GEF-8 REQUEST FOR CEO ENDORSEMENT/APPROVAL

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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 Europe and Central Asia	GEF Project ID 11524
Country(ies) Kazakhstan	Type of Project FSP
GEF Agency(ies): UNDP	GEF Agency Project ID 9727
Project Executing Entity(s) Ministry of Ecology and Natural Resources (MENR), - Committee for Forestry and Wildlife	Project Executing Type Government
GEF Focal Area (s) Multi Focal Area	Submission Date 9/10/2025
Type of Trust Fund GET	Project Duration (Months) 72
GEF Project Grant: (a) 7,270,000.00	GEF Project Non-Grant: (b) 0.00
Agency Fee(s) Grant: (c) 690,650.00	Agency Fee(s) Non-Grant (d) 0.00
Total GEF Financing: (a+b+c+d) 7,960,650.00	Total Co-financing 90,864,516.00
PPG Amount: (e) 200,000.00	PPG Agency Fee(s): (f) 19,000.00
Total GEF Resources: (a+b+c+d+e+f) 8,179,650.00	
Project Tags CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No	
Project Sector (CCM Only) Mixed & Others	

Taxonomy

Focal Areas, Climate Change, Biodiversity, Land Degradation, International Waters, Gender Equality, Stakeholders, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Deploy innovative financial instruments, Transform policy and regulatory environments, Demonstrate innovative approache, Private Sector, Beneficiaries, Local Communities, Type of Engagement, Civil Society, Communications, Financial intermediaries and market facilitators, Large corporations, SMEs, Individuals/Entrepreneurs, Non-Governmental Organization, Community Based Organization, Academia, Partnership, Information Dissemination, Consultation, Participation, Awareness Raising, Public Campaigns, Behavior change, Education, Capacity, Knowledge and Research, Targeted Research, Knowledge Generation, Capacity Development, Knowledge Exchange, Learning, Innovation, Adaptive management, Theory of change, Indicators to measure change, Gender Mainstreaming, Gender results areas, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Access and control over natural resources, Participation and leadership, Knowledge Generation and Exchange, Access to benefits and services, Protected Areas and Landscapes, Coastal and Marine Protected Areas, Community Based Natural Resource Mngt, Terrestrial Protected Areas, Productive Landscapes, Productive Seascapes, Mainstreaming, Tourism, Fisheries, Agriculture and agrobiodiversity, Extractive Industries, Species, Threatened Species, Invasive Alien Species, Biomes, Rivers, Grasslands, Wetlands, Financial and Accounting, Conservation Finance, Payment for Ecosystem Services, Conservation Trust Funds, Sustainable Land Management, Sustainable Agriculture, Sustainable Livelihoods, Improved Soil and Water Management Techniques, Ecosystem Approach, Integrated and Cross-sectoral approach, Community-Based Natural Resource Management, Sustainable Fire Management, Income Generating Activities, Restoration and Rehabilitation of Degraded Lands, Sustainable Pasture Management, Land Degradation Neutrality, Land Productivity, Land Cover and Land cover change, Freshwater, Coastal, Areas Beyond National Jurisdiction, Large Marine Ecosystems, Acquaculture, Marine Protected Area, Climate Change Adaptation, Climate Change Mitigation, Climate resilience, Ecosystem-based Adaptation, Livelihoods, Agriculture, Forestry, and Other Land Use, United Nations Framework Convention on Climate Change, Nationally Determined Contribution, Enabling Activities

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	Significant Objective 1	Principal Objective 2	Significant Objective 1

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. (max. 250 words, approximately 1/2 page)

The Caspian Sea is the largest endorheic water body in the world (i.e. without outflow to external water bodies), that is ecologically linked with important wetlands of the Zhaiyk (Ural) river delta, terrestrial semi-desert and desert landscapes that provide important habitat for valuable aquatic and terrestrial fauna species, including the endangered Caspian Seal (*Pusa caspica*) and six critically endangered sturgeon species. The wetlands support an estimated 150,000 waterbirds during breeding season, and around 3 million during migration, including at least 10 endangered species. Terrestrial, coastal and marine ecosystems of the Zhaiyk Caspian basin offer crucial natural resources and ecosystem services that underpin key economic sectors. Despite its biological importance, today the Zhaiyk Caspian basin in Kazakhstan is facing a profound ecological crisis.

To address these threats, the project aims to promote an integrated ecosystem-based approach to conserve the Caspian Sea basin in Kazakhstan and ensure sustainable economic development. This is to be achieved through a strategic integrated marine and land spatial planning framework to achieve a shift from a focus on the revenue generation and production systems to an ecological-centered vision of systems and wealth. Through this process, the project aims to: (i) improve the management effectiveness of 2,964,419 hectares and 771,262 hectares of existing terrestrial and marine protected areas; (ii) establish 676,969 hectares and 169,832 hectares of terrestrial and aquatic protected areas; (iii) strengthen conservation in 1,500,000 hectares of terrestrial eco-corridor and 132,526 hectares of aquatic corridor through zoning; (iv) promote sustainable land management in 25,500 hectares of pasture and degraded agricultural land; (v) support restoration of 201,000 hectares of degraded agricultural lands; (vi) mitigate 39,277,303 metric tons of CO2eq over a 20-year period; and (vii) directly benefit around 8,500 people through improved resource use and livelihood opportunities.

Project Description Overview

Project Objective

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

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
3,853,826.00	48,163,206.00

Outcome:

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

(i) Marine and Land Spatial Planning and Policy Framework established/ strengthened and operational at the Zhaiyk Caspian basin level (#1)

(ii) Number of gender-responsive regional development programs and/or sectoral plans/ policies/ guidelines developed and endorsed (#4)

(iii) Improved management effectiveness of existing (2,964,419 ha), expanded (630,000 ha) and newly created (46,969 ha) terrestrial protected areas (#20)

(iv) Improved management effectiveness of existing (771,262 ha) and expanded (169,832 ha) marine protected areas (#20)

(iv) % increase in capacity of the Kazakh Research Institute of the Caspian Sea for monitoring biodiversity in marine and coastal areas of the Caspian Sea in Kazakhstan (#40%)

Output:

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

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

Output 1.3: Improve conservation and protection of globally important biodiversity in the Caspian Sea region through PA/conservation area expansion, PA and KBAs effective planning

Output 1.4: Enhance environmental monitoring of the Kazakhstan part of the Caspian Sea Enhanced environmental monitoring of the Kazakhstan part of the Caspian Sea by responsible government entities to inform effectiveness of spatial land use/PA/KBA planning and management

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 ($)	Co-financing ($)
1,846,093.00	23,069,438.00

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) Increase in 1,500,000 hectares of landscapes under improved practices from terrestrial OECM (eco-corridor) supported

(ii) Number of sectoral partnerships/initiatives for location-appropriate pilot initiatives projects for SLM (#5)

(iii) Sustainable management of 25,500 hectares of degraded pastoral lands in production systems

(iv) Degraded rangeland and pastures and ecosystems (201,000 hectares) under restoration

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

Output:

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

Output 2.2 Piloting SLM in the pilot districts

Output 2.3: Roll out of 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

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
694,613.00	8,677,599.00

Outcome:

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

This will be measured by:

(i) Nature-based or nature-positive financial instruments identified and evaluated for effectiveness in the project landscapes / seascapes and prepared for replication and scaling-up (#2)

(ii) Percentage increase in people using / benefiting from sustainable natural resources products and services (pasture, fisheries, ecotourism, etc.) promoted / demonstrated by the project (#20%).

(iii) Financing mobilized / leveraged for public and private sector directly available for investment in nature-positive natural resources use practices. (USD 10 million)

Output:

Output 3.1: Economic values 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 conservation and 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 ($)	Co-financing ($)
402,992.00	5,032,757.00

Outcome:

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

This will be measured by:

(i) Change in stakeholder attitudes and participation in conservation efforts measured using KAP surveys (#20%, with 45% women)

(ii) Number of good practices lessons documented and disseminated through relevant channels (#8)

(iii) Level of participation in regional / global knowledge sharing events in the context of project topics (#10 events)

Output:

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

Output 4.2: Documentation and dissemination of case studies, best practices and lessons learned

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

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
135,250.00	1,695,081.00

Outcome:

Outcome 5: Enhanced monitoring for adaptive management.

This will be measured by:

(i) Evaluations conducted e)

Output:

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

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Component 1: Strategic policy and planning to promote ecological integrity of the Caspian Sea landscapes and seascapes	3,853,826.00	48,163,206.00
Component 2: Sustainable management of land and water resources in the Caspian lowlands and western region of Kazakhstan	1,846,093.00	23,069,438.00
Component 3: Financial incentives/instruments for sustainable natural resources management, alternative nature-friendly livelihood activities and engagement of private sector	694,613.00	8,677,599.00
Component 4: Knowledge management, awareness raising and gender mainstreaming	402,992.00	5,032,757.00
M&E	135,250.00	1,695,081.00
Subtotal	**6,932,774.00**	**86,638,081.00**
Project Management Cost	337,226.00	4,226,435.00
Total Project Cost ($)	**7,270,000.00**	**90,864,516.00**

Please provide Justification

PROJECT OUTLINE

A. PROJECT RATIONALE

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 endorheic water body in the world (i.e. without outflow to external water bodies), lying approximately 27 m below the level of the world oceans, in a deep depression on the boundary between Europe and Asia, east of the Caucasus, west of the extensive steppes of Central Asia, south of the fertile plains of Southern Russia, and north of the mountainous Iranian Plateau. The distinct differences in physico-hydrological conditions of the Caspian Sea's regions and its extensive watershed ensure a richness in biological diversity, in its aquatic zones, estuaries, deltas and their wetlands, as well as the terrestrial area. The Northern

Caspian Sea region, which includes the Zhaiyk Caspian basin has the richest fauna and flora, followed by the Middle and Southern regions[1][1]. The northern part of the Caspian Sea in Kazakhstan is designated as the Northern Caspian Sea State Nature Zone (WDPA-ID 342651)[2][2], and is part of the Caspian Seal Breeding Area Important Marine Mammal Area (IMMA), the Caspian Seal Moulting and Haul Out Areas IMMA, and the Caspian Seal Transitory Migration and Feeding Area IMMA[3][3], confirming the Caspian Seal's (*Pusa capsica*) internationally recognized status as an endangered species. The shallow fresh to oligohaline marine zone also provides important habitat for other valuable aquatic fauna species, including six critically endangered sturgeon species, including Beluga (*Huso huso*; CR), Russian sturgeon (*Acipenser gueldenstaedtii;* CR), Persian sturgeon (*Acipenser persicus*; CR), Stellate sturgeon (*Acipenser stellatus*; CR), Ship sturgeon (*Acipenser nudiventris*; CR), and Sterlet (*Acipenser ruthenus*; VU)[4][4], as well as the Caspian inconnu (Caspian whitefish, *Stenodus leucichthys*; NT) and Caspian trout (*Salmo trutta caspius*; EN)[5][5]. The important wetlands of the North Caspian in Kazakhstan, including the Akzhaiyk State Nature Reservation (WDPA-ID 342650), designated as Ramsar site in 2009 (Ramsar site No. 1856)[6][6], and designated Important Bird and Biodiversity Areas / Key Biodiversity Areas (IBAs/KBAs)[7][7], including the Kazakhstan portion of the Volga Delta - Zhambay IBA/KBA, the Delta of the Ural River IBA/KBA, the Tyulen Islands IBA/KBA, and the Aktau cliff faces IBA/KBA, together being a key link on the East African-Eurasian Flyway, support an estimated 150,000 waterbirds during breeding, and around 3 million during migration, including key bird species like the Dalmatian Pelican (*Pelecanus crispus*), Ruddy Shelduck (*Tadorna ferruginea*), Common Coot (*Fulica atra*), Pink Flamingo (*Phoenicopterus roseus*), and numerous species of geese and ducks (*Anatidae*), gulls (*Larinae*), and waders (*Scolopacidae*). Also, at least 10 endangered species are observed, including White-headed Duck (*Oxyura leucocephala*; EN)[8][8], Pallas's Fish-eagle (*Haliaeetus leucoryphus*; EN)[9][9], White-tailed Sea-eagle (*Haliaeetus albicilla*; EN), Sociable lapwing (*Vanellus gregarious*; CR), Slender-billed curlew (*Numenius tenuirostris*; CR), Black-bellied sandgrouse (*Pterocles orientalis*: EN), Pallas's sea-eagle (*Haliaeetus leucoryphus*; EN), Saker falcon (*Falco cherrug*; CR), Osprey (*Pandion haliaetus*, EN), Egyptian Vulture (*Neophron percnopterus*; EN), and Siberian Crane (*Grus leucogeranus*; CR)[10][10],[11][11]. In the extensive semi-desert and desert ecosystems surrounding the North Caspian region's coastal areas, including the designated Caspian Lowland Desert (Ecoregion ID: 815) and Kazakh Semi-Desert (Ecoregion ID: 828) Ecoregions recognized as part of WWF's Global 200 priority regions, the critically endangered Saiga antelope (*Saiga tatarica*; CR) migrates over large distances. The interior terrestrial areas of the Mangystau province, including the the Ustyurt Plateau and its rocky escarpments, recognized as potential UNESCO World Heritage Sites, represent unique 'cold winter deserts', home to the Goitered Gazelle (*Gazella subgutturosa*), the Kulan (*Equus hemionus*), and the Ustyurt Urial (*Ovis vignei arkal*). The area is also home to the Turkestan Desert Magpie (*Podoces panderi*), as well as the endemic subspecies *Podoces panderi ilensis* and a significant number of rare and endemic plant species, as confirmed by the latest floristic surveys conducted in 2023–2024. Overall, the project area provides valuable natural habitat for over 460 vertebrate species, including 292 bird species, while the number of rare and endangered species from the Caspian Sea and its coastal zones, as listed in the National Red Book of Kazakhstan, amount to 75 species, including 12 plant species, 20 insects, 2 reptiles, 31 birds, 5 mammals and 5 fish species[12][12].

The Zhaiyk Caspian basin, which is the focus of the project, is conditioned by the presence of the Kazakhstan part of the Northern Caspian Sea region. Administratively, the area belongs to 4 regions: the Atyrau region, Mangystau region, West Kazakhstan region, and the Aktobe region. The key ecosystems in the terrestrial part of the Zhaiyk Caspian basin predominantly include steppic grasslands, permanent wetlands in the coastal zone, extensive lowland semi-deserts, and deserts and barren lands in the southern part of the region. Terrestrial, coastal and marine ecosystems of the Zhaiyk Caspian basin offer crucial natural resources and ecosystem services that underpin key economic sectors like marine and coastal fisheries, agriculture, especially livestock farming, tourism, and mining industries, including oil and gas exploration and quarrying of metal ores supported by processing and transportation infrastructure, all of which are integral to support the livelihoods of communities in the Mangystau and Atyrau

regions. Beyond its economic value, the area holds cultural and historical significance, representing both a livelihood and a heritage for millions. At the same time, over time, the combined impacts of socio-economic driving forces have negatively influenced the state of the environment in the Zhaiyk Caspian basin's marine and coastal zones,[13][13], including in particular the sturgeon population in the Caspian Sea that accounted for up to 82 per cent of total world catches.

While the Constitution of the Republic of Kazakhstan as well as multiple regulatory and legal acts proclaim the equality of all before the law and the court and prohibits discrimination based on, among others, gender, polarized views on gender roles with dominance of patriarchal views continue to dominate among 96% of the population, in the labor market, society and households. Gender discrimination in the labor market is characterized by a low level of gender awareness among civil servants, a low level of representation of women in leadership positions, gender pay gap and occupational segregation, as well as the feminization of low-wage jobs in selective economic sectors (education, healthcare, services), due to the limited access to (re)training and the inability to work long hours in paid work from a expected focus on their responsibilities for domestic and family care work. In agriculture, households produce about half of all agricultural products, in which women usually have a heavy workload and perform many jobs at the same time, including cooking food, caring for children and the elderly, in parallel to working on their plots for personal consumption or performing other agricultural work, including through seasonal informal employment. In the project region, this includes engagement in illegal overfishing, especially sturgeon, informal processing and trading of fish. In livestock production, women engage in caring for the herd, in milking and processing meat and dairy products, including on distant pastures with lack of water, electricity, access to health services. Overall, in agriculture, women suffer from the lowest wages, as well as lower incomes due to their limited access to technology, financial resources, fertilizer, etc. While in Kazakhstan, legally women have equal access to land, gender stereotypes and traditional norms regarding inheritance and land management still persist, which limit women's actual access to land resources. In the absence of a centralized water supply across most of the project region women are also responsible for collecting water and ensuring heating. Furthermore, women are more likely to face the consequences of problems related to the degradation of ecosystems and the environment. They are more vulnerable to the negative impact of polluted water, degradation of pasture, fish, and water resources on health, while continuing to be excluded from decision-making processes in the management of these resources.

Despite, its socio-economic value, the Zhaiyk Caspian basin is facing a profound ecological crisis. A variety of direct drivers, such as pollution from industrial activities, in particular oil and gas production and quarrying, (illegal) fishing, agricultural activities, specifically livestock farming and pasture overgrazing, and, in recent years, tourism development, are putting pressures on the state of the region's environment. Indirect drivers that further affect marine, coastal and terrestrial ecosystems relate to climate change and sea level fluctuations[14][14]. As a consequence, a number of threats, varying across the Caspian Sea region in Kazakhstan, lead to the degradation of terrestrial, freshwater, coastal and marine ecosystems and the key fauna and flora species that occupy these ecosystems, including the Caspian Seal, sturgeons and other fish species, as well as migratory birds, mammals and other species.

Key threats and drivers of environmental degradation

Threats and drivers continue to result in significant loss of biodiversity, natural resources and natural ecosystems, diminishing ecosystem services from these ecosystems that support socio-economic development, human well-being and global environmental benefits. The loss of ecosystems and biodiversity in the Zhaiyk Caspian basin in Kazakhstan is considered to be largely due to (i) Unsustainable and over-exploitation of terrestrial and marine natural resources; (ii) unsustainable fishing; (iii) pollution from oil and gas extraction, radio-active waste and land-based sources of industrial, agricultural and domestic pollution; and (iv) climate change. The unsustainable use of land, water and mineral natural resource in the Caspian lowland deserts and northern deserts of the pilot regions continues to threaten key ecosystems inhabited by a rich diversity of fauna and flora species, including many vulnerable and endangered species like Caspian seals, sturgeons, migratory birds and mammals. The main threats are largely related to the degradation of the catchments of the Caspian Sea, flow regulations, over-exploitation of aquatic resources and pollution that are discussed below:

Pasture overgrazing is one of the major causes of rangeland and desert ecosystem degradation with the catchment areas[15][15]. As a result, over the past 10 years, habitat loss and degradation has resulted in a 66% decrease of the biodiversity index[16][16]. Consequently, increasingly nutritious forage plants and edible wormwoods disappear, saltworts are replaced by ephemerals and inedible plants, and desertification processes intensify, including the development of sand dunes in the Mangystau region. The reduction in vegetation cover, alteration in plant species composition and disruption of the ecological balance severely impacts

biodiversity, including globally significant species like Saiga antelope, by reducing food availability, fragmenting habitats, and increased direct competition for limited resources with domestic livestock. Degraded pastures cover 1.7 million ha, 14% of the total area of pastures in the region, of which 1.2 million ha are moderately degraded and 0.5 million ha are severely degraded. As a result, the area of disturbed lands has increased over the past 10 years from 20,000 ha to 87,400 ha. Due to increased occurrence of droughts, in recent years forage reserves are minimized, leading to a sharp drop in animal productivity and mortality, affecting income and livelihoods of livestock breeders. Climate variability and climate change also impact on vegetation changes, especially the observed reduction in precipitation and snow cover in the pilot regions, which between 2000 and 2019 experienced 13 times higher temperatures and 4.7 times lower precipitation rates compared to the national average change rates[17][17]. Improvement of pasture management is hampered by disintegrative and uncoordinated land use planning and the lack of functional zoning of ecosystems in the pilot regions. Sectoral planning prevails, without attention to the ecological integrity of natural ecosystems.

Flow regulation of the Zhaiyk (Ural) River was achieved in the mid-20th century by the construction of a large number of water reservoirs, multiple water intake facilities and extensive channel networks mainly in the upper part of the basin. Augmented by population growth, increased water consumption and climate change, in the lower reaches of the Zhaiyk River this has resulted in an earlier beginning and end of spring floods, a decrease in maximum water discharges, reduction of inundation area and duration, and increase in pollution concentrations[18][18]. Specifically, since 1971, a systematic and gradual decrease in the long-term average annual flow of 12 km3 was observed, to on average 10.0 km3 (-17%) in 1995 and to 7.5 km3 (-38%) in 2016[19][19]. The decreased runoff during the spring flood season caused an increase in water salinity by 2.5 times, increasing to 5-8 times during the low-water period. During the spring flooding, sediments are no longer flushed, causing siltation of waterways. Consequently, these changes (not adequately considered during the land use planning process) had a profound impact on downstream riparian, coastal and marine ecosystems. Specifically, the area of floodplain spawning grounds decreased, reducing the efficiency of fish spawning, leading to negative impacts on fish populations, including threatened sturgeon species[20][20]. Specifically, In the Ural River, sturgeons spawn mainly on sites located between 250 and 700 kms upstream of the delta. Flow alteration and siltation caused the total area of spawning grounds to reduce, from 1,700 ha in the 1970s to 1,100 ha in the 1990s[21][21]. In 2016, surveys showed that the area of sturgeon spawning sites further reduced to 200 ha, with the remaining being in critical conditions, due to meandering, the prevalence of low-water years, and the decreased quality of the spawning substrate (silting; overgrowing with shrubs, woody, hard herbaceous, and higher aquatic vegetation)[22][22].

Overexploitation of aquatic resources. Legal fisheries activities, exacerbated by illegal, unreported, and unregulated (IUU) fishing in the Caspian region, including in the marine zone of Zhaiyk Caspian basin, is among the key factors causing the decline of freshwater and (semi)-anadromous fish stocks, which have negative economic impacts on the fishing industry, and causes serious threats to the conservation of the fish populations, including sturgeons. Fishing activities also have a significant negative impact on the population of Caspian seals, due to their accidental drowning in (illegal) fishing nets associated with sturgeon poaching. For most of the 20th century, Caspian seals were subjected to unsustainable commercial hunting, being considered a 'harvested species' species under Soviet legislation which led to the drastic decline of the population during the 20th century[23][23].

The current commercial fishing system in Kazakhstan, which is largely artisanal coastal fisheries, that was permitted within state-established limits uses methods to determine quotas that are neither transparent nor based on sound science, while bidding processes for licenses are expensive and complicated, discouraging individual fishers to participate in auctions, and forcing them into illegal fisheries[24][24]. According to FAO assessments, less than one-third of the total fish catch in Kazakhstan is officially reported, indicating widespread IUU activities, especially in the Caspian zone[25][25]. While the commercial fishing of sturgeon species is officially banned since 2005, it has been recognized that IUU catches have driven the rapid depletion of all six Caspian sturgeon species. At the same time, by-catch in illegal sturgeon fisheries is a major cause of mortality for the endangered Caspian seal. With at least several thousand seals being entangled each year, by-catch is likely to be the biggest current source of anthropogenic

associated mortality for Caspian seals[26][26]. At the same time, manpower and resources for effective surveillance and enforcement are insufficient or lacking. While stocking programs are in place, and private sector breeding farms receive subsidies from the state on the basis of the number of stocking units (rather than weight) released, there is very little monitoring of the efficiency of stocking, while the success of stocking is undermined by the continuing widespread IUU fishing[27][27]. In addition to overfishing, a decline in freshwater and semi-anadromous fish stocks, including sturgeon species, relates also to a significant decrease in the level of the Caspian Sea over the past 20 years, low river water levels, increased sedimentation of almost all fish passage channels, including the Ural-Caspian shipping canal, which does not allow migratory fish species to travel upstream the Zhaiyk River for spawning.

Pollution: The loss of biodiversity and bio-productivity of aquatic organisms is further caused by increased pollution of the Zhaiyk River and Caspian Sea. The water and sediments of the Zhaiyk River are heavily contaminated by polychlorinated biphenyls, heavy metals (copper, zinc, lead, cobalt, chromium, nickel), oil contaminants, PCBs and pesticides (including organochlorine pesticides-metabolites of DDT), arising from mining, oil production and refinery, metallurgical industry, domestic and industrial wastewater outflows, as well as agricultural activities, with the major industrial centers mostly situated both in Russia and in Kazakhstan[28][28]. Across the Zhaiyk Caspian basin, the oil and gas industry is one of the main drivers putting significant pressures on the marine and coastal environment. Activities such as drilling, rig construction and maintenance, road and pipeline construction, oil transportation, technological oil and gas leakages, and processing as well as accidental accidents all have a strong anthropogenic impact on all components of the marine, coastal and terrestrial environment, including violations of the environmental balance of natural ecosystems, changes in species composition, as well as a decrease in the number and spatial distribution of animal populations[29][29]. From terrestrial activities, the annual flow of petroleum products through the Zhaiyk River is 900 tons/year, 1.2% of the total river flow of petroleum products to the Caspian Sea (95% is provided by the Volga river). As a result of offshore oil production in the Kazakhstan section of the Caspian Sea, the water is heavily contaminated by petroleum hydrocarbons, with the concentration of petroleum hydrocarbon exceeding the maximum permissible concentration (MPC) up to 26 times, showing a high variability between years. As a result, a sufficiently high level of accumulation of toxic petroleum hydrocarbons, organochlorine pesticides and heavy metals was determined in the muscles of Caspian fish. All these contaminations lead to the loss of biodiversity and bio-productivity of aquatic organisms in the Caspian Sea, including of globally significant sturgeon species, impacting their health, reproduction, and survival[30][30]. The UNDP project will complement baseline WB-led initiative to address pollution (as per Table 1) and will aim to help improve the framework for sustainable marine and coastal land use planning while the World Bank/UNEP FAO GEF 8 project as reflected in Table 1, will support improved pollution management, including creating pollution inventories and mitigation programs. Specifically, in 2023–2024, several mass mortality events of Caspian Seals (*Pusa caspica*) were recorded in Kazakhstan's sector of the Caspian Sea. Probable contributing factors include a contamination of the marine environment (heavy metals, petroleum products, toxicants), leading to immunosuppression and gas emissions or leaks triggered by seismic activity[31][31].The Caspian Sea is currently undergoing increasing anthropogenic pressure: there is an increase of eutrophication, water pollution by oil, heavy metals, chemicals and overexploitation of the Caspian biota. Main sources of the Caspian Sea pollution are: river run-off; industrial and municipal waste waters; offshore and onshore oil production; oil transportation; and flooded coastal zones due to sea level rise. Intensive oil and gas development in the Caspian region resulted in extensive water, land and air pollution, wildlife and plant degradation, exhaustion of natural resources, ecosystem disturbance, desertification and considerable losses in biological and landscape diversity.

Climate change: Being an endorheic lake, the Caspian Sea is particularly sensitive to climatic change, because its water levels are determined by the delicate balance between discharge into the lake, and precipitation and evaporation over the lake surface[32][32]. In the past, the Caspian Sea has experienced large variations in water level, from tens to hundreds of meters on various time scales, substantially altering its surface area. Multiple natural and anthropogenic factors have combined to produce historical sea level variations. Over the last century, the decrease of 3 m between 1930s and 1977 has been attributed partly to precipitation decreases in the Volga catchment and partly to an intense period of reservoir construction and filling; over the last 90 years over 14,000 dams were built for agricultural irrigation, domestic, and industrial purposes, which

together have the capacity to store >75% of the total annual discharge. The most recent decrease by 1.5 m over the last three decades was dominated by enhanced evaporation over the Caspian Sea itself, as human extraction has decreased, while regional temperatures increased. Precipitation decline contributed only to a smaller degree. In future, evaporation from the reservoirs, estimated at 8-10 km3 per year[33][33], together with climate change and a renewed increase in water abstraction driven by population growth and change in lifestyle, could amplify the decline of Caspian Sea level[34][34], with profound consequences for agriculture, fisheries, infrastructure and other economic activities, as well as human health and wellbeing.[35][35] Climate change will also have profound consequences for biodiversity, including globally significant species including seals, sturgeons and mammal species, altering their habitats through desertification and habitat shifts, intensifying droughts and unpredictable precipitation, and increasing human-wildlife conflict as animals search for resources. To address this issue, the project will support under Output 1.1 the development of detailed **Basin Climate Change Adaptation Plan (BAP) for the Zhaiyk Caspian basin of Kazakhstan** with action plan for integration into two oblasts (Atyrau and Mangystau) development programs. It is intended to serve as the basis for defining future strategies, plans, guidelines that inform future directional changes in sustainable land, water and resource use management and economic development within the country, and serve as the basis for defining future investments that are beyond what the GEF can support.

The key barriers to maintenance of biodiversity and ecosystem services

Today, environmental problems in the Zhaiyk Caspian basin and the wider Caspian Sea are multiple and various, caused by commercial use of the marine area, as well as by unsustainable human activities in the coastal zone and the wider terrestrial basin, as well as insufficient and ineffective protected area management actions in support of the effective conservation of biodiversity and ecosystems[36][36]. To ensure that the project effectively and with impacts promotes an integrated ecosystem-based approach to conserve key species and habitats of the Caspian Sea basin in Kazakhstan and ensures sustainable economic development, through integrating the ecological integrity into policy, planning and management practices, improve resilience, habitat connectivity and flow of ecosystem services in production landscapes, improved financing and incentives for nature-positive practices, and upscaled awareness, information management and gender mainstreaming, the following identified systemic barriers will be addressed.

Barrier 1: Disintegrated and uncoordinated land use planning. A key threat to biodiversity, ecosystems and natural resources in the land/seascapes of the Zhaiyk Caspian basin is the narrow sectoral, resource extraction-oriented approach in planning and implementation of socio-economic development (e.g., water impoundments, water management, agriculture, fisheries, oil and gas exploration, industrial processing, tourism, etc.), augmented by 'silo' budget accounting that dilutes any efforts to deviate away from sector-specific approaches. While at the sectoral level many policies and strategies in Kazakhstan support sectoral approaches to addressing environmental degradation, biodiversity conservation and sustainable economic development, the institutional system as well as mechanisms and processes for inter-sectoral coordination and cooperation remain poorly defined and coordinated and thus unable to ensure the holistic implementation of the principles of sustainable development and the landscape approach. Specifically, there is a duplication of functions and fragmentation of powers, inadequate institutional cooperation and stakeholder participation, intersectoral harmonization of sectoral policies and regulations, and coordination within and between multiple sectors, stakeholders and jurisdictions with varying priorities and objectives. This is further complicated by inconsistent or conflicting development policies and measures that are often the root cause of the problem, driven by policy reform related challenges and the common practice of prioritizing sectoral interests that also, among others, may tailor specific actions that are not multi-disciplinary in their nature. Improved collaboration between sectors, to improve monitoring and control procedures, delivery of Environmental Impact Assessment (EIA) practices, and enhanced considerations for conducting Strategic Environmental Assessments (SEA) will all assist in addressing this barrier, towards reducing the risk of changing waterflows and siltation rates that are having significant impacts on downstream riparian, coastal and marine ecosystems and their important biodiversity.

Barrier 2: Insufficient on-the-ground capacities and models available. Kazakhstan currently has insufficient human resource capacity and understanding (or demonstrated experience) to support Marine and Land Spatial Planning (MLSP) approaches promoting the systemic transformation towards the sustainable management of land and water resources in production

land/seascapes in Zhaiyk Caspian basin. In Kazakhstan, sectoral stakeholders lack the theoretic understanding, and practical knowledge and experience, to apply models and holistic, science-informed spatial planning tools that comprehensively give due consideration to the complex inter-relationships and spatial dimensions of the geomorphological, hydrological, biological and climatic realities of the landscape/seascape, taking into account the human-centered socio-economic development vision. Such capacity gaps, as well as an overall lack of scientific and monitoring data for managing, maintaining, and valuing marine, coastal and terrestrial ecosystems constrain the possibilities to define, evaluate and value nature-based solutions (NbS) that achieve an improved flow of ecosystem services in production landscapes, including the ability to determine socioeconomic trade-offs, implementation of which would enhance the transformation from current unsustainable natural resource use practices towards sustainable land and water management. The lack of knowledge is augmented by a lack of capacities, techniques, and guidelines for applying habitat/landscape/land use resilience assessments, the outcomes of which would allow defining solutions to strengthen the resilience of production landscapes, from restoring and sustaining critical ecological functions, processes and biodiversity over time, in the face of rapidly evolving stressors and directional changes associated with socio-economic development and climate change. While the United Nations System of Environmental-Economic Accounting (UNSEEA) provides a standardized approach for measuring the contribution of natural resources and ecosystem services to the economy and the impact of economic activities on the environment, insufficient data results in decision-makers lacking the necessary information to make informed decisions that properly take the value of nature into account. Support to piloting identified solutions would strengthen the capacities in the agriculture, fisheries, tourism and conservation sectors to support achieving a systemic transformation through expanded biodiversity and natural resource protection, including from valuing natural capital, and nature-positive development decision-making for the sustainable management of water and land resources in the pilot regions with healthy ecosystems that provide meaningful and lasting ecosystem benefits to people and nature.

