastal region and become advocates for the cause. This Output will target behavior change of certain stakeholders as well as raising the profile of Caspian Sea to generate momentum for their long-term conservation. The overall communication strategy (I) will adopt global best practices in Social Behavior Change Communications (SBCC) in line with recent STAP guidance and advisory documents, to develop behavior change campaigns targeting certain key stakeholders; (ii) develop a clear messaging framework and brand identity for the program that communicates the importance of Caspian Sea and its biodiversity and the program's objectives, outcomes, and impacts; (iii) establish a program-wide communications team responsible for implementing the communications strategy, coordinating with country projects, and ensuring consistency and quality across all communications materials; (iv) undertake stakeholder analyses to identify the key audiences for the program, including policymakers, decision-

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makers, civil society organizations and local communities, women and youth, and the private sector; (v) develop tailored communications plans and materials for each audience (including women and youth), using a variety of channels and formats, including social media, videos, webinars, brochures, biodegradable promotional materials, and other creative means; (vi) foster partnerships with media outlets and influencers to amplify the program's messaging and engage wider audiences; (vii) develop a system for collecting, synthesizing, and disseminating knowledge, tools, and best practices emerging from the program and country projects, including using geospatial decision support tools; and (viii) develop a recognition program to celebrate local conservation heroes and promote collaboration with regional celebrities and organizations.

Output 4.2: Documentation and dissemination of best practices and learning to promote replication

This Output will ensure that the successes (and failures) from project target sites will be documented and disseminated, learning and experiences shared in regional, national and international fora. As part of an effort to promote scaling up, this output will support the following activities: (i) documentation and dissemination of case studies, best practices and experiences emanating from the project to be used for targeted decision-making bodies at the local and provincial levels, as well as identifying, documentation and dissemination of best practices related to gender equality and gender mainstreaming; (ii) development of policy guidance notes to address gaps and constraints of existing planning and policies that favor mainstreaming; (iii) technical reports, publications and other knowledge management products in English and Kazakh; (iv) documentation of traditional knowledge related to marine and coastal biodiversity conservation and ocean resources management; (v) national and provincial level workshops to facilitate dissemination of field lessons; and (vi) inter-provincial site visits to share lessons.

Output 4.3: Cooperation and exchange of information and learning, including exchange visits and information sharing with Caspian Sea countries

To bring the lessons learned from the project and to share best practices from other Caspian Sea nations, this Output will explore opportunities for meaningful participation in specific regional events where UNDP (and other donors) could support engagement with development discourse on marine and coastal conservation issues. The project will furthermore provide opportunities for regional Caspian Sea cooperation. In particular, this would include close collaboration, knowledge sharing and exchange visits with other regional countries that are implementing similar projects. This Output would support through the following indicative activities: (i) **host regional cooperation and exchanges**, including visitation between countries to support dialogue and Knowledge Sharing platforms on lessons learnt and best practices to support transfer of knowledge for improved implementation of relevant project activities; (ii) **participate in relevant regional events** for information and lessons sharing and learning; (iii) **promote knowledge sharing and best practices** through formal and informal networks, study visits and improved communication channels.

COMPONENT 5: MONITORING AND EVALUATION

(Total Cost: USD 2,450,000; GEF project grant requested: USD 350,000; Co-financing: USD 2,100,000)

This Output will focus on providing technical support and limited financing to establish monitoring protocols and initiate monitoring of the project outcomes in terms on integration of biodiversity conservation, gender and sustainable economic development at the Caspian landscape/seascape level. The monitoring and evaluation will include gender disaggregated data to capture the impacts and benefits of the program on women. During the monitoring process, the PMU will actively consult with women to ensure that it captures the impacts of the project. Specific workshops will be held with women to review monitoring and evaluation results (including the MTR and TE) to ensure that these capture the perceptions and impacts on women. It will support also the mid-term and term evaluation, revision and update of monitoring protocol and ensure that the monitoring results provide input to enable adaptive management.

Outcome 5. Enhanced monitoring for adaptive management.

This Outcome has one Output.

Output 5.1: M&E system supports project impact assessment including gender and youth mainstreaming

The project will design and operate a monitoring and evaluation system to track environmental, socio-economic <mark>and gender benefits generated by the project. The M&E system will follow UNDP and GEF M&E policies related to monitoring and reporting. The monitoring system can be used to inform decision-making by government resource managers and private resource users.</mark>

Table 2: Stakeholder Engagement

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Stakeholder	Mandate	Role in project
Ministry of Ecology and Natural Resources (MENR)	MENR is the GEF Focal Point and is the central executive body responsible for environmental protection, 'green economy' development, waste management (excluding municipal, medical, and radioactive waste), forestry, wildlife conservation, and management of protected areas.	Proposed Implementing Partner for project, responsible for project coordination. Provide technical and logistical support. Part of coordination unit/working group at horizontal level.
Fisheries Committee of MENR Committee of forestry and wildlife of MENR	Fisheries Committee is an agency of MENR performing strategic, regulatory, implementation and control functions in the field of protection, reproduction and use of fish resources and other aquatic animals.[1] The Committee of forestry and wildlife is an agency of MENR for implementation, control and Supervisory functions in the field of forestry, protection, reproduction and use of wildlife and specially protected natural	Key partner agency that will provide technical support for promotion of sustainable fisheries activities Provide technical oversight for support to PA management, forest restoration, etc.
Ministry of Water Resources and Irrigation (MWRI)	territories.[2] ⁵ MWRI is responsible for the formation and implementation of state policy, coordination of management processes in the areas of control in the field of use and protection of the water fund, water supply, sewerage and irrigation.[3] ⁶	Key partner that will support planning and oversight for issues related to water management and oversight for implementation of water-related regulations
Ministry of Agriculture (MA)	The ministry manages in the following areas agro- industrial complex, irrigated agriculture and melioration, land resources, also, within the limits provided for by law, intersectoral coordination of state bodies in the field of activity within its competence.	Will provide technical support and extension for planning and management of sustainable agricultural activities
Regional Authorities	Akimats of Atyrau oblast[4] ⁷ and Mangystau oblast[5] ⁸ The Akimats of the regions manage a broad range of activities through its specialized departments, each focusing on key areas: The Department of Entrepreneurship and Industry, focusing on industry, international trade, foreign investment, and digitalization. The Department of Fisheries, tasked with managing and sustainably developing the fisheries sector through effective policy implementation. The Department of Agriculture, dedicated to efficient operation of the agrarian sector and enforcing unified agricultural policies. The Department of Natural Resources and Environmental Regulation, responsible for managing natural resources, regulating their use, and overseeing environmental protection initiatives.	Responsible for development and implementation of the sector management plans, accessing land, resources and having the autonomy and authority to work with land-users and land owners/ leasers to halt LD processes. At the district level, facilitates coordination, enables local communities to gain sustainable economic benefits from fisheries, ecotourism, and livelihoods.

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	Coast Guard Department of the National Security Committee for the Mangystau and Atyrau regions[6] ⁹ . These departments ensures the safety of maritime economic activities and the delivery of military-technical assistance by sea in the Kazakh sector of the Caspian Sea.	Supporting enforcement of environmental regulations in project areas within their jurisdiction
Community- based organizations (CBOs)	The union of legal entities 'Republican Association of Fisheries and Aquaculture 'Qazaq balyk'[7] ¹⁰ encompasses various sectors including commercial fishing, recreational and sport fishing, fish farming in ponds and cages, and other related aquaculture activities.	Participate in capacity building exercises, Implement SLM, conservation actions and other livelihood development activities.
Private sector entities and small business operators	The largest fishing enterprises in the country are located in the Atyrau and Mangystau regions (e.g. 'Imeni Amangeldy', 'Caspi-Balyk' Production Company). The North Caspian Operating Company N.V. (NCOC), overseeing Kazakhstan's first major offshore oil and gas development which includes the Kashagan, Kairan, and Aktoty fields, stands out in this effort. NCOC is currently the only oil and gas company in the Caspian actively initiating, funding, and fostering Russian-Kazakhstani collaboration for the study of the Caspian seal. This initiative is supported by the Fisheries Committee of MENR, under which NCOC has launched and financed two international programs for researching the Caspian seal across the Northern Caspian. Kubley[8] ¹¹ LLP is one of the largest processing enterprises in Kazakhstan, engaged in the production of fresh-chilled meat: horse meat, beef, lamb, as well as the production of canned products. In the Mangystau region, three enterprises stand out for their varied business activities: 'Caspian Riviera,' 'Kazakh Osseter,' which exports commercial sturgeon and fish to Russia and Azerbaijan, and 'Nataly Company,' known for selling commercial fish varieties	These entities, in particular those in the oil and gas industry will have an important role in promotion of business practices that are environmental acceptable. Other private sector entities will be essential for the value chain development through provision of technical support, training and extension and market information. Act as collective access point for practices or marketing strategies developed by project. These entities will be essential for the value chain development
Academic Institutions	Academia, as a primary stakeholder in research and ecological data analysis participates in a state-funded grant project as ' Sustainable Development of Natural, Economic, and Socio-Economic Systems in the West Kazakhstan Region in the Context of Green Growth: Comprehensive Analysis, Concept, Forecast Assessments, and Scenarios.' (2023-2025)[9] ¹² The following academic institutions are actively engaged in various capacities in the research of the Caspian Sea:	Academic institutions are of central importance given experience with applied research and the innovative approach being introduced through this project. These entities can act to ensure approved applied research protocols are followed to improve M&E procedures, validate and promote conclusions, recommendations