Barrier 3: Poor/absent financial/economic incentives for biodiversity conservation. In recent years, numerous studies highlight the economic potential of investing in NbS for biodiversity conservation[37][37], however, actual funding for the conservation of biodiversity and ecosystem services through applying NbS lags behind. Typically, short-term interests and perceived limited growth opportunities, environmental and economic externalities, uncertain levels of risk and return, and weak enabling environments combine to limit downstream understanding, willingness and action of the private sector (businesses, banks) to invest in nature-positive business models with demonstrated economic and ecological benefits. At the same time, there is a limited knowledge and poor understanding on financially viable NbS successfully piloted across the globe, including in landscapes, ecosystems and socio-economic conditions comparable with those in the Zhaiyk Caspian basin. As a result, the interest in nature-positive investments bringing long-term sustainability benefits is ignored in favor of investments in unsustainable economic activities bringing short-term profits. There is no definition of NbS on the national level in Kazakhstan, no reporting and no statistics covering nature-positive investments, and no responsible institution that monitors such investments on a regular basis. Furthermore, there is a significant lack of knowledge on sustainable alternative livelihood options suitable for application in different landscapes of the Zhaiyk Caspian basin. No instruments are yet available that provide financial/social incentives to resource-dependent communities or private sector business entities, while the lack of prioritization of ecosystem restoration or biodiversity conservation in terrestrial, coastal and marine development planning is another constraint. Business entities in rural economic sectors that have direct impacts on biodiversity could be one of the key stakeholders for implementing actions for biodiversity-positive outcomes, from adopting innovative green technologies, nature-based and nature-supportive production solutions in their supply chains. The financial sector, including banks and tourism operators, holds untapped potential to integrate biodiversity risk assessments into their policies and to support innovative financing tools, such as biodiversity credits or payments for ecosystem services (PES). While the green bonds market is developed in Kazakhstan, blue bonds and blue taxonomy have not yet emerged, and green bonds are not used to finance ecosystem conservation projects. Bridging these gaps through targeted capacity building among policy makers and the private sector, including Micro, Small and Medium Enterprises (MSMEs), conducting economic valuation and PES, identification and pilot demonstration of location-specific NbS for ecosystem restoration, including valuation of costs and benefits, and improved engagement of decision makers, public organizations and private sector entities is all critical to mainstreaming biodiversity finance at district and local levels, fostering long-term conservation outcomes.

Barrier 4: Limitations in information, data, awareness, knowledge and exchange. The importance of healthy ecosystems and the key role of biodiversity in support of providing local communities and the wider society with, among others, natural resources and raw materials, insect pollination, habitat for important species, soil fertility, erosion control, etc. is poorly understood and appreciated, among decision makers as well as local communities. The awareness of the need to conserve globally threatened and endemic species, reduce threats to ecosystems and biodiversity, and manage ecosystems effectively to ensure delivery of ecosystem services is also limited across communities and decision-makers. Furthermore, there is insufficient recognition of the different ways men and women use ecosystem resources, how gendered roles shape resource dependency, and how changing natural resources impact workloads and relations. At the same time, there are severe limitations in data and information available even to those members of society that are aware of importance and needs for ecosystem restoration and conservation of biodiversity, including decision makers, natural resources users and potential investors. Considerable research and monitoring have been carried out in the past, but the data is often not comparable among different sources, often insufficient, inaccurate or non-harmonized, available

in a non-user-friendly format, and not freely available and shared among the responsible institutions and with society. The lack of strong stakeholder commitment often also results in the available information not to be used, or not be used in a coherent and comprehensive manner to address environmental issues. The sectoral development focus also results in insufficient media attention to the environmental issues. Consequently, many stakeholders remain unaware of information that is available on the sustainable and context-specific solutions available for the effective management of coastal, marine, and terrestrial ecosystems, which in part is caused by the lack of information technology and open-access digital platforms to promote collecting, synthesizing and sharing of data, information, knowledge, tools, case studies and best practices. Addressing this barrier is essential for fostering informed, inclusive, and effective ecosystem restoration, biodiversity conservation and sustainable land and water management efforts.

System drivers and future trends:

The economy of the Zhaiyk Caspian basin is based on oil and gas exploration, marine and coastal fisheries, agriculture, especially livestock farming, tourism, and quarrying of metal ores. The drivers of environmental and ecological degradation that would further exacerbate these threats and increase challenges are: (i) policies and practices that prevent collective and coordinated development planning that takes into consideration environmental externalities; (ii) limited incentives for achievement of conservation outcomes by sector and development agencies in economic development planning; and (iii) climate impacts. Further, in terms of trends, the growing need to accelerate development is likely to exacerbate these drivers, along with the added effects of climate change, that are expected to cause significant effects on ecosystems and biodiversity.

To manage these threats and challenges, the project seeks to reorient economic development towards a transformation that promotes greener and bluer outcomes in the economic productive sectors, while reducing social disparities and environmental impacts. This approach would require recognition of the: (i) critical importance of coastal, marine and terrestrial ecosystems in the Zhaiyk Caspian basin for sustainable economic development; (ii) complexity of the geological, geomorphological and climatic reality of landscape/seascape inter-relationships and the spatial dimensions in which these interactions take place; (iii) importance of maintaining connectivity across the landscape/seascape that integrates marine and coastal ecosystems and the land-based catchment areas and their intervening production areas (agriculture, animal husbandry, fisheries, tourism and coastal development) as an ecologically inter-linked system that can be sustainably managed for its biological, ecological and economic values; (iv) importance of maintaining ecosystem goods and services for producers and society as a whole; and (v) engagement of conservation practitioners, resource managers, local communities and the private productive sector (mainly tourism, fisheries, oil and gas, and small/medium business operators) in collective and coordinated actions. Unless there is a transformational shift, the probability of further loss and degradation of the marine, coastal and terrestrial landscapes and their biodiversity and ecological functions in the Zhaiyk Caspian basin in Kazakhstan will remain **high**. A set of simple narratives were developed at PPG stage to explore potential future changes in key drivers beyond the project's scope. These narratives are not centered on varying degrees of integrated landscape/seascape, 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 marine resource uses.
Narrative: The global market volatility triggers an increase in demand for oil and gas, leading to aggressive investment in exploration across Caspian coastline. 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 on critical marine and coastal areas, in particular from those sectors that are already in the forefront of economic progress, in particular the oil and gas sectors. In the absence of spatial planning and valuation of ecosystem services, concessions expand into key habitats negatively impacting critical globally important biodiversity. The pressure on these ecosystems may escalate, causing higher loss of critical corridors and habitat locations for key species and their habitats.
To manage these threats, better consideration of ecosystem service valuation and cost benefit analysis as well as integrated spatial planning will/could help reduce the threat level of this driver and the materialization of the risk it poses. These were assessed at PPG stage, and the project has under 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 (Financial incentives/ instruments for sustainable natural resources management, alternative nature-friendly livelihood activities and engagement of private sector) designed interventions to address these threats. The robust policy, institutional and financial framework supported through the project could provide effective measures to improve conservation and sustainable management of the Caspian Sea and adjacent coastal and terrestrial areas.

External Driver 2 – Inability to accurately predict the climate future.
Narrative: Climate impacts exceed forecasts, with severe droughts, ice-free winters, declining river inflows, and continued sea level recession in the northern Caspian. This scenario envisions a future where climate change effects intensify beyond current projections that might have potential for enhancing ecological and economic impacts. If this happens, there is potential that government investments and priorities might shift away from conservation action. In such an unprecedented situation, the shallower "shelves" of the northern and eastern Caspian, which provide the major food supplies for fish and birds, might be depleted. This could devastate fish species, the Caspian Seal and a rich array of mollusks. Climate change can also result in a severe reduction of winter

ice, on which about 99% of Caspian Seal pups are raised. Remaining biodiversity hotspots in depths between 50 -150 meters are likely to be also affected, as rivers dump nutrients into the deeper central basins combined with rising temperatures. This will decrease oxygen levels and lead to the development of ecological dead zones, which 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 favorable results that could potentially enhance the resilience of wetland and coastal ecosystems to climate change. 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.

External Driver 3 – Ineffective international collaborations along the Caspian Sea.

Narrative: Building on the Tehran Convention, Caspian littoral states agree to a regional framework for marine biodiversity, fisheries regulation, and oil spill response. Although the Caspian Environment Program provides a platform for international 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 and political agendas amongst transboundary countries further complicate efforts at cooperation 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. The project's alignment with such initiatives and its collaboration with the World Bank/GEF transboundary project necessitates careful collaboration and coordination of actions across the entire Caspian Sea range and also to effectively leverage external resources effectively.

As part of these efforts to address current threats and an uncertain future, the project aims to promote sustainable fisheries, agriculture, and sustainable tourism and many other activities that are vital for the local economy and economic development at large. Clearly, in the Scenarios 1 and 2 the project may need to place greater emphasis on changing national policy and planning frameworks, particularly in light of weakened government capacity and shifting economic or climate pressures. In Scenario 3, political will and coordination will allow for a smoother implementation and potential upscaling. Investments in NbS, alternative, sustainable livelihoods—especially in fisheries, climate-resilient agriculture, and ecotourism—are feasible and effective but would require adaptation and stronger safety nets in the future Scenario 1 and 2. Testing project strategies against these exploratory scenarios supports the selection of interventions that are robust—i.e., able to perform well across diverse futures. The most promising among these are: (i) Building cross-sectoral alliances (e.g. between fisheries, oil/gas, tourism, and agriculture), (ii) Mainstreaming biodiversity and climate resilience into spatial planning and economic decision-making, and (iii) Promoting livelihood diversification and nature-based solutions at the local level These approaches promoted by the project are most likely to deliver enduring global environmental benefits, regardless of how the future unfolds.

The integration of biodiversity conservation, ecosystem restoration and sustainable agriculture, pastoral and tourism activities and ecologically-sustainable economic development planning in the Zhaiyk Caspian basin will contribute to the protection and restoration of ecosystems and the preservation of wildlife habitats, while maintaining the productive potential of these resources. 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 to ensure that such development integrates biodiversity, climate risks, ecosystem services and local economy outcomes in a sustainable manner. Through this approach, the project will identify what is needed to build resilience of local communities, prevent further degradation of natural resources and ecosystems to buffer future climate risks associated with coastal erosion, flooding, drought and fire risks posed to terrestrial ecosystems.

Overall, in the long run, the intent is to catalyze work on innovative financial instruments that can be piloted to test their viability and thus promote some level of financial sustainability to continue to buttress against threats. Given the limitations of the resources available under the project, the intent is to showcase and demonstrate interventions that capture the key constraints to sustainable resource governance and application outlined in the previous sections of this document that would also provide the learning, best practices and tools necessary as part of an approach for scaling up to other areas in the country. To facilitate the process of scaling up, the project supports a range of activities under Output 4.2, including the preparation of a replication and scaling-up strategy based on project experiences. The strategy will detail a step-by-step approach to promote inclusive and integrated landscape/seascape management approaches as tools for promoting sustainable resource use. The project will build on the current baseline and take into consideration lessons learned from previous projects as discussed in the baseline section below.

Baseline Scenario and Preferred Approach

The baseline scenario in the Zhaiyk Caspian basin highlights significant threats to biodiversity and ecosystem health, compounded by limited capacity to address them comprehensively. While Kazakhstan has implemented various policies and programs to conserve its coastal, marine, and terrestrial ecosystems within the Caspian Sea and its catchments, gaps in coordination, financing, and on-the-ground interventions have hindered progress. Yet, given the constrains that it is unlikely, given the lack of a comprehensive multi-stakeholder basin level coordinated planning approach, that there will be a significant transformation of policies and practices

that recognizes the ecological connectivity between the terrestrial, coastal and marine ecosystems and the intervening production areas, the lack of recognition of the value of natural assets and their linkages to economic development will continue to lead to fragmented sectoral planning, undervaluation of ecosystem services, and policies that disproportionately affect the conservation of biological features in the Zhaiyk– Caspian basin and the communities that depend on these resources.

As a consequence, without the GEF investment, governance gaps will continue, there will be limited private sector investment in nature-based solutions, and inadequate collaboration across stakeholders that would exacerbate these challenges, leaving ecosystems and biodiversity at risk.

To address these gaps, the project intends to capitalize on existing baseline initiatives to address the systemic barriers and external drivers that limit the conservation of biodiversity, restoration of ecosystems, and the promotion of inclusive economic growth in Kazakhstan's part of the Caspian Sea. To do so, the project approach aims to tackle these interconnected barriers by enhancing policy and planning coherence within the basin, multi-sectoral governance, financial mechanisms, and community and private sector engagement to foster sustainable ecosystem management. It aims to promote an integrated landscape and seascape planning and management approach within the Zhaiyk Caspian basin to facilitate mainstreaming of biodiversity, sustainable natural resource use and nature-based solutions that occur in the multiple use terrestrial, coastal and marine landscapes/seascapes. It will also emphasize the importance of leveraging existing and validated best practices to foster a positive relationship between humans and biodiversity, enabling effective conservation and sustainable resource use.

The project acknowledges that promoting good governance and equity is fundamental to sustainable natural resource management. It highlights the importance of institutional coordination, participatory decision-making, and locally-based management of natural resources in advancing this integrated and inclusive agenda. The project will demonstrate the benefits of ecosystem services for the socio-economic well-being and food security, ensuring sustainable biological resource use through: (i) the development and application of environmentally friendly options to control the overuse of biological resources; (ii) the cyclical use of natural resources aligned with ecosystem functioning and human activities; (iii) the promotion of approaches to reduce or manage social and environmental impacts; and (iv) the application of key lessons learned for effective biodiversity conservation and sustainable use. Recognizing this preferred project approach, potential future changes in key drivers beyond the project's scope were assessed to develop simple narratives, enabling a better understanding of resilience to external factors and uncertainties, as outlined above.

Building on existing programs: The proposed GEF 8 project will build on existing baseline activities and programs, enhancing their scope and impact within the Zhaiyk Caspian basin as described in Table 1 below:

Table 1: Baseline projects and programs

Baseline Project/Activities	Key Objectives of baseline project/activities related to the GEF project	Additional Complementarity with proposed GEF project
UNDP GEF Small Grants	The Small Grants Program (SGP) is an initiative of the GEF, providing financial, advisory and technical support to non-governmental organizations and local communities for the development and implementation of innovative integrated measures aimed at solving environmental problems and social and economic well-being of people. In Kazakhstan, the SGP supports projects on climate change mitigation and reducing land degradation.	The GEF8 project will build on the innovative integrated measures to reduce land degradation and conserve biodiversity emanating from the SGP, and promote NbS related activities (Output 2.2 and Outputs 3.1/3.2/3.3), as well as activities to improve the well-being of local communities (including such groups as women, youth, vulnerable groups) (Output 4.1/4.2).
GEF/WB-UNEP Blueing the Caspian Sea project (BCSP) USD 11,743,120 (2026-2031)	The project aims to enhance environmental management in the Caspian Sea through capacity building, policy harmonization, and regional cooperation. It will develop coastal and marine management plans, provide technical assistance, and conduct workshops, in particular to improve pollution management, including creating pollution inventories and mitigation programs. Additionally, the project supports 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.	The UNDP project will complement the WB-UNEP project in marine and land spatial planning (Outputs 1.1/1.2) and development of basin plan for adaptation to climate change (BAP) supported as the designated platforms for integrated intersectoral cooperation, for planning and activities in the basin. The project will jointly with the WB support strengthening the KRISC, with complimentary focus on harmonizing biodiversity and pollution monitoring approaches, as well as complimentary strengthening of protected area management, including the use of METT (Output 1.3/1.4). UNDP will participate as an observer in the UNEP and WB Steering Committee meetings to ensure complementarity of activities and share knowledge and learning (related activities under Component 4).
Two billion trees program	In 2020, the President of the country instructed to plant 2 billion trees in the forest fund and 15 million trees in settlements within 5 years. Currently, work is underway to implement the Integrated Plans in the oblasts. The government has proposed to prolong the time frame	The UNDP GEF8 project will complement the tree planting program through improved forest ecosystem protection and restoration measures based on solutions based on natural processes NbS promoted under Output 2.2. including saxaul shelterbelts, and moisture capture measures to reduce wind and

		water erosion of soils and increase productivity of natural ecosystems and pasture lands (Output 2.2).
UNDP: Supporting Kazakhstan to achieve Global Biodiversity Framework ambitions through development of spatial plans and financing strategies (UNEP-WCMC)[1]	SPACES is an emerging coalition that mobilizes spatial intelligence to support governments, businesses, finance institutions, funders and investors in achieving climate and nature goals. The objective of the SPACES program is to inform the designation of ecological corridors to support the integrated management of landscapes and to enhance the implementation of PAs, OECMs and other NbS in a financially viable way and in agreement with local communities.	The development of the basin wide digital platform will complement activities to integrate the collection, storage and use of sectoral and local information for biodiversity and natural ecosystem protection in support of developing NSS of new and expanded protected areas and establishment of an ecological corridor (Output 1.4), integrated approaches and basin planning (Output 1.1/1.2).
Bilateral research program between Kazakhstan and Russian: 'Conducting comprehensive studies of the current state of the Caspian Seal population in the Caspian Sea	The Program's goals were to analyze the Caspian Seal population's size and health, assess their living conditions and food availability, examine their habitats, identify threats to their well-being, and devise effective conservation plans for both the seals and their natural environment.	The GEF8 project will build on the results emanating from the bilateral research program in developing species action plans for Caspian Seals (activities related to Output 1.2/1.3.) with planning of an aquatic eco-corridor for improved Seal migration successes, as well as with the preparation of NSS and FS documentation for the expansion of the Seal Island MPA (Output 1.4).
Program for assessing the abundance, distribution and natural reproduction of the Caspian Seal population in the Kazakh and Russian waters of the Northern Caspian Sea	The program entails three extensive instrumental surveys aimed at accurately counting the Caspian Seal species in the northern part of the Caspian Sea, the primary breeding ground for these seals, recognizing its importance for the species' survival. Through bilateral collaboration, the project seeks to facilitate in-depth research in this crucial region, obtaining data on the population dynamics of the Caspian Seal for implementing effective conservation strategies.	The complementary activities of the program that will benefit the GEF8 project are: improved t capacity of governmental organizations (the Fisheries Committee under the Ministry of Agriculture and the Ministry of Ecology and Natural Resources) and scientific organizations to monitor and conserve Caspian Seals in the Northern part of the Caspian Sea benefitting the planning of an aquatic eco-corridor for improved Seal migration, the preparation of NSS and FS documentation for the expansion of the Seal Island MPA (Output 1.4), as well as the overall basin and sectoral planning based on MLSP (Output 1.1/1.2).
UNDP: Introduction of modern ecotourism practices into the curriculum of universities of Kazakhstan[2]	The aim is to strengthen cooperation in the field of sustainable development and the implementation of modern practices in the tourism and environmental protection sector at Kazakhstan's universities, through updating the structure and format of training modules, and their consistent integration into the educational curriculum. This agreement was signed within the framework of the Biodiversity Finance Initiative - BIOFIN, which implements six financial solutions in Kazakhstan, including the creation of a basis for certification in the field of ecotourism.	The GEF8 project will build on the modern practices in the sphere of ecological tourism that emerge. While such tools will also support enhancing education and awareness for marine and coastal sustainable economic development (Output 1.4).
UNDP: BIOFIN	BIOFIN will identify innovative financial solutions that are relevant for biodiversity conservation.	The GEF8 project will build on the BIOFIN project's results in policy and institutional review and analysis of country-appropriate biodiversity finance instruments to analyze, select apply and pilot a few 2-3 innovative financial instruments for

		location-appropriate demonstration projects for SLM and IWRM (Output 2.2) and for NbS to strengthen ecosystem and biodiversity conservation and promote nature-supportive (alternative) revenue-generation investment-models (Output 3.2).
Altyn Dala Conservation Initiative[3]	The Altyn Dala Conservation Initiative is a partnership to enable the protection of fragile steppe, wetland and desert ecosystems, and allow the diverse wildlife to flourish, through creating protected areas, patrolling and monitoring, research, and cooperation with local communities.	The project activities on conservation and restoration of rangeland ecosystems are very relevant to the GEF 8 project and hence experiences of the Altyn Dala Conservation Initiative in cooperation can be applied to the project landscapes At the same time, GEF 8 project will also build on the this initiative, for the design and effective management of the terrestrial ecological corridor and related terrestrial PAs, to achieve mammal species migration from ecosystem conservation and SLM (Output 1.3).
GIZ: Ecologically oriented development in the Aral Sea Region (ECO ARAL) Euro 8 million	ECO ARAL supports the Uzbek and Kazakh governments to create sustainable and resilient economic development of the Aral Sea region and improve the livelihoods of the population, including training for MSME, introduction of water-saving technologies, afforestation of desert zone of the dry Aral Sea, capacity building in GIS and RS for environmental planning. ECO-ARAL is also supporting the development of ecotourism, management of protected areas and wildlife protection in the Mangystau province.	The experience of Kazakhstan and Uzbekistan, as well as Turkmenistan and other countries of the Aral Sea basin in the conservation and restoration of degraded ecosystems, will be taken into account in the implementation of Project activities, especially extensive experience in planting saxaul in desolate areas and improving water supply to local populations for sustainable economic development (Output 2.2) as well as for the development of operational l sustainable livelihood and business ventures (Output 3.3).
Tehran Convention - web-based Caspian Environmental Information Center[4]	The Caspian Environment Information Center (CEIC) is an instrument under the Tehran Convention serving as a central information and communication hub on the Caspian Sea environment.	The project will complement this program by integrating the innovative digital information platform to support coordinated decision-making systems and with open access for all stakeholders, including the Caspian Environmental Information Center (Output 1.1), while the results of the project will be widely shared through documentation and dissemination (Output 4.2) and interaction with the wider Caspian Sea countries and communities (output 4.3).
WB-FAO-GEF 'Kazakhstan Resilient Agroforestry and Rangeland Management Project' (2021 - ongoing)[5] USD 6.28 million	Restoration of land productivity in targeted degraded landscapes in Kazakhstan. through piloting of agroforestry practices using a community-centered approach and to build government capacity for landscape management and restoration and expanding the use of sustainable pasture management practices and technologies.	In particular, the GEF8 project will build on the successes of restoring pasture productivity to find the most effective solutions based on the participation of local communities and NbS (Output 2.2), while such successes will also inform eco-corridor design and the achieving of improved protected area management effectiveness (Output 1.3).
WB: Kazakhstan Sustainable Livestock Development Program[6] USD 500 million	The Program aims to boost small and medium business growth and create opportunities for socio-economic development in rural areas and foster environmentally friendly production, and improve the use of Kazakhstan's vast pasture and grassland resource potential.	The green development approaches will help the GEF 8 project in preparation of a portfolio of NbS linked to finance solutions (Output 3.2) and the diversification of pastoral activities based on the participation of SMEs (Output 3.3).
UNDP-GCF: Integrating climate change adaptation into Kazakhstan's strategic planning (2024-2028)	The Project aims to establish clear mandates, coordination mechanisms, and standard procedures for climate adaptation at both national and subnational levels in four priority sectors: Agriculture, Forestry, Water resource management, Emergencies. The Project is designed to equip decision-makers with climate services that provide a comprehensive understanding of the impacts of climate change and adaptation options and capacity to incorporate climate risks into standard planning and budgeting procedures, as well as improve governance and institutional coordination, develop evidence for impactful effective adaptation solutions, catalyze private sector engagement and increase financing for adaptation finance.	Th GEF 8 project will both learn from and contribute to the UNDP-GCF initiative with regards to policy instruments, technical guidelines and institutional arrangements for marine and land spatial planning, including the development of a detailed Basin Climate Change Adaptation Plan (BAP) (output 1.1), territorial planning in the pilot districts to reduce anthropogenic pressures and impacts (Output 2.1), and build and promote successful climate adaptation measures, including land and water management, alternative and climate-resilient activities, and the involvement of the private sector and NGOs. adaptation in the basin (Outputs 2.2/ 3.3).

USD 2,763,763		

Baseline Project/Activities	Key Objectives of baseline project/activities related to the GEF project	Additional Complementarity with proposed GEF project
UNDP GEF Small Grants	The Small Grants Program (SGP) is an initiative of the GEF, providing financial, advisory and technical support to non-governmental organizations and local communities for the development and implementation of innovative integrated measures aimed at solving environmental problems and social and economic well-being of people. In Kazakhstan, the SGP supports projects on climate change mitigation and reducing land degradation.	The GEF8 project will build on the innovative integrated measures to reduce land degradation and conserve biodiversity emanating from the SGP, and promote NbS related activities (Output 2.2 and Outputs 3.1/3.2/3.3), as well as activities to improve the well-being of local communities (including such groups as women, youth, vulnerable groups) (Output 4.1/4.2).
GEF/WB-UNEP Blueing the Caspian Sea project (BCSP) USD 11,743,120 (2026-2031)	The project aims to enhance environmental management in the Caspian Sea through capacity building, policy harmonization, and regional cooperation. It will develop coastal and marine management plans, provide technical assistance, and conduct workshops, in particular to improve pollution management, including creating pollution inventories and mitigation programs. Additionally, the project supports 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.	The UNDP project will complement the WB-UNEP project in marine and land spatial planning (Outputs 1.1/1.2) and development of basin plan for adaptation to climate change (BAP) supported as the designated platforms for integrated intersectoral cooperation, for planning and activities in the basin. The project will jointly with the WB support strengthening the KRISC, with complimentary focus on harmonizing biodiversity and pollution monitoring approaches, as well as complimentary strengthening of protected area management, including the use of METT (Output 1.3/1.4). UNDP will participate as an observer in the UNEP and WB Steering Committee meetings to ensure complementarity of activities and share knowledge and learning (related activities under Component 4).
Two billion trees program	In 2020, the President of the country instructed to plant 2 billion trees in the forest fund and 15 million trees in settlements within 5 years. Currently, work is underway to implement the Integrated Plans in the oblasts. The government has proposed to prolong the time frame	The UNDP GEF8 project will complement the tree planting program through improved forest ecosystem protection and restoration measures based on solutions based on natural processes NbS promoted under Output 2.2. including saxaul shelterbelts, and moisture capture measures to reduce wind and water erosion of soils and increase productivity of natural ecosystems and pasture lands (Output 2.2).
UNDP: Supporting Kazakhstan to achieve Global Biodiversity Framework ambitions through development of spatial plans and financing strategies (UNEP-WCMC)[38] [38]	SPACES is an emerging coalition that mobilizes spatial intelligence to support governments, businesses, finance institutions, funders and investors in achieving climate and nature goals. The objective of the SPACES program is to inform the designation of ecological corridors to support the integrated management of landscapes and to enhance the implementation of PAs, OECMs and other NbS in a financially viable way and in agreement with local communities.	The development of the basin wide digital platform will complement activities to integrate the collection, storage and use of sectoral and local information for biodiversity and natural ecosystem protection in support of developing NSS of new and expanded protected areas and establishment of an ecological corridor (Output 1.4), integrated approaches and basin planning (Output 1.1/1.2).
Bilateral research program between Kazakhstan and Russian: 'Conducting comprehensive studies	The Program's goals were to analyze the Caspian Seal population's size and health, assess their living conditions and food availability, examine their habitats, identify threats to their well-being, and devise effective conservation plans for both the seals and their natural environment.	The GEF8 project will build on the results emanating from the bilateral research program in developing species action plans for Caspian Seals (activities related to Output 1.2/1.3.) with planning of an aquatic eco-corridor for improved Seal migration successes, as well as with the preparation of NSS and FS documentation for the expansion of the Seal Island MPA (Output 1.4).

of the current state of the Caspian Seal population in the Caspian Sea		
Program for assessing the abundance, distribution and natural reproduction of the Caspian Seal population in the Kazakh and Russian waters of the Northern Caspian Sea	The program entails three extensive instrumental surveys aimed at accurately counting the Caspian Seal species in the northern part of the Caspian Sea, the primary breeding ground for these seals, recognizing its importance for the species' survival. Through bilateral collaboration, the project seeks to facilitate in-depth research in this crucial region, obtaining data on the population dynamics of the Caspian Seal for implementing effective conservation strategies.	The complementary activities of the program that will benefit the GEF8 project are: improved t capacity of governmental organizations (the Fisheries Committee under the Ministry of Agriculture and the Ministry of Ecology and Natural Resources) and scientific organizations to monitor and conserve Caspian Seals in the Northern part of the Caspian Sea benefitting the planning of an aquatic eco-corridor for improved Seal migration, the preparation of NSS and FS documentation for the expansion of the Seal Island MPA (Output 1.4), as well as the overall basin and sectoral planning based on MLSP (Output 1.1/1.2).
UNDP: Introduction of modern ecotourism practices into the curriculum of universities of Kazakhstan[39][39]	The aim is to strengthen cooperation in the field of sustainable development and the implementation of modern practices in the tourism and environmental protection sector at Kazakhstan's universities, through updating the structure and format of training modules, and their consistent integration into the educational curriculum. This agreement was signed within the framework of the Biodiversity Finance Initiative - BIOFIN, which implements six financial solutions in Kazakhstan, including the creation of a basis for certification in the field of ecotourism.	The GEF8 project will build on the modern practices in the sphere of ecological tourism that emerge. While such tools will also support enhancing education and awareness for marine and coastal sustainable economic development (Output 1.4).
UNDP: BIOFIN	BIOFIN will identify innovative financial solutions that are relevant for biodiversity conservation.	The GEF8 project will build on the BIOFIN project's results in policy and institutional review and analysis of country-appropriate biodiversity finance instruments to analyze, select apply and pilot a few 2-3 innovative financial instruments for location-appropriate demonstration projects for SLM and IWRM (Output 2.2) and for NbS to strengthen ecosystem and biodiversity conservation and promote nature-supportive (alternative) revenue-generation investment-models (Output 3.2).
Altyn Dala Conservation Initiative[40][40]	The Altyn Dala Conservation Initiative is a partnership to enable the protection of fragile steppe, wetland and desert ecosystems, and allow the diverse wildlife to flourish, through creating protected areas, patrolling and monitoring, research, and cooperation with local communities.	The project activities on conservation and restoration of rangeland ecosystems are very relevant to the GEF 8 project and hence experiences of the Altyn Dala Conservation Initiative in cooperation can be applied to the project landscapes At the same time, GEF 8 project will also build on the this initiative, for the design and effective management of the terrestrial ecological corridor and related terrestrial PAs, to achieve mammal species migration from ecosystem conservation and SLM (Output 1.3).
GIZ: Ecologically oriented development in the Aral Sea Region (ECO ARAL)	ECO ARAL supports the Uzbek and Kazakh governments to create sustainable and resilient economic development of the Aral Sea region and improve the livelihoods of the population, including training for MSME, introduction of water-saving technologies, afforestation of desert zone of the dry Aral Sea, capacity building in GIS and RS for environmental planning. ECO-ARAL is also supporting the development of ecotourism, management of protected areas and wildlife protection in the Mangystau province.	The experience of Kazakhstan and Uzbekistan, as well as Turkmenistan and other countries of the Aral Sea basin in the conservation and restoration of degraded ecosystems, will be taken into account in the implementation of Project activities, especially extensive experience in planting saxaul in desolate areas and improving water supply to local populations for sustainable economic development (Output 2.2) as well as for the development of operational l sustainable livelihood and business ventures (Output 3.3).