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Research and Production Center for Fisheries' [11]14 Introduction of innovative practices in the cultivation and formation of a replacement brood stock of sturgeon fish through genotyping for the intensive development of fish farming in the Mangistau region tute of Geography and water security [12]15 "Water security of the Republic of Kazakhstan in the transboundary Zhaiyk-Caspian basin: strategy for sustainable water supply" on the direct instructions of the Head of State Kassym-Jomart Tokayev Institute of Zoology: The main and only scientific zoological organization in Kazakhstan, which coordinates and conducts fundamental and applied research on the study of the country's fauna akhstan Agency of Applied Ecology' LLP[13]16 KAAE conducts interstate monitoring studies on a long-term basis aimed at preserving the biological resources of the Caspian Sea, transboundary aquatic ecosystems, environmental safety of the population, conservation of biological diversity. ECOPROJECT LLP[14]17 Study and assessment of the state of components of the natural; Development of recommendations for the rational use of natural resources; Preparation and publication of maps of environmental and tourist-recreational content; Conducting comprehensive research to obtain permits for all types of environmental management in Kazakhstan; Conducting environmental impact assessments; = Central Asian Institute of Environmental Research (CAIER)[15]18 focuses on the conservation of Caspian	
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seals populations, and to monitor these seals for diseases.	
Financial The 'Damu' Entrepreneurship Development Fund Financially support project	
Institutions JSC[16] ¹⁹ supports Kazakhstan's MSMEs through models. Work with project models with project models and financial experiences including loan guarantees interest.	
and financial financial assistance, including loan guarantees, interest intermediaries rate subsidies, and concessional financing via banks and VC conclusions and if po	
intermediaries rate subsidies, and concessional financing via banks and leasing companies. Besides financial aid, it offers VC conclusions and if po	
consultations and training. With branches across	•

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Youth and women	Kazakhstan, the Fund collaborates with local entrepreneurs, organizations, and government bodies, promoting regional economic development. The National Chamber of Entrepreneurs 'Atameken'[17] ²⁰ is a non-profit organization, established to strengthen the negotiating power of businesses. The Chamber represents the interests of small, medium, and large businesses, encompassing all areas of entrepreneurship, including domestic and foreign trade. JSC 'Agrarian Credit Corporation'[18] ²¹ that invests in projects and provides loan programs, agricultural insurance and sale of collateral and assets. The corporation is aimed at forming of an affordable and effective financing system through the involvement of private financial institutions and improving the competencies of agribusiness entities. 'KazAgroFinance'[19] ²² provides assistance in the technical equipment of the agro-industrial complex The involvement of youth and women enables skill development and empowerment, essential for g long-term community sustainability. By empowering these demographic groups and leveraging their involvement in resource management, agricultural practices, and entrepreneurship, the project aims to enhance community resilience and economic opportunities. JSC 'Agrarian Credit Corporation' loan programs that provides microcredits for youth for starting business in agriculture. Regional and district-level Councils of Business Women have been formed within the Regional Chambers of Entrepreneurs, part of the National Chamber of Entrepreneurs of Kazakhstan 'Atameken'. Another example, the Women's Entrepreneurship Development Center at the Chamber of Entrepreneurs of the Atyrau Region for training	Involvement in capacity-building activities, skill development, and entrepreneurship, contributing to community sustainability and economic growth
Local communities (fishers, tourism providers, natural resource users, etc.)	In the project areas, local communities practice fishing, agriculture, crop farming, animal husbandry, and tourism-related businesses. The region also features several small associations of gardeners.	Direct or indirect beneficiaries that will participate in all on-the-ground activities of the project
Indigenous communities	There is no concept of indigenous communities in Kazakhstan.	NA

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Non-Government Organizations

Several NGOs, including the Globe Eco-Legal Initiative Center, Eco Mangistau, Atameken Eco, and the Zhaiyk-Caspian Aarhus Center, are actively working in the project regions. Their efforts are centered on enhancing environmental and socio-economic conditions, advocating for resource conservation for future generations, and providing ecological education. Along with their active involvement in civic activities and public hearings, these organizations also organize environmental conservation events, focusing on the Caspian regions.

One of them, the Zhaiyk-Caspian Aarhus Center, was established to enforce the Aarhus Convention in the Zhaiyk-Caspian basin, and is managed by a Board of Trustees which includes representatives from the MENR, the OSCE Centre in Astana, and the Environmental forum of NGOs from three Caspian regions of the country. However, over the years, the Center has faced criticism for excessive involvement of local government bodies (akimats) in its operations.

The 'Coalition for Green Economy and G-Global Development'[20]²³ promoting the country's transition to a green economy. The Association for the Conservation of Biodiversity of Kazakhstan (ACBK), established by 5 NGOs, is a key player in Kazakhstan's biodiversity protection. ACBK has longstanding expertise in researching and conserving crucial environmental indicator species in the country. Their focus encompasses a range of species, including the saiga, goitered gazelle, kulan, and others, highlighting their commitment to ecological health and diversity.

NGOs will take part in training, act as liaison agents between project and local communities and scale-up SLM and conservation technologies and approaches. Roles in advocacy, capacity building, and community engagement efforts, ensuring environmental and social project components align with broader conservation goals and community needs

- [1] https://www.gov.kz/memleket/entities/fishery/activities/16044?lang=en
- [2] https://www.gov.kz/memleket/entities/forest/activities/directions?lang=en
- $\underline{\hbox{[3]}}\ https://www.gov.kz/memleket/entities/water/activities/directions?lang=ru$
- [4] https://www.gov.kz/memleket/entities/moa/about?lang=en
- [5] https://www.gov.kz/memleket/entities/mangystau/about?lang=ru
 - [6] https://adilet.zan.kz/rus/docs/G22KNA00666
 - [7] http://qazaqbalyk.kz
 - [8] https://kublei.kz
 - [9] https://www.gov.kz/uploads/2023/6/20/147e5207b7c56276da012367d9c0ad1a_original.1109284.docx
 - [10] https://ihe.kz/ru/

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[11] https://nasec.kz/ru/node/255

[12] https://ingeo.kz/?lang=en

[13] https://www.kape.kz/main-eng

[14] https://ecoproject.kz/ru/

[15] https://asianecology.kz/about_eng

[16] https://damu.kz/en/

[17] https://atameken.kz/ru/

[18] https://agrocredit.kz/en/

[19] https://www.kaf.kz/en/about/about-company/

[20] https://greenkaz.org

https://undp-

my.sharepoint.com/personal/manar_shehadeh_undp_org/Documents/Desktop/PIMS%209727%20clean%20Kazakhstan%20PIF_1 4March2024-mj.dt_clean_STAR%20rev.docx - _ftnref1

Coordination and Cooperation with Ongoing Initiatives and Project.

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

No

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

The proposed Implementing partner (IP) for the project will be the Ministry of Ecology and Natural Resources (MENR) and the project will be implemented over a period of six years with UNDP as the GEF Implementing Agency. `Based on initial consultations with the proposed IP, the project is expected to be implemented through National Implementation Modality (to be validated at the PPG stage).