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UNDP-GCF: Integrating climate change adaptation into Kazakhstan's strategic planning (2024-2028) USD 2,763,763	The Project aims to establish clear mandates, coordination mechanisms, and standard procedures for climate adaptation at both national and subnational levels in four priority sectors: Agriculture, Forestry, Water resource management, Emergencies. The Project is designed to equip decision-makers with climate services that provide a comprehensive understanding of the impacts of climate change and adaptation options and capacity to incorporate climate risks into standard planning and budgeting procedures, as well as improve governance and institutional coordination, develop evidence for impactful effective adaptation solutions, catalyze private sector engagement and increase financing for adaptation finance.	Th GEF 8 project will both learn from and contribute to the UNDP-GCF initiative with regards to policy instruments, technical guidelines and institutional arrangements for marine and land spatial planning, including the development of a detailed Basin Climate Change Adaptation Plan (BAP) (output 1.1), territorial planning in the pilot districts to reduce anthropogenic pressures and impacts (Output 2.1), and build and promote successful climate adaptation measures, including land and water management, alternative and climate-resilient activities, and the involvement of the private sector and NGOs. adaptation in the basin (Outputs 2.2/ 3.3).

In addition, in recent years the GEF has supported the implementation of several projects in Kazakhstan, including GEF/UNDP 'Improving sustainability of the Protected Area (PA) system in desert ecosystems through promotion of biodiversity compatible livelihoods in and around PAs' (2013-2018), GEF/UNDP 'Supporting Sustainable Land Management in Steppe and Semi-arid Zones through Integrated Territorial Planning and Agro-environmental Incentives' (2014-2021), GEF/UNDP 'Conservation and Sustainable Management of Key

Globally Important Ecosystems for Multiple Benefits' (2018 - ongoing), GEF/UNDP 'Sustainable food systems and improved ecosystems service' (2021-2026), part of the global GEF Impact Program on Food Systems, Land Use, and Restoration (FOLUR). Applicable practices and lessons learned from these projects will inform the detailed design of targeted measures and implementation approaches, among others with regards to tugai (riparian) forests, and saxaul landscapes (desert and semi-desert shrubs), PA establishment and improving their management effectiveness. The previous successful experience of implementing GEF, UNDP and other projects will make it possible to achieve the ambitious task of the GEF8 project, to change the previous and ongoing economic development activities with negative impacts on the environment and depleting natural resources into “green” and sustainable activities involving all stakeholders. The results and innovations in MLSP, cross-sectoral integrated planning and pilot projects can be used for other regions of Kazakhstan and neighboring countries.

Role of Stakeholders

Given, the above-described situation, the project’s objective and strategies cannot be achieved through government action alone. The success of this project hinges on a collaborative governance model that harnesses the unique strengths of diverse stakeholders—from local communities to private sector investors—each playing a vital role in delivering Global Environmental Benefits (GEBs) and climate adaptation outcomes.

- Government agencies: The Ministry of Ecology and Natural Resources (MENR), Ministry of Water Resources and Irrigation (MoWRI), Ministry of Agriculture (MoA) and their respective Fisheries and Forestry and Wildlife Committees, the Fishery Research and Production Center, and the State Institute for Land Survey Work (Giprozem), the Ministry of National Economy and its Economic Research Institute, the Ministry of Energy and the Ministry of Industry and Infrastructure Development, as well as regional Authorities. Their role extends beyond oversight to enabling systemic change: integrating sustainability and conservation outcomes into the MLSP framework for the Zhaiyk Caspian basin and decision-support systems, aligning conservation goals with sustainable economic development plans. The Kazakh Research Institute of the Caspian Sea (KRICS) will contribute to developing a systematic monitoring system for the assessment of the ecological state of the ecosystems of the Caspian Sea and its coastal areas. Regional administrations (oblasts) will strengthen public and sectoral planning of current and future functional uses of land and water resources, including on the development of new infrastructure, the promotion of sector-specific investment projects, sustainable marine and land resources management, the creation of protected areas and ecological corridors, etc.
- Local communities: Local communities dependent on natural resources in the Zhaiyk Caspian basin are not merely beneficiaries but co-designers of conservation solutions. Their traditional ecological knowledge is indispensable for conserving marine and coastal ecosystems, restoring degraded agricultural and pastoral landscapes, etc.
- Private sector: The private sector’s involvement transforms conservation from a cost center to a value driver. They will play a critical role in advancing sustainable operations, in particular in the Caspian Sea to generate biodiversity-positive outcomes and leverage financial resources to support nature-based solutions within their economic activities.
- Academic and civil society: They will contribute knowledge, tools, and best practices for implementing enabling long-term biodiversity and ecosystem conservation within Zhaiyk Caspian basin as well as supporting conservation initiatives, within and outside the PA network.

This multistakeholder approach ensures the project’s outcomes endure as they are embedded in economic/livelihood systems (private sector), traditional resource use practices (communities), and governance frameworks (government). For detailed stakeholder roles, refer to **the Stakeholder Engagement Plan** (Annex 9 of UNDP Project Document).

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[15] A comprehensive list of causes of rangeland degradation include among others “overgrazing, cutting of shrubs, land abandonment, overstocking, lack of maintenance of rangeland infrastructure, lack of economic and organizational capacity among farmers, and limited awareness on approaches for addressing rangeland degradation issues (CACILM, 2006).

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B. 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 guidance document. (Approximately 3-5 pages) see guidance here

During project preparation certain key changes were necessitated from the PIF documents. These changes are discussed in **Table 2** below.

Table 2: Key Changes from PIF

PIF	Change at CEO Endorsement	Rationale
During the PIF, it was proposed to support the formal establishment of the Seal Islands State Nature Reserve, with an estimated area of 427,538 hectares.	The Seal Islands State Nature Reserve (WDPA-ID n/a) was formally gazetted in July 2024, with an agreed area of 108,632 hectares. During PPG, it was agreed to support expansion of the Seal Islands State Nature Reserve, and provide support to the PA on improving management effectiveness through capacity building and training, preparation of management and operational plans, and the provision of technical assistance to strengthen patrolling, biodiversity monitoring, and other critical tasks.	The expansion of the Seal Islands State Nature Reserve with 2 sections - Prorvo-1 (86,232 ha; WDPA-ID n/a) and Prorvo-2 (83,600 ha; WDPA-ID n/a) will ensure that aquatic habitats important for feeding and resting during seasonal migration of the Caspian Seals receive critically-important protection from encroachments of socio-economic development, especially oil-gas exploration and exploitation in the surrounding marine zone of the Caspian Sea, as well as increasing disturbance from tourism developments.
The implementation phase of the project was agreed to be 6 years.	The duration of the project implementation phase was reduced to 5 years	The implementation period was reduced from 6 to 5 years to align with the standard practice of the UNDP Country Office, where projects with similar funding levels are typically implemented within a 5-year timeframe. Moreover, the planned project outcomes and targets are considered achievable within this shortened period.

In the PIF, the project aimed 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 60,000 hectares of terrestrial and marine habitats (outside PAs) respectively to benefit biodiversity; (iii) sustainable land management in 6,000 hectares of pasture and degraded agricultural land.	At CEO Endorsement, the project aims to (i) improve the management effectiveness of 2,964,419 hectares and 771,262 hectares of existing terrestrial and marine protected areas respectively and 676,969 hectares and 169,832 hectares of proposed terrestrial and marine protected areas respectively; (ii) 1,525,000 hectares and 132,526 hectares of terrestrial and marine habitats respectively under improved practices to benefit biodiversity; (iii) sustainable land management in 201,000 hectares of pasture and degraded agricultural land under restoration.	The area of existing terrestrial protected areas increased due to the inclusion in the project of the Ustyurt State Nature Reserve (WDPA-ID 11827) in the Mangystau oblast as well as the Kyzylsai State Regional Nature Park (WDPA-ID n/a) with 6 'stepping stone' subordinate PAs (WDPA-ID n/a) along the terrestrial ecological corridor (1,500,000 hectares outside protected areas) as OECM (WDPA-ID n/a) to improve the land and water use practices in support of migratory species, including endangered Saiga antelopes. The area of existing marine protected areas increased due to the establishment of the Seal Islands State Nature Reserve (WDPA-ID n/a), while in the in Northern Caspian Sea State Nature Zone (WDPA-ID 342651) 132,526 hectares will be designated as aquatic eco-corridor to promote the preservation of the migration routes of Caspian seals and sturgeons. Accordingly, project support is shifted from the predominantly preparation of studies for gazetting to support to improve management planning and operations, combined with creating one new terrestrial PA (Zhaiyk River Floodplain State Nature Reserve; WDPA-ID n/a) and the expansion of 2 terrestrial PAs (Ustyurt State Nature Reserve, WDPA 11827, and Akzhaiyk State Nature Reservation Ramsar Site, (WDPA-ID 342650, Ramsar site No.01856) and one marine protected area (Seal Islands State Nature Reservation (WDPA-ID n/a), with Prorvo-1 & Prorvo-2 sections (WDPA-ID n/a). An additional 25,500 hectares will benefit from sustainable land management pilots, on improved grazing rotation on pastures, agroforestry reclamation of desert pastures, and water retention to improved pasture productivity. See section 'core indicators' for more details.
In the PIF, the indicative co-financing amount was agreed at $50,989,000	At CEO Endorsement, the amount of co-financing secured in writing amounts to $91,114,516.	During the PPG phase, co-financing commitments were revised to reflect strengthened national ownership and prioritization of the Caspian Sea conservation agenda. The Fisheries Committee under the Ministry of Agriculture increased its contribution in line with the national strategy for sustainable fisheries and marine ecosystem protection. The Akimat of Atyrau region also enhanced its support from the local budget to ensure alignment with regional development and environmental priorities. UNDP adjusted its contribution upward to further support technical assistance and effective implementation of the project.

Project Approach:

Under the baseline scenario, despite significant advances in conservation and management efforts, the Kazakhstan part of the Caspian Sea basin remains vulnerable to a number of threats, which if not addressed, will lead to the continued fragmentation and degradation of key marine, coastal and terrestrial ecosystems and habitats for globally important biodiversity, as well as the loss of vital ecosystem services critical for socio-economic development, particularly as social and economic pressures increase.

The GEF alternative scenario, designed to support addressing threats, direct and indirect drivers, and barriers, taking into account the above-referenced plausible changes in key external drivers, which are outside the scope/control of the project, proposes a 'Project-Based reality' (with project intervention) that supports achieving systemic transformative changes brought by the design and subsequent implementation of MLSP and supporting framework of inter-sectoral and integrated policy and planning approaches for enhancing the ecological integrity of the land/seascapes across the Zhaiyk Caspian basin in Kazakhstan. Subsequently, planning and piloting of innovative Sustainable Land Management (SLM) and NbS interventions in two coastal provinces of Atyrau and Mangystau will demonstrate hybrid solutions for strengthening biodiversity, ecosystem restoration and ecosystem services as the basis for the sustainable management of land and water resources to improve their resilience and productivity, supported by improved financing and incentives for promoting diversified resilient nature-based livelihoods and nature-positive green/blue business opportunities. Augmented by upscaled awareness, information management and gender mainstreaming, building on the role of women in the main sectors of importance in the project region and taking into account their needs, this will lead to measurable, tangible outcomes to ensure long-term sustainability, scalability and innovation.

Building on existing capacities, the project will also supplement and complement existing knowledge and information platforms, including from innovative financial solutions that will support new resources, and wider (inclusive) communication strategies to engage all related economic sectors. Importantly, it shall develop and disseminate strategies for sharing and exchanging knowledge and lessons learned, as well as communicating project results and impacts. Additionally, the project will implement and report on project-level safeguards and risk management measures, including action plans and for gender equality and women's empowerment, and stakeholder engagement. By doing so, the project aims to ensure that the project is transparent and accountable, and that risks are identified and managed effectively.

This approach promotes a gradual shift from sector-focused planning-as-usual to innovative approaches to achieve better integrated landscape/seascape management at the basin level, that collectively includes expanding PAs and strengthening the management

of marine ecosystems, coastal wetlands and river floodplains, and upstream terrestrial areas in which the use of natural land and water resources is commensurate with sound ecological principles. In this situation, key aquatic wetlands, coastal habitats and terrestrial lands that are critical to migratory species - fish, birds and mammals - are better protected and restored, not only within PAs, but also in interconnecting productive landscapes that are used by these species.

As part of this approach, the project will pay special attention to addressing gender-disaggregated needs specifically of women engaged in the various sectors of importance in the project region, e.g., pasture use, fisheries, tourism and others. Across project activities, including MLSP, sectoral planning, PA management and environmental monitoring, as well as SLM planning and piloting targeted SLM initiatives, NbS financing for strengthening diversified resilient livelihoods, and knowledge management and awareness raising, specific attention will be paid to engaging women in technical and entrepreneurial trainings on skills development, location-appropriate pilot investments in pasture rotation, water management, etc., improved access to finance for investment in agricultural equipment, small infrastructure, ecotourism packages, and other practical initiatives. In parallel, women will be also particularly be engaged in integrated basin planning processes, including regional and local development plans and sectoral investment plans, the development of policy instruments and technical guidelines, etc. As such, the project contributes to achieving gender equality and social integration, defined as one of the main priorities of the state national policy of Kazakhstan.

The above-proposed approach seeks to identify and take necessary actions to transform socio-economic development systems to achieve the project objective 'to promote an integrated ecosystem-based approach to conserve key species and habitats in the Caspian Sea basin of Kazakhstan and ensure sustainable economic development' without compromising the ecological values associated with the region. Since the economy of the Caspian Sea basin in Kazakhstan is currently mainly based on fisheries, pasture use and exploitative industries, the project's vision is to promote a transformational change from a narrow sectoral, resource extraction-oriented planning approach, to an approach that addresses environmental degradation, biodiversity conservation and sustainable economic development through an intersectoral approach, with mechanisms and processes for institutional cooperation, inter-sectoral harmonized and coordinated planning procedures in place, based on proper considerations for, and value of, ecosystems, ecosystem services and biological resources in decision-making, supported by the demonstration of innovative NbS and finance mechanisms for nature-positive practices across the Zhaiyk Caspian basin to achieve sustainable development. The integration of biodiversity conservation and ecological principles in socio-economic development planning and decision-making will contribute to the protection, preservation and restoration of ecosystems, by reducing key threats and impacts on the biological resources of the project area, enhancing ecosystem services and improving local revenues.

To achieve these goals, the project will ensure that policy instruments, technical guidelines, institutional arrangements and results for integrated MLSP are integrated into sectoral economic and social development plans in a coordinated manner that engages all sectors and stakeholders, to ensure that such development plans and strategies give due consideration to actions to integrate biodiversity, climate risks, ecosystem services and local economic outcomes. As part of this approach, the project will identify what is needed to protect and conserve as well as prevent further degradation of natural resources, ecosystems and biodiversity, both within and beyond PAs, to buffer future climate risks associated with ecosystem productivity loss in the Zhaiyk Caspian basin. 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 for diversified more resilient and sustainable livelihoods.

Theory of change considerations:

The Theory of Change (ToC) is presented in Figure 1. Achieving the project objective is premised on the political will and commitment of the key national and regional public authorities and sectoral stakeholders, including public development planners and decision makers as well as sectoral state agencies and private sector actors in agriculture, fisheries, tourism as well as mining of oil and gas and other minerals, to demonstrate their willingness and buy-in, expressed during consultations at the PPG stage, in adopting pro-active cross-sectoral cooperative approaches in legal-regulatory and institutional revisions, intersectoral coordination in planning land and water resources use, and the uptaking of innovative technical and financial solutions for the implementation of a more ecosystem and biodiversity-friendly and actions in support of achieving the overall project objective through considerations for a more sustainable use of the Caspian Sea basin's productive economic resources. In parallel, achieving a transformational shift in planning and managing the use of land and water resources assumes that all relevant stakeholders engage in strengthening their capabilities for integrated planning and informed decision making for the uptake of best available technologies and innovative finance solutions for sustainable land management and nature positive economic development. At the same time, challenges and risks to achieving project success remain, related to the potential materialization of external drivers of future changes and uncertainties, such as the occurrence of a long-lasting economic recession, the installation of major institutional reforms with drastic change in policy priorities, or the occurrence of severe extreme climatic events (e.g., extreme droughts, river or flash-floods, etc.).

Best management practices, new and innovative technologies, improved and sustainable production systems, and financial solutions augmented by upscaled awareness, information management and gender mainstreaming 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 summarized below:

- **IF** benefits of the MLSP are demonstrated to key government authorities and sectoral stakeholders, and costs of potential ecosystems losses are calculated through pilot, **THEN** there will be increased trust and buy-in to the MLSP processes and the implementation of sustainable natural resource use practices.

- **IF** participatory approaches are used and oil and gas companies, as well as other users of natural resources of the Zhaiyk Caspian basin are interested, incentivized, capacitated and involved in cross-sectoral integrated planning processes that concern them, ensuring the incorporation of local knowledge, data and best practices, **THEN** a trajectory to improved MLSP is feasible.
- **IF** land/sea use and development plans with budgets in adjacent areas of the Zhaiyk Caspian basin are based on MLSP results and improved in this regard, **THEN** broader landscape/seascape planning will lead to integration of ecosystems, environment, biodiversity, climate aspects into economic territorial and sectoral developments.
- **IF** state entities have increased understanding of their territory and the capacities to implement the new planning system based on a scientific approach to spatial development (MLSP), which includes an evaluation of the carrying capacity of natural resources and environment to sustain economic growth without causing degradation, as well as an assessment of land/sea and spatial suitability for economic development plans, **THEN** the pressure on natural resources and ecosystems will be prevented, decreased or reversed.
- **IF** stakeholders, specifically local communities and private sector entities, are demonstrated best practices of the sustainable management of different ecosystems, including livelihood options that are conservation-friendly and economically feasible, **THEN** they will likely see the benefits of improving their capacity and having tools, technologies and access to financing to better conserve globally significant biodiversity across the Caspian Sea basin of Kazakhstan, including upstream terrestrial areas and increase their income.
- Overall, **IF** the conservation and management of marine, coastal and terrestrial areas and their resources is improved following the adoption and operationalization of integrated national, province and rayon/district-level development plans and sectoral management plans based on the MLSP as well as the increased awareness, knowledge and capacity among communities, planners and decision makers, and the private sector, **THEN** this will lead to less degraded marine, coastal and terrestrial landscapes in the Zhaiyk Caspian basin, including from improved self-enforcement, which, together with piloted conservation-friendly livelihood options, will help alleviate the unsustainable exploitation of natural resources, reducing behaviors such as illegal fishing, poaching, over-harvesting, poor and/or detrimental agricultural and fisheries practices, while improving the conversion of marine, coastal and terrestrial ecosystems and habitats.
- **IF** the combined threats are reduced, **THEN** improvement of the quality, integrity and biodiversity of the Caspian Sea basin in Kazakhstan will be better protected and the conserved, allowing the continued use of this area as well as the wider Caspian Sea by key species and globally important biodiversity.
- **IF** the Caspian Sea biodiversity is better protected and conserved, **THEN** ecosystem services beneficial for economic development and local nature-based livelihoods will be better maintained, leading to improved security, wellbeing and livelihoods for surrounding communities and the country's socio-economic development.
- Within Kazakhstan and the wider Caspian Sea basin, **IF** the project is implemented as planned, **THEN** it will become a model for integrated and inclusive management that can be successfully scaled-up to other regions in Kazakhstan as well as regionally across the Caspian Sea's riparian countries.

Based on the theory of change and in response to the identified barriers, as well as applying six system transformation levers of the GEF8 - policy and capacity, coordination with parallel initiatives[1][44], multi-sectoral governance, financial leverage, innovation and learning - as well as informed by the demonstrated practices and lessons learned from other GEF and non-GEF projects, on integrated landscape management, spatio-temporal analytical instruments in spatial planning, innovative finance instruments piloted, effective capacity instruments for government decision makers, science and education stakeholders as well as community practitioners, etc., the project design thematically clusters program outputs into **five** inter-linked and inter-dependent components and consistently identified key outputs. In particular, the outputs of **Component 1** apply the levers of improve governance and policies, using multi-stakeholder and multi-sectoral dialogues, to ensure that policy instruments, technical guidelines and institutional arrangements for MLSP become embedded in a whole-of-government framework that, in the framework of the Tehran Convention, can contribute to improved transboundary governance of the Caspian Sea basin in support of global environment benefits. The levers are also 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 Caspian Sea basin in Kazakhstan. 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 the conservation of ecosystems and biodiversity, the sustainable use of land and water resources, the restoration of ecosystem services, as well as climate-resilience and sustainable economic investments.

The outputs of **Components 2 and 3** will operate in an integrated manner, delivering together the innovative and transformation change on the ground, from the transformation levers of innovation and learning, and finance. In this respect, **Component 2** features

a pathway that is dependent on the learning demonstration for the adoption of appropriate, innovative and validated solutions for the sustainable management of land and water resources that will improve the resilience and productivity of productive landscapes as well as strengthen habitat connectivity and the flow of ecosystem services. **Component 3** specifically hinges on transformational financial leverage, critical to provide the financing for demonstrating and promoting nature-based solutions for ecosystem restoration and nature-positive practices in nature-friendly resource use, based on the premise that if stakeholders (private enterprises and local communities) receive adequate financial and/or livelihood benefits from environmentally positive practices, it will result in behavioral changes that encourage the sustainable use of land and water resources. This is premised on the assessment of financing needs and development of appropriate financial solutions sufficiently attractive to the private sector to sustain investments in the Caspian Sea basin of Kazakhstan, as a means to supplement the limited financing available through the public sector. The pathway of **Component 4** merits that if the knowledge, data and information from previous initiatives supported by the GEF and other development partners are synthesized and shared together with good practices resulting from the implementation of this project, it will catalyze a widespread increased awareness, adoption, scaling up and replication for greater impact and long-term sustainability, while also raising the profile and appreciation of the marine, coastal and terrestrial 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 allow for adaptive management for any adjustments to changing needs.

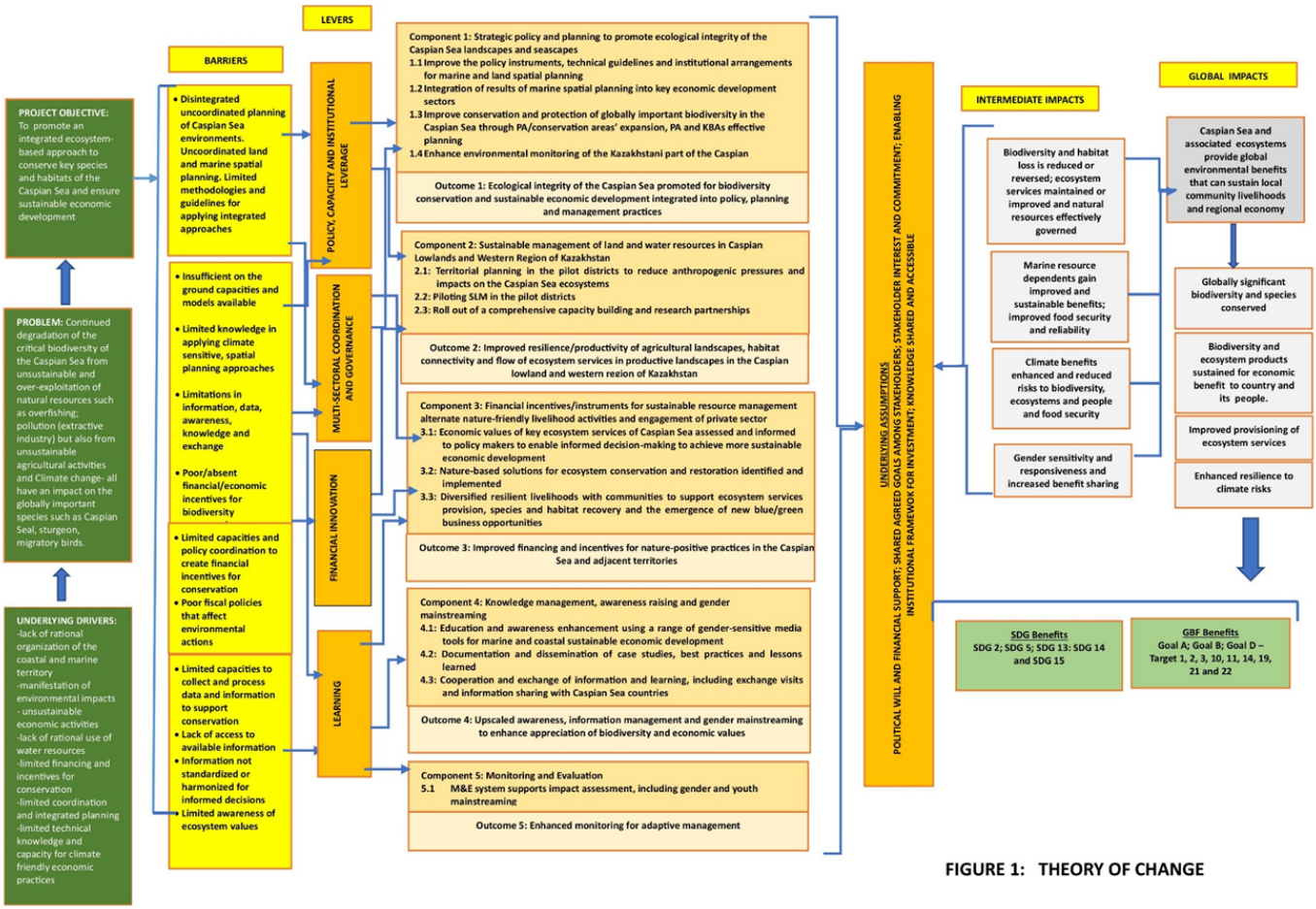

FIGURE 1: THEORY OF CHANGE

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this project, including financial management and procurement. If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

Section 1: General roles and responsibilities in the projects' governance mechanism

Implementing Partner:

The Implementing Partner (IP) for this project is the CFW of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan (MENR). The IP is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance

specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

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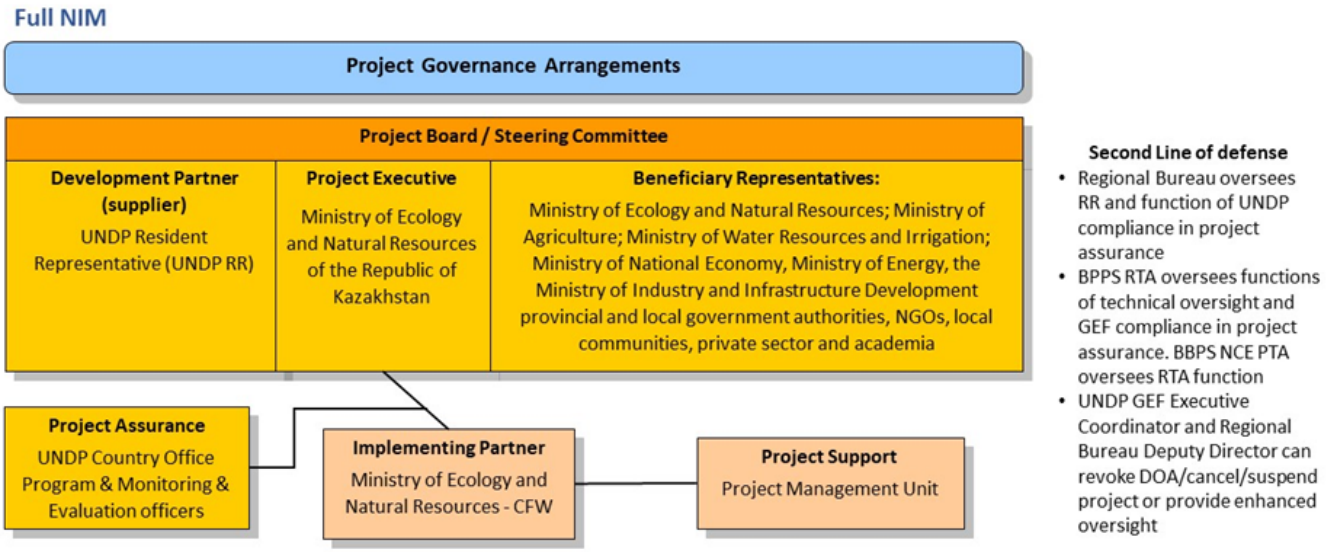
As the IP, the CFW of the MENR maintains the executive power mandate in the field of full relevance for the project and responses to the key programmatic criteria, and has capacities to ensure quality program management, to provide synergies, to replicate and upscale project results, to mobilize development partners, and to ensure national-level co-financing for the project. Specifically, the IP maintains its overall responsibility for the following aspects of the project:

- Chairing of the Project Board (PB).
- Coordination of participation of other ministries, state agencies and other stakeholders in project implementation.
- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The IP will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation.
- Procurement of goods and services, including human resources.
- Financial management, including overseeing financial expenditures against project budgets.
- Approving and signing the multiyear workplans.
- Approving and signing the quarterly and yearly combined delivery reports.
- Signing the financial report or the funding authorization and certificate of expenditures.

Section 2: Project governance structure



Responsible Parties:
Currently there are no RP under the project

Project Management – Execution of the Project:

The project management will be executed by the Project Management Unit (PMU) of the CFW of the MENR. The PM is the most senior representative of the PMU and is responsible for the overall day-to-day management of the project on behalf of the IP, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The PM typically presents key deliverables and documents to the PB for their review and approval, including progress reports, annual work plans, progress of materialized co-financing, adjustments to tolerance levels and risk registers.

UNDP:

UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the IP to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. **The UNDP-BPPS Executive Coordinator, in consultation with UNDP Bureaus and the IP, retains the right to revoke the project DOA, suspend or cancel this GEF project.** UNDP is responsible for the Project Assurance function in the project governance structure and presents to the PB, and attends PB meetings as a non-voting member.

The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project, as per the DOA, and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Program and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the PB, and therefore attend PB meetings as a non-voting member.

UNDP Oversight and Assurance: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures. UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Steering Committee and attends Project Steering Committee meetings as a non-voting member.

Project Steering Committee: All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Steering Committee (also called the Project Board) is the most senior, dedicated oversight body for a project. Further role of the Project Board is detailed in the ProDoc Section VIII on Governance and Management Arrangements.

Organigram: Funds Flow Diagram

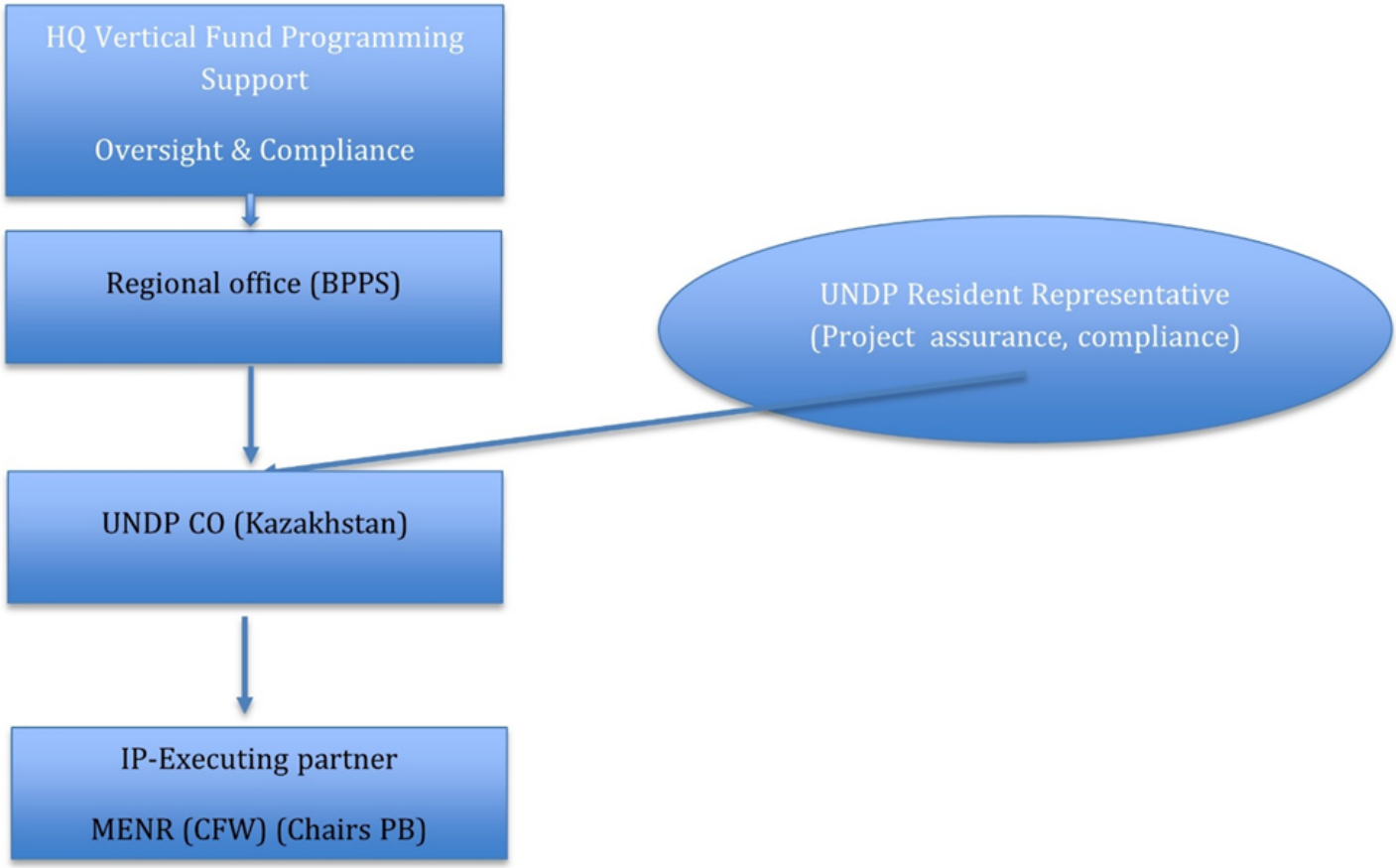


Figure: Organigram showing the flow of budget allocation from HQ → Regional Office → UNDP Country Office, and distribution at the country level through UNDP Country Office to the Implementing Partner (MENR - CFW). The IP will be responsible for internal

fund transfers. Oversight and assurance functions are reflected via the Project Board, National Project Director, and UNDP Resident Representative.