The GEF project will cooperate with ongoing initiatives as described in the Table 3 below:

Table 3: Complementarity with Existing and Past GEF, GCF and Other Projects and Programs

Ongoing Initiatives	Complementarity with GEF 8 project
GIZ project "Trade Facilitation in Central	The new phase of the project will focus on:
Asia" (Phase 4: 2024-2026)	
	- further implementation of digital solutions for trade facilitation;
	- use of a regional platform for the formation and further monitoring of a
	joint roadmap of trade facilitation measures;
	- assistance to transport and logistics companies using air transport in
	expanding their capabilities in order to improve the quality of services
	through new alternative corridors, such as the Trans-Caspian Corridor, to
	enter the European market;
	- conducting specialized trainings for national partners in order to teach them
	how to independently develop digital solutions for interaction at the regional
	level.
Blueing The Caspian Sea: Building	The project aims to enhance environmental management in the Caspian Sea through capacity building,
Capacities For Pollution Management And	policy harmonization, and regional cooperation. It will develop coastal and marine management
	plans, provide technical assistance, and conduct workshops to improve pollution management,
	including creating pollution inventories and mitigation programs. Additionally, the project supports

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Biodiversity Conservation (GEF-UNEP) 2025-2030[1] ²⁴	the management of protected areas, develops new management plans, supports local fisheries, implements nature-based solutions for biodiversity conservation, and compiles inventories of threatened species.
Supporting Kazakhstan to achieve Global	SPACES is an emerging coalition that mobilizes spatial intelligence to support governments,
Biodiversity Framework ambitions	businesses, finance institutions, funders and investors in achieving climate and nature goals. SPACES
through development of	is coordinated by the UN Environment Program World Conservation Monitoring Centre (UNEP-WCMC) and Systemiq, working with UNDP, IIASA and IIS amongst other partners. The objective of the
spatial plans and financing strategies	SPACES program is to inform the designation of ecological corridors to support the integrated
(UNEP-WCMC)[2] ²⁵	management of landscapes and to enhance the implementation of Pas, OECMs and othe NbS in a
	financially viable way and in agreement with local communities.
Bilateral research program between	The Program's goals were to analyze the Caspian seal population's size and health, assess their living
Kazakhstan and Russian: 'Conducting	conditions and food availability, examine their habitats, identify threats to their well-being, and
comprehensive studies of the current	devise effective conservation plans for both the seals and their natural environment. Kazakh-Russian
state of the Caspian seal population in the	collaborative research enabled comprehensive study of seals across the Northern Caspian Sea,
Caspian Sea (2019-2023)	bridging gaps that emerged post-Soviet Union when seal studies were conducted independently within territorial waters using different methodologies.
Program for assessing the abundance,	To conduct three extensive instrumental surveys between 2020 and 2022, the program was aimed at
distribution and natural reproduction of	accurately counting the Caspian seal species in the northern part of the sea. The project focuses on
the Caspian seal population in the Kazakh	the Northern Caspian, the primary breeding ground for these seals, recognizing its importance for the
and Russian waters of the Northern	species' survival. Through bilateral collaboration, the project seeks to facilitate in-depth research in
Caspian Sea (2020-2024)	this crucial region, obtaining data on the population dynamics of the Caspian seal for implementing effective conservation strategies.

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[2] https://www.spaces coalition.org/en

Core Indicators

Table 4: Core Indicator Table

Proj	ect Core Indicators	Expected at PIF
1	Terrestrial protected areas created or under improved management for conservation and sustainable use (Hectares)	1,741,259
2	Marine protected areas created or under improved management for conservation and sustainable use (Hectares)	1,260,000
4	Area of landscapes under improved practices (excluding protected areas) (Hectares)	610,000
5	Area of marine habitat under improved practices (excluding protected areas) (Hectares)	60,000
6	Greenhouse Gas Emissions Mitigated (metric tons of CO2e) over 20-year period	<mark>2,037,543</mark>
11	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	Approx. 8,500 (4,250 men and 4,250 women)

otes:

C.I. 1: Includes the following existing terrestrial PAs: (a) Akzhayik State nature reservat (111,500 ha); (b) Novinsky State Nature Sanctuary (45,000 ha); (c) Aktau-Buzachinsky State Nature Sanctuary (170,000 ha); (d) Karakiya-Karakol State Nature Sanctuary (137,500 ha) and (e)

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Kenderli-Kayasanskaya State Nature Reserved Zone (1,230,290 ha) and proposed terrestrial PA, namely Zhaiyk River Floodplain State Nature Reservat (46,969 ha)

<u>C.I. 2</u>. Includes the existing marine PA of Northern Caspian Sea State Nature Reserved Zone (662,630.09 ha) and proposed Seal Islands State Nature Reserve (427,538 ha); Prorva 1 State Nature Reserve (86,232.27 ha) and Prorva 2 State Nature Reserve (83,600,51 ha)

C.I. 4: - TOTAL OF 610,000 hectares as follows: (i) 600,000 ha - Development and implementation of an Integrated sustainable natural resources management plan (agriculture, pasture, forests, etc.) covering one rayon (district) in the Atyrau oblast – Jylyoisky rayon; (ii) 4,000 ha - Demonstration model of management and use of agricultural and distant pastures through the restoration of wells (boreholes), installation of solar panels, and planting drought-resistant crops (alfalfa, sainfoin, bermudagrass, etc.). in the two selected rayons of Mangistau and Atyrau regions (oblasts) (iii) 6,000 hectares as SLM as detailed below

Accelerated restoration of degraded pasture and agricultural lands based on the experience of Northern China and Mongolia using 'Dolphin Technology':

In the Tupkaragan district of the Mangystau region, 1,000 hectares;

In the Zhylyoi district of the Atyrau region, 1,000 hectares.

Sub-Total: 2,000 hectares.

(2) <u>Reclamation of pasture and agricultural lands contaminated by oil emissions following the scientific recommendations of university scientists:</u>

In the Tupkaragan district of the Mangystau region, 1,000 hectares;

In the Zhylyoi district of the Atyrau region, 1,000 hectares.

Sub-Total: 2,000 hectares.

(3) <u>Phytomelioration in the shallow drawdown areas of the Caspian Sea based on the experience of reclaiming the dried-up bed of the Aral Sea</u>

In the Tupkaragan district of the Mangystau region, 1,000 hectares;

In the Zhylyoi district of the Atyrau region, 1,000 hectares.

Sub-Total: 2,000 hectares.

C.I. 5: Approximately 2 km buffer zones around marine PAs, of management of around 10% of the buffer zone = 60,000 ha

C.I 6: Calculated on the basis of:

(i) 1,741,259 hectares of terrestrial PAs are maintained at 'moderate' degradation status, but fire is eliminated resulting in mitigation of 1,122,831 metric tons of CO₂e over 20 -year period

(ii) 2,000 hectares of high intensity grazing areas that otherwise be 'severely degraded' is improved with medium inputs during the project resulting in mitigation of 119,192 metric tons of CO₂e over 20 -year period

(iii) 2,000 hectares of existing tidal marshes, without project at 50% 'excavated' and with project 0% excavated resulting in mitigation of 795,520 metric tons of CO₂e over 20 -year period

These figures will be re-assessed at PPG when more information is available on potential investment sites and nature of the landscape

<u>C.I. 11</u>: Covers around 8275 beneficiaries (Tupkaragay district - Mangystau region and Zhyly oi district - Atyrau region) in application of sustainable approaches to management and integrated use of land and water in the coastal zone of the Caspian Sea outside PAs and around 225 existing PA and forest staff that would receive training in improved conservation practice.

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Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1741259	0	0	0

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
46969	0	0	0

Name of the	WDPA	IUCN	Total Ha	Total Ha (Expected	Total Ha	Total Ha
Protected Area	ID	Category	(Expected at	at CEO	(Achieved at	(Achieved at
			PIF)	Endorsement)	MTR)	TE)
Zhaiyk River			46,969.00			
Floodplain State						
Nature Reserve						

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

1694290	0	0	0
DIE)	Endorsement)	MTR)	TE)
Ha (Expected at	Ha (Expected at CEO	Total Ha (Achieved at	Total Ha (Achieved at

Name of the Protected Area	WDP A ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorseme nt)	Total Ha (Achiev ed at MTR)	Total Ha (Achiev ed at TE)	METT score (Baseline at CEO Endorseme nt)	METT score (Achiev ed at MTR)	METT score (Achiev ed at TE)
Aktau- Buzachins ky State Nature Sanctuary	6257 8	Habitat/Spe cies Managemen t Area	170,000.0						
Akzhayik State Nature Reserve	3426 50	Protected area with sustainable use of natural resources	111,500.0						
Karakiya- Karakol State Nature Sanctuary	6260	Habitat/Spe cies Managemen t Area	137,500.0						
Kenderli- Kayasansk aya State Nature Reserve Zone	3426 49	Others	1,230,290						

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					I	_
Novinsky	6261	Habitat/Spe	45,000.00			
State	5	cies				
Nature		Managemen				
Sanctuary		t Area				
Sancidary						

Indicator 2 Marine protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1260000	0	0	0

Indicator 2.1 Marine Protected Areas Newly created

Total Ha (Expected at	Total Ha (Expected at CEO	Total Ha (Achieved at	Total Ha (Achieved at
PIF)	Endorsement)	MTR)	TE)
597370	0	0	0

Name of the	WDPA	IUCN	Total Ha	Total Ha (Expected at	Total Ha	Total Ha
Protected Area	ID	Category	(Expected at	CEO Endorsement)	(Achieved at	(Achieved at
			PIF)		MTR)	TE)
Lrorvo 2 State			83,600.00			
Nature Reserve						
Prorvo 1 State			86,232.00			
Nature Reserve						
Seal Islands			427,538.00			
State Nature						
Reserve						

Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at	Total Ha (Expected at CEO	Total Ha (Achieved at	Total Ha (Achieved at
PIF)	Endorsement)	MTR)	TE)
662630	0	0	0

Name of the Protecte d Area	WDPA ID	IUCN Categor y	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsemen	Total Ha (Achieve d at MTR)	Total Ha (Achieve d at TE)	METT score (Baseline at CEO Endorsemen	METT score (Achieve d at	METT score (Achieve d at TE)
				t)	,		t)	MTR)	J. 5. 5. 5 ,
Norther	34265	Others	662,630.0					,	
n Caspian	1		0						
_									
Sea State									
Sea State Nature									

Indicator 3 Area of land and ecosystems under restoration

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

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6000	0	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Rangeland and pasture	2,000.00			

Indicator 3.2 Area of forest and forest land under restoration

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

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation	Ha (Expected at	Ha (Expected at CEO	Ha (Achieved at	Ha (Achieved at
Type	PIF)	Endorsement)	MTR)	TE)
Natural grass	2,000.00			

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2,000.00			

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
610000	0	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
604,000.00			

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

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

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
6,000.00			

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

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

Indicator 4.5 Terrestrial OECMs supported

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

Documents (Document(s) that justifies the HCVF)

Title

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
60,000.00			

Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations

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

Type/name of the third-party certification

Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia

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

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

Indicator 5.3 Marine OECMs supported

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

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	2037543	0	0	0
Expected metric tons of CO₂e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

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Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	2,037,543			
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting	2026			
Duration of accounting	20			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)				
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target	Energy (MJ)	Energy (MJ) (At CEO	Energy (MJ) (Achieved at MTR)	Energy (MJ)
Benefit	(At PIF)	Endorsement)		(Achieved at TE)
Target Energy Saved (MJ)			,	

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW)	Capacity (MW) (Expected at	Capacity (MW)	Capacity (MW)
	(Expected at PIF)	CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	4,250			
Male	4,250			
Total	8,500	0	0	0

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

- C.I. 1: Includes the following existing terrestrial PAs: (a) Akzhayik State nature reservat (111,500 ha); (b) Novinsky State Nature Sanctuary (45,000 ha); (c) Aktau-Buzachinsky State Nature Sanctuary (170,000 ha); (d) Karakiya-Karakol State Nature Sanctuary (137,500 ha) and (e) Kenderli-Kayasanskaya State Nature Reserved Zone (1,230,290 ha) and proposed terrestrial PA, namely Zhaiyk River Floodplain State Nature Reservat (46,969 ha)
- C.I. 2. Includes the existing marine PA of Northern Caspian Sea State Nature Reserved Zone (662,630.09 ha) and proposed Seal Islands State Nature Reserve (427,538 ha); Prorva 1 State Nature Reserve (86,232.27 ha) and Prorva 2 State Nature Reserve (83,600,51 ha)

C.I. 3: as follows:

(1)Accelerated restoration of degraded pasture and agricultural lands based on the experience of Northern China and Mongolia using "Dolphin Technology":

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In the Tupkaragan district of the Mangystau region, 1,000 hectares;

In the Zhylyoi district of the Atyrau region, 1,000 hectares.

Sub-Total: 2,000 hectares.

(2) Reclamation of pasture and agricultural lands contaminated by oil emissions following the scientific recommendations of university scientists:

In the Tupkaragan district of the Mangystau region, 1,000 hectares;

In the Zhylyoi district of the Atyrau region, 1,000 hectares.

Sub-Total: 2,000 hectares.

(3) Phytomelioration in the shallow drawdown areas of the Caspian Sea based on the experience of reclaiming the dried-up bed of the Aral Sea

In the Tupkaragan district of the Mangystau region, 1,000 hectares;

In the Zhylyoi district of the Atyrau region, 1,000 hectares.

Sub-Total: 2,000 hectares.

TOTAL: 6,000 Hectares

- C.I. 4: (i) 600,000 ha Development and implementation of an Integrated sustainable natural resources management plan (agriculture, pasture, forests, etc.) covering one rayon (district) in the Atyrau oblast Jylyoisky rayon; (ii) 4,000 ha Demonstration model of management and use of agricultural and distant pastures through the restoration of wells (boreholes), installation of solar panels, and planting drought-resistant crops (alfalfa, sainfoin, bermudagrass, etc.). in the two selected rayons of Mangistau and Atyrau regions (oblasts)
- C.I. 5: Approximately 2 km buffer zones around marine PAs, of management of around 10% of the buffer zone = 60,000 ha
- C.I 6: to be calculated at PPG stage when more information is available on potential investment sites
- C.I. 11: Covers around 8275 beneficiaries (Tupkaragay district Mangystau region and Zhyly oi district Atyrau region) in application of sustainable approaches to management and integrated use of land and water in the coastal zone of the Caspian Sea outside PAs and around 225 existing PA and forest staff that would receive training in improved conservation practice.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Please see pre-SESP
Environmental and Social	Moderate	Please see pre-SESP
Political and Governance	Moderate	The openness of the entities at national and district levels to collaborate and work together to ensure that integrated and cross-sectoral planning of the Caspian Sea marine seascape and adjacent catchments for economic development is commensurate with ecological needs would present some problems, given that political priorities trend to generally focus on economic development (particular on oil and gas exploration) rather than environmental priorities. During project preparation, the risk will be

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		further assessed to identify additional and focused consultation, dialogue , incentives and planning needs that are required to ensure that the effective engagement of the administrative structures that operate and affect the management of the Caspian Sea
INNOVATION		
Institutional and Policy	Moderate	Government policy for promotion of economic development might have implications for the project, related to potential impacts on the sensitive marine ecosystems and vulnerable species such as the Caspian Seal, sturgeon and other species To mitigate this, project design will attempt to demonstrate that economic development benefits that can be better achieved through sustainable practices, provision of improved environmental incentives, institutional capacities and improved monitoring and enforcement. Exposure to best practices, technical and planning support, etc. will form the basis for managing this threat
Technological	Moderate	Given that the limited technical capacity for marine spatial planning, integrated and multi-sectoral planning and management, monitoring the status of the Caspian Sea might affect achievement of intended outcomes, the project design will include a capacity needs assessment, and to the extent feasible activities will be designed taking into consideration existing institutional capacity and supplementary needs for capacity building, training and technical support to mitigate any constraints that might exists for promoting of integrated management approaches for wetland areas. Adequate stakeholder consultation will be conducted with key stakeholders to make robust design of the project
Financial and Business Model	Moderate	The current economic condition in the country, although reasonably stable, the wars in Europe and the Middle East and increased inflation presents a challenge in terms of government resources and staff availability, including co-financing. In terms of institutional and capacity constraints, during project preparation, additional technical and international and national consultancy services, realistic co-financing options will be investigated that could provide significant co-financing through currently committed externally mobilized investments to reduce burden of government financing
EXECUTION		
Capacity	Moderate	The inconsistent and limited capacities across the government administrative bodies for integration of economic and ecological outcomes in development planning could negatively affect implementation of the project. This will be further assessed, and arrangements will be made in consultation with the IP for UNDP CO, following the HACT assessment to identify requirements for potential UNDP oversight, training and technical support required during the project implementation phase that would be reviewed by GEFSEC.

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Fiduciary	Moderate	Although the Government has implemented series of GEF projects In Kazakhstan, some capacity constraints might exist in terms of financial management and procurement within the IP that can delay project implementation. This will be rectified at PPG stage with identification of the need for limited UNDP support to execution and training in procurement and financial management for PMU staff
Stakeholder	Moderate Stakeh interes the ber explor econor for eco capaci demon	Stakeholders (including private industries that operate) might have an interest or engagement with the Caspian Sea, may not easily recognize the benefits of sustainable nature-positive approaches to oil and gas exploration, fisheries, navigation, tourism, agriculture and other economic activities and hence could be reluctant to engage in the project for economic reasons This will be rectified through identification of capacity development and training needs, incentives and means for demonstration of nature-based activities that could incentivize community and stakeholder engagement.
Other		
Overall Risk Rating	Moderate	Previous lesson of the GEF and other donor supported project will be taken into consideration during project formulation.

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

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

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

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

The project is consistent with BD-1-1: Financial sustainability, effective management, and ecosystem coverage of protected area systems. Relevant project activities include identification and implementation of blended/innovative/incentive-based finance solutions to bridge the finance gap in short, medium and long term at the local levels (Outputs 3.1) that will be applied to support nature-based solutions for ecosystem restoration (Output 3.2) and supporting new blue and green business opportunities (Output 3.3) It will also demonstrate implementation of locally based financial solutions, such as linking with government sector financing, generating revenues from conservation-related nature-based activities and supporting biodiversity-friendly small-scale enterprises that will build community support for conservation. The project is also supporting the improved management effectiveness of a number of PAs through management planning, ecological restoration demonstration, enhance the viability of the PA network (Output 1.4) by collaborative efforts with local communities in PA buffers and natural corridors, improve PPPs for supporting community engagement in nature-positive livelihood activities (Output 3.3), improving SMART patrols and improved data management and monitoring. In terms of BD 1-4, the project will focus on mainstreaming biodiversity and sustainable natural resource into key development sectors using spatial planning tools and knowledge and technology transfer (Outputs 1.2 and 1.3) to improve/enhance positive environmental practices in these sectors. It would improve guidelines, protocols and planning strategies (Output 1.1) and build institutional capacities (Output 2.4) across key sectors and administrative levels to better integrate conservation outcomes. Without the GEF project, it is likely that there will be limited effort at strengthening the integration of biodiversity in spatial and developmental planning that will likely result in further loss of biodiversity, associated habitats and ecosystem services. Project components include improved planning processes that address direct threat to habitat loss by increasing habitats through conservation and restoration of key marine and coastal ecosystems, improved PA management effectiveness (Output 1.4); enhancing conservation in coastal and other natural and productive use areas; capacity building and improved

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community participation in sustainable resource use practices to reduce threats and community livelihood improvement to reduce unsustainable practices (Outputs 3.2 and 3.3). In terms of BD 3: To increase mobilization of domestic resources for biodiversity - the project aims to identify and mobilize domestic resources for investment in biodiversity conservation and NbS. In terms of BD 3-1, it would build on the existing BIOFIN assessments and BFP, to undertake a limited assessment of financial needs and develop a resource mobilization strategy for application in the project areas. In terms of BD 3-2, the project will facilitate the implementation of the resource mobilization plan, working closely with the Oblast and rayon administrations (that have financial decision-making and environmental management mandates) to enhance their capacity for resource mobilization through targeted training programs and their capacity for making investments of NbS through development of guidelines and availability best practice examples.

In terms of the GEF-8 Land Degradation Focal Area, the project aligns with Objective 1: Avoid and reduce land degradation through sustainable land management (SLM); and objective 2: Reverse land degradation through landscape restoration (LD-1 & LD-2) of the programming directions. In terms of LD 1, the project will aim to avoid and reduce degradation through promoting an integrated and collaborative planning and decision-making approach to reduce inherent conflicts to land and resource use. It will focus on best practices in fisheries, tourism, forestry and agriculture to reduce harmful impacts and promote nature-friendly practices to reduce chemical usage, promote soil fertility improvements, reduce erosion, promote mixed cropping to conserve soil and improve habitat for species in cultivable areas. The overall goal is to promote the achievement of land degradation neutrality and no net loss of natural capital. Under Component 2 and supported by the enabling framework of Component 1 and financial mechanisms under Component 3, the project will focus on smallholder farms (production landscapes) that sustain a significant number of households, where agricultural management practices underpin the livelihoods of rural farmers. The project will include support for improved access to technical assistance and finance for smallholders to implement innovative agricultural practices (climate smart agriculture) for sustainable land management to achieve LDN, protect ecosystem services, and improve profitability (improved profitability will be used as an indicator of project success). Project SLM interventions will target the drivers of land degradation within a framework of integrated community planning, governance and management at landscape scale. It will provide technical support and training to restore and maintain functional landscapes to avoid and manage degradation through oblast and rayon planning systems, enhanced technical knowledge, demonstration on the ground for land degradation control and management and other unsustainable activity and technical support for integration into oblast and rayon level planning. These activities would be undertaken through active community mobilization and involvement, including men, women and youth. Upscaling will be achieved through extension programs and sharing of successful interventions through community exchanges and visits (Component 4). Strategies pursued with the private sector (Outputs 3.3 and 3.4) will target SMEs that are promoting innovations in agriculture and livestock production systems and improved access to markets including in the tourism sector, as well as improvements in the environmental performance of the infrastructure sector.

In terms of Climate Change FA, it aligns with CCM 1.4 'Promote nature-based solutions with high mitigation potential' the project will support mitigation actions in terms of reduced fires in terrestrial protected areas, improvement in steppe grassland through improved management with medium inputs, reduction in excavation of tidal marshes in the shoreline of the Caspian Sea and improvements in arable crop lands that will generate climate benefits. This will also generate significant co-benefits, notably in terms of improved and sustainable livelihoods for farmers and rural communities (including fishers and coastal communities) to enhanced biodiversity outcomes and reduced upstream land and coastal degradation threatened by unsustainable and increased exploitation and impacts of climate change. The project will work with communities to enhance protection and thus support natural regeneration of the species and ecosystems that are threatened by human actions. To support this effort, the project will develop guidelines and provide best practices in support of NbS for agriculture, animal husbandry, coastal wetlands and climate mitigation. The intent is to reduce the further exacerbation of the impacts of climate change on vulnerable communities, including women. The proposed project is in conformity with the NAPA, NAP, and other national instruments as discussed in Table 6 below:

Table 6: Conformity with Existing National Strategies and plans

Strategy/Plan	Conformity with the proposed project
Development	Adopted by the Statement of the President of the Republic of Kazakhstan dated 14 December 2012, the Strategy is
Strategy of the	focused on creation of a prosperous society based on a strong state, developed economy and universal labor
Republic of	opportunities, as well as entry of Kazakhstan into the thirty most developed countries in the world.
Kazakhstan until	
2050	
Concept for the	Action Plan for the implementation of the Concept for the Transition of the Republic of Kazakhstan to a 'green economy'
transition of the	for 2021-2030 (Enactment of the Government of the Republic of Kazakhstan #479 dated 29 July 2020) was developed for
Republic of	the implementation of necessary measures to reduce greenhouse gas emissions in the energy sector, energy efficiency
Kazakhstan to a	and energy conservation, development of sustainable transport, infrastructure for electric and gas vehicles, smart traffic
green economy	management systems, sustainable municipal waste management, transition to sustainable land use methods and organic
until 2050	agriculture, afforestation and the formation of ecological culture.

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National project "Green Kazakhstan" (2021-2025)	The national project "Green Kazakhstan" aims at creating a favorable living environment for the population and improving the environmental situation, including improving air quality, effective management of production and consumption waste, efficient and careful use of water, preserving the ecosystems of Lake Balkhash and the Northern Aral Sea.
	The proposed project conforms with the goals of the national project in conserving biological diversity by increasing the number of rare and endangered species of animals and ichthyofauna, as well as the creation of specially protected natural areas, increasing the area of green spaces, instilling respect for nature and wildlife, as well as modernizing the environmental consciousness of the population.
National	The development of the National Biodiversity Strategy and Action Plan is currently in progress under the UNDP-GEF
Biodiversity	project 'Global Biodiversity Framework – Early Action Support'. The Government recognizes the critical need to adopt such
Strategy and	strategic document and is committed to developing and implementing it as a comprehensive, long-term vision aligned
Action Plan	with the goals of Global Biodiversity Framework of the Convention on Biological Diversity.
Strategy for	Adopted by the President of the Republic of Kazakhstan on February 2, 2023, the Strategy on Achieving Carbon Neutrality
achieving	by 2060 outlines ambitious net-zero carbon goals and key technological transformations for national decarbonization. To
carbon	make these changes happen, the country needs to develop and put into action targeted and effective policies and
neutrality until	programs across its entire economy.
2060	
Concept of	Approved by the Decree of the Government of the Republic of Kazakhstan dated November 24, 2022 No. 941, the Concept
Education	includes measures to involve young people in improving environmental culture and respect for the environment.
Development of	
the Republic of Kazakhstan for	
2022-2026	
Concept of the	Approved by the Resolution of the Government of the Republic of Kazakhstan dated March 28, 2023, No. 262, the Concept
development of	includes improving air connectivity among tourist destinations within the country, the initial focus is on the Caspian coast
the tourism	as well, specifically the Mangystau Region and the city of Aktau. Furthermore, to foster cruise tourism in the Caspian Sea,
industry of the	there are plans to explore the construction of a marine terminal in the Aktau port. The concept provides development
Republic of	strategy for tourism products prioritizing eco-tourism, agro-tourism (rural tourism), ethnographic tourism etc.
Kazakhstan for	States, for tourism products prioritizing coo tourism, agro tourism (fural tourism), ethnographic tourism etc.
2023 –	
2029[1] ²⁶	