Will the GEF Agency play an execution role on this project?

No

If so, please describe that role here and the justification.

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 (max. 500 words, approximately 1 page)

The success of the project relies on dynamic, strategic, and multi-sector partnerships among government agencies, NGOs, donor agencies, private sector actors, and local communities, including women and disadvantaged groups. The project aims to engage key stakeholders to provide technical support, plan and implement management interventions, and promote biodiversity and ecosystem conservation through target on-the-ground investments that are supported by policy, legislative, spatial planning and capacity building efforts. National, oblast and local government entities will play a crucial role in ensuring that conservation initiatives are integrated into sector and socio-economic development planning and that there is significant public and private investments. It builds on experiences and lessons from on-going and past GEF and GCF projects, GEF-UNDP's small grants program and other donor-financed initiatives (refer Table 1), in integrated planning and mainstreaming biodiversity, establishment of private-public and private-community partnerships, value chain development, and enhancing conservation outcomes in in marine, coastal and terrestrial environments. The private sector will be a vital partner, promoting conservation-friendly practices, supporting nature-based solutions in resource extraction and use, and ensuring sustainable natural resources use practices.

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

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	3641388	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	676969	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Expansion of Akzhaiyk State Nature Reservation Ramsar Site	342650	Protected area with sustainable use of natural resources		30,000.00		
Expansion of Ustyurt State Nature Reserve	11827	Strict Nature Reserve		600,000.00		
Zhaiyk River Floodplain State Nature Reserve		Protected area with sustainable	46,969.00	46,969.00		

		use of natural resources				

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
1694290	2964419	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Aktau-Buzachinsky State Nature Sanctuary	62578	Habitat/Species Management Area	170,000.00	170,000.00			21.00		
Akzhayik State Nature Reserve	342650	Protected area with sustainable use of natural resources	111,500.00	111,500.00			53.00		
Karakiya-Karakol State Nature Sanctuary	62600	Habitat/Species Management Area	137,500.00	137,500.00			21.00		
Kenderli-Kayasanskaya State Nature Reserve Zone	342649	Others	1,230,290.00	1,230,290.00			21.00		
Kyzylsai State Regional Nature Park		Habitat/Species Management Area		68,445.00			53.00		
Novinsky State Nature Sanctuary	62615	Habitat/Species Management Area	45,000.00	45,000.00			21.00		
Stepping stone' PAs along the terrestrial eco-corridor		Habitat/Species Management Area		978,342.00			23.00		
Ustyurt State Nature Reserve	11827	Strict Nature Reserve		223,342.00			63.00		

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	941094	0	0

Indicator 2.1 Marine Protected Areas Newly created

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
597370	169832	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Expansion of Seal Islands State Nature Reservation		Protected area with sustainable use of natural resources		169,832.00		
Lrorvo 2 State Nature Reserve			83,600.00	0.00		
Prorvo 1 State Nature Reserve			86,232.00	0.00		
Seal Islands State Nature Reserve			427,538.00	0.00		

Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
662630	771262	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Northern Caspian Sea State Nature Reserve	342651	Others	662,630.00	662,630.00			21.00		
Seal Islands State Nature Reserve		Protected area with sustainable use of natural resources		108,632.00			7.00		

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)

6000	201000	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	201,000.00		

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 Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at 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	1525500	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	1,500,000.00		

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	25,500.00		

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

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

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (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	132,526.00		

Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations

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

Type/name of the third-party certification

Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia

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

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

Indicator 5.3 Marine OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Aquatic eco-corridors (20% of area) in the Northern Caspian Sea State Nature Zone aimed at preserving the migration routes of Caspian seals and sturgeons	34651		132,526.00		

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	2037543	39277303	0	0
Expected metric tons of CO_2e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the 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_2e (direct)	2,037,543	39,277,303		
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting	2026	2026		
Duration of accounting	20	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_2e (direct)				
Expected metric tons of CO_2e (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 Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (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) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (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	4,250		
Male	4,250	4,250		
Total	**8,500**	**8,500**	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 - Terrestrial protected areas created or under improved management: Includes the following (A) Terrestrial protected areas newly created, including Zhaiyk River Floodplain State Nature Reserve (46,969 ha; WDPA-ID n/a), expansion of Akzhaiyk State Nature Reservation Ramsar Site (30,000 ha; WDPA-ID 342650), and expansion of Ustyurt State Nature Reserve (600,000 ha; WDPA-ID 11827); (B) Terrestrial protected areas under improved management effectiveness, including Akzhayik State Nature Reserve (111,500 ha; WDPA-ID 342650), Novinsky State Nature Sanctuary (45,000 ha; WDPA-ID 62615), Aktau-Buzachinsky State Nature Sanctuary (170,000 ha; WDPA-ID 62578), Karakiya-Karakol State Nature Sanctuary (137,500 ha; WDPA-ID 62600), Kenderli-Kayasanskaya State Nature Reserve Zone (1,230,290 ha; WDPA-ID 342649), Kyzylsai State Regional Nature Park (68,445 ha; WDPA-ID n/a), Ustyurt State Nature Reserve (223,342 ha; WDPA-ID 11827), 'Stepping stone' PAs along the terrestrial eco-corridor (978,342 ha; WDPA-ID n/a).

C.I. 2 - Marine protected areas created or under improved management: Includes the following: (A) Marine protected areas newly created, including expansion of Seal Islands State Nature Reservation (169,832; WDPA-ID n/a); and (B) Marine protected areas under improved management effectiveness, including the Northern Caspian Sea State Nature Reserved Zone (662,630 ha; WDPA-ID 342651), and Seal Islands State Nature Reserve (108,632 ha WDPA-ID n/a).

C.I 3 - Area of land and ecosystems under restoration: A total of 201,000 ha of degraded rangeland and pasture under restoration, from the development and implementation of integrated sustainable pasture management plans in the Shetpinsky rural district

(36,000 ha), and the Seneksky rural district (40,000 ha) in the Mangistau oblast, and in the Akkystau rural district (125,000 ha) in the Atyrau oblast.

C.I. 4 - Area of landscapes under improved practices: A total of 1,525,500 hectares, including (A) 25,500 of landscapes under sustainable land management in production systems, for (i) organization of seasonal pasture rotation in 3 districts (24,000 ha); (ii) agroforestry reclamation of desert pastures. (500 ha); (iii) retention of melt and rainwater to improve water supply of pasture lands (1,000 ha); and (B) Assigning a legal status to the eco-corridor between Ustyurt State Nature Reserve (WDPA-ID 11827) and Aktau-Buzachinsky State Nature Sanctuary (Zoological; WDPA-ID 62578) - with 7 local-level "stepping stone" PAs (WDPA-ID n/a), installing a management regime outside PAs (1,500,000 ha; WDPA-ID n/a)

C.I. 5 - Area of marine habitat under improved practices to benefit biodiversity: A total of 132,526 hectares of the core zones of the Northern Caspian Sea State Nature Zone (WDPA-ID 342651) identified as aquatic eco-corridors (20% of area) to promote the preservation of the migration routes of Caspian seals and sturgeons.

C.I. 6 - Greenhouse gas emission mitigated: In total 39,277,303 metric tons of CO2e over 20 -year period mitigated, calculated on the basis of (i) 25,500 hectares of severely degraded landscapes (pastures) under sustainable land management in production systems restored with project support to non-degraded pastures, resulting in mitigation of 364,650 metric tons of CO2e over 20 -year period; (ii) Establishment of the Zhaiyk floodplain Nature Reservation protected area (46,969 ha; WDPA-ID n/a), in which as the result of installed management regime severely degraded floodplain rangelands and pastures are restored, resulting in mitigation of 671,657 metric tons of CO2e over 20 -year period; (iii) Expansion of the Ustyurt Nature Reserve (+600,000 ha; WDPA-ID 11827) and Akzhaiyk Nature Reservation (+30,000 ha; WDPA-ID 342650) protected areas, where, as the result of installed conservation management regime the severely degraded grasslands are restored resulting in mitigation of 9,009,000 metric tons of CO2e over 20 -year period; (iv) Establishment of an ecological corridor (1,500,000 ha; WDPA-ID n/a) linking the established PAs in the Mangystau area - the Ustyurt State Nature Reserve (223,342 ha; WDPA-ID 11827) and the Aktau-Buzachinsky State Nature Sanctuary (Zoological; 170,000 ha; WDPA-ID 62578), with the Kyzylsai State Regional Nature Park (68,445 ha; WDPA-ID n/a) and 6 local-level "stepping stone" PAs (WDPA-ID n/a) in between (total 978,342 ha), where, as the result of sustainable land use management regimes high intensity grazed pastures are restored, resulting in mitigation of 7,150,000 metric tons of CO2e over 20 -year period; (v) Existing non-degraded landscapes in terrestrial protected areas (total 2,964,419 ha), where project investments in protected area management effectiveness improves the quality of grasslands, resulting in mitigation of 19,782,556 metric tons of CO2e over 20 -year period; (vi) In total 201,000 hectares of high intensity grazing pastures restored with improved grasslands, from the development and implementation of integrated sustainable pasture management plans in the Shetpinsky rural district (36,000 ha), and the Seneksky rural district (40,000 ha) in the Mangistau oblast, and in the Akkystau rural district (125,000 ha) in the Atyrau oblast, resulting in mitigation of 2,299,440 metric tons of CO2e over 20 -year period.

C.I. 11: Covers around 8,275 beneficiaries in the coastal oblasts of the Zhaiyk Caspian basin in Kazakhstan - Mangystau oblast and Atyrau oblast - in application of sustainable approaches to planning, management and integrated use of land and water resources outside PAs, and around 225 existing PA staff that would receive training in improved protection and conservation practices.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Assessment: Climate variability, extreme weather events, and temperature fluctuations may affect biodiversity conservation efforts and land-use planning. Mitigation Measures: To mitigate this, the project will integrate climate-resilient practices such as sustainable land management (SLM), afforestation, and ecosystem-based adaptation (EbA) approaches. Continuous

		climate risk monitoring will be embedded within project activities. Please see SESP (Annex F)
Environmental and Social	Substantial	Assessment: Resource restrictions, land-use conflicts, and socio-economic disparities may result in adverse environmental and social impacts. Mitigation Measures: The project will ensure that interventions align with local livelihood and stakeholder needs, reducing potential conflicts. Participatory planning, community engagement, and gender-sensitive approaches will be prioritized to ensure social inclusion. To do so, the project will establish a systematic activity-level screening process to identify any risks with associated project activities, manage these risks through ESIA and/or SESA processes, engage potentially affected stakeholders to identify appropriate measures etc. See SESP (Annex F).
Political and Governance	Moderate	Assessment: Given, the different administrative systems that operate at the Caspian Sea (national, oblast and rayon) and the division of authorities in terms of decision-making and responsibilities between the different entities can results in different priorities in terms of economic development that might have an impact on ecological and community requirements. This is due to the tendency of political priorities to override other considerations. Mitigation Measures: As the project progresses, the risks will be carefully evaluated to determine the need for additional consultations, dialogues, and planning processes that can effectively engage various administrative levels to arrive at a common understanding of priorities for the Caspian Sea. The effectiveness of this governance structure is crucial in promoting improved planning and integration of sector mandates and priorities.
INNOVATION		
Institutional and Policy	Moderate	Assessment: The project can be affected by government policies aimed at promoting economic development (oil and gas, in particular), especially concerning their potential impacts on the marine ecosystems, and on the Caspian Seal and sturgeon populations. Mitigation Measures: To address this concern, the project design tries to demonstrate integrated approaches to resource governance and management that balances economic development cand sustainable resource use practices. Access to exemplary practices, technical expertise, and planning support will be utilized to effectively manage this potential risk.
Technological	Moderate	Assessment: Considering the potential impact of insufficient technical expertise on the attainment of desired results can impact project implementation Mitigation Measures: The project design will require the evaluation of capacity needs to define specific training, technical assistance and other institutional support that is needed. Where feasible, activities will be tailored to accommodate existing institutional capabilities while also addressing the additional capacity-building, training, and technical support needed to overcome any limitations that may hinder the promotion of integrated management approaches for marine and coastal ecosystems associated with the Caspian Sea.
Financial and Business Model	Moderate	Assessment: The prevailing economic circumstances in the world (and particularly in Kazakhstan) may pose difficulties regarding inflation,

		government resources, staff availability, and co-financing. Mitigation Measures: To address institutional and capacity limitations, the need for extra technical expertise and national consultants will be evaluated during project preparation. As for co-financing, viable options have been identified and will be verified to secure substantial co-financing through existing externally mobilized investments. This approach aims to alleviate the burden of government financing.
EXECUTION		
Capacity	Moderate	Assessment: The project implementation may be hindered by the inadequate capacity of government agencies to effectively integrate economic and ecological considerations into economic development planning.
Fiduciary	Moderate	Assessment: The IP may lack adequate capacity for procurement and financial management that might effect project implementation in a timely manner Mitigation Measures: As part of the HACT and Partner Capacity Assessment the capacity of the IP for effective conduct of procurement and financial management was assessed and suitable support and training will be provided to meet any shortfall in capacity development and training requirements. Additionally, it explores methods to showcase nature-based activities that can serve as incentives for community and stakeholder engagement, thereby addressing any reservations or reluctance and promoting their active participation in the project.
Stakeholder	Moderate	Assessment: There is a possibility that stakeholders may not readily perceive the advantages of adopting sustainable nature-positive approaches for management of the Caspian Sea, leading to hesitancy in their involvement with the project. Mitigation Measures: To address this, the project will provide capacity development , awareness and training. Additionally, the project will showcase beast practices to promote community and stakeholder engagement, thereby addressing any reservations or reluctance and promoting their active participation in the project.
Other		
Overall Risk Rating	Substantial	Assessment: The overall risk is rated as ‘Substantial’ that can negate and/or delay project implementation. Mitigation Measures: Project interventions will be aligned with local livelihood and stakeholder needs, through consultations and dialogue, participatory planning, community engagement, training and capacity development, and gender-sensitive approaches prioritized to ensure social inclusion. To reduce potential conflicts, systematic activity-level screening processes will be used to identify any risks with associated project activities, manage these risks through ESIA and/or SESA processes, tailor interventions to needs and capacities to overcome any limitations that may hinder the promotion of integrated management approaches for marine and coastal ecosystems, and engage potentially affected stakeholders to identify appropriate measures etc.

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

Explain 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.

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.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this. (max. 500 words, approximately 1 page)

Alignment with GEF focal area strategies

The project aligns with BD-1-1 by supporting the financial sustainability and management effectiveness of protected area (PA) systems. This includes identification and implementation of blended, innovative, and incentive-based finance solutions to bridge local-level finance gaps in the short, medium, and long term (Output 3.2), supporting nature-based solutions and green/blue businesses (Outputs 3.2, 3.3). It also enhances PA management effectiveness through updated management planning, ecological restoration demonstrations, and improved viability of PA networks and ecological corridors (Output 1.3), as well as PPPs that promote community engagement in nature-positive livelihoods, SMART patrolling, and data and monitoring systems.

Under BD-1-4, the project focuses on mainstreaming biodiversity and sustainable natural resource management into development sectors through marine and land spatial planning tools and technology transfer (Output 1.2). It will improve planning guidelines and institutional capacities (Outputs 1.1 and 2.3) to integrate conservation across administrative levels. Without this intervention, biodiversity integration in planning would remain limited, increasing risks of biodiversity and habitat loss. Project actions also include improved planning for marine, coastal, and terrestrial areas and enhanced community involvement in sustainable resource use to reduce threats and improve livelihoods (Outputs 3.2 and 3.3).

For BD-3, the project supports domestic resource mobilization for biodiversity and NbS investments. Linked to BIOFIN, it will conduct a financial needs assessment and develop a resource mobilization strategy for the project areas. Under BD-3-2, the project will work with Oblast administrations to implement the strategy, providing targeted training and best-practice guidelines to build their investment capacities in NbS.

Land Degradation Focal Area (LD)

Aligned with LD-1, the project promotes integrated, collaborative planning to reduce land and resource use conflicts, applying sustainable land management (SLM) in pastoralism, tourism, forestry, and agriculture. It will reduce chemical use, prevent erosion, and enhance soil fertility and water management—contributing to land degradation neutrality (LDN). Under Component 2, supported by enabling policy and finance mechanisms (Components 1 and 3), the project targets smallholder farms with technical and financial support for climate-smart practices to achieve LDN, protect ecosystem services, and enhance profitability—used as a success indicator.

In line with LD-2, the project will reverse land degradation through landscape-scale SLM interventions. It addresses key drivers of degradation via community-based planning and governance, technical training, and demonstration activities. These will be integrated into Oblast and Rayon-level planning, with active participation from men, women, and youth. Upscaling will occur through extension services and peer-to-peer exchanges (Component 4).

Climate Change Focal Area (CCM)

Under CCM 1.4, the project promotes nature-based solutions with mitigation potential, including fire reduction in terrestrial PAs, improved steppe and arable land management. These actions contribute to emissions reductions and generate significant co-benefits: sustainable livelihoods for farmers, fishers, and pastoralists, enhanced biodiversity, and reduced land and coastal degradation aggravated by climate change.

Consistency with national priorities and regional and international conventions:

To support the shift to a more transformative multi-sectoral and inclusive planning and management of the Kazakhstan portion of the Caspian Sea basin, the project will promote and demonstrate the benefits of holistic and multi-disciplinary planning approaches towards a more sustainable management of land and water resources, including from demonstrated nature-friendly practices in production landscapes supported by innovative finance instruments. The project will build on the current baseline of national commitments, strategies, and initiatives adopted, taking due notice of ongoing developments and building on lessons learned from

previous projects and programs implemented. In doing so, the project will particularly ensure alignment with the following national strategies and initiatives listed in Table 7:

Table 7: Conformity with Existing National Strategies and plans

Strategy/Plan	Conformity with the proposed project
Development Strategy of the Republic of Kazakhstan until 2050	Dated 14 December 2012, the Strategy is focused on creation of a prosperous society based on a strong state, developed economy and universal labor opportunities, as well as entry of Kazakhstan into the thirty most developed countries in the world.
National Development Plan of the Republic of Kazakhstan until 2029	Under the national priority “Improving environmental sustainability” one of the tasks is the 'conservation of biodiversity', under which it is planned to achieve the following results: an increase in the share of specially protected natural areas, an increase in the level of material and technical equipment of nature conservation and forestry institutions, and an increase in forest cover. This is planned to be achieved through (i) the strengthening protected areas; (ii) increasing the level of personnel qualifications, through incentive mechanisms, social guarantees and benefits, and the development of advanced training programs; (iii) the accelerating of reforestation and reforestation processes; and (iv) developing an integrated ecosystem approach that provides for ecosystem monitoring, assessment of environmental threats, development and implementation of management strategies for the restoration and protection of habitats. Special attention will be paid to the conservation and restoration of the population of rare animals listed in the Red Book, such as the snow leopard, Caspian seals, goitered gazelles, tugai deer, golden eagles and other species.
Concept of conservation and sustainable use of biodiversity in the Republic of Kazakhstan for 2025-2035	The Concept presents a Vision, basic principles and approaches for the conservation and sustainable use of biodiversity. To achieve its goals and objectives, solutions committed to include, among others, the expansion of the network of protected areas to cover 12.5% of the territory of Kazakhstan, consisting of existing, expanded and newly established PAs with legal status, hunting reserves, and ecological corridors (following appropriate legislative revisions), and improved management efficiency; creation of a biodiversity monitoring system, using uniform methods of accounting for species based on state-of-the-art technologies. The Concept also stipulates the need for the integration of ecosystem services valuation into the national sustainable development planning.
Concept for the transition of the Republic of Kazakhstan to a green economy until 2050	Dated 29 July 2020, the Concept focuses on the implementation of necessary measures to reduce greenhouse gas emissions in the energy sector, energy efficiency and energy conservation, development of sustainable transport, infrastructure for electric and gas vehicles, smart traffic management systems, sustainable municipal waste management, transition to sustainable land use methods and organic agriculture, afforestation and the formation of ecological culture.
Draft National Biodiversity Strategy and Action Plan 2025-2035	Relevant to the GEF 8 project, the draft NBSAP seeks to: (2.1) develop an unified ecological network of PAs; (2.2) improve the efficiency of forest protection and sustainable forest management; (2.3) improve monitoring , protection and sustainable use of wildlife; (2.4) conservation of biological diversity of ichthyofauna; (2.5) effective measures for protection, restoration an use of flora; and (2.6) restoration of degraded pastures through sustainable practices.
Caspian Seal Conservation Action Plan (2021).	The Action Plan 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.
State Nature Reserve 'Caspian Itbalygy' of the Fisheries Committee of the Ministry of Agriculture of Kazakhstan 2024.	Establishment of the protected area supports to preserve the Caspian Seal population in the Northern Caspian within the borders of Kazakhstan, which implies the creation of conditions conducive to their stabilization and growth, including: protection of habitats (breeding grounds, molting), elimination of obstacles on migration routes, reduction of the impact of unfavorable factors, as well as the conservation of rare, endangered, endemic and other valuable species of fish resources and other aquatic animals and ensuring the protection, restoration and maintenance of the biological diversity of natural complexes (aquatic ecosystems).
Five-year public development programs for Atyrau and Mangystau provinces	Contain sections on environment and certain indicators matching sustainable development indicators that are altogether compliant with those specified in the key policy papers of the Republic of Kazakhstan.
Strategy for achieving carbon	Adopted in 2023, the Strategy outlines ambitious net-zero carbon goals and key technological transformations for national decarbonization. To make these changes happen, the country needs to develop and put into action targeted and effective policies and programs across its entire economy.

neutrality until 2060	
Environmental Code of Kazakhstan 2021	The Environmental Code of Kazakhstan includes a chapter on biodiversity conservation, voluntary payments for ecosystem services, and biodiversity offsetting mechanism that sets the principle of preventing, minimizing, mitigating, and compensating for biodiversity loss—designed to address potential impacts of the industrial and infrastructural projects at the planning stage. Additionally, the new Code includes principles for developing eco-tourism in national parks, promoting eco-friendly transport, preventing biodiversity harm, informing visitors, reducing waste, and involving local communities to benefit from tourism. The Environmental Code also strengthens procedures for conducting EIA and introduces a new regulation for conducting Strategic Environmental Assessment (SEA) of new regional and sectoral development plans and programs. According to the Article 52 Subject of the SEA, "Mandatory strategic environmental assessment applies to Documents concerning the development of agriculture, forestry, fisheries, energy, industry (including exploration and mining), transport, waste management, water management, telecommunications, tourism, urban and rural development planning, land use and protection, with the exception of cases provided for in paragraphs 5 and 6 of this Article." The Environmental Code also includes Annex 1: Section 1. List of planned activities and installations that shall be made subject to a mandatory environmental impact assessment, and Section 2. List of planned activities and installations that shall be made subject to a mandatory screening procedure for impacts of the planned activity.
Nationally Determined Contribution of Kazakhstan (2023).	The updated NDC includes an unconditional target of reducing emissions by 15% by 2030 and a conditional emissions reduction target of 25% relative to the 1990 baseline. The NDC covers energy, industrial processes and product use, agriculture, forestry and other land use, and waste sectors. Kazakhstan aims to achieve carbon neutrality by 2060[1][45].
National Land Degradation Neutrality Targets (2017)	The national land degradation neutrality targets in 2017 and has set a goal of a neutral balance of land degradation by 2030, and aim to increase the efficiency of land use, improve irrigation, restore abandoned agriculture lands, maintain water bodies and to strengthen tenure rights and land governance.
Law 'On Pastures' (2024).	The Law aims at preventing the degradation of pastures, improvement of their condition, which are directly related to issues of soil protection, and the foundations of a green economy. The Law defines the regulatory and legal framework for the process of state management and coordination of the use of pasture lands. It provides for all provisions aimed at the rational use of pastures, improving their condition and infrastructure, and preventing their degradation.
Concept for the Development of the Water Resources Management System of Kazakhstan for 2024 - 2030	The Concept aims at reducing unproductive losses during water transportation, strengthen hydrogeological and meliorative monitoring to improve the condition of irrigated lands, improve the technical condition of hydraulic structures to guarantee water supply to economic sectors and reduce the risk of emergency situations. In addition, to improve information and analytical support for the water resources management system, a unified system, including digitalization and automation, for recording, monitoring and forecasting water resources will be created, which includes information on the state and quantity of water resources, water management and hydraulic structures.
Draft Water Code (2025)	The updated draft Water Code aims at regulating the protection and use of water resources, including ensuring the safety of water management and hydraulic structures, introducing the principle of water conservation in all sectors of the economy in light of the predicted future water shortage. The Code's five basic principles include (i) strengthening the role of water as an integral part of the environment, the basis of human life and economic development; (ii) economic value of water resources when used; (iii) integrated use of surface and groundwater resources; (iv) efficient and rational water conservation; and (v) involving the public in solving problems related to the protection and use of water resources.
Program for the Development of Fisheries of Kazakhstan for 2021–2030	The Program defines tasks for the restoration of fish resources and the development of aquaculture. The Program also aims at restoring natural fish migration, modernizing fish farming infrastructure and expanding protected areas. Particular attention is paid to the need for dredging at the mouth of the Zhaiyk River, which will restore fish passages and increase the reproduction of sturgeons. Furthermore, the program also provides for measures to improve the ecological state of the Caspian Sea, including monitoring toxicants, regulating fishing pressure and developing marine aquaculture. The key measures of the Program are related to the development of commercial fish farming, expansion of cage and pond farms, and the development of closed water supply systems.
Law of on the Protection, Reproduction and Use of Wildlife, 2004	Regulates relations in the field of fisheries, establishing catch quotas and protecting biological resources.
Concept of the development of the tourism industry of the Republic of Kazakhstan for	Approved on March 28, 2023, No. 262, the Concept includes improving air connectivity among tourist destinations within the country, with the initial focus being on the Caspian coast as well, specifically the Mangystau Region and the city of Aktau. Furthermore, to foster cruise tourism in the Caspian Sea, there are plans to explore the construction of a marine terminal in Aktau port. The concept provides development strategy for tourism products prioritizing eco-tourism, agro-tourism (rural tourism), ethnographic tourism etc.

2023 – 2029[2][46]	

Kazakhstan is a party of five priority international agreements directly operating in the field of biodiversity conservation and sustainable use: the Convention on Biological Diversity (CBD), the Convention Concerning the Protection of the World Cultural and Natural Heritage, the Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn), the Ramsar Convention on Wetlands of International Importance (or Ramsar), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); and the United Nations Convention to Combat Desertification (UNCCD).

Furthermore, the project 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 support addressing 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 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.

Complementarity with International Program Priorities:

The project is complementary with the following key international program priorities, as follows:

Table 8: 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.
	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 improving 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.	The project intends promoting an integrated, participatory and inclusive landscape/seascape planning and management approach to resource governance and use.
	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.
	Target 2: At least 30 percent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration.	To meet this goal, the project intends to install for 1,525,500 of landscapes a sustainable land management regime in production systems, and put 201,000 ha of degraded rangeland and pasture under restoration.
	Target 3: At least 30 percent of terrestrial, inland water, and of coastal and marine areas effectively conserved and managed including over their traditional territories.	To meet the above goal, the project intends to improve management effectiveness in 2,964,419 ha of terrestrial and 771,262 ha of marine systems.
	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 and 1.2 are directed at measures to promote integrated cross-sectoral planning for the management of land/seascapes to avoid, minimize or offset biodiversity impacts.
	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 sustainable natural resource management, alternative nature-friendly livelihood activities and engagement of private sector 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. Output 4.2 focuses on the documentation and dissemination of best practices and learning to promote replication, while Output 4.3 strengthens cooperation and exchange of information and learning.
	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.

In terms of other international programs, the project is aligned with the following:

- **UNDP's Strategic Plan (2022-2025):** The project is relevant as follows: (i) Direction of Change, namely transformation to nature-positive inclusive development that is supported by digital transitions (data collection, monitoring systems and gender differentiated targets to promote sustainable development pathways); leaving no-one behind by empowering local communities, in particular women and disadvantaged groups to ensure inclusive decision-making, equitable sharing of benefits, enhanced community development and building resilience through strengthening community capacity to manage and mitigate climate change impacts and other social and economic shocks; (ii) Promoting solutions in terms of improving local governance and decision-making processes, ensuring gender equality and gender targeted interventions, improving resilience to nature events and improving environmental conditions through promotion of more sustainable and nature-based solutions to current unsustainable resource use; and (iii) enabling new innovation in resource use, enhancing innovative financial solutions to support conservation outcomes.
- **UNDP's Nature Pledge:** The project is relevant as follows: (i) Value Shift: namely to demonstrate through the intervention in the Zhaiyk Caspian basin that conservation of species, ecological systems, environmental conditions and ecological interests are in the long-term development and economic interests of the country. By supporting the promotion of nature-based solutions in key economic sectors at multiple levels within government, business, civil society, the private sector and communities, the project intends to create and strengthen cooperation and accountability among key stakeholder groups to

protect and conserve these natural systems; (ii) Economic and Finance Shift: Implement biodiversity finance solutions emanating from the BIOFIN exercise to mobilize innovative financing to support nature-positive growth and reduce the impact on natural ecosystems. It would also help enhance private-public partnerships to upscale private investment in conservation action and promote improved private business planning strategies, in particular in the tourism sector to reduce negative impacts of natural ecosystems and biodiversity; and (iii) Policy and Practice Shift: by strengthening national and sub-national capacities to provide integrated and inclusive landscape/seascape planning approaches, mainstream NbS in sector and sub-national economic planning systems and support specific gender programs to enhance incomes and livelihoods (through SME and value chain programs) and improve resilience to natural disasters.

[1] https://ndcpartnership.org/country/kaz

[2] https://adilet.zan.kz/rus/docs/P2300000262

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment

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

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

Yes

If the project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Yes

Improving women's participation and decision-making; and/or

Yes

Generating socio-economic benefits or services for women.

Yes

2) Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

Stakeholder Engagement

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

Yes

Select what role civil society will play in the Project

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body ;

Executor or co-executor;

Other (Please explain) Yes

Private Sector

Will there be private sector engagement in the project?

Yes

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

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	High or Substantial High or Substantial		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided.

Yes

Socio-economic Benefits

We confirm that the project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

ANNEX A: FINANCING TABLES

GEF Financing Table

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 ($)
UNDP	GET	Kazakhstan	Biodiversity	BD STAR Allocation: BD-1	Grant	3,801,907.60	361,181.22	4,163,088.82
UNDP	GET	Kazakhstan	Biodiversity	BD STAR Allocation: BD-3	Grant	968,091.04	91,968.64	1,060,059.68
UNDP	GET	Kazakhstan	Climate Change	CC STAR Allocation: CCM-1-4	Grant	600,000.26	57,000.03	657,000.29
UNDP	GET	Kazakhstan	Land Degradation	LD STAR Allocation: LD-1	Grant	1,108,639.26	105,320.73	1,213,959.99
UNDP	GET	Kazakhstan	Land Degradation	LD STAR Allocation: LD-2	Grant	791,361.84	75,179.38	866,541.22
Total GEF Resources ($)						**7,270,000.00**	**690,650.00**	**7,960,650.00**

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested?

true

PPG Amount ($)

200000

PPG Agency Fee ($)

19000

GEF Agency	Trust Fund	Country/	Focal Area	Programming of Funds	PPG($)	Agency Fee($)	Total PPG Funding($)

		Regional/ Global					
UNDP	GET	Kazakhstan	Biodiversity	BD STAR Allocation: BD-1	131,225.00	12,467.00	143,692.00
UNDP	GET	Kazakhstan	Climate Change	CC STAR Allocation: CCM-1-4	16,506.00	1,568.00	18,074.00
UNDP	GET	Kazakhstan	Land Degradation	LD STAR Allocation: LD-1	52,269.00	4,965.00	57,234.00
Total PPG Amount ($)					**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 Resources					**8,179,650.00**

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
BD-1-1	GET	1,140,572.07	37422872
BD-1-4	GET	2,661,335.53	12474291
BD-3-1	GET	677,663.74	3742287
BD-3-2	GET	290,427.30	7484574
LD-1	GET	1,108,639.26	15127751
LD-2	GET	791,361.84	8732004
CCM-1-4	GET	600,000.26	5880737
Total Project Cost		**7,270,000.00**	**90,864,516.00**

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

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	11257000
Recipient Country Government	Fisheries Committee of MoA	Public Investment	Investment mobilized	58622000
Recipient Country Government	Akimat of Atyrau Region	Public Investment	Investment mobilized	20085516
GEF Agency	UNDP	Grant	Investment mobilized	900000
Total Co-financing				**90,864,516.00**

Please describe the investment mobilized portion of the co-financing

(i) Committee of Forestry and Wildlife, MENR: The Committee of Forestry and Wildlife confirms co-financing in the amount of KZT 5.1 billion (USD-eq 11,257,000), for expenses in relation to ensure the security of protected areas, for forest comparison, and for forest management (Annex 33 of ProDoc).

(ii) Fisheries Committee of MoA: The Fisheries Committee confirms co-financing in the amount of KZT 29.90 billion (USD-eq. 58,622,000) for the period from 2026 to 2030. Table. Financial contribution of the Fisheries Committee to the implementation of the Project (thousand tenge) for the following: (i) operations of the Atyrau Sturgeon Breeding Plant in the Mangystau and Atyrau regions to ensure the conservation, reproduction and rational use of fish resources and other aquatic animals; (ii) to raise fry of valuable fish species; (iii) to conduct comprehensive marine research to assess bioresources in the Kazakhstan part of the Caspian Sea; (iv) to prepare biological justifications for the acquisition of fauna objects; and (v) to ensure the functioning of the State Nature Reserve to preserve the Caspian seal population (Annex 33 of ProDoc).

(iii) Akimat of Atyrau oblast: The Management Department of Natural Resources and Regulation of Environmental Management of Atyrau oblast has committed to project co-financing of various activities, including (i) protection of atmospheric air (KZT 11,117,000); (ii) protection of water objects (KZT 12,138,670); (iii) protection of coastal and aquatic ecosystems (KZT 22,843,377); (iv) protection of land (KZT 125,000); (v) protection of fauna and flora (KZT 6,068,555); (vi) waste management (KZT 25,288,475); (vii) management system and implementation of innovative technologies; and (viii) scientific activities (KXT 1,822,000) (Annex 33 of ProDoc).

(iv) UNDP: The UNDP Country Office in Kazakhstan confirm its commitment to co-finance the Project In the amount of USD 900,000.00 over the period from 2026-2030, through aligned UNDP initiatives, including the BIOFIN financial and non-financial mechanism to mobilize resources for biodiversity conservation, as well as other UNDP-supported initiatives focused on climate adaptation, resilience building, and environmental sustainability in the project targeted regions.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	7/29/2025	Ms. Nancy Bennet		nancy.bennet@undp.org
Project Coordinator	7/29/2025	Ms. Monica Moldovan		monica.moldovan@undp.org

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

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (MM/DD/YYYY)
Saule Sabiyeva	Acting Director of the Department of Climate policies of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan	Ecology and Natural Resources	9/8/2023

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document.

Contribution to the Sustainable Development Goal (s): SDG 2 - End hunger, achieve food security and improved nutrition, and promote sustainable agriculture; SDG 5 - Gender Equality; SDG 13 - Climate Action; SDG 14 - Conserve and sustainably use the oceans, seas, and marine resources for sustainable development and SDG 15 – life on land

Intended Outcome as stated in the UNSDCF/Country Program Results and Resource Framework:

Outcome 3. By 2030, all people in Kazakhstan, especially the most vulnerable, benefit from enhanced age and gender-sensitive environmental resilience, as well as inclusive, rights-based climate, nature and pollution action and sustainable management of natural resources

15.1.2 Share of specially protected natural areas (million hectares) Baseline: 30.9 (2025) Target: 32.1 (2030)

15.3.1 Area of eroded agricultural lands (thousand hectares) Baseline: 29,925.7 ha (2024) Target: 28,4 thousands ha (2030)

13.2.2 Total annual greenhouse gas emissions (million tons of CO2 equivalent) Baseline: 367.7 (2024) Target: 324.4 (2030)

Applicable Output(s) from the UNDP Strategic Plan: Strategic Plan Outcome 1: Structural transformation accelerated, particularly green, inclusive and digital transitions.

IRRF Indicator 4.1: Natural resources protected and managed to enhance productivity and livelihoods; 4.2 Public and private investment mechanisms mobilized for biodiversity, water, oceans, and climate solutions

Project title and Quantum Project Number: Integrated Management of Seascapes of the Kazakhstani part of the Caspian Sea and Land Resources of Adjacent Territories

Objective and Outcome Indicators[1]47 **(no more than a total of 20 indicators)**	**Data Source**	**Baseline[2]48**	**Mid-term Target[3]49**	**End of Project Target**	**Data Collection Methods[4]50**	**Risks/Assumptions**
Project Objective:	To promote an integrated ecosystem-based approach to conserve key species and habitats in the Caspian Sea basin of Kazakhstan and ensure sustainable economic development					

Indicator 1: Mandatory GEF Core Indicator 11: # direct project beneficiaries disaggregated by gender (individual people)	Reports of number of people involved in project activities, feeding into detailed analysis of project beneficiaries, to be conducted at mid-term and project completion	0 (zero beneficiaries)	Target: 2,000 (men and women 50:50)	Target: 8,500 (men and women 50:50)	Annual project work plans and budgets; Independent social and gender evaluations; reports on pilot projects; Socio-economic surveys; M&E reports; TE report	Assumptions (i) Local communities, private sector, provinces and district authorities understand the need to participate in promoting sustainable resource use and restoration activities; (ii) Authorities consider it their priority to support integrated planning of their landscapes/ seascapes for ecosystem conservation; (iii) Communities are willing to use new sustainable solutions; (iv) Women are willing to participate in biodiversity conservation and livelihood activities; (v) Landscape/seascape planning, NbS and on-the-ground investments will follow requirements of UNDP's SES, EIA and SEA requirements, and FPIC procedures. Risks: (i) Lack of capacity in government, private sector and communities to meet obligations related to project; (ii) Rather rapid staff turnover in state agencies, losing institutional memories; (iii) Lack of involvement from resource

							users that continue unsustainable practices; (iv) Currently accepted gender roles hinder the participation of women in livelihood activities.
	Indicator 2: Mandatory GEF Core Indicator 1: Terrestrial protected areas created or under improved management.	Consultation with MENR and provincial authorities, PA authorities, forestry and hunting departments, local communities.	Terrestrial PAs existing (2,964,419 ha), expanded (0 ha) and newly created (0 ha) have limited capacity and resources, and therefore are not effectively managed, with METT scores of: <u>West Kazakhstan province</u>: - Zhaiyk Floodplain State Nature Reservation (planned; WDPA-ID n/a): 0 <u>Atyrau province</u>: - Akzhaiyk State Nature Reservation Ramsar Site: 53 (WDPA-ID 342650) - Novinskiy State Nature Sanctuary (zoological; WDPA-ID 62615): 21 <u>Mangystau province</u> - Ustyurt State Nature Reserve	Target: On average a 10-point increase in METT scores is achieved, from staff training on relevant topics (e.g., biodiversity monitoring, patrolling, tourism development, finance instruments, management planning), technical assistance provided, and some investment achieved.	Target: Terrestrial PAs existing (2,964,419 ha), expanded (630,000 ha) and newly created (46,969 ha) have on average achieved a 20-point increase in METT scores, from improved staff operations, expanded technical capacities, management planning and implementation and finance, as follows: <u>West Kazakhstan province</u>: - Zhaiyk Floodplain State Nature Reservation (planned; WDPA-ID n/a): 25 <u>Atyrau province</u>: - Akzhaiyk State Nature Reservation Ramsar Site (WDPA-ID 342650): 73	GEF METT dashboard and annual reports; Management Plans; Government notifications; Implementation progress reports	<u>Assumptions</u> (i) local communities, private sector and municipal authorities are willing to engage in PA management improvement and recognize the value of conserving terrestrial and coastal ecosystems; (ii) PA authorities and communities agree to support sustainable resources use in allocated zones to derive economic benefits. <u>Risks</u>: (i) Establishing new PA is time-consuming and subject to state approval; (ii) strengthening management effectiveness requires commitment and in part depends on community behavioral change.

			(WDPA-ID 11827): 63 - Karakiya-Karakol State Nature Sanctuary (WDPA-ID 62600): 21 - Kenderli-Kayasanskaya State Nature Zone (WDPA-ID 342649): 21 - Aktau-Buzachinsky State Nature Sanctuary (WDPA-ID 62578): 21 - Kyzylsai State Regional Nature Park (WDPA-ID n/a): 53, managing 6 subordinate regional-level sanctuaries (WDPA-ID n/a): 23		- Novinskiy State Nature Sanctuary (zoological; WDPA-ID 62615): 41 <u>Mangystau province</u> - Ustyurt State Nature Reserve (WDPA-ID 11827): 83 - Karakiya-Karakol State Nature Sanctuary (WDPA-ID 62600): 41 - Kenderli-Kayasanskaya State Nature Zone(WDPA-ID 342649): 41 - Aktau-Buzachinsky State Nature Sanctuary (WDPA-ID 62578): 41 - Kyzylsai State Regional Nature Park (WDPA-ID n/a): 73, managing 6 subordinate regional-level sanctuaries (WDPA-ID n/a): 43		
	Indicator 3: Mandatory GEF Core Indicator 6: Greenhouse Gas Emissions Mitigated (metric tons of CO_2e)	Calculation of metric tons CO2e mitigated using FAO EXACT tool kit.	0	Target: 0 0	Target: 39,277,303 metric tons of CO_2 over a 20-year timeframe	Progress and survey reports on terrestrial and aquatic resources use (pastures, forests, aquaculture, etc.). Use of FAO-EXACT tool kit	<u>Assumptions</u>: (i) investment in agriculture, conservation measures, SLM and NbS, restoration efforts are successful; (ii) local communities take action to conserve their natural resources, including pastures, wetlands, etc. <u>Risks: (i)</u> opportunities for

							current or alternative livelihood improvements may constraint community engagement.
Project component 1	**STRATEGIC POLICY AND PLANNING TO PROMOTE ECOLOGICAL INTEGRITY OF THE CASPIAN SEA LANDSCAPES AND SEASCAPES**						
Project Outcome 1 Ecological integrity of the Caspian Sea promoted Promoting the ecological integrity of the Caspian Sea for biodiversity conservation and sustainable economic development integrated into policy, planning and management practices	**Indicator 4***:* Number of Marine and Land Spatial Plans and Policy Framework developed at Zhaiyk Caspian basin level	(i) Identified mandates of BC, government agencies, sectoral institutions on planning and coordination; (ii) documented minutes of coordination meetings; and evidence of actions taken.	Current planning and decision-making arrangements at national, provincial and sector levels are sector-based.	Target: Two coastal oblasts) completed institutional coordination measures and strengthened mandates for formal MLSP for the Zhaiyk Caspian basin	Target: One Marine and Land Spatial Planning and Policy Framework for Zhaiyk Caspian basin developed with clear coordination mechanism envisaged.	Minutes of coordination meetings and provincial documentation; MLSP at the decision support system/platform.	Assumption: (i) Key sectoral agencies are willing to support recognition of social and environmental considerations in landscape/seascape planning; (ii) Adequate representation of women in coordination systems is achievable Risks: (i) Priority of provincial governments and key sectors might shift due to external or internal needs or developments; (ii) Insufficient engagement of women in governance mechanisms and decision-making processes.
	Indicator 5: Number of sectoral and public policies that apply MLSP, SLM, NbS, and biodiversity conservation principles in planning for integrated terrestrial, coastal and marine sustainable development with ecosystem restoration and biodiversity conservation benefits.	Review of specific public and sectoral policies for incorporation of MLSP, SLM and NbS principles, approaches, targets, indicators and priority actions for integration.	Current public and sectoral policies and decision-making systems do not apply MLSP, SLM or NbS principles.	Target: At least 2 draft gender-responsive regional development programs and/or sectoral plans/ policies/ guidelines integrating biodiversity and sustainable resource use under review.	Target: At least 4 gender-responsive regional development programs and/or sectoral plans/ policies/ guidelines developed and endorsed, based on planning in line with MLSP and considerations for adopting SLM and NbS (e.g., in fisheries, pasture, water management, ecotourism, biodiversity / species and ecosystems conservation).	Approved sectoral plans, regulations, strategies and guideline documents; Project progress reports.	
	Indicator 6: % increase in capacity of the Kazakh Research Institute of the Caspian Sea for monitoring biodiversity in marine and coastal	Communication with KRICS and ministerial oversight agencies, scientific partners.	Baseline surveys completed in Year 1 to assess capacity of KRICS; KRICS is unable to plan and effectively implement biodiversity monitoring due to lack of	Target: A 10% increase from baseline in KRICS' capacity for biodiversity monitoring using UNDP capacity development tool, from	Target: A 40% increase from baseline in KRICS' capacity for biodiversity monitoring using UNDP capacity development tool, from the KRISC information and analytical	Approved monitoring plans, guidelines and protocols; Reports on biodiversity monitoring; Project progress reports.	Assumptions: (i) KRICS received tangible technical support and financing from the state budget. Risks: (i) external state organizations, scientific, educational

	areas of the Caspian Sea in Kazakhstan.		training, SOPs for monitoring, and appropriate equipment.	training and capacity building ongoing and partly completed, and guidelines, manuals and SOPs to promote monitoring developed.	system for collecting, processing, evaluating, analyzing, visualizing and storing information on the state of the biodiversity operationally used by trained staff.	UNDP capacity development scorecard	institutions and private sector are unwilling to cooperate with KRICS, including data sharing; (ii) Financing from budget or other sources is insufficient or not reliable to ensure continuous biodiversity monitoring.
	Indicator 7: Mandatory GEF Core Indicator 2: Marine protected areas created or under improved management (ha)	Ministerial departments of MENR and MoA, Fisheries Committee and other agencies	Marine PAs existing (771,262 ha) and expanded (0 ha) have limited capacity and resources, and therefore are not effectively managed, with METT scores of: Northern Caspian Sea State Nature Reserve (WDPA-ID 342651): 21 Seal Islands State Nature Reservation (WDPA-ID n/a): 7	Target: Marine PAs existing (771,262) and expanded (0 ha) under improved management from management plans and guidelines developed, for patrolling, tourism management and biodiversity monitoring, other topics; METT score increase by 10 points over the baseline.	Target: Marine PAs existing (771,262 ha) and expanded (169,832 ha) have on average achieved a 20-point increase in METT scores, from improved staff operations, expanded technical capacities, management planning and implementation and finance, as follows: Northern Caspian Sea State Nature Reserve (WDPA-ID 342651): 41 Seal Islands State Nature Reservation (WDPA-ID n/a): 27	GEF METT Scorecards; Management plans, guidelines and training plans; Implementation progress reports	Assumptions: (i) Communities, hotels and other ecotourism enterprises anticipate receiving direct benefit from improved MPA management, reducing threats for biodiversity and marine ecosystems; (ii) Willingness of communities to engage in alternate sustainable activities in buffer zones of MPA; (iii) Restoration activities take into consideration requirements of SESA and avoid economic displacement; (iv) Women are adequately consulted on conservation and restoration practices. Risks: (i) Benefits of marine management approaches are costly and time consuming, and might negate efforts; (ii) Communities and touristic facilities might not see any direct economic benefits to engage in

							conservation actions.
	Indicator 8: Mandatory GEF Core Indicator 5: Area of marine habitat under improved practices to benefit biodiversity (ha)	Reports from Ministerial departments of MENR and MoA, Fisheries Committee, KRICS, and other agencies	0 (zero) ha: no marine areas in the Northern Caspian Sea State Nature Zone (WDPA-ID 34651) recognized as aquatic eco-corridors aimed at preserving the migration routes of Caspian seals and sturgeons	0 (zero) ha: zoning of the Northern Caspian Sea State Nature Zone finalized, and core zones identified; formal recognition as aquatic eco-corridors initiated	Aquatic eco-corridors formally recognized in the Northern Caspian Sea State Nature Zone (WDPA-ID 34651), covering 132,526 ha (20% of area)	Provincial documentation, MPA management plan, project reports	Assumptions: (i) local communities, private sector and state authorities are willing to engage in PA zoning and recognition of the aquatic eco-corridors, recognizing the value of conserving of aquatic ecosystems and populations; (ii) PA authorities and communities agree to focus sustainable resources use in allocated zones to derive economic benefits. Risks: (i) Establishing new PA is time-consuming and subject to state approval; (ii) enforcement of the protection regime is difficult and costly; (iii) fishermen may not recognize the long-term importance of the aquatic eco-corridor and continue illegal fishing practices.
Outputs to achieve Outcome 1	Output 1.1: Improve the policy instruments, technical guidelines and institutional arrangements for marine and land spatial planning Output 1.2: Integration of results of marine spatial planning into key economic development sectors Output 1.3: Improved conservation and protection of globally important biodiversity in the Caspian Sea through PA/conservation areas' expansion, PA and KBAs effective planning Output 1.4: Enhanced environmental monitoring of the Kazakhstan part of the Caspian Sea by responsible government entities to inform effectiveness of spatial land use/PA/KBA planning and management						
Project component 2	**SUSTAINABLE MANAGEMENT OF LAND AND WATER RESOURCES IN THE CASPIAN LOWLANDS AND WESTERN REGION OF KAZAKHSTAN**						
Outcome 2 Improved resilience/productivity of agricultural landscapes, habitat connectivity and flow of ecosystem services in	**Indicator 9:** Mandatory GEF Core Indicator 4: Area of landscapes under improved	Consultations with beneficiaries, authorities, and scientific institutes.	0 (zero; no project implementation).	Target: 0 ha (Eco-corridor not legally recognized, management plans regulating seasonal	Target: 1,525,000 ha, from legal establishment of a terrestrial eco-corridor in Mangystau province (1,500,000 ha	Project reports and documents; GIS and/or RS analysis.	Assumptions: (i) Broad societal willingness to establish regulate land use and adapt unsustainable management practices; (ii) PA,

productive landscapes in the Caspian lowland and western region of Kazakhstan	practices (ha)			land use not yet adopted by PA and local district and provincial authorities, improved seasonal land use and practices not yet implemented).	outside PAs) and improved pasture management (25,500 ha).		provincial and district managers, and land users have capacity to plan, agree, and implement SLM measures. Risks: (i) Local pasture users do not agree on seasonal pasture use regulations for biodiversity.
	Indicator 10: Number of pilot initiatives for SLM in the pilot area	Consultations with beneficiaries, authorities, and scientific institutes	0 (zero; no project implementation)	Target: At least 2 pilot initiatives for SLM developed and piloted	Target: At least 5 pilot initiatives for SLM developed and piloted	Project progress reports; Mass media publications covering pilots, supported by project	Assumptions: (i) Relevant SLM pilot activities / options can be identified; (ii) identified activities / options are attractive (communication efforts are successful) for engagement of public, private and/or community stakeholders; (iii) Capacity building is effective, so that partners progressively adopt SLM practices. Risks: (i) Achieving notable benefits of SLM are costly or economically unattractive, and take time, and might negate efforts; (ii) Communities, businesses and authorities see no direct economic incentives to engage in SLM that justify the efforts.
	Indicator 11: Mandatory GEF Core Indicator 3: Area of land and ecosystems under restoration	District-level sustainable pasture management plans, on-the-ground monitoring	0 (zero; no degraded rangeland and pastures and ecosystems under restoration)	Target: at least 36,000 ha of degraded rangeland and pastures and ecosystems under restoration	Target: at least 201,000 ha of degraded rangeland and pastures and ecosystems under restoration	Project reports and documents; GIS and/or RS analysis	
Outputs to achieve Outcome 2	Output 2.1: Territorial planning in the pilot districts to reduce anthropogenic pressures and impacts on the Caspian Sea ecosystems Output 2.2: Piloting SLM in the pilot districts Output 2.3: Roll out of a comprehensive capacity building and research partnerships						
Project component 3	**FINANCIAL INCENTIVES/INSTRUMENTS FOR SUSTAINABLE NATURAL RESOURCE MANAGEMENT, ALTERNATIVE NATURE-FRIENDLY LIVELIHOOD ACTIVITIES AND ENGAGEMENT OF PRIVATE SECTOR**						
Outcome 3	**Indicator 12:** Number	Project reports,	0	Target: 0	Target: At least two targeted	Review of annual	Assumptions: (i) Pilot projects

Improved financing and incentives for nature-positive practices in the Caspian Sea and adjacent territories	of Nature-based or nature-positive financial instruments identified and evaluated for effectiveness in the project landscapes / seascapes and prepared for replication and scaling-up.	publications in open sources Direct information from the governmental bodies on the appraisal of the proposed financial instruments.		(Feasibility studies of two new targeted nature-based / nature-positive financial solutions conducted)	nature-based financial solutions or nature-positive solutions tested (e.g., payment for ecosystem services, blue bonds, biodiversity offsets, green loan guarantees, other tailored financing).	reports; Publications in open sources; Direct information from government bodies on the appraisal of the proposed financial instruments.	may be identified, their owners are motivated to apply to participate, and pilots are scalable and present a value as demonstration cases for subsequent replication; (ii) Gender and Social Mainstreaming Plan followed and benefits distributed equitably, and pilot projects may be selected in a transparent and a fair manner; (iii) Stakeholders willing to actively participate in the pilot cases review process and sharing of experience. Risks: (i) High costs of funding or lack of market access to funding or other resources might stifle opportunities for income generation by potential pilot projects; (ii) Private sector may be more motivated by profits rather than conservation outcomes, which may potentially lead to less profitable investments; (iii) Women may not adequately engaged in businesses and they might not have access to finances.
	Indicator 13: Proportion	Consultation with private sector	0 (the baseline will be measured	Target: 10% increase (compared	Target: TE: 20% increase (compared to	(i) Project progress report; (ii)	Assumptions: (i) Capacity and techniques are

	/ Number of people using / benefiting from sustainable natural resources products and services (pasture, fisheries, ecotourism, etc.) promoted / demonstrated by the project, disaggregated by sex (count)	enterprises; local communities, etc.	during the inception phase)	to the baseline) in people (disaggregated by sex; count) using / benefiting from nature-positive products and services promoted by the project (measured through sales, visits, interviews and questionnaire surveys).	the baseline) in people (disaggregated by sex; count) using / benefiting from nature-positive products and services promoted by the project (measured through sales, visits, interview and questionnaire surveys).	Available statistics and information provided by partners on sustainable practices; (iii) Baseline and end-of-project surveys	available for implementation sustainable resource use practices; (ii) Adequate resources and financing is available for development of sustainable resource use activities; (iii) Government support is available to incentivize investments in eco-tourism and other productive activities. Risks: (i) Community short-term needs over-ride interests in promotion of sustainable resource uses; (ii) Funding is not available or is not affordable for the investments in touristic and other productive facilities; (iii) Economic crisis or uncertainties limit the growth of tourism in Kazakhstan in general.
	Indicator 14: Financing mobilized / leveraged for public and private sector directly available for investment in nature-positive natural resources use practices.	Available information from open publications and confirmations from supported entities.	0	Target: At least increase of USD 2 million in physical assets or long-term rights to use intangible assets (e.g., software) mobilized, in form of equity, loans, other debt, commitments, loan guarantees and physical assets contribution	Target: At least increase of USD 10 million in physical assets or long-term rights to use intangible assets (e.g., software) mobilized, in form of equity, loans, other debt, commitments, loan guarantees and physical assets contributions in nature-positive projects with direct support of the project.	Available information from open publications and confirmations from supported entities.	Assumptions: (i) public and / or private sector investment projects may be identified; (ii) The project may provide reasonable support (e.g. completing feasibility studies, assistance / direct support in implementation funding schemes such as blue bonds, green loans or guarantees, promotion of the projects, etc.) to

				s in nature-positive projects with direct support of the project.			such investment projects to mobilize funds to cover long-term investments; (iii) investments are attractive and funding is available and affordable; Risks: (i) low interest or low attractiveness of nature-positive investments demotivate the owners of such projects; (ii) funding is not available or is not affordable for the investments for such projects; (iii) general economic issues and / or fiscal crisis, or other uncertainties limit the investment activity of public and private sectors in Kazakhstan in general.
Outputs to achieve Outcome 3	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						
Project component 4	**KNOWLEDGE MANAGEMENT, AWARENESS RAISING AND GENDER MAINSTREAMING**						
Outcome 4 Upscaled awareness, information management and gender mainstreaming to enhance appreciation of the biodiversity and economic values	**Indicator 15**: Change in stakeholder attitudes and participation in conservation efforts measured using KAP surveys	(i) Consultation with stakeholders; (ii) Attitudinal change studies / surveys	Baseline surveys completed in Year 1 to assess awareness levels, disaggregated by sex. Currently no coordinated outreach on integrated planning, SLM and NbS in support of sustainable resource uses	Target: At least 20% (of which at least 45% women) of sampled community members, government and sector agency staff, private sector and other stakeholders aware of potential of integrated	Target: At least 40% of participating stakeholders aware of the benefits of application of NbS (of which at least 45% women)	(i) KAP survey reports; (ii) Progress reports	Assumptions: (i) Gender and Social Mainstreaming Plan implemented and benefits distributed equitably; (ii) Stakeholders willing to actively participate in the review process; (iii) Project management will be able to identify, document and disseminate the

			in the project area.	planning, applying SLM and NbS for ensuring sustainable resource uses			best practices; Best practice topics may be identified; (v) Best practices are of interest to potential users; (vi) There are efficient communication means to share useful information. Risks: (i) Knowledge management products may not reach correct audiences; (ii) Knowledge management products may have limited impact, due to low prioritization by the audiences, which may have competing interests at the time of communication
	Indicator 16: Number of good practices lessons documented and disseminated through relevant channels	(i) Consultation with stakeholders on usefulness of case studies; (ii) Reports on uptake of best practices	Limited number of good practices in pasture, water management, fisheries, tourism, etc. codified, disseminated and applied. Baseline to be developed in Year 1	Target: Best practice topics identified, data and monitoring data collection in progress and at least 5 best practices in progress	Target: At least 8 best practices developed, and results disseminated	(i) Best practice Reports/ implementer's guide; (ii) Broadcast; (iii) Event Reports	
	Indicator 17: Level of participation in regional / global knowledge sharing events in the context of project topics	(i) Consultation with participants, disaggregated by sex, in regional events	Limited opportunities and funding for participation in regional / global events for project stakeholders	Target: At least participation, disaggregated by sex, in five regional or global knowledge sharing events as relevant and context specific	Target: Participation, disaggregated by sex, in at least 10 regional or global knowledge sharing events as relevant and context specific	(i) Project progress reports; (ii) Regional KM event reports	Assumptions: (i) National and regional authorities are willing to allow staff to participate in regional or global KM events; (ii) reports of regional events are widely shared. Risks: (i) Geopolitical risks or epidemics may limit international contacts; (ii) Global uncertainties may reduce international activity in the relevant area.
Outputs to achieve Outcome 4	Output 4.1: Education and awareness enhancement using a range of gender-sensitive media tools for marine and coastal sustainable economic development Output 4.2: Documentation and dissemination of case studies, best practices and learning to promote replication Output 4.3: Cooperation and exchange of information and learning, including exchange visits and information sharing with Caspian Sea countries						

Project component 5	**MONITORING AND EVALUATION**						
Outcome 5 Enhanced monitoring for adaptive management	**Indicator 18**: Status of adaptive management to achieve in accordance to M&E plan that is aligned with management and coordination standards	Consultation with key project stakeholders, including Project Board Members, national, provincial and local government entities, community representatives, etc.	NA	Target: PIRs of moderately satisfactory status and MTR of at least 'moderately satisfactory' status	Target: PIRs of moderately satisfactory status and TE of at least 'moderately satisfactory' status	-Project progress reports _monitoring reports -Annual performance reviews	(i) Mid Term Review and End of Project Evaluation of the project will contribute to identifying best practices; (ii) Best practices on sustainable resource management readily available to resource users
Outputs to achieve Outcome 5	Output 5.1: M&E system supports project impact assessment including gender and youth mainstreaming						

[1] *UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.*

[2] *Baseline, mid-term and end of project target levels must be expressed in the same neutral unit of analysis as the corresponding indicator. Baseline is the current/original status or condition and needs to be quantified. The baseline can be zero when appropriate given the project has not started. The baseline must be established before the project document is submitted to the GEF for final approval. The baseline values will be used to measure the success of the project through implementation monitoring and evaluation.*

[3] *Target is the change in the baseline value that will be achieved by the mid-term review and then again by the terminal evaluation.*

[4] *Data collection methods should outline specific tools used to collect data and additional information as necessary to support monitoring. The PIR cannot be used as a source of verification.*

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount ($)		
	Budgeted Amount	Amount Spent To date	Amount Committed
International consultants International project development specialist; International Land Degradation, LDN, and Drylands Management Specialist; International Integrated Marine and Land Spatial Planning Specialist; International Nature Finance Expert	106,000.00	50,225.00	54,225.00
Local consultants Lead National Expert for PPG coordination, outreach and stakeholder engagement; National Nature Finance Expert; National GIS Specialist; National Hydrologic Specialist; National Social and Environmental Standards Specialist; National Sustainable Livestock and Pasture Management Specialist;	61,250.00	63,616.90	0.00

National Expert on Nature-based Tourism and Sustainable Livelihoods; National Economist; National Marine and Land Use Spatial Planning Specialist; National Water Management Specialist; National Gender and Safeguard Specialist			
Training Inception meeting, online validation workshop, translation during the meeting	12,875.00	2,953.06	0.00
Travel National/International travels related to inception mission and meeting with the stakeholders	12,875.00	14,851.38	911.31
Supplies	1,000.00	0.00	0.00
Translate Translation costs related to the online Validation workshop, ProDoc Translation	5,000.00	645.78	5,918.00
Miscellaneous Bank charge	1,000.00	0.00	26.35
Total	**200,000.00**	**132,292.12**	**61,080.66**

ANNEX E: PROJECT MAP AND COORDINATES

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

Location Name	Latitude	Longitude	GeoName ID
Aktau	43.667391	51.247178	

Location Description:

Populated area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Atyrau	47.110849	51.931447	

Location Description:

Populated area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Zhanaozen	43.34131	52.86219	

Location Description:

Populated area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Ustyurt	43.059265	54.577286	

Location Description:

Protected Area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Kenderli-Kajasan	42.84499	53.533217	

Location Description:

Protected Area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
V severnoy chasti Kaspiyskogo morya	45.825083	51.125273	

Location Description:

Protected Area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Akzhaiyk	46.895744	51.643219	

Location Description:

Protected Area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Caspi itbalygy	45.19736	50.776245	

Location Description:

Protected Area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Karakia-Karakol	43.428285	51.731454	

Location Description:

Protected Area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Aktau-Buzashy	44.661584	51.363939	

Location Description:

Protected area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
The Ural River Delta with the adjacent Caspian coast	46.907391	51.727981	

Location Description:

Wetland

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Ural Delta	46.884583	51.759893	

Location Description:

Key bird area

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Aktau	44.432239	51.485739	

Location Description:

Key bird area

Activity Description:

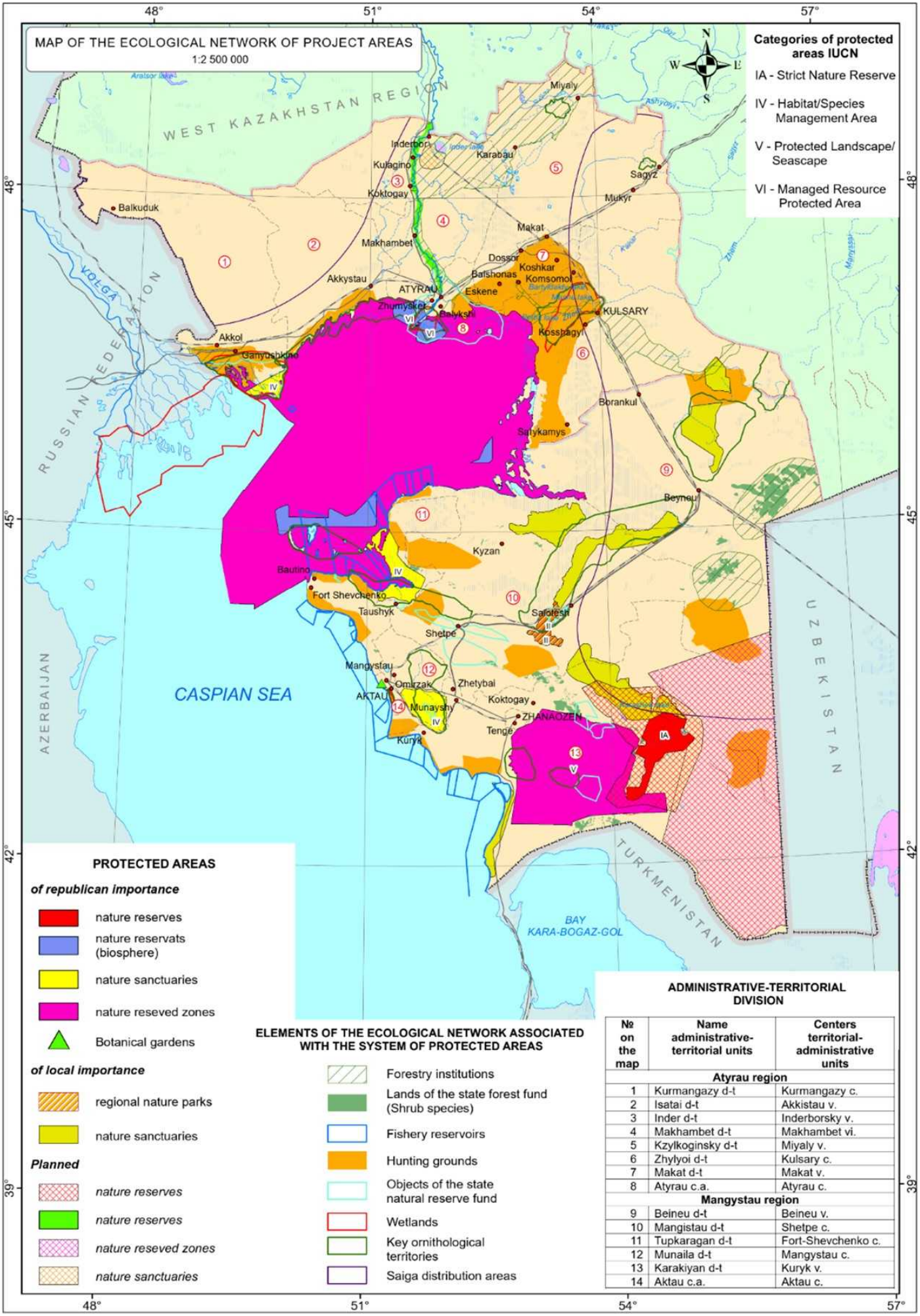
Location Name	Latitude	Longitude	GeoName ID
Caspian coast between the deltas of the Volga and Ural Rivers	46.906227	50.853206	

Location Description:

Key bird area

Activity Description:

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.