Table 7: Contribution to key Global Programs

Program	Program Contribution	Project Conformity
Strategic Development Goals	SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture,	The project will facilitate promotion of nature-positive small- scale enterprises and livelihood operations to help improve nutrition and food security
	SDG 5: Gender Equality:	Project investments are targeted at enhancing the role of women in decision-making, enhance economic benefits to women and promote gender equality
	SDG 13: Climate Action	The project will promote climate resilience through enhanced conservation outcomes, ensuring sustainable natural resources use that reduces climate negative impacts on critical ecosystems and support diversification of incomes and livelihoods
	SDG 14: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development	Through the promotion of enhancing of the marine conservation areas, improving environmental conditions in the Caspian Sea will ensure delivery of sustainable ecosystem services
	SDG 15: Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss,	The focus of the project is to improve management of existing terrestrial PAs, create new PAs and promote ecological connectivity and ecosystem integrity at the landscape and seascape level to enhance conservation outcomes
KM Global Biodiversity Framework (GBF)	GOAL A: Maintain ecosystem integrity, connectivity, resilience; halt extinctions; maintain genetic diversity by 2050.	The project through its integrated landscape/seascape approach intends to improve protection of Caspian Seal and other key species and their habitats, improve ecological connectivity between component parts of these systems, and reduce pressures on key species through improved conservation practice

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GOAL B: Biodiversity is sustainably used and managed and nature's contributions to people, including ecosystem functions and services, are valued, maintained and enhanced, with those currently in decline being restored, supporting the achievement of sustainable development for the benefit of present and future generations by 2050.	The intent of the project is improve the sustainable use of marine and terrestrial natural resources through creation of awareness, enhancing sustainable resource use regimes tied to improved value chains and livelihoods to create opportunities for local community participation in achieving conservation outcomes
Goal D: Ensure adequate implementation means, including finance, capacity, technology and science. Target 1: Ensure that all areas are under participatory integrated biodiversity inclusive spatial planning and/or effective management processes addressing land and sea use change.	The project intends promoting an integrated, participatory and inclusive landscape/seascape planning and management approach to resource governance and use The project intends promoting an integrated, participatory and inclusive landscape/seascape planning and management approach to resource governance and use
Target 2: At least 30 percent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration. To meet Target 3: At least 30 percent of terrestrial, inland	To meet the above goal, the project intends to improve management effectiveness in over 1,741,259 ha of terrestrial and 1,260,000 ha of marine systems and restore about 6,000 ha of associated habitats. To meet this goal, the project intends to improved management
water, and of coastal and marine areas effectively conserved and managed including over their traditional territories.	effectiveness of 604,000 ha of terrestrial and 60,000 ha of marine areas for biodiversity conservation
Target 10: Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably.	The overall intent of the project is to ensure that fisheries, aquaculture, agriculture, pastoral and other livelihood activities are managed in a sustainable fashion.
Target 11: Restore, maintain and enhance nature's contributions to people.	The project recognizes and promotes maintenance and enhanced contribution of these ecosystems for the economic benefit of local communities through sustainable use.
Target 14: Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes.	Output 1.1 is directed at ensuring the policies and sectoral guidelines are complementary to outcome of achieving biodiversity and its multiple values in planning and development processes, while Output 1.2 focusses on spatial planning and budgeting and Output 1.3 on environmental monitoring systems to avoid activities that impact biodiversity.
Target 19: Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner.	Component 3 seeks to improve financing for conservation actions, such as to seek private sector engagement (and resources) to support co-management models in resource use and the development of small business and value chain programs respectively
Target 21: Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity	Output 1.3 is specifically geared at improving national inventory and sharing information to support monitoring of the condition of the Caspian Sea.
Target 22: Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity.	The overall intent of the project is to ensure full and inclusive participation of all stakeholders (including women, youth and ethnic groups) in decision making, access to information and benefit sharing from project interventions.

Incremental/additional cost reasoning and expected contributions from the baseline

Table 8: Incremental Cost Reasoning

Baseline	Alternative to be put in place	Project impact including GEBs
Component 1: Strategic policy and planning to prom	ote ecological integrity of the Caspian Sea land	dscapes and seascapes

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- -Planning and management of marine resources in Caspian Sea governed by a multitude of separate sector policies, legislation, regulations and institutional arrangements that make it impossible to ensure complementarity
- Policies and practices will continue to promote the capitalization of natural resources by powerful business interests (oil and gas) at the expense of maintaining biodiversity and ecosystem services
- Limited information and monitoring of drivers and pressures that act at multiple spatial, temporal and political scales results in uncertainties and challenges.
- Limited recognition and capacity for considering the complexity of the geological, geomorphological and climatic reality of the Caspian Sea and linkages with adjacent coastal and basin inter-relationships
- Lack of understanding of, and capacity to use marine spatial planning tools, the technical knowledge to evaluate and define ecosystem services and their socioeconomic value, as well as the ability to determine trade-offs using readily available decision-making systems
- Full range of ecosystem services and biological diversity values are rarely integrated into sectoral and industry developmental plans, impeding their ecological and hydrological functioning.

- -Transformative integrated and inclusive planning and management of Kazakhstan portion of the Caspian Sea through a multi-disciplinary marine spatial planning exercise
- Improved guidelines, tools and practices to identify best options for implementation of integrated management plan that is best suited for the effective and sustainable management of Caspian Sea and adjacent coastal and catchment systems
- Improved and adaptive planning and adaptive management of Caspian Sea, its biodiversity and habitats through improved information availability
- Capacity for integrated approaches for management of Caspian Sea strengthened
- Improved inter-sectoral coordination and collaboration across sectors and interests that support integrated and inclusive plans for the Caspian Sea
- Caspian Seal Conservation Action Plan measures for the protection of key habitats and for ensuring the preservation of areas under active consideration

- -Improved policy directives for the conservation and management of the Caspian Sea
- -Improved sector-based guidelines and procedures provide tools that ensure the sustainable use of Caspian Sea resources are integrated into economic decisions regarding the Caspian Sea
- Increased capacity of institutions for marine spatial planning
- -Improved capacity of institutions for monitoring the ecological status of the Caspian Sea
- -Improved inventory and information facilitate better ecosystem and species (e.g. Caspian Seal, Sturgeon, fisheries resources, etc.)
- Improved the management effectiveness of 1,741,259 hectares and 1,260,000 hectares of existing and proposed terrestrial and marine protected areas respectively

Component 2: Sustainable management of land and water resources in the Caspian lowlands and western region of Kazakhstan

- -Degradation of immediate catchments and coastal areas adjacent to the Caspian Sea results in degradation of the ecology and biology of the Caspian Sea
- -Globally significant biodiversity, habitats and natural ecosystems are lost due to loss or degradation of agricultural lands, wetlands, grasslands and forest
- -Human use of adjacent catchment areas are often unsustainable resulting in their loss and degradation
- -Limited opportunities to promote sustainable economic development opportunities and alternative livelihoods to existing unsustainable activities
- -Enhanced flow of pollution into the Caspian Sea due to poor land-based practices

- -Resource use in catchment areas are effectively managed in accordance to rules, regulations and self-enforcement by local communities
- -Nature-based solutions implemented for degraded agricultural, pastoral, forest and other production lands in the catchments
- -Improved information, procedures and practices reduces conflicts arising from different priorities and needs for use of catchment resources
- -Alternative livelihood products and value chain enterprises available to promote more sustainable use of natural resources

- Improved management of 604,000 hectares and 60,00023) and hectares of terrestrial and marine habitats (outside PAs) hectares of terrestrial and marine habitats, respectively to benefit biodiversity
- -6,000 hectares of degraded agricultural and pastoral lands and shallowing areas of the Caspian Sea under sustainable land management
- increased capacity for Integrated management/ SLM on production lands in coastal and catchment areas
- Weighted vulnerability analysis helps identify vulnerable areas and practical measures to control and manage degradation in the Caspian Sea environs At least 8,500 persons (50% women) benefit from sustainable use of natural resources and nature-based solutions
- -Around 2,037,543 metric tons of CO₂eq mitigated over 20-year period on the basis of reduction of fires in terrestrial PAs, grassland improvement and arable land crop enrichment (to be revalidated at PPG stage)

Component 3: Financial incentives/instruments for sustainable natural resources management, alternative nature-friendly livelihood activities and engagement of private sector.