MAP OF THE ECOLOGICAL NETWORK OF PROJECT AREAS
1:2 500 000
Categories of protected areas IUCN
IA - Strict Nature Reserve
IV - Habitat/Species Management Area
V - Protected Landscape/ Seascape
VI - Managed Resource Protected Area
WEST KAZAKHSTAN REGION
RUSSIAN FEDERATION
AZERBAIJAN
UZBEKISTAN
TURKMENISTAN
CASPIAN SEA
BAY KARA-BOGAZ-GOL
VOLGA
Miyaly
Inderbory
Karabau
Kulagino
Koktogay
Sagyz
Mukyr
Balkuduk
Makat
Makhambet
Dossor
Koshkar
Balshonas
Komsomol
Akkystau
ATYRAU
Eskene
Zhumyskol
Balykshi
KULSARY
Kosshagyl
Akkol
Ganyushkino
Borankul
Satykamys
Beyneu
Kyzan
Bautino
Fort Shevchenko
Taushyk
Saiotesh
Shetpe
Mangystau
Omirzak
Zhetybai
AKTAU
Munaysyn
Koktogay
ZHANAOZEN
Tenge
Kuryk
PROTECTED AREAS
of republican importance
nature reserves
nature reservats (biosphere)
nature sanctuaries
nature reseved zones
Botanical gardens
of local importance
regional nature parks
nature sanctuaries
Planned
nature reserves
nature reserves
nature reseved zones
nature sanctuaries
ELEMENTS OF THE ECOLOGICAL NETWORK ASSOCIATED WITH THE SYSTEM OF PROTECTED AREAS
Forestry institutions
Lands of the state forest fund (Shrub species)
Fishery reservoirs
Hunting grounds
Objects of the state natural reserve fund
Wetlands
Key ornithological territories
Saiga distribution areas
ADMINISTRATIVE-TERRITORIAL DIVISION
№ on the map
Name administrative-territorial units
Centers territorial-administrative units
Atyrau region
1 Kurmangazy d-t Kurmangazy c.
2 Isatai d-t Akkistau v.
3 Inder d-t Inderborsky v.
4 Makhambet d-t Makhambet vi.
5 Kzylkoginsky d-t Miyaly v.
6 Zhylyoi d-t Kulsary c.
7 Makat d-t Makat v.
8 Atyrau c.a. Atyrau c.
Mangystau region
9 Beineu d-t Beineu v.
10 Mangistau d-t Shetpe c.
11 Tupkaragan d-t Fort-Shevchenko c.
12 Munaila d-t Mangystau c.
13 Karakiyan d-t Kuryk v.
14 Aktau c.a. Aktau c.
48°
51°
54°
57°
45°
42°
39°

ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title

Annex 05 - Social and Environmental Screening Procedure

ANNEX G: BUDGET TABLE

Please upload the budget table here.

ANNEX G: Budget Table

Expenditure Category	Detailed Description	Component (USDeq.)							Total (USDeq.)	Responsible Entity
		Component 1	*Component 2*	*Component 3*	*Component 4*	*Sub-Total*	*M&E*	*PMC*		(Executing Entity receiving funds from the GEF Agency)
		Outcome 1	**Outcome 2**	**Outcome 3**	**Outcome 4**	***Sub-Total***	***M&E***	***PMC***	***Total***	
Equipment	Responsible Party engaged to purchase equipment for Decision Support System (DSS) system	40,000				40,000			40,000	MENR-CFW
	Upgrading hardware & equipment capacities of protected area (PA) related to patrolling, biodiversity monitoring (Smart technology, marine and outside protected areas monitoring equipment), fire protection & prevention, visitor management, other	687,665				687,665			687,665	MENR-CFW
	Purchasing of Information technology (IT) equipment for PAs to promote SMART monitoring data processing	210,000				210,000			210,000	MENR-CFW
	Upgrading hardware & equipment capacities of Kazakh Research Institute of the Caspian Sea (KRICS) (equipment for creating databases, monitoring ecosystems and studying water conditions, training, knowledge management)	300,300				300,300			300,300	MENR-CFW
	Consumables for lab analyses, field monitoring and patrolling surveys	7,000				7,000			7,000	MENR-CFW
	Purchasing of the Information Technology (IT) equipment for SMART monitoring data processing.	12,000				12,000			12,000	MENR-CFW
	T equipment in Sustainable Land		20,000			20,000			20,000	MENR-CFW

	Management (SLM)/Land Degradation Neutrality (LDN) demonstration projects									
	Procurement of IT equipment for institutionalized training		20,000			20,000			20,000	MENR-CFW
	Services like confidential or sensitive documents (e.g., agreements, contracts, reports), hard-copy signatures needed for legal or administrative documents, distribution of promotional materials or publications to field offices				4,999	4,999			4,999	MENR-CFW
	Office Information Technology (IT) equipment for project staff					-		5,000	5,000	MENR-CFW
	Purchasing of equipment for GEF investments in Sustainable Land Management (SLM)/Land Degradation Neutrality (LDN) demonstration projects on landscape planning, pasture management, fish and water resources (solar panels, desalinators, fish cages and incubators, equipment for nurseries and greenhouses)		402,582			402,582			402,582	MENR-CFW
Contractual Services – Individuals	Project manager (annual average salary $59,116.6) 16.8% of technical input to outcome 1; 16.6% of technical input to outcome 2; 16.6% of technical input to outcome 3; 50% PMC	49,658	49,067	49,067		147,792		147,792	295,584	MENR-CFW
	Task Leader (Project Analyst) for Integrated Land Use Planning & Sustainable Agriculture (annual average salary $46,940) Outcome 1-50%; Outcome 2- 50%	117,350	117,351			234,701			234,701	MENR-CFW
	Task Leader (Project Analyst) for Conservation & Restoration of Wildlife and Natural Habitat (annual average salary $46,940) Outcome 1-33%; Outcome 2-33%; Outcome 3-34%	77,451	77,451	79,798		234,700			234,700	MENR-CFW
	Knowledge Management (KM) and Outreach Specialist (Project Analyst on Knowledge Management (KM) and Outreach)				113,090	113,090			113,090	MENR-CFW

	Project Associate (annual average salary $31,711) 40% under PMC/cost shared							63,422	63,422	MENR-CFW
	Procurement PMC (annual average salary $31,711) 40% under PMC/cost shared ($63,422)							63,422	63,422	MENR-CFW
Contractual services-Company	Conduct Climate Risks and Vulnerabilities Assessment (CRVA) and Basin Climate Change Adaptation Plan (BAP) with focus on 2 pilot regions, covering 2 non-focus regions via desktop research; Develop Action Plan for establishing an integrated, cross-sectoral planning and decision support system (DSS) for the Zhaiyk Caspian Basin.	140,348				140,348			140,348	MENR-CFW
	Conduct Environmental stock assessment of at least one critical river (e.g. Ural), comprehensive mapping of the Zhaiyk Caspian basin with focus on 2 pilot regions;	50,000				50,000			50,000	MENR-CFW
	Conduct Marine and Land Spatial Planning (MLSP) implementation (zoning Atyrau, Mangystau oblasts, including mirror of the Caspian Sea-Kazakhstan territory);	250,000				250,000			250,000	MENR-CFW
	Conduct Strategic Environmental Assessment (SEA) of BAP	50,000				50,000			50,000	MENR-CFW
	Develop Action Plan for establishing an integrated, cross-sectoral planning and decision support system (DSS) for the Zhaiyk Caspian Basin.	200,000				200,000			200,000	MENR-CFW
	Prepare Targeted Scenario Analysis (TSA), Environmental Impact Assessment (EIA) of critical projects to support Regional Development Program, develop Vision for sustainable regional development, Regional Development Program, Action and Investment Plans for 2 provinces, piloting green value chains	612,000				612,000			612,000	MENR-CFW
	Conduct regional Strategic Environmental Assessment (SEA) of two Regional Development Plans	80,000				80,000			80,000	MENR-CFW

	Develop Capacity and Learning Program on Marine and Land Spatial Planning (MLSP), training on Best Available Technologies (BAT), planning of sustainable public and sectoral development	15,000				15,000			15,000	MENR-CFW
	Conduct inventory of the marine and terrestrial ecological and biodiversity network (protected areas (PAs), Key Biodiversity Areas (KBA), Important Bird and Biodiversity Areas (IBA), Other Effective Area-based Conservation Measures (OECM), corridors), Strengths, Weaknesses, Opportunities, and Threats (SWOT)) on management	22,150				22,150			22,150	MENR-CFW
	Develop Ecosystem Conservation Plan for the Zhaiyk Caspian basin	15,000				15,000			15,000	MENR-CFW
	Develop/update of management plans for selected protected areas (PAs), including topical operational plans, 3 management plans	30,000				30,000			30,000	MENR-CFW
	Development of Natural Scientific Justification (NSS) and Feasibility Studies (FSs) for new and expanding protected areas (PAs) (5), eco-corridors (2), 1 new and 2 expansions / Natural Scientific Justification (NSS) & Feasibility Studies (FS), 1 eco-corridor	200,000				200,000			200,000	MENR-CFW
	Develop capacity building program, including thematic guidelines, for protected area (PA) staff on relevant topics to be determined	20,000				20,000			20,000	MENR-CFW
	Conduct Study on strengthening finance for protected areas (PAs) and regional biodiversity conservation	40,000				40,000			40,000	MENR-CFW
	Develop Key Species Conservation Strategies	40,000				40,000			40,000	MENR-CFW
	Conduct Inventory of regional aquatic and coastal biodiversity monitoring;	20,000				20,000			20,000	MENR-CFW
	Develop Aquatic & Coastal Monitoring Strategy and Action Plan for integrated monitoring of the state of the aquatic and coastal biodiversity	20,000				20,000			20,000	MENR-CFW

	Develop capacity building program for Kazakh Research Institute of the Caspian Sea (KRICS);	15,000				15,000			15,000	MENR-CFW
	Design a knowledge management web platform and associated tech-support	20,000				20,000			20,000	MENR-CFW
	Develop incentive schemes for piloting, including green value chains		483,581			483,582			483,582	MENR-CFW
	Conduct Policy review of regional and district public and sectoral plans, and prioritized recommendations (protocols, guidelines) for strengthening each sectors' capacity to support Sustainable Land Management (SLM) and biodiversity conservation,		15,000			15,000			15,000	MENR-CFW
	Protocols, guidelines		3,000			3,000			3,000	MENR-CFW
	Prepare local integrated plan(s) for promotion of sustainable land management activities (selected sectors)		30,000			30,000			30,000	MENR-CFW
	Develop Capacity building program for planning and implementation of regional integrated planning and on-the-ground nature-positive investment practices		15,000			15,000			15,000	MENR-CFW
	Design and implement a Collaborative Learning Strategy (CLS) and program		10,000			10,000			10,000	MENR-CFW
	Conduct assessment of land/water degradation in vulnerable ecosystems		20,000			20,000			20,000	MENR-CFW
	Prepare portfolio with descriptions of location-specific Sustainable Land Management (SLM)/restoration investment plans		15,000			15,000			15,000	MENR-CFW
	Draft 3 district-level sectoral sustainable development plans for pasture use		15,000			15,000			15,000	MENR-CFW
	Develop a training program on location-specific Sustainable Land Management (SLM)/restoration investment solutions		20,000			20,000			20,000	MENR-CFW
	Support to climate-smart Sustainable Land Management (SLM) demonstration projects on innovative land- and water-based practices to reverse on-going ecosystem degradation, 5 packages (preliminary: livestock farming, pasture rotation,		90,000			90,000			90,000	MENR-CFW

	fisheries/aquaculture, ecotourism, water management/moisture capture, shelterbelts)									
	Conduct a national multi-sectoral institutional capacity needs assessment on science-technology transfer		17,000			17,000			17,000	MENR-CFW
	Prepare training course and course materials on cross-sectoral planning instruments (Marine and Land Spatial Planning (MLSP), Decision Support System (DSS), sectoral technical solutions (protected area (PA) management, biodiversity monitoring, Sustainable Land Management (SLM), Nature-based Solutions (NbS), finance instruments, etc.) for sustainable economic development with ecosystems/biodiversity benefits		20,000			20,000			20,000	MENR-CFW
	Prepare a vision and agreement on institutionalization of training course (organization, technical & resources needs)		14,000			14,000			14,000	MENR-CFW
	Develop a training-of-trainers course on institutionalization of training materials		15,000			15,000			15,000	MENR-CFW
	Conduct valuation of Ecosystem Services (ES) in the Zhaiyk (Ural) river delta, incl. recommendations for revisions of legal framework			20,000		20,000			20,000	MENR-CFW
	Conduct a stock-taking of finance gaps and develop a finance strategy for biodiversity conservation and the sustainable flow of ecosystem services.			20,000		20,000			20,000	MENR-CFW
	Conduct analysis of finance options for NbS and development of Portfolio of Concept Notes of location-suitable investment opportunities, incl. finance mechanism, for biodiversity conservation and nature-positive investment opportunities, financial support mechanism			120,000		120,000			120,000	MENR-CFW
	Develop a Concept Note and Policy brief on a establishing Biodiversity			22,993		22,993			22,993	MENR-CFW

	Conservation Fund (BCF).									
	Training and capacity building campaign on location-specific Nature-based Solutions (NbS) investments linked to finance instruments, incl. Biodiversity Conservation Funds (BCF), for Nature-based Solutions (NbS) for conservation and sustainable economic land/water use			25,000		25,000			25,000	MENR-CFW
	Nature-based Solutions (NbS) demonstration projects for mobilizing/leveraging private sector finance, e.g., 5-7 demonstration project on aquaculture, fodder production, meat/milk/wool processing, greenhouse vegetables etc.			100,000		100,000			100,000	MENR-CFW
	Mapping of private-sector readiness for participate in community-based Nature-based Solutions (NbS) promotion and mobilizing/leveraging private sector finance			20,000		20,000			20,000	MENR-CFW
	Design of the awareness raising and communication strategy, incl. tailored communications plans and information/promotion materials for each audience				10,000	10,000			10,000	MENR-CFW
	Conduct gender analysis, development of Gender Mainstreaming Action Plan, incl. indicators and monitoring plan, and training to project staff				10,000	10,000			10,000	MENR-CFW
International Consultants	Marine and Land Spatial Planning (MSLP) expert , plus travel costs	26,532				26,532			26,532	MENR-CFW
	International Regional Development Planning and Sustainable Economic Development expert plus travel costs	56,532				56,532			56,532	MENR-CFW
	International expert on protected areas (PAs) and Other Effective Area-based Conservation Measures (OECM) Development expert plus travel costs; International expert on protected area (PA) finance plus travel costs	56,814				56,814			56,814	MENR-CFW

	International aquatic biodiversity monitoring expert plus travel costs	22,782				22,782			22,782	MENR-CFW
	Sustainable Land Management (SLM) planning expert plus travel costs		47,742			47,742			47,742	MENR-CFW
	International ecosystem valuation expert (methodologies and guidance under activity 3.1.2) plus travel costs; International Nature-based Solutions (NbS) finance expert (finance instruments, finance gap, best practices, guidance activities under outcome 3) plus travel costs			49,816		49,816			49,816	MENR-CFW
	International expert on Biodiversity Conservation Funds (BCF) (best-practice report, advisory mission) plus travel costs; International expert on Nature-based Solutions (NbS) for conservation and sustainable economic development and development of financial support mechanism to support innovative financial instruments plus travel costs			32,890		32,890			32,890	MENR-CFW
	International Knowledge Management (KM) and Outreach expert plus travel costs; Gender mainstreaming expert 15 days plus travel costs; Invited lecturers/practitioners to educational course, 1 international, plus travel costs				39,960	39,960			39,960	MENR-CFW
	International Knowledge Management (KM) expert to support national consultant to develop 2 knowledge products				30,000	30,000			30,000	MENR-CFW
	International Consultants for Mid-Term Review and Terminal Evaluation plus travel costs					-	47,500		47,500	UNDP
Local Consultant	Local Project Coordinator (Mangystau and Atyrau) to coordinate provincial government support	22,500				22,500			22,500	MENR-CFW
	National protected area (PA) and Other Effective Area-based Conservation Measures (OECM) Development expert plus travel costs	21,944				21,944			21,944	MENR-CFW

	National Sustainable Land Management (SLM) expert; Local project coordinator (Mangystau and Atyrau) to coordinate provincial government support (37.5% of the contract amount will be covered under Outcome 2)		34,500			34,500			34,500	MENR-CFW
	National consultant on capacity development and training plus travel costs		27,791			27,791			27,791	MENR-CFW
	National ecosystem valuation expert (support international expert, guidance under activity 3.1.2) plus travel costs; National Nature-based Solutions finance expert (support international expert, guidance under 3.2.1), plus travel costs; Local Project Coordinator (for Mangystau and Atyrau) to coordinate provincial government support (25% of the contract amount will be covered under Outcome 3)			38,688		38,688			38,688	MENR-CFW
	National Biodiversity Conservation expert (support to international expert and Biodiversity Conservation Funds (BCF) design) plus travel costs; National Consultant to prepare to analyze potential scalable innovative financing options, incl. comprehensive descriptions and designing financial support mechanism to pilot an innovative financial instrument plus travel costs			18,080		18,080			18,080	MENR-CFW
	4 national technical experts, on pastures, fisheries, aquaculture, water management, ecotourism plus travel cost			56,000		56,000			56,000	MENR-CFW
	Invited lecturers/practitioners to educational course plus travel costs				15,943	15,943			15,943	MENR-CFW
	Consultant to develop 15 knowledge products; Consultant to develop 5 Policy Notes; Consultant to prepare replication and scaling up strategy; Consultant on Information Technology (IT)-based knowledge platform development				33,000	33,000			33,000	MENR-CFW
	National consultant for Mid-Term Review and Terminal Evaluation plus travel costs						-20,000		20,000	UNDP

	National consultant on environmental and social safeguards and gender						24,250		24,250	MENR-CFW
Training, Workshop,Meetings	Regular meetings regional working group on cross-sectoral basin planning, regional stakeholder consultation workshops & trainings (output 1.1): 10 meetings; Organization of 6 workshops/trainings on Marine and Land Spatial Planning (MLSP), Basin Climate Change Adaptation Plan (BAP), and Strategic Environmental Assessment (SEA)	33,000				33,000			33,000	MENR-CFW
	Organization of workshops on planning mechanisms, 2 regional workshops; Training on BAT and sectoral planning, 3 trainings	17,500				17,500			17,500	MENR-CFW
	Organization of Capacity building trainings; Organization of Consultations workshops on protected area (PA) network, management plans, capacity building plan, Natural Scientific Justification (NSS) & Feasibility Studies (FS) development, finance, key species strategies, lumpsum; Organization of Workshops on Ecosystem Services (ES) valuation of the Zhaiyk (Ural) river delta; Organization of Zhaiyk Caspian basin workshop	44,000				44,000			44,000	MENR-CFW
	Organization of Workshops on monitoring plan development	8,000				8,000			8,000	MENR-CFW
	Costs associated with renting conference rooms		16,000			16,000			16,000	MENR-CFW
	Costs associated with renting conference rooms; Training workshops on specific Sustainable Land Management (SLM)/restoration investment solutions		30,000			30,000			30,000	MENR-CFW
	Organization of Training program		20,000			20,000			20,000	MENR-CFW
	Organization of workshops on finance options			7,000		7,000			7,000	MENR-CFW
	Consultations/workshops for development of the Gender Mainstreaming Action Plan				7,000	7,000			7,000	MENR-CFW
	Organization of workshops on				15,000	15,000			15,000	MENR-CFW

	inventory, 4 local and 1 regional workshops									
	Organization of Inception workshop; Organization of End-of-Project seminar					-	19,800		19,800	MENR-CFW
Travel	Travel costs for Task Leader (Project Analyst) for Integrated Land Use Planning & sustainable agriculture, meeting of regional working group annually 2 meetings, activities under Outcome 1.1. Workshop participants annually 2 workshops/trainings and activities under Outcome 1.1. Regional workshops, basin-level workshop and national workshop	82,000				82,000			82,000	MENR-CFW
	Travel costs for 2 regional workshops on planning mechanisms, 6 regional workshops on Regional Development Programs, participants to Basin Climate Change Adaptation Plan (BAP) & planning trainings	26,000				26,000			26,000	MENR-CFW
	Travel costs for activities implementation by Project Analyst, capacity building training, consultation workshops	35,000				35,000			35,000	MENR-CFW
	Travel costs for workshops on monitoring plan development, for workshops on inventory	17,800				17,800			17,800	MENR-CFW
	Travel costs related to project implementation for 3 project critical staff; Costs for local project coordinator's travels; Travel costs for capacity building workshops		83,205			83,205			83,205	MENR-CFW
	Workshops on land degradation assessment 6 1-day workshops, Training workshops on specific Sustainable Land Management (SLM)/restoration investment solutions 6 2-day trainings, National travel costs for participants of Collaborative Learning Strategy (CLS) workshops in pilot provinces 6 workshops		85,440			85,440			85,440	MENR-CFW
	Travel costs, related to implementation of activities, for participants in thematic workshops and seminars, participants in thematic workshops and seminars, for participants in thematic			30,781		30,781			30,781	MENR-CFW

	workshops and seminars, 3 national seminar									
	Travel costs related to Knowledge Management (KM) and Outreach expert's activities, and for scientific exchange visits between collaborative institutions				15,000	15,000			15,000	MENR-CFW
	International travel for project-sponsored stakeholders (government representatives, practitioners, scientists, educational representatives) to participate in high-level missions and workshops under the Tehran Convention, exchange visits, and international conventions				90,000	90,000			90,000	MENR-CFW
	Travel costs related to Inception workshop and End-of-Project seminar					-	15,200		15,200	MENR-CFW
	Travel related to the project implementation activities					-		5,000	5,000	MENR-CFW
Other Operating	Production costs for regular meetings, workshops/trainings	20,000				20,000			20,000	MENR-CFW
	Production costs of workshop and training materials under output 1.3, lumpsum, protected area (PA) guidelines.	7,000				7,000			7,000	MENR-CFW
	Production costs of state of the Kazakhstan Caspian biodiversity report; Translation into 3 languages: project reports, evaluation reports, publications, leaflets & brochures for seminars & workshops; translations during workshops & seminars, field visits, other project outreach under Outcome 1	14,500				14,500			14,500	MENR-CFW
	Misc expenses related to realization of activities under for bank commission	1,000	600	500	500	2,600	500	150	3,250	MENR-CFW
	Workshop materials for 12 workshops		6,783			6,783			6,783	MENR-CFW
	Production costs of training materials		2,500			2,500			2,500	MENR-CFW
	Production costs of sustainable training materials; Translations costs of reports & publications, during workshops & seminars, other project outreach under Outcome 2		22,500			22,500			22,500	MENR-CFW

	Production costs of capacity building materials, thematic workshops			4,000		4,000			4,000	MENR-CFW
	Information/promotion materials for each audience, for awareness raising and communication; Production of project reports, guidelines, manuals, leaflets & brochures for seminars & workshops under outcome 3.				5,500	5,500			5,500	MENR-CFW
	Production costs of technical reports, publications, policy notes, knowledge products and awareness raising products produced under outcome 4				8,000	8,000			8,000	MENR-CFW
	Production of project reports, publications, leaflets & brochures for seminars & workshops				5,000	5,000			5,000	MENR-CFW
	Translation costs for Mid-Term Review and Terminal Evaluation materials, evaluation reports, translations during field visits into 3 languages; Translation into 3 languages, translations during workshops & seminars, field visits, for monitoring of SESP, ESMP, SEP, GAP, GRM					-	8,000		8,000	MENR-CFW
	Office rent including all expenses during project implementation					-		37,440	37,440	MENR-CFW
	Annual audit services					-		15,000	15,000	UNDP
Grand Total		**3,853,826**	**1,846,093**	**694,613**	**402,992**	**6,797,525**	**135,250**	**337,226**	**7,270,000**	

Please explain any aspects of the budget as needed here

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.

Comments	Response	Response Location
STAP Comments		
1. The project summary section should be revised with the aim of streamlining and simplifying the narrative. The meaning of terms such as 'sector and planning levels' should	The project summary was revised to reflect the logical structure of the project. The reference to 'sector and planning' was revised to reflect the focus of the project on integrating public development planning with planning in the various sectors and administrative levels relevant to the project region.	Page 1, 'brief summary description'

be explained clearly and the difference between the two clarified. The description and scope of outcome #1 is not clear and does not match the scope of the outcome indicators. The description for the outcomes under components 2-4 is adequate and provides enough clarity about the scope of proposed activities, outputs and results. The description of the outcomes under component 5 is also adequate but could be merged and integrated with component 4 as they are quite germane	The description and scope of Outcome 1 was fully revised to stress the outcome's focus on strengthening the enabling environment –policy instruments, technical guidelines and institutional arrangements - for marine and land spatial planning, the integration of Marine and Land Spatial Planning (MLSP) into key economic development programs and sector policies, enhancement of environmental monitoring, and effective spatial planning and management of PAs/KBAs for improved conservation and protection of globally important biodiversity. The text for outcomes 2-4 were further elaborated and strengthened to better describe their scope and results. Outcome 5 was not merged with outcome 4, to stress its focus on monitoring of project-related outcomes for adaptive management beyond education and awareness raising, documentation and dissemination of information, and strengthening cooperation and exchange as the focus of outcome 4. It is general UNDP and GEFSEC advise to separate project-related monitoring into a separate Component to enable tracking of project-expenditure against project-related monitoring.	
2. The description of the outcomes should be revised to ensure that a) it explains clearly what the project is trying to achieve; and b) it is aligned with the scope and description of the outcome indicators and outputs	All descriptions and statements of outcomes, outputs and activities were revised to strengthen clarity on how activities under outputs contribute to achieving the targets of the various indicators under the outcomes and of the project. .	Section IV 'Results and Partnerships', page 35-59
3. The phrasing of outputs 1.3 and 1.4 needs to be revised to ensure it describes activities and/or deliverables The phrasing of outputs 1.3 and 1.4 is inadequate as it describes results, which should be rather used for outcomes e.g. Enhanced environmental monitoring of the Kazakhstani part of the Caspian Sea.	The phrasing was revised, as follows: Output 3.1 ' Improve the conservation and protection of globally important biodiversity in the Caspian Sea through PA/conservation areas' expansion, PA and KBAs effective planning' and output 1.4 'Enhance environmental monitoring of the Kazakhstani part of the Caspian Sea basin'. These Outputs describe in detail Activities and Deliverables.	Section IV 'Results and Partnerships', page 39, 42
4. The description of the barriers should be revised to provide more	The descriptions of the barriers were overhauled to strengthen linkages between threats, impacts and barriers, the framework of which serves as the basis for the design of project activities to address	Section II 'Development Challenge', page 9-11

details about the specific context each refer to. The description of the barriers is quite generic and lacks sufficient detail. For example, barrier 1 mentions the need for more stringent enforcement and compliance of existing laws and regulations and poor or absent financial incentives for conservation but does not provide enough clarity about the government ministries or agencies it is referring to coastal land pollution').	negative impacts from the commercial use of the marine area, unsustainable human activities in the coastal zone and the wider terrestrial basin, as well as ineffective protected area management actions, hampering the effective conservation of biodiversity and ecosystems, and biodiversity supportive sustainable natural resources use. The ToC diagram shows the linkages between barriers, outputs and outcomes.	
5. The proposal should provide a more detailed description of the stakeholders that need to be targeted by the project in order to achieve optimal levels of impact. The proposal also mentions stakeholders but does not provide any indications of who these may be. Having this information is important because it will be needed to design and tailor project activities to ensure effectiveness and impact	Information on stakeholder engagement was completely revised, to reflect the participatory consultation approach in project design, including community organizations, national, regional and local government entities, NGOs, scientific and educational institutions, as well as private sector representatives at the national, regional and local level. The list of stakeholders consulted during project design is included as Annex 9a (Stakeholders consulted during project development) of the Project Document. A Stakeholder Engagement Plan was developed (Annex 9 of the Project Document), the results of which are summarized in Table 10 'Stakeholder Involvement Plan' of the Project Document. The Stakeholder Engagement plan describes the role of each stakeholder group in project implementation.	Section IV 'Results and Partnerships', subsection 'Stakeholder engagement', page 64-67
6. The baseline section should be revised to ensure that a) it provides enough details about current policies, regulations and legislation that are directly relevant to the scope of the project and b) that it identifies existing/ongoing investments and interventions in related fields (e.g. environmental management, biodiversity conservation) that can be leveraged for collaboration, sharing of knowledge and best practice, co-ordination of activities and interventions etc. The baseline provides an adequate description of the broad (macro-level) challenges affecting the Caspian Sea region, but is also quite generic and does not provide enough information or details about the existing policies and legislation that could be leveraged to achieve results. It also omits any details about on-going environmental or biodiversity conservation interventions, which should be identified in order to avoid duplication and foster synergies where applicable. Instead the proposal provides a list of infrastructure and economic development investments that provide some useful context but are not	The baseline for the project underwent complete revision, including with regards to the overall development context and challenge, the key threats and drivers, as well as the baseline scenario and associated baseline projects and initiatives. This includes an improved description and detailed information on current and planned investment in the Zhaiyk Caspian basin in Kazakhstan (Table 1) as well as an overview of current baseline of national commitments, strategies and initiatives (Table 2), taking due notice of ongoing developments and building on lessons learned from baseline projects and programs (Table 3). During the PPG, discussions were held with representatives of the World Bank - UNEP project 'Blueing the Caspian Sea' (GEF ID 11429). A Note of Complementarity was prepared (Annex 40 of the Project Document), describing the areas of synergy and complementarity between the projects, as well as a description as to how synergies will be managed. These proposals for cooperation of the GEF-UNDP Project with the parallel GEF project implemented by the World Bank, UNEP and the Secretariat of the Tehran Convention for the Protection of the Marine Environment of the Caspian Sea were also presented and confirmed at	Section II 'Development Challenge', page 5-19, Annex 37, Annex 41

directly relevant to the proposed scope of the project. STAP also identified another project, which is currently being designed by the World Bank and could be leveraged to build synergies and improve impact, as it will be operating in the same area (i.e. GEF ID 11429 - Blueing the Caspian Sea).	the validation workshop (Annex 35 of the Project Document).	
7. The proposing implementing agency, should also aim to collaborate and build synergies with another project (GEF ID 11429 - Blueing the Caspian Sea), which will be operating in the same area and is currently being designed by the World Bank.	During the PPG, several discussions were held with representatives of the World Bank - UNEP project 'Blueing the Caspian Sea' (GEF ID 11429). A Note of Complementarity was prepared (Annex 40 of the Project Document), describing the areas of synergy and complementarity between the projects, as well as a description as to how synergies will be managed. These proposals for cooperation of the GEF-UNDP Project with the parallel GEF project implemented by the World Bank, UNEP and the Secretariat of the Tehran Convention for the Protection of the Marine Environment of the Caspian Sea were also presented and confirmed at the validation workshop (Annex 35 of the Project Document).	Section II 'Development Challenge', page 17, Annex 37, Annex 41
8. The project's logical pathways should be revised to ensure that they are simplified and follow a clear linear logic without any gaps. The overall number of pathways should also be reduced and some of the existing ones should be merged to create simpler but more articulated ones. The narrative description of the Theory of Change (ToC) covers the main points but presents some weaknesses. The project's logical pathways are not always clear. For example, #5 merges increased capacity and awareness to pursue monitoring and enforcement activities with livelihood options that are conservation-friendly into a single category. Whereas #7 appears to imply that improved management plans will lead to self-enforcement of rules and reduce the need to exploit natural resources, without explaining how one will lead to the other.	The description of the logical pathways in the theory of change is streamlined to better describe the approach of the project towards achieving a transformational change of a more sustainable use of the Caspian Sea basin's productive economic resources and conservation of ecosystems and biodiversity. Specifically, it is reasoned that strengthening capacities and awareness of stakeholders (former #5) on the important role that ecosystem services can play in their lives and business, integrated with participatory approaches in administrative and sectoral planning and management based on MLSP, allocated budgets and incentives, and demonstration of best practices, will lead to an alleviation of unsustainable exploitation of natural resources, reducing behaviors such as illegal fishing, poaching, over-harvesting, poor and/or detrimental agricultural and fisheries practices, including from self-enforcement of rules and sustainable resources use exploitation (former #7) as stakeholders better understand the need for behavioral changes in support of people and nature.	Section III 'Strategy', subsection 'Theory of change considerations', page 24-26
GEF Councill Comments - Germany		
1. The background provided by the baseline description is helpful. Nevertheless, Germany recommends that the project inception phase includes generation of reliable baseline data for biodiversity, (including overfishing, poaching and illegal fishing), carbon sequestration, potential and invasive alien species, due to data availability issues.	The Project recognizes the current gaps in reliable baseline data and information across several sectors and areas, During year-1, the Project will conduct a spatially-explicit baseline assessment and mapping of environmental, biological, social, economic and livelihood conditions and practices, values of ecosystem services, climate risks and vulnerabilities, land, ecosystem and biodiversity degradation from sectoral (over)exploitation, pollution, stocktaking of dynamic water resources variability, including hydrological changes and sea level fluctuations, as well as inventory and mapping of the marine and	Section IV 'Results and Partnerships', activity 1.1.2 (p. 36-37), activity 1.3.1 (p. 40), activity 2.1.1 (p.44-45), activity 2.2.1 (p. 46), activity 3.1.2 (p. 49)

A reference to the implementation of the Aarhus Convention is also recommended.	terrestrial ecological and biodiversity network, including (invasive) species, threats and management practices. To strengthen the right of the public to environmental information, and improve their participation in decision making, the project, through integration with existing information platforms in the water, land and environmental sectors will establish a digital-open access platform for collecting, synthesizing and sharing of data, information, knowledge, tools, case studies and best practices. A reference to the Aarhus convention was added.	Section IV 'Results and Partnerships', p. 34
2. Germany recommends that the full proposal clearly explains the baseline applied and how the mitigation/sequestration effects of the project activities will be measured. The calculations presented in the proposal (p. 34) can be reviewed and adapted based on the baseline study results, since such calculations require extensive scientific field data and can only partly be taken from other regions. It remains unclear how maintaining a “moderate” degradation status of protected areas can contribute to CO2 sequestration.	During the PPG, the calculations GHG mitigation were re-assessed based on a review of the expected achievements of the project with regards to the areas of (i) terrestrial and marine protected areas created or under improved management for conservation and sustainable use; and (ii) area of terrestrial and marine landscapes under improved practices. A baseline estimation of GHG emissions will be conducted in Year-1 of the project, to more comprehensively value current conditions as well as future conditions from impacts achieved by the project. An appropriate, cost-effective monitoring system and methodology will be selected and tested, and the appropriate quantified data will be collected. Monitoring experts will be trained in data collection and processing.	Section VI 'Project Results Framework', p. 76-85
3. Germany recommends including measures to activate the nature protection effect of existing protected areas, such as the Northern Caspian Sea State Nature Reserved Zone, covering nearly half of the Kazakh part of the Caspian Sea	The project has selected the Northern Caspian Sea State Nature Reserved Zone as one of the protected areas to be supported with a suite of capacity building activities to improve PA management planning and implementation, as well as to strengthen PA operational planning, on a range of themes (as relevant per PA). Furthermore, a targeted technical assistance program will support improved management as well as implementation of a broad range of conservation management activities, including monitoring.	Section IV 'Results and Partnerships', activity 1.3.4, p.41
4. Component 3 (Financial incentives/instruments for sustainable natural resource management, alternative nature-friendly livelihood activities and engagement of the private sector) includes economic valuation of ecosystem services as a mechanism. The project would benefit from verifying the need for ecosystem services valuation and explaining the demand from the end users, as this method is resource consuming.	The results of the economic valuation of ecosystem services will support making decisions on the financing of measures for the natural resources development as well as the conservation or restoration of ecosystems. The results will also inform the implementation of appropriate finance instruments like offset/compensation measures for biodiversity loss as well as payments for ecosystem services (PES), introduced in the Environmental Code of the Republic of Kazakhstan. The project will support a comprehensive capacity building measures to inform end users on approach and benefits of using valuation measures.	Section IV 'Results and Partnerships', output 3.1, p. 48-49
5. The action to prevent further introduction of invasive alien species, such as the Sea Walnut (Mnemiopsis leidyi) and address existing threats at the international and national legal levels can be strengthened. Germany recommends conducting a respective feasibility study.	To support addressing threats at the international level, the project will invest in strengthening the Kazakh Research Institute of the Caspian Sea (KRICS) in conducting systematic monitoring system for the assessment of the ecological state of the ecosystems of the Caspian Sea and its coastal areas, including on invasive species, as relevant. The project will also contribute to strengthening the	Section IV 'Results and Partnerships', output 1.4 p.42-43, output 4.3, p. 56-57

	cooperation and exchange of information with the Caspian Sea countries, among others to ensure that relevant monitoring information is timely and comprehensively shared in line with Kazakhstan's obligations under the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran Convention).	
6. Germany recommends examining possible synergies with a project which currently being designed by the World Bank and to be implemented in the same are (Blueing the Caspian Sea, GEF ID 11429)	During the PPG, several discussions were held with representatives of the World Bank - UNEP project 'Blueing the Caspian Sea' (GEF ID 11429). A Note of Complementarity was prepared (Annex 40 of the Project Document), describing the areas of synergy and complementarity between the projects, as well as a description as to how synergies will be managed. These proposals for cooperation of the GEF-UNDP Project with the parallel GEF project implemented by the World Bank, UNEP and the Secretariat of the Tehran Convention for the Protection of the Marine Environment of the Caspian Sea were also presented and confirmed at the validation workshop (Annex 35 of the Project Document).	Section II 'Development Challenge', page 17, Annex 37, Annex 41
GEF Councill Comments – Switzerland		
1. What is more exactly the potential number of direct and indirect beneficiaries of the Project in the country/region and how is the currently rather low number of 8'500 for direct beneficiaries derived	The project team feels that the number of direct beneficiaries are appropriate, given that a major focus of the project will be on addressing major issues related to private sector engagement in tourism and land and water exploitation, and that specific SLM investments target actual beneficiaries in the immediate coastal oblasts adjacent to the Caspian Sea. During project implementation, the project team will assess if additional direct beneficiaries can be added. This will be reported in the PIRs. Indirect beneficiaries are hard to assess at this stage, but through the PIRs, the project will regularly report on this indicator based on the development of the MLSP and potential to influence oblast and sector-level planning.	
2. Which are the experiences and lessons learned from past endeavors applying an integrated ecosystem-based approach in similar contexts and problem areas. Insights from comparably multi-faceted endeavors in their identification, deployment and monitoring would be a valuable addition to the Project Identification Form.	The project is designed taking into account the results, best practices and lessons learned from a variety of past and ongoing initiatives across Kazakhstan and the wider region (Table 3 of the Project Document). Specifically, among others, these include the GEF/UNDP small grants program, regarding the implementation of innovative integrated measures aimed at solving environmental problems and social and economic well-being; integrated provincial planning under the two-billion trees program initiated by the President of Kazakhstan; integrated planning pf PA network and strengthening PA management and financing demonstrated by the UNDP BIOFIN program; Strengthened cooperation among governments, businesses, finance institutions, funders, investors and local communities under the UNDP-UNEP SPACES program to designate ecological corridors, PAs, OECMs and other NbS to support the integrated management of landscapes in a financially viable way; and Approaches piloted under the UNDP-GCF project 'Integrating climate change adaptation into Kazakhstan's strategic planning' to establish clear mandates, coordination mechanisms, and standard procedures for climate adaptation at both national and subnational levels in	UNDP Kazakhstan has supported the Ministry of Water Resources and Irrigation of Kazakhstan with creation of a Coordination Council of Partners for Water Sector Development, bringing together key stakeholders from government, private sector, and civil society. This council is designed to foster cooperation, streamline decision-making, and ensure that all partners work towards a coherent national strategy

	four priority sectors, including agriculture and water management.	
3. What are the reasons for focusing on SLM practices in the component 2 (pilot) while not addressing more specifically also water resources management aspects when speaking about an integrated management approach?	From PPG consultations, activities under component 2, were expanded to include both land and water resources as the focal area for project support. Specifically, local development planning (activity 2.1.2) and implementation (activity 2.1.3) shall focus both on land and water resources use, with similar consideration for project support to piloting SLM and IWRM measures in the pilot districts.	Section IV 'Results and Partnerships', output 2.1 and output 2.2, p.44-47
4. What could be opportunities and challenges for bringing the achievements in Kazakhstan such as in policy, planning and management practices as well as financial incentives/instruments to other littoral states and for envisaging a transboundary component of the Project?	Challenges for the transboundary approach consist of the upstream section of the Zhaiyk Caspian basin, specifically the watershed of the Zhaiyk (Ural) river, being located in Russia, complicating stakeholder coordination and harmonization of basin management approaches, especially integrated water resources management. On the contrary, the exchange of information with Caspian Sea countries (output 4.3) on project-supported approaches on MLSP policy framework, BAP, integrated planning of land and water resources use in the Caspian basin as the unitary landscape element will contribute to streamlining planning and measures for reducing negative impacts on from the use of shared natural resources, improving coordinated planning for the conservation and restoration of these resources as well as ecosystems and valuable biodiversity, and, ultimately, the improvement of local livelihoods and sustainable economic development.	Section IV 'Results and Partnerships'
GEF Secretariat Comments		
1. Still the Ministry of Ecology and Natural Resources (MENR) is shown as the Executing Partner. Please remove the Ministry of Ecology and Natural Resources (MENR) and type (Government) as this is not endorsed by the Government. Do not resubmit the project until you make these corrections in the portal please.	The MENR is the Implementing Partner of the Project. The project envisions engaging two Responsible parties (RPs) for the implementation of project activities under the various outputs, including the Information Analytical Center of the Ministry of Water Resources and Irrigation (MoWRI) for project activities related to water resources management and digitalization of water related data, and the KRICS of the MENR for project-related activities related to environmental monitoring, biodiversity assessments, and support to conservation planning and ecosystem health tracking.	Section 'Governance and Management Arrangements'

Project Target Area:

Project activities will be implemented at the level of the Zhaiyk–Caspian basin (Component 1, Component 4) and in two coastal provinces of the Zhaiyk Caspian basin, the Atyrau and Mangystau pilot oblasts of the project. The key features of the coastal oblasts are summarized below.

Table 3: Summary of geographical, biological and socio-economic features of target provinces

Atyrau Oblast	Mangystau Oblast
The Atyrau region covers 118,600 km^2 in western Kazakhstan, on the northeastern coast of the Caspian Sea. On January 1st, 2024, its population was about 710,000 people, 52% of which lived in rural	The Mangystau region covers 165,000 km^2 in the south-west of Kazakhstan, on the eastern coast of the Caspian Sea. On January 1st, 2024, its population was almost 800,000 people, 55% of which lived

areas, and 48% in urban areas, mainly Atyrau and Kulsary. The ethnic population is dominated by Kazakhs (93%) and Russians (4%). Most of the region's terrain is flat, with a slight decline from north to south. The region is located in the lowlands of the northeastern Caspian Depression, bordered by the Akkegershin Plateau in the east of, and the western part of the Ustyurt Plateau in the southeast. Steppe and semi-desert ecosystems prevail, while also large areas are covered with sands ridges and barchan sands. In the north, sagebrush-pseudo-steppe vegetation prevails, in the south it is sagebrush-suffruticose. Pastures occupy 9,612,900 ha of the Atyrau region, which is 81% of the total territory. There are a few rivers, the largest being the Ural River. Many small lakes occur in river valleys and around the Caspian coast, characterized by reed thickets, poplar and willow trees. Small tree-shrub thickets (tugai) are found in the floodplains of the Ural and Emba rivers. The climate is continental, with moderately cold, snowy winters and hot dry summers. The average temperature in January is -4°C, in July 25°C.

Animal life is rich and includes wolves, foxes, jerboas, wild boars, saigas, steppe eagle, bustard and other species typical for steppes and semi-desert ecosystems. Of special importance is the Zhaiyk (Ural) River delta and adjacent Caspian Sea, comprising a large variety of marine/coastal and inland wetland types that support a high diversity and considerable populations of species, including threatened bird species. The marine, coastal and riparian areas provide valuable habitat for commercial fish species, including four species of sturgeon: beluga, sevruga (stellate), Russian and Persian. Overall, the site supports about 460 species of vertebrate animals, including 76 fish species, 20 reptile species, 292 bird species and 48 mammal species.

The mineral resources of Atyrau region are extremely rich in hydrocarbons. Oil and gas are found in the fields of Tengiz, Kulsary, Bajshonas, Karaarna, Kenbai, others, while also deposits of boron, sodium and potassium salts occur. Engineering, food, and construction industries have also developed alongside the petrochemical industry. The oil pipeline infrastructure is geared to serve both domestic and international markets. In 2022, the volume of industrial output amounted to KZT 13,100 billion, exceeding by far the outputs in other regions, while gross agricultural output amounted to KZT 133.4 billion. In 2024, livestock included 231,000 heads of cattle, 505,000 sheep, 117,000 goats, 136,000 horses, and 42,200 camels. The region has many opportunities for tourism development, a priority for the region's development, including historical and cultural tourism, fishing and hunting, ethnographic and wellness tourism.

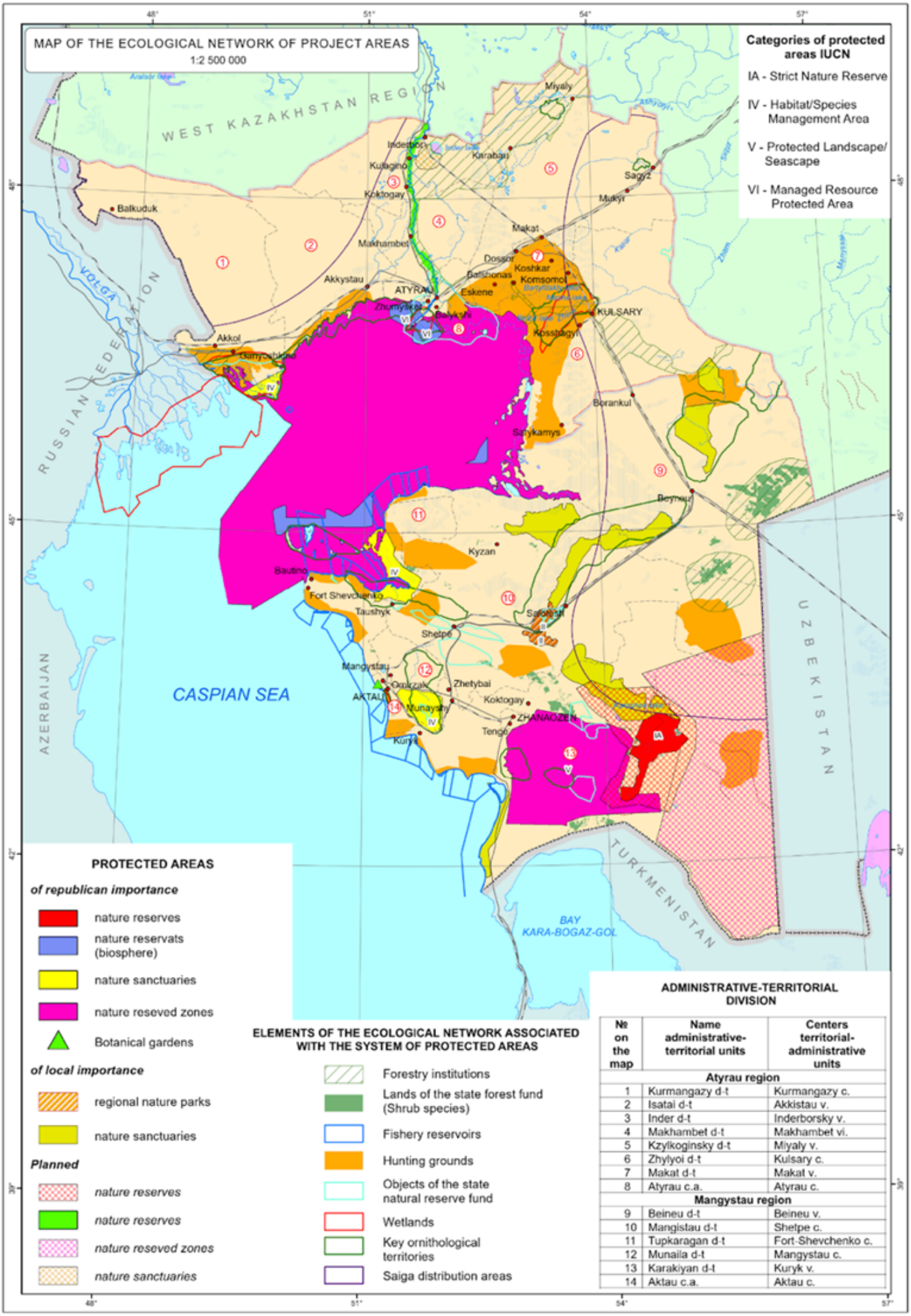
in rural areas, and 45% in urban areas, mainly Aktau, Zhanaozen and Fort-Shevchenko. The ethnic population is dominated by Kazakhs (92%) and Russians (5%). The Mangystau regions developed from the discovery in the 1950s of the rich deposits of uranium, rare earth metals, oil and gas deposits. The northern part of the region is part of the Caspian depression, while the south and east are characterized by the Mangystau mountains, the Kenderli-Kayasan plateau, and the Ustyurt plateau. The region is predominant occupied by deserts and semi-deserts, interrupted by solonchaks and takyrs with wormwood vegetation and sparse bushes. There are no permanent rivers and the whole region suffers from a deficit of water resources. The climate is continental and extremely dry; annual rainfall is 50-150 mm, mainly occurring during the winter-spring period. The average temperature in January is about -3°C, occasionally reaching -26° to -43°C while summers are hot and dry, with average temperatures in July not lower than +24°C and maximum of +45°C.

The region is rich in flora and fauna diversity, with more than 250 flora species and a large number of animals and birds, including endangered ones. The flora is characterized by feather grass, sheep fescue, Anabasis salsa, ferula, wormwood as well as Haloxylon and turanga shrubs, - species well-adapted to a harsh dry climate. Fauna species include jerboas, gerbils, lizards, snakes and scorpions, as well as ground squirrels, saiga and gazelle antelopes, Ustyurt mouflons, and predatory animals, including wolfs, corsac foxes and desert lynxes (caracal).

Mangystau is an industrial region with an emphasis on terrestrial hydrocarbon production, accounting for one-third of all oil extracted in Kazakhstan. Prospective deposits are identified on the shelf of the Caspian Sea. The region also has extensive deposits of uranium and rare earth metals, as well as deposits of iron ore, phosphorites, brown coal, barium, mineral and common salt. Mining and quarrying account for 88.6% of the region's industry; oil production in 2022 amounted to 16.7 million tons. The oil pipeline infrastructure is geared to serve both domestic and international markets. In 2022, regional industrial production valued KZT 3,112 billion, while gross agricultural output valued KZT 24.3 billion, 81% of which comes from animal husbandry. In 2024, livestock included 19,000 heads of cattle, 226,000 sheep, 80,000 goats, 130,500 horses, and 89,000 camels. The region has an ancient cultural history connected to the Great Silk Road, and many natural sights, promoting opportunities for tourism development.

Sources: https://qazalem.kz/en/regions/; https://silkadv.com/en/content/fauna-mangystau; https://visitmangystau.kz/en/places/red-book-animals-and-birds-of-mangystau; https://welcome.kz/en/kazakhstan/flora-fauna/; Makhambetov M. et al., 2024. Impact of climate change on pastural ecosystems of Atyrau region of the republic of Kazakhstan; DOI: 10.56525/NAHP2391; Ramsar information sheet ' Ural River Delta and adjacent Caspian Sea coast', https://rsis.ramsar.org/ris/1856; https://stat.gov.kz/api/iblock/element/region/122960/file/en/; https://stat.gov.kz/api/iblock/element/region/206945/file/en/.

Map 1: Map of the project areas



№ on the map	Name administrative-territorial units	Centers territorial-administrative units
Atyrau region		
1	Kurmangazy d-t	Kurmangazy c.
2	Isatai d-t	Akkistau v.
3	Inder d-t	Inderborsky v.
4	Makhambet d-t	Makhambet vi.
5	Kzylkoginsky d-t	Miyaly v.
6	Zhylyoi d-t	Kulsary c.
7	Makat d-t	Makat v.
8	Atyrau c.a.	Atyrau c.
Mangystau region		
9	Beineu d-t	Beineu v.
10	Mangistau d-t	Shetpe c.
11	Tupkaragan d-t	Fort-Shevchenko c.
12	Munaila d-t	Mangystau c.
13	Karakiyan d-t	Kuryk v.
14	Aktau c.a.	Aktau c.

Incremental/additional cost reasoning

Overall, to meet the incremental costs of measures to achieve agreed global environmental benefits, a brief summary of the projects' expected impacts by addressing the identified barriers negatively affecting the current baseline situation in the Project's area of intervention is provided in Table 4.

Table 4: Incremental Cost Reasoning

Baseline	Alternative to be put in place	Project impact including GEBs
Component 1: Strategic policy and planning to promote ecological integrity of the Caspian Sea landscapes and seascapes		
- Planning and management of marine and land resources in the Caspian Sea section of Kazakhstan 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 basin in Kazakhstan 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 basin in Kazakhstan, its biodiversity and habitats through improved information availability. - Capacity for integrated approaches for management of Caspian Sea basin in Kazakhstan strengthened. - Improved inter-sectoral coordination and collaboration across sectors and interests that support integrated and inclusive plans for the Caspian Sea basin in Kazakhstan. - Caspian Seal Conservation Action Plan measures for the protection of key habitats and for ensuring the preservation of areas under active consideration.	- Improved marine and land spatial planning promotes coordinated and collaborative approach for the management of the Zhaiyk Caspian basin KMGBF Target 1). -Improved sector-based guidelines and procedures provide tools that ensure the sustainable use of resources in the Zhaiyk Caspian basin, integrated into economic decision making. (KMBGF Target 10). - Increased capacity of institutions for marine and land spatial planning (KMGBF Target 14). -Improved capacity of institutions for monitoring the ecological status of the Zhaiyk Caspian basin (KMGBF Target 14). -Improved inventory and information facilitate better ecosystem and species (e.g. Caspian Seal, Sturgeon, fisheries resources, etc.) conservation and restoration. (KMGBF Target 21). - Improved management effectiveness of existing (2,964,419 ha), expanded (630,000 ha) and newly created (46,969 ha) terrestrial protected areas (KMGBF Target 3 and SDG 14 and 15). - Improved management effectiveness of existing (771,262 ha) and expanded (169,832 ha) marine protected areas (KMGBF Target 3 and SDG 14 and 15).
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 is 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 is 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.	- Sustainable land management in 25,500 hectares of degraded pasture and agricultural land (SDG 15). - Restoration of 201,000 hectares of degraded agricultural lands. (SDG 15). - Increased capacity for integrated management/ SLM on production lands in coastal and catchment areas (KMGBF Target 10). - Weighted vulnerability analysis helps identify vulnerable areas and practical measures to control and manage degradation in Zhaiyk Caspian basin areas (KMGBF Target 10). - At least 5 pilot initiatives for SLM developed and piloted in the target provinces.

		- At least 8,500 persons (50% women) benefit from sustainable use of natural resources and nature-based solutions (KMGBF Target B and SDG 5 and 15). -Around 39,277,303 metric tons of CO_2eq mitigated over 20-year period on the basis of reduction of fires in terrestrial PAs, grassland improvement and arable land crop enrichment.
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 and collective action for conservation of species and habitats. - Insufficient resources to conduct the necessary monitoring and enforcement activities to protect the environment. - Limited donor based financial contributions to the region is also a major constraint.	- Internalization and capacitating responsible private sector participation can contribute towards maintenance of the globally important biodiversity by private-public partnerships. - Improved private sector participation in conservation actions. - Improved integration of conservation outcomes in industry business planning.	- At least USD 10 million mobilized / leveraged for public and private sector for nature-positive activities that focus on nature-based economic solutions (KMGBF Target 19). - At least 2 nature-based or nature-positive financial instruments evaluated for effectiveness in the landscapes / seascapes, and prepared for replication and scaling-up. (KMGBF Target 19).
Component 4: Knowledge management, awareness raising and gender mainstreaming		
-Marine ecosystems remain poorly appreciated due to lack of baseline information for decision-making. - 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. -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. -Lack of effective information sharing, coordination and sharing of experiences at hinders collaborative regional coordination.	-Increased awareness and knowledge sharing promote community, private industry and stakeholder conservation actions. - Results and lessons learned from project are made available to a wide national and Caspian countries' audience. -Increased level of awareness and information available to support a coordinated and collaborative effort.	- At least 40% of participating stakeholders aware of the benefits of application of NbS (of which at least 45% women) KMGBF Target B and SDG 5 and 15). -At least eight lessons of best practices in biodiversity conservation and sustainable use in the Zhaiyk Caspian basin available for public access (KMGBF Target 21). - At least ten regional knowledge sharing events support improved regional cooperation among the Caspian Sea countries. (KMGBF Target 21).

Global environmental benefits

The project will reduce threats from degradation across critical terrestrial, marine and coastal ecosystems in Kazakhstan, demonstrating synergy between the goals and targets of UNCCD, CBD, UNFCCC, KMGBF and the Sustainable Development Goals (SDGs)[2][51]. By promoting the achievement of these outcomes, the project will provide crucial support to meeting its international commitments. The project will target the high value landscapes/seascapes of the Zhaiyk Caspian basin to generate global environmental benefits for biodiversity conservation in around **771,263 ha** of existing marine PAs and **2,964,419 hectares** of terrestrial PAs through coordination efforts with key stakeholders. To enhance land productivity and promote improved ecosystem services and biodiversity, at least **201,000 hectares of degraded ecosystems** (grasslands and agricultural lands) will be under restoration (GEF Core Indicator 3). Additional benefits will be derived in terrestrial, coastal and marine areas zones through enhancement of the biological and natural values, helping to support tourism, pastoral, fisheries and agricultural activities that will benefit at least **8,500 people** (4,250 men and 4,250 women) by promotion of sustainable resource uses, climate smart agricultural and pastoral activities, other natural products, improved livelihood and income generating activities, training and capacity development, etc. (GEF Core Indicator 11). This project offers strong potential for climate change mitigation and adaptation co-benefits through nature-based solutions that lead to enhanced carbon sequestration in soils and forests and coastal ecosystems and improved protection from severe weather events as a result of habitat rehabilitation. A conservative estimate of **39,277,303 metric tons of CO_2e mitigated** over a 20-year period through avoided pastoral land degradation, conversion of current unsustainable

smallholder practices to SLM (GEF Core Indicator 6). Please see Annex 12 'Estimations of GEF8 Core Indicator Targets' for detailed information on the project's contributions to the global environmental benefits.

Socioeconomic Benefits

The socio-economic benefits in the project will be observed at the individual (household level) as well as at the collective community level as follows:

- At least **8,500 individuals** (50% women) living in and around the targeted landscapes and seascapes will directly benefit from conservation initiatives and improved management of areas outside PAs (buffer and eco-sensitive zones) through enhanced co-existence, improved and sustainable resource management and use, diversified biodiversity-friendly livelihood opportunities, and value chain development. This may include sustainable agriculture, pastoral and fisheries activities, agroforestry, fisheries, and nature-based tourism activities, supported by enhanced ecosystem services and conservation outcomes.
- Improved conservation and sustainable management of terrestrial and marine ecosystems will enhance the ecological value of these areas, leading to increased availability of natural resources, improved water quality, and healthier fisheries and agricultural and pastoral systems for community benefits.
- Implementation of community management strategies and mainstreaming of sustainable resource use practices will result improved conservation outcomes while strengthening livelihoods and reducing resource use conflicts.
- Providing recognition to the traditional knowledge, social practices, and cultural and spiritual beliefs that promote effective and equitable use of biological and genetic resources. This will entail acknowledging and embracing the role of stakeholders in management, their traditional/local governance systems and value for biodiversity and further including them in the local-to-global conservation agenda which will help incentivize managers to maintain their current practices over the long-term.
- Improved access to technical services, technology and capacity building programs will enable communities to adopt sustainable practices in agriculture, pastoral, fisheries, forest management and tourism. This will lead to diversified livelihoods options, better market access, and higher incomes for households.
- The project will address gender inequality by promoting opportunities for participation of both men and women including the socially marginalized and vulnerable groups in decision-making and benefit sharing through activities such as ecotourism, livelihood and small-scale local enterprise development and ensuring their participation in various conservation activities. This will foster greater gender equality in terms of leadership, resource ownership, and economic opportunities.
- A reduction in the **resource use conflicts** and the adoption of sustainable practices will create a more harmonious relationship between communities and their natural environments, ensuring long-term resource availability and improved community well-being.
- Support by the project to the development of more (alternative) nature-positive products and services will provide direct economic benefits to households, particularly for women and socially marginalized groups, while promoting sustainable use of natural resources.
- Incremental innovative funding through innovative financial mechanisms, including through **private-public-community partnerships,** will provide communities with improved and diversified livelihood options, ensuring the sustainability of these investments beyond the project's lifespan.
- Stable or improved populations of key species and healthier ecosystems will enhance ecotourism potential, creating new income-generating opportunities for communities through visitor experiences and nature-based tourism.