- -Inadequate and sustainable financial resources and private sector participation prevents effective
- Internalization and capacitating responsible private sector participation can contribute towards maintenance of
- At least 20% increase in private-sector funding for nature-positive activities that

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and collective action for conservation of species and habitats	the globally important biodiversity by private-public partnerships	focus on nature-based economic solutions
-Insufficient resources to conduct the necessary monitoring and enforcement activities to protect the environment.	-Improved private sector participation in conservation actions	- At least 15 small- scale community enterprises supported through private public partnerships.
- Limited donor based financial contributions to the region is also a major constraint.	-Improved integration of conservation outcomes in industry business planning	-Improved capacity of district level to improve financial management as measured by capacity development scorecard
Component 4: Knowledge management, awareness	raising and gender mainstreaming	
-Marine ecosystems remain poorly appreciated due to lack of baseline information for decision-making	-Increased awareness and knowledge sharing promote community, private industry and stakeholder conservation actions	-Improved awareness among stakeholders on importance of Caspian Sea ecosystems and value to the regional and local economies
 - Awareness and understanding about biodiversity, ecosystem service values and threats is limited at all levels and in all sectors, which constrains engagement and behavior change. 	- Results and lessons learned from project are made available to a wide national and Caspian	-At least ten lessons of best practices in Caspian Sea biodiversity conservation and sustainable use available for public access
-No comprehensive efforts to raise awareness of the benefits and need for conservation of globally threatened and endemic species, habitats, ecosystem management and threat reduction	-Increased level of awareness and information available to support a coordinated and collaborative effort	- At least ten regional knowledge sharing events support improved regional cooperation among the Caspian Sea countries
-Lack of effective information sharing, coordination and sharing of experiences at hinders collaborative regional coordination		

1 https://adilet.zan.kz/rus/docs/P2300000262

https://adhet.zan.kz/fus/does/1/2500000202

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

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

Yes

Stakeholder Engagement

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

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities:

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Civil Society Organizations: Yes

Private Sector: Yes

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

During the PPG phase and implementation, a broad approach to stakeholder engagement will be continued, as strong partnerships across government and with the private sector and local communities are needed to achieve sustainable biodiversity-related natural resources and economic development.

Table 9: Consultations during PIF stage

Name of Stakeholder	Description	Date
Ministry of Ecology and	MENR, serving as the GEF Focal Point, expressed interest and reached an	14.07.2023
Natural Resources	agreement during the meeting, indicating a positive stance on the discussed	
(MENR)	strategies for the designation and effective management of protected areas in the	
	Caspian Sea.	
Fisheries Committee of	UNDP and the Committee engaged in discussions to finalize an agreement on the	11.09.2023
MENR	current concept. The aim was to ensure alignment with the goals and objectives of	
	both the Fisheries Committee and UNDP.	
Kazakhstan Agency of	Collaboration opportunities were explored, specifically in providing of geospatial	23.10.2023
Applied Ecology	maps and specialized knowledge. The discussions centered around leveraging	
	KAAE's expertise in conducting long-term interstate monitoring studies focusing on	
	the biota of the Caspian region.	
HKOK (North Caspian	During the meeting, the focus was on NCOC's distinctive role as the sole oil and gas	4.12.2023
Operating Company) –	company in the Caspian actively driving and financing collaboration between Russia	
Private Sector	and Kazakhstan for the comprehensive study of the Caspian seal. The meeting	
	highlighted the commitment to scientific collaboration and environmental	
	stewardship.	
Experts (including civil	Consultations took place with researchers from institutions such as the Kazakh	5.12.2023-
society individuals)	National Agrarian Research University (T.S. Kerteshev), the Kazakh Research	9.12.2023
	Institute of Livestock and Forage Production (headed by K.I. Kushenov), and the	
	Kazakh Scientific-Production Center for Fisheries (led by K. Isbekov). The	
	discussions centered around the strategic choice of pilot regions for showcasing	
	effective approaches to sustainable agricultural, water, and forestry management.	
	These scientists have conducted research on sustainable natural resource	
	management in the Atyrau and Mangystau regions in recent years.	
Agriculture	Clarification of project goals, tasks, and agreement on proposals for sustainable	5.12.2023-
Management of Atyrau	land use	9.12.2023
and Mangystau Regions		
Natural Resources	Explanation of project objectives, discussion of proposals for combating land	5.12.2023-
Management of Atyrau	degradation, and reducing the threat to Caspian Sea biodiversity	9.12.2023
and Mangystau Regions		
Land Relations		5.12.2023-
Management of Atyrau	Clarification of project goals, tasks, and discussion of proposals for improving	9.12.2023
and Mangystau Regions	legislation on land and nature management, as well as landscape planning	
Ecology Departments of	Explanation of project goals and tasks, discussion of proposals for preserving	5.12.2023-
Atyrau State University	Caspian Sea biodiversity, and exploration of collaboration opportunities	9.12.2023
and Aktau State		
University		

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

Private Sector

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Will there be private sector engagement in the project?

Yes

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

Yes

Environmental and Social Safeguard (ESS) Risks

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

Yes

Overall Project/Program Risk Classification

PIF	CEO	MTR	TE
	Endorsement/Approval		
Medium/Moderate		1	1

E. OTHER REQUIREMENTS

Knowledge management

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

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

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

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
UNDP	GET	Kazakhstan	Climate Change	CC STAR Allocation: CCM- 1-4	Grant	600,000.00	57,000.00	657,000.00
UNDP	GET	Kazakhstan	Land Degradation	LD STAR Allocation: LD-1	Grant	1,200,000.00	114,000.00	1,314,000.00
UNDP	GET	Kazakhstan	Land Degradation	LD STAR Allocation: LD-2	Grant	700,000.00	66,500.00	766,500.00
UNDP	GET	Kazakhstan	Biodiversity	BD STAR Allocation: BD-1	Grant	4,000,000.00	380,000.00	4,380,000.00

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Total GE	F Resou	rces (\$)				7,270,000.00	690,650.00	7,960,650.00
UNDP	GET	Kazakhstan	Biodiversity	BD STAR Allocation: BD-3	Grant	770,000.00	73,150.00	843,150.00

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount (\$)

200000

PPG Agency Fee (\$)

19000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
UNDP	GET	Kazakhstan	Biodiversity	BD STAR Allocation: BD-1	Grant	131,225.00	12,467.00	143,692.00
UNDP	GET	Kazakhstan	Climate Change	CC STAR Allocation: CCM-1-4	Grant	16,506.00	1,568.00	18,074.00
UNDP	GET	Kazakhstan	Land Degradation	LD STAR Allocation: LD-1	Grant	52,269.00	4,965.00	57,234.00
Total PPO	G Amount	(\$)		I		200,000.00	19,000.00	219,000.00

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
UNDP	GET	Kazakhstan	Biodiversity	BD STAR Allocation	3,838,061.00
UNDP	GET	Kazakhstan	Climate Change	CC STAR Allocation	593,441.00
UNDP	GET	Kazakhstan	Land Degradation	LD STAR Allocation	3,748,148.00
Total GEF Reso	urces	1	1		8,179,650.00

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Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
BD-1-1	GET	3,000,000.00	21000000
BD-1-4	GET	1,000,000.00	7000000
BD-3-1	GET	300,000.00	2100000
BD-3-2	GET	470,000.00	4200000
LD-1	GET	1,200,000.00	8489000
LD-2	GET	700,000.00	4900000
CCM-1-4	GET	600,000.00	3300000
Total Project Cost		7,270,000.00	50,989,000.00

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co- financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Committee of forestry and wildlife of MENR	Public Investment	Investment mobilized	13564000
Recipient Country Government	Fisheries Committee of MENR	Public Investment	Investment mobilized	16770000
Recipient Country Government	Kazakh Research Institute of Fishery	Public Investment	Investment mobilized	1650000
Recipient Country Government	Akimat of Atyrau region	Public Investment	Investment mobilized	8975000
Recipient Country Government	Akimat of Mangistau region	Public Investment	Investment mobilized	9000000
Civil Society Organization	NGO "EcoMangystau"	Public Investment	Investment mobilized	30000
GEF Agency	UNDP	Grant	Investment mobilized	900000
GEF Agency	UNDP	Other	Investment mobilized	100000
Total Co-financing				50,989,000.00

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Describe how any "Investment Mobilized" was identified

Clarification on the investment mobilized:

- (i) Committee of Forestry and Wildlife, MENR: Involves expenses in relation to the management of nature reserves, updating and monitoring wildlife, biotechnology and technical staff engagement and training, providing leadership in the areas of formation and implementation of state policy, coordination of management processes in the areas of environmental protection, development of the green economy, waste management (excluding municipal, medical and radioactive waste), protection, control and supervision the rational use of natural resources, the state geological study of the subsoil, the reproduction of the mineral resource base, the use and protection of the water fund, in water supplies, sanitation, forestry, protection, reproduction and use of wildlife and the specially protected areas.
- (ii) Fisheries Committee of MENR: To support: realization of the state and regional policy, strategic plans, state and other programs and projects concerning fishery; implementation of state control of protection, reproduction and use of fish resources and other water animals and maintaining fishery; and management of fishery and state regulation of fishery and fish-breeding and reproduction activities.
- (iii) Kazak Research Institute of Fisheries: evaluation of reservoirs for use by the fishery sector, developing recommendations for restocking of reservoirs, ecological monitoring, aquaculture development and demonstration activities, and fisheries management advisory services, etc.
- (iv) Akimat of Atyrau: supporting innovation and technologies for improving the investment climate and export potential. Support fishing and processing companies in commercial fishing and production base development, and implementation of state policies on the protection, reproduction, and use of fish resources. It also includes efforts in fish species conservation and habitat management based on scientific recommendations, alongside developing rural social infrastructure, subsidizing agricultural investments, and supporting deep-processing agricultural product manufacturers.
- (v) Akimat of Mangistau region: implementing a national project* to develop entrepreneurship in tourism creating favorable tourism conditions, and protecting tourism resources. Initiatives include executing regional industrial strategies, improving the investment climate and subsidizing fisheries and aquaculture investments. It covers implementing agro-industrial policies; and ensuring the conservation and sustainable use of forests, wildlife, and specially protected areas as well as improving means of control and supervision over the condition, conservation, protection, and use of protected areas.
- (vi) EcoMangystau (NGO): Improvement of ecological and socio-economic conditions, the improvement of the environment and the preservation of its resource, environmental education, development of civil activity, implementation of mass environmental protection activities and participation in the formation of ecological and socio-economic policy
- (vii) UNDP: The UNDP allocates USD 100,000 for project management costs which cover expenses associated with the planning, executing, and closing of project activities. An additional USD 900,000 will be co-financed through UNDP projects, including the implementation of biodiversity offset mechanism under the UNDP BIOFIN project. This financial solution is aimed at compensating for biodiversity loss and ecosystem disturbances caused by infrastructure projects in targeted regions. Furthermore, the regions will benefit from the UNDP-GCF project (2024-2027) "Institutionalization of adaptation planning and integration of climate risks into Kazakhstan's development planning processes." This initiative is designed to enhance National Adaptation Planning (NAP) policies by strengthening adaptation governance and coordination, generating evidence and building capacities for effective adaptation solutions, catalyzing private sector engagement in adaptation, and increasing financial resources for adaptation measures. Other UNDP initiatives will also be integrated into the co-financing in the project regions.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Nancy Bennet		Ms. Monica Moldovan		monica.moldovan@undp.org

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

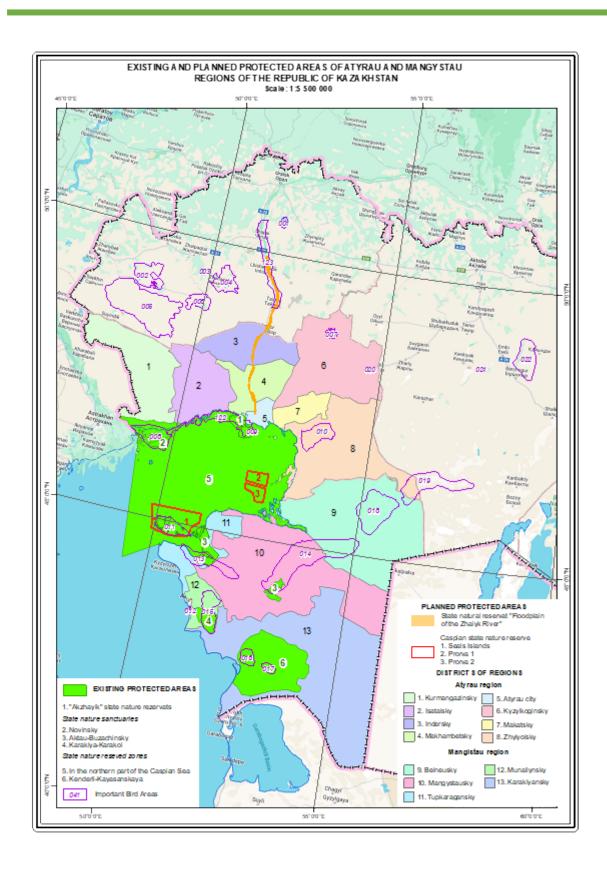
Name	Position	Ministry	Date (MM/DD/YYYY)
Saule Sabiyeva	GEF OFP	Ecology and Natural Resources	8/9/2023

ANNEX C: PROJECT LOCATION

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

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ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

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

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Title

Annex D

Significant Objective 1	Significant Objective 1	Principal Objective 2	Significant Objective 1
Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
ANNEX E: RIO MARKERS			

ANNEX F: TAXONOMY WORKSHEET

ANNEX F: Taxonomy Worksheet

Level 2	Level 3	Level 4
Transform policy and regulatory environments		
Strengthen institutional capacity and decision-making		
Convene multi-stakeholder		
instruments		
Private Sector		
	Financial intermediaries and market facilitators	
	Large corporations	
	SMEs	
	Individuals/Entrepreneurs	
Beneficiaries		
Local Communities		
Civil Society		
	Community Based Organization	
	Non-Governmental Organization	
	Academia	
Type of Engagement		
	Information Dissemination	
	Partnership	
	Consultation	
	Participation	
Communications		
	Awareness Raising	
	Education	
	Public Campaigns	
	Behavior Change	
Enabling Activities		
Capacity Development		
Knowledge Generation and Exchange		
_		
1	Theory of Change	
†		
1		
Innovation	<u> </u>	
Knowledge and Learning		
	Transform policy and regulatory environments Strengthen institutional capacity and decision-making Convene multi-stakeholder alliances Demonstrate innovative approaches Deploy innovative financial instruments Private Sector Beneficiaries Local Communities Civil Society Type of Engagement Communications Enabling Activities Capacity Development Knowledge Generation and Exchange Targeted Research	Transform policy and regulatory environments Strengthen institutional capacity and decision-making Convene multi-stakeholder alliances Demonstrate innovative approaches Deploy innovative financial instruments Private Sector Financial intermediaries and market facilitators Large corporations SMES Individuals/Entrepreneurs Beneficiaries Local Communities Civil Society Community Based Organization Non-Governmental Organization Academia Type of Engagement Information Dissemination Partnership Consultation Participation Communications Awareness Raising Education Public Campaigns Behavior Change Enabling Activities Capacity Development Knowledge Generation and Exchange Targeted Research Theory of Change Indicators to Measure Change

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		Knowledge Management	
		Innovation	
		Capacity Development	
		Learning	
	Stakeholder Engagement Plan		
Gender Equality			
Gender Equancy	Gender Mainstreaming		<u> </u>
	Conservation of the cons	Beneficiaries	
		Women groups	
		Sex-disaggregated indicators	
		Gender-sensitive indicators	
	Gender results areas		
		Access and control over natural resources	
		Participation and leadership	
		Access to benefits and services	
		Capacity development	
	<u> </u>	Awareness raising	-
		Knowledge generation	
		span lang='EN-ZA' style='font-size: 8pt;	
Focal Areas/Theme		font-family: Calibri, sans-serif;'>	
	Biodiversity		
		Protected Areas and Landscapes	
			Terrestrial Protected Areas
			Coastal and Marine Protected
			Areas
			Productive Landscapes
			Productive Seascapes Community Based Natural
			Resource Management
		Mainstreaming	
			Extractive Industries (oil, gas,
			mining)
			Tourism
			Agriculture & agrobiodiversity
			Fisheries
		Species	
			Threatened Species
		Diames	Invasive Alien Species (IAS)
		Biomes	Wetlands
			Rivers
			Grasslands
	<u> </u>	Financial and Accounting	
	1		Conservation Finance
	Land Degradation		
		Sustainable Land Management	
		Ĭ	Restoration and Rehabilitation
			of Degraded Lands
			Ecosystem Approach
			Integrated and Cross-sectoral approach
			Community-Based NRM
			Sustainable Livelihoods
			Income Generating Activities
			Sustainable Agriculture
			Sustainable Pasture Management
			Sustainable Forest/Woodland Management
			Improved Soil and Water Management Techniques
	<u> </u>		Sustainable Fire Management
		Land Degradation Neutrality	
		,	Land Productivity
	•	•	•

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		Carbon stocks above or below
		ground
International Waters		
	Fisheries	
	Pollution	
		Nutrient pollution from all
		sectors except wastewater
	Areas Beyond National Jurisdiction	
	Large Marine Ecosystems	
	Private Sector	
	Marine Protected Area	
Chemicals and Waste		
	Sound Management of chemicals and Waste	
	Best Available Technology / Best Environmental Practices	
Climate Change		
	Climate Change Adaptation	
		Climate Resilience
		Ecosystem-based Adaptation
		Community-based Adaptation
		livelihoods
	Climate Change Mitigation	
		Agriculture, Forestry, and other
		Land Use
	United Nations Framework on Climate Change	
		Nationally Determined
		Contribution
		Sustainable Development Goals
	Climate Finance (Rio Markers)	
		Climate Change Mitigation 1
1		Climate Change Adaptation 1

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