Expected Results:

The project will adopt a multi-sectoral spatial planning exercise to design and subsequent implement MLSP and supporting framework of inter-sectoral and integrated policy and planning approaches for enhancing the ecological integrity of the land/seascapes across the Zhaiyk Caspian basin in Kazakhstan. This strategy will highlight the ecological continuum between natural ecosystems and human-altered ecosystems (including agricultural, pastoral, fisheries and tourism areas). This focus is crucial for the conservation of key species in the Caspian Sea basin in Kazakhstan, and emphasizes socio-ecological production seascapes/landscapes which are vital for sustaining biodiversity and ecosystem services. To ensure inclusive and effective management, the project will engage a broad spectrum of stakeholders, including women, youth, and marginalized groups across the Zhaiyk Caspian basin. Through participatory decision-making and collaborative management approaches, the project aims to enhance biodiversity conservation and sustainable use of resources of the Caspian Sea basin in Kazakhstan. The strategic approach is founded on the following principles:

- **Address the threats** in the Zhaiyk Caspian basin and key species, such as the Caspian Seal, sturgeons, endemic fish species and migratory bird habitats through a holistic and multi-disciplinary effort that recognizes the inter-connectivity of marine, coastal and terrestrial ecosystems.
- **Policy integration:** To reinforce conservation and integrate biodiversity concerns into economic and social development planning in the Zhaiyk Caspian basin.
- **Network of healthy ecosystems:** Align actions with the goals and targets of UNCCD, CBD, UNFCCC, KMGBF and relevant national plans to maintain and enhance a network of robust habitats and ecosystems that support diverse biological communities.
- **Collaborative planning:** Promote a collaborative planning process involving government agencies, NGOs, the private sector, civil society, local people, and community leaders to ensure comprehensive and inclusive conservation efforts.
- **Strong institutional and financial mechanisms:** Establish strong institutional and financial frameworks to support conservation, leveraging centrally and state-funded schemes as potential sustainable mechanisms.

Project Objective:

The project is designed with the assumptions that its long-term objective ***to promote an integrated ecosystem-based approach to conserve key species and habitats in the Caspian Sea basin of Kazakhstan and ensure sustainable economic development*** can be achieved from the implementation of five vertically linked and horizontally integrated Components that entail **integrated landscape and seascape planning and governance approaches at the basin, regional and sectoral levels**. This approach will strengthen considerations for the conservation and mainstreaming of ecosystems and biodiversity in planning and sustainably using natural resources in production landscapes and seascapes of the Zhaiyk Caspian basin in Kazakhstan. The project will apply a two-pronged approach to demonstrate socio-economic and adaptation benefits from an enhanced flow of ecosystem services for local communities and the private sector, achieved from (i) ***investments in the sustainable management and use of land and water resources*** that improve the productivity and resilience of production land/seascapes while improving biodiversity, habitat quality, and ecosystem connectivity, and (ii) the ***assessing and piloting of scalable financial incentives and instruments, including Payments for Ecosystem Services (PES), blue bonds or others*** to promote biodiversity and ecosystem-positive nature-based solutions to support ecosystem services, species and habitat recovery and the emergence of new environmentally-friendly and sustainable business opportunities. Further, to support the design of integrated and inclusive multi-stakeholder approaches to plan and sustainably manage terrestrial and marine resources, as well as to demonstrate innovative land and natural resources use practices based on environmentally-friendly solutions that promote attention to ecosystem health and biodiversity, the project, through integration with existing information platforms in the water, land and environmental sectors, ***will establish a digital-open access platform*** for collecting, synthesizing and sharing of data, information, knowledge, tools, case studies and best practices. This platform will serve as a Decision Support System (DSS) to analyze the current state of land and marine ecosystems, assess the economic impact of various land and ecosystem use scenarios, and ensure transparency and justification in land allocation, resource use permits, and changes in functional designation, including assessment of the ecological state of the ecosystems of the Caspian Sea and its coastal and terrestrial areas, including topics like the lowering of the sea level, mass mortality of fish and seals, preservation of the Caspian Seal population, and the protection status of coastal, marine and terrestrial biodiversity. This will enable improving multi-lateral and bilateral collaboration, awareness raising and capacity building, knowledge management and communication, and gender mainstreaming.

Adopting integrated and inclusive multi-stakeholder approaches to manage landscapes and seascapes, the project emphasizes the ecological continuum between natural ecosystems (terrestrial steppes and semi-deserts, terrestrial and coastal wetlands, and marine areas) and altered ecosystems (from agriculture, fisheries, pastural and tourism areas), as the basis for the sustainable management of socio-ecological production landscapes and seascapes that strengthen the adaptation capacities of communities, production sectors, as well as natural ecosystems and biodiversity of the Zhaiyk Caspian basin in Kazakhstan. The project's implementation principles focus on:

- Applying integrated spatial and land/sea-use planning to optimize sustainable resource use to ensure economic growth while preserving natural ecosystems, biodiversity and ecosystem services.
- Strengthening ecological connectivity by linking considerations for maintaining natural habitats (forests, wetlands, coastal, and marine ecosystems) with productive systems (agriculture, fisheries, tourism) through environmentally friendly, biodiversity-positive practices, improved protected area and eco-corridor management.
- Establishing inclusive policy, planning, and governance frameworks that align sector interests and provide incentives for biodiversity-positive resource use so as to promote a basin-wide approach to the management of the Zhaiyk Caspian basin, that includes the two project-targeted Atyrau and Mangystau coastal oblasts and the inland oblasts of West Kazakhstan and a large part of the Aktobe oblast. In terms of area, the basin is the largest, covering 23.5% of the country's territory. In the latter two oblasts, investments will not be supported by the GEF project, but by co-financing, to the extent co-financing is available.

- Promoting biodiversity-positive production practices in key sectors with significant ecological impact, to improve biodiversity conservation, ecosystem health and sustainable use of land and water resources.
- Enhancing information management to improve the quality, availability, accessibility and sharing of information and data to inform integrated planning and decision-making processes on sustainable economic development incorporating proper considerations for maintaining and restoring natural landscapes and seascapes and their valuable biodiversity.
- Empowering communities, including women and marginalized groups, alongside local government and community-based organizations, to play active roles in planning and practices to achieve sustainable development, improve ecosystem protection and biodiversity management.
- Mainstreaming gender equality by ensuring equitable opportunities and benefits for women and men, including from ensuring free, prior, and informed consent (FPIC) in alignment with national policies and UNDP's SES to uphold community rights.

Overall, achieving a more integrated, cross sectoral and ecosystem-based approach in planning the conservation and sustainable use of natural resources in the Zhaiyk Caspian basin will support achieving outcome 3 of the UNDP's Country Program Document for Kazakhstan 'By 2030, all people in Kazakhstan, especially the most vulnerable, benefit from enhanced age and gender-sensitive environmental resilience, as well as inclusive, rights-based climate, nature and pollution action and sustainable management of natural resources' as well as UNDP's Integrated Results and Resources Framework (IRRF) Outcome 1 'Structural transformation accelerated, particularly green, inclusive and digital transitions' and specifically IRRF Indicator 4.1 'Natural resources protected and managed to enhance productivity and livelihoods' and indicator 4.2 'Public and private investment mechanisms mobilized for biodiversity, water, oceans, and climate solutions'.

The above-objective will be achieved through the following Components, Outcomes, Outputs and activities:

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

(Total cost: USD 52,153,621; GEF project grant requested: USD 3,853,826 Co-financing: USD 48,163,206)

This Component will strengthen the enabling environment (policy, regulatory etc.) to support establishing a framework in Kazakhstan that promotes conducting strategic Marine and Land Spatial Planning (MLSP) supported by additional assessments (SEA of the regional development programs and plans of two project coastal oblasts) to help identify alternative options for the economic development of the region, including industrial and extractive activities, taking into account the requirements for the conservation of biodiversity and the interests of vulnerable groups and gender aspects. Both will be implemented through a suitable regulatory framework and coordination mechanism that is designed to strengthen the technical capacities and knowledge skills required for the effective to conservation and sustainable use of the Kazakhstani marine and land space (as part of the Caspian Sea). This shift from the 'business as usual' approach to a more MLSP related modality will benefit people's well-being, and contribute to the GEF8 Focal Area strategies for Biodiversity and GEF Core Indicators 5, 6 and 11.

Production of a specific Basin Climate Change Adaptation Plan (BAP), which represents a new and important planning tool in response to the growing challenges of biodiversity loss, environmental degradation and climate change in Kazakhstan, that along with the SEA and EIA of critical investment projects serve as additional layers that support the resulting MLSP. The BAP will be based on the principles of integrated, ecosystem management, involvement and consideration of the interests of all parties, support for cross-sectoral solutions, while also helping to meet the country meet its obligations under the Paris Agreement, SDGs, UNCBD and other international agreements. The BAP will support the integration of landscape and seascape zoning assessments, mapping and digitizing tasks, as part of a digital platform, including a repository of multi-sectoral spatial information and supporting maps that will serve as the basis of the development of an integrated spatial zoning map of the Zhaiyk Caspian basin in Kazakhstan based on MLSP approaches. This will enable decision-making on issues of territorial and sectoral planning, determining limits and permits for natural resources use, environmental impact assessment, state monitoring, expertise and state control, that is in accordance to Resolution of the Government No.790 'The System of State Planning in the Republic of Kazakhstan' dated November 29, 2017, This is also aligned with the Concept of Conservation and Sustainable Use of Biodiversity in the Republic of Kazakhstan for 2025-2035 that highlights the need for integrated planning and management of the natural environment, ensuring that public and sectoral development programs and plans build on results of landscape/seascape zoning and planning and practices in other sectors, and issues not limited to the use of natural resources only, but related to the sustainable economic development as a whole.

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

Building on the participation of all relevant government, non-government, educational, scientific, and private sector stakeholders, this Outcome will entail strengthening the enabling environment – such as policy instruments, technical guidelines and institutional arrangements for marine and land spatial planning, the integration of results of marine and land spatial planning into key economic

development programs and sector policies, including for industrial and extractive commercial practices, enhanced environmental monitoring of the Kazakhstani part of the Caspian Sea to inform effectiveness of spatial land use/PA/KBA planning and management and the improved conservation and protection of globally important biodiversity through PA/conservation areas' expansion, PA and KBAs effective planning. Outcome 1 has four outputs.

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

Key deliverables:

- Development of **formal Marine and Land Spatial Planning (MLSP) approach and processes, Decision Support System tool** and support policy frameworks.
- Development of detailed **Basin Climate Change Adaptation Plan (BAP) for the Zhaiyk Caspian basin of Kazakhstan** with GEF-supported costed action and integrated into two oblasts (Atyrau and Mangystau) development programs. In terms of the inland oblasts of West Kazakhstan and Aktobe, efforts to be made to seek co-financing to support integration into their respective development programs.

This output shall support the development (update) of policy and technical guiding documents for supporting the implementation of MLSP. This, in particular, includes improvements and synchronization of policies, laws and regulatory mechanisms to help improve the effectiveness and efficiency of management and use of marine resources and associated coastal and land resources. It is designed to address the issues surrounding the current policy approval and implementation delays and controversaries that occur as a consequence of the complex administrative procedures and bureaucratic resistance to pragmatic sustainable management of coastal and marine space. It also shall provide the headroom for improved coordination between different government entities, including relevant Ministries and Agencies, extractive private sector entities, agricultural and tourism enterprises, and other stakeholders, leading to a more effective and successful marine and land spatial planning regime to be implemented. Indicative Activities under Output 1.1 are the following:

Activity 1.1.1 Rapid Assessment Methodology (RAM) and a Conceptual Vision for establishment of governance and institutional processes to implement Marine and Land Spatial Planning (MLSP) within the Zhaiyk Caspian basin: The RAM approach shall be carried out to identify gaps and legal, institutional, methodological needs to introduce and sustain MLSP. The Conceptual Vision will help define a long-term vision for a sustainable, inclusive, and prosperous MLSP processes for the two Oblasts of relevance and the Caspian Sea. This vision will inform public and sectoral planning, budgeting and finance (see Output 1.2) of current and future functional uses of land and water resources, including on the development of new infrastructure, the promotion of sector-specific investment projects in, among others, industrial and extraction activities, sustainable marine and land resources management, the creation of protected areas and ecological corridors, etc., to achieve a rational use of land, water and other natural resources by relevant sectors, and a balanced distribution of production and natural conservation zones. Development of the vision will also require particular attention to evaluating and addressing the gaps in the ability of government institutions (i.e. institutions responsible for policy formulation, implementation and regulatory oversight and institutions tasked to plan resources production, enforce policies and regulations and ensure compliance) to commit to, implement, monitor, and enhance MLSP, identifying and addressing gaps in intersectoral planning of extraction and production of natural resources, monitoring, regulatory enforcement, and institutional capacity, and providing concrete recommendations to strengthen governance structures. Simplified Strategic Environmental Assessment (SEA) shall be conducted during the preparation of the Conceptual Vision, following the requirements of the respective national legislation, if applicable, or SESA as required by the UNDP SES policy. As such, the activity is intended to enable coordinated and participatory decision-making on promising priority pathways for sustainable economic development and growth, maximize the economic potential and benefits of the region while achieving the conservation and restoration of ecosystems and biodiversity.

Activity 1.1.2 Baseline assessments to support MLSP and development of a detailed Basin Climate Change Adaptation Plan (BAP) for the Zhaiyk-Caspian Basin of Kazakhstan region: This activity will entail the undertaking of baseline assessments of the climate risks and vulnerabilities (CRVA) to identify risk and exposures in the agriculture, fisheries, energy, water, transport and other sectors, with a core focus on major changes in climate exposure relevant for the Zhaiyk Caspian basin (that includes the 2 project supported coastal oblasts of Mangystau and Atyrau and non-project supported inland oblasts of West Kazakhstan and Aktobe) based on past and forecasted climate change, the status of land, ecosystem and biodiversity degradation from sectoral (over)exploitation, pollution, hydrological changes and sea level fluctuations, and other direct and indirect impacts. Based on

the CRVA, the project will support, in pilot mode, the development of the BAP, including the simplified, scoped SEA, founded within the principles of MLSP that will embrace the two coastal and two inland oblasts. Approved within the draft updated Water Code of Kazakhstan, Article 7, the BAP will represent an innovative and important tool for planning economic activities in response to the growing problems of biodiversity loss, environmental degradation and climate change. It will set out detailed costed actions, aligned with national plans, embedding the anticipated climate risks into sectoral and public development planning for the oblasts and Caspian Sea. It will serve as the basis for defining strategies, plans, guidelines that inform future directional changes in sustainable land, water and resource use management and economic development within the country, and serve as the basis for defining investments, their preliminary appraisal and derisking under Component 2 and 3 of the project. As part of this activity, the project will also support a baseline assessment of environmental stock related to water resources within the Zhaiyk Caspian basin. This will include quantifying the availability, seasonal variability, quality, and renewal capacity of surface and groundwater systems. Results will serve as foundational input for integrated marine and land spatial planning processes and decision-support tools. Stakeholder consultations will be conducted to understand barriers, bottlenecks, conflicts, gaps, expectations, etc., as well as stakeholder-specific visions for future development. Information on localized developments and investments ongoing or planned will be subjected to Targeted Scenario Analysis (TSA) and comprehensive EIA, to assess how a business-as-usual (BAU) scenario in which narrow sectoral, resource extraction-oriented planning in industry, agriculture, fisheries, tourism, energy, transport, water use, etc., continues into the future compares with a sustainable ecosystem management (SEM) scenario, achieved from incorporating improved ecosystem and natural capital considerations into sectoral development policies, taking into account obligations and requirements for the conservation of ecosystems and biodiversity, as well as the interests of vulnerable groups and gender aspects. As such, TSA and SEA shall provide sound economic justifications to support the transition to more effective and sustainable sector development policies incorporating ecosystem management considerations based on the introduction of the MLSP in strategic planning system. To add up to MLSP data layers, regional SEA will be produced as required by the Environmental Code, focusing on the assessment of the regional development plans of two pilot oblasts (activity 1.2.2) and engagement of the remaining two inland oblasts of the Zhaiyk Caspian basin through capacity building.

Activity 1.1.3 Developing a Marine and Land Spatial Planning and Policy Framework: Building on the baseline assessment (Activity 1.1.2) and Conceptual Vision for MLSP (Activity 1.1.1), this activity will focus on producing a formal MLSP and supporting Policy Framework that will complement the production of the more detailed Basin Climate Change Adaptation Plan (Activity 1.1.2). SEA will be conducted within MLSP development, following the SEA requirements of the Environmental Code. The MLSP and Policy Framework for the Zhaiyk Caspian basin will cover the two coastal oblasts of Mangystau and Atyrau that are part of the GEF target oblasts, as well as the two inland oblasts of West Kazakhstan and Aktobe, that are not directly part of the GEF project. Detailed assessment will be undertaken in the Mangystau and Atyrau oblasts, and in the case of the non-project oblasts of West Kazakhstan and Aktobe, available information will be used for development of the MLSP for the Zhaiyk Caspian basin**.** Updates to policy and legal frameworks and associated SEA regulations may be required, in tandem with a new focus placed on sectors (established and emerging sectors) that are of relevance within the BAP. In particular, this might include developing an integrated, cross-sectoral planning and decision support system (DSS)/platform for the Zhaiyk Caspian basin that would be decided during early implementation phase of the project. The intent will be to coordinate the MLSP processes that are aligned with the Conceptual Vision for the Development of the Zhaiyk Caspian basin and serve as a basis for the formulation of the BAP (Activity 1.1.2) as well as sector-specific plans for economic development (Output 1.2), environmental monitoring (Output 1.4), coordinated protected area development and improved management (Output 1.3) and development of an effective communications strategy, the latter to ensure widespread dissemination, stakeholder engagement, and successful uptake of the MLSP processes. It will also entail the development of a robust mechanism for monitoring and evaluation, with tangible indicators to assess the effectiveness of the framework's implementation and adapt strategies where necessary.

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

Key deliverables:

- Development of the new generation public and sectoral development programs and **investment plan** to pilot alternative green value chains

The promotion of a sustainable marine and land economy requires a shift from a focus on revenue generation and production systems to an ecological-centered vision of systems and wealth (including natural wealth) and well-being, and therefore to an integrated approach to conservation, economy, livelihoods, and jobs. To promote this concept, the project will effectively integrate the outcomes of MLSP into public and sector development planning, including strategies, plans and guidelines, that support future directional changes in sustainable land and resource use management and economic development opportunities in existing economic sectors, e.g. livestock farming, tourism, fisheries, oil and gas, mining, energy, transport, etc. relevant in the Zhaiyk Caspian Sea basin. Critical, however, will be the integration of the MLSP results with additional data layers (climate risks, wildlife, KBAs, OECMs, PAs etc.) into regional development programs for two pilot oblasts, which according to the existing strategic planning system are the key documents guiding socio-economic development of the oblasts and directing public funding streams. MLSP results will be leveraged to ensure that sectoral economic development activities are planned and managed within the set of sustainable

development and ecosystem conservation parameters, including spatial zoning of the basin, are introduced into regional development programs for two pilot oblasts, in order to meet acceptable environmental and conservation standards while ensuring sustainable and profitable economic development. To do so, this output will support the following indicative activities.

Activity 1.2.1 - Review sectoral public and private sector planning systems: The project will organize comprehensive multi-sector stakeholder consultation workshops with national and local entities, civil society, local communities, women, and marginalized groups and the private sector. These workshops will help map key sectors that are relevant to the Zhaiyk Caspian basin to analyze current public and sectoral planning mechanisms and documentation for adherence or gaps, overlaps and regulatory bottlenecks based on which entry points can be to identified for integration of sustainable marine and land asset management into strategies, plans and programs for development and investment in the basin. Where lacking, the project supports to identify and evaluate feasible options for integrating biodiversity and sustainable resource use in specific sectors, with recommendations to revise existing policies and economic development planning systems.

Activity 1.2.2 Develop regional development programs for the two pilot oblasts based on MLSP within consideration of basin approach: Based on the review undertaken in Activity 1.2.1, the intent is to enable coordinated and participatory decision-making on promising priority pathways for sustainable economic development and growth, maximize the economic potential and benefits of the region while achieving the conservation and restoration of ecosystems and biodiversity. This will inform public and sectoral planning of current and future functional uses of land and water resources, including on the development of new infrastructure, the promotion of sector-specific investment projects, sustainable marine and land resources management, the creation of protected areas and ecological corridors, etc., to achieve a rational use of land, water and other natural resources by relevant sectors, and a balanced distribution of production and natural conservation zones. The activity involves a comprehensive assessment of the development landscape in the pilot regions. This includes analyzing existing oblasts' development plans, evaluating the current socio-economic situation, and identifying key constraints to economic growth, such as population outflow. Ongoing and potential projects will be reviewed to assess their impact on the regional economy, alongside forecasts for economic and sectoral growth. Stakeholder consultations will be conducted to understand barriers, bottlenecks, conflicts, gaps, expectations, etc., as well as stakeholder-specific visions for future development. The analysis will identify priorities for sustainable development over a 10-year horizon, drawing on international best practices. Particular focus will be given to new growth areas, including agricultural diversification, the green economy, tourism, education, and creative industries, all aligned with the Sustainable Development Goals. Based on these findings, a concept for the region's sustainable development will be developed, followed by a draft Regional Development Program(s) for 2026–2030, an Action Plan, and supporting documents. This work will be informed by economic modeling under three scenarios, using TSA or other modeling tool—business as usual, ambitious, and optimal—factoring in GDP growth potential, climate risks, and environmental impacts and ecosystem services using the BIOFIN methodology. The analysis will feed the SEA, which shall be an integral part of the regional development plans' elaboration, following the requirements of the respective legislation (Environmental Code, Article 52).

Activity 1.2.3- Develop investment plans to implement regional development programs and pilot alternative green value chains: This activity aims to develop investment plans for the implementation of the regional development programs for two pilot oblasts, with a focus on piloting alternative 'green' value chains in two selected oblasts. It includes a comprehensive analysis of existing data and reports to assess the export potential of current and prospective environmentally sustainable products and services. A tailored methodology and criteria will be developed to identify products with high added value, strong employment potential, combined with low economic, social and ecological risks and positive impacts on land degradation and biodiversity. The analysis will identify key production clusters, market trends, competitiveness, and supply-demand dynamics at both local and international levels. Forecasts of demand and price trends over a five-year horizon will inform the selection of up to 10 priority products or services with high export and employment potential. The activity will identify barriers to production and export—including policy, regulatory, technical, and infrastructure constraints—and conduct in-depth internal value chain analysis for four priority products or services. For each, key actors, value creation dynamics, vulnerabilities, and bottlenecks will be assessed. Two target export markets will be analyzed per product, covering trade flows, competition, and entry requirements, as well as needed competencies and potential investor groups. A review of the policy and institutional context will be conducted, with recommendations for improving the enabling environment. Each value chain will undergo a PESTLE analysis to identify potential risks and mitigation strategies, and a targeted climate risk registry and localized climate risk management plan will be prepared for each value chain, including the assessment of climate- and disaster-related hazards. Business models will be developed for at least two selected products/services, including financial modeling and recommendations for financing options such as green financial and climate instruments. The activity will also provide hands-on support to at least two producers to enhance supply chain efficiency and market access, including targeted technical support (incl. under Component 2), training and stakeholder engagement. Strategic recommendations will be provided for scaling up green value chains across the region.

Activity 1.2.4 - **Foster skills, tools, knowledge and technology transfer:** In contribution to sectoral planning, the project will design and implement a comprehensive capacity and learning program (CLP) that enables the private and public sector to align agendas, incentives, and priorities that will guide planning of sectoral economic investments aligned with spatial zoning and long-term ecosystem and biodiversity conservation principles and goals. It would also help exploring possibilities for terrestrial-

and marine-based production solutions that also boosts job creation and profitable economic development. This CLP also serves to build skills to navigate trade-offs, externalities and impacts of sustainable production and consumption. Support to the implementation of the CLP will also include providing guidance for improving sector specific policies and planning systems that promote investments in integrated nature-based solutions (NbS) in terrestrial, coastal, and marine planning. In addition, the project will support trainings on Best Available Technologies, standard methodologies and digital tools in selected key sectors, e.g., livestock farming, fisheries, water management, ecotourism, and others that strengthen stakeholders' knowledge and capacities for global best practice but location-appropriate solutions that increase sustainability, achieve climate-adaptation, reduce environmental impacts, which subsequently can be incorporated in sectoral planning documents. Attention may also be given to strengthening stakeholders' capacities for the preparation of sectoral Restoration Targeted Action Plans, e.g., for the accelerated rehabilitation of degraded pasture lands, increased carbon sequestration, biodiversity conservation, and others.

Output 1.3: Improve conservation and protection of globally important biodiversity in the Caspian Sea through PA/conservation areas' expansion, PA and KBAs effective planning

Key deliverables:

- Report on **baseline inventory** of marine and terrestrial ecosystems and biodiversity in the Zhaiyk Caspian basin
- Preparation of a **regional area-based biodiversity and ecosystems conservation plan** (BECP) for the Zhaiyk Caspian basin
- New **and expanded area-based conservation network** for the Zhaiyk Caspian basin
- Development of **key species conservation strategies**

Complementary to the development of the MLSP processes, the effective conservation of the Zhaiyk Caspian basin requires targeted actions for the improved management of biodiversity important areas and critical species. This will entail the enhanced coverage of valuable natural areas legally recognized in the country's protected area system, a society-wide reliable and up-to-date data information on the status of biodiversity values and threats to natural ecosystems and biodiversity within and beyond the PA network, as well as updated management and operational plans. It will also require improved financial means, staffing, skills and capacities to plan and implement effective conservation management actions, augmented by a comprehensive vision for strengthening ecosystem and biodiversity conservation across the basin. The project support in addressing identified current deficiencies will include the following indicative activities:

Activity 1.3.1 - **Baseline inventory and mapping of the marine and terrestrial ecological and biodiversity network** in the Zhaiyk Caspian basin in Kazakhstan: The project will support the collection of baseline information on species, ecosystems, threats and current management effectiveness across in the basin, for PAs legally established at the national level as well as PAs with lower-legal status (oblast or district levels), designated IBAs and identified Key Biodiversity Areas (KBAs), and legally established eco-corridors. Based on the inventory, supported by stakeholder consultations with local public authorities, the science community and communities, areas without legal protection, but having noticeable globally important biodiversity values will be identified. An advisory report will be prepared, offering strategic guidance and recommendations to create new PAs and expand existing PAs, and to strengthen management effectiveness. The report will pay special attention to the use of Other Effective Area-based Conservation Measures (OECMs), including hunting reserves and ecological corridors, which, by means of (seasonal) sustainable land/sea use plans in place will effectively contribute to improving the connectivity between terrestrial and aquatic PAs and support the migration of globally important species like Caspian seals, sturgeons, Saiga and others. Data collected on areas and boundaries, as well as ecosystem and biodiversity values will contribute to the MLSP DSS (activity 1.1.2), in support of map overlaying to achieve informed spatial development decisions in the basin from cross-sectoral coordination.

Activity 1.3.2 - **Regional biodiversity and ecosystems conservation plan (BECP):** The project will draft an area-based regional conservation plan for the Zhaiyk Caspian basin - terrestrial, coastal and marine ecosystems and their biodiversity - based on the inventory (activity 1.3.1). It will provide guidance to governance and sector decision-makers for their application in the planning of housing, infrastructure, industry, transport and other public and sectoral development planning across the basin. The BECP will serve as a targeted sectoral development plan supporting integrated multi-sectoral planning and zoning approaches elaborated in the MLSP processes and provide strategic guidance for expanding the PA network and strengthening ecosystem interconnectivity of PAs and OECMs within the basin, as well as for improving the conservation management effectiveness in the established PAs as well as in the wider landscape. The BECP will also advise on opportunities to enhance the legal-regulatory framework on integrated area-based conservation planning, establishing PAs and recognizing OECMs and related effective management regimes agreed at the cross-sectoral levels, in line with international standards and best practices. It will also provide recommendations for developing/upgrading key species management plans.

Activity 1.3.3 - **Support to establishing new and expanding existing area-based conservation initiatives:** Based on the lists of protected areas to be established and extended (Concept of Conservation and Sustainable Use of Biodiversity in the Republic of Kazakhstan for 2025-2035), the project will support creating 676,969 hectares of terrestrial protected area (GEF CI 1.1). This

includes establishing the Zhaiyk floodplain Nature Reservation (46,969 ha; WDPA-ID n/a), and the expansion of the Ustyurt State Nature Reserve (currently 222,342 ha; WDPA-ID 11827) and the Akzhaiyk State Nature Reservation (currently 111,500 ha; WDPA-ID 342650), with 600,000 ha and 30,000 ha, respectively. For this, the project will support relevant studies, the preparation of Natural Scientific Justifications (NSS) and Feasibility Studies (FS) as well as legal documentation for the designation with a regional/local status under Decrees issued at Akimat-level. Furthermore, the project further will support creating 169,832 hectares of marine protected areas (GEF CI 2.1), by preparing the NSS and FS for the expansion of the recently established Seal Island State Nature Reservation (currently 108,632 ha; WDPA-ID n/a) with the planned cluster sites Prorva 1 (86,232 ha; WDPA-ID n/a) and Prorvo 2 (83,600 ha; WDPA-ID n/a). In addition, the project will demonstrate establishing an eco-corridor (1,500,000 ha; WDPA-ID n/a)[1], introducing improved land use practice through Other Effective Area-based Conservation Measures (OECM) (GEF CI-4.5, contextually linked to CI-4.1 'Area of landscapes under improved management to benefit biodiversity') covering landscapes located between established PAs in the Mangystau area - the Ustyurt State Nature Reserve (WDPA-ID 11827) and Aktau-Buzachinsky State Nature Sanctuary (Zoological; 170,000 ha; WDPA-ID 62578) - with the Kyzylsai State Regional Nature Park (68,445 ha; WDPA-ID n/a) and 6 local-level 'stepping stone' PAs in between (total 978,342 ha; WDPA-ID n/a)[2]. Assigning a legal status to the eco-corridor under the management of the state hunting or forest inspection services will allow installing a management regime for land owners and users regulating and controlling their land use practices, mainly grazing and hunting, to ensure natural migration of wildlife, especially Saiga antelopes and other important mammals and birds, and promote the preservation of biological diversity. The project will also update NSS and FS For the Northern Caspian Sea State Nature Zone (662,630 ha; WDPA-ID 342651), including internal zoning, including one or several aquatic eco-corridors to bring 132,526 ha, or 20% of the MPA under improved practice to benefit biodiversity (GEF CI-5.4, contextually linked to CI-5 'Area of marine habitat under improved practices to benefit biodiversity'), by preserving the migration routes of Caspian seals and sturgeons. Work on strengthening the eco-corridor principles in the Zhaiyk Caspian basin will be informed by the IUCN guideline for conserving connectivity through ecological networks and corridors (2020)[3][52]. Project activities include training and capacity building for PA managers and employees of state organizations, development of NSS, FS and legal documentation, territorial demarcation, development of sustainable land use plans. Work under this activity will be closely aligned with, and build on, activities planned by the WB/UNEP BCS project, including support to training for applying standardized criteria for classifying and categorizing marine and terrestrial protected areas, and in applying WB guidance and global standards for delimitation and designation work to create or expand (M)PAs.

Activity 1.3.4 - **Management and technical assistance support to selected protected areas:** The project will support a suite of capacity building and technical assistance activities to improve the management effectiveness in 2,964,419 hectares of terrestrial protected areas (GEF CI 1.2)[4][53] and 771,262 hectares of marine protected areas (GEF CI 2.2)[5][54]. Specifically, project activities include support to improving PA management and operational planning, on general effective protected area management as well as a range of themes (as relevant per PA): on patrolling and law enforcement, ecosystem management, fire detection and management, infrastructure & assets maintenance, income generation and financial management, conflict resolution, waste management, communication and outreach, community engagement, and climate change impact mitigation. Special attention will also be paid to developing practical guidelines for developing eco-tourism, including regulation and control of flows, information and awareness raising, trail development and maintenance, and payment mechanisms. Implementation of a targeted technical assistance program could support selected PAs with, e.g., equipment to support a broad range of conservation management activities (e.g., biodiversity monitoring of Caspian Seal, sturgeon, etc., law enforcement, tourism and visitor management, natural resources use, threat assessment). In response to the broad lack of reliable and up-to-date information on biodiversity values across the large PAs, the project will also support the design and implementation of Standard Operating Protocol on field-based assessments of selected ecosystems and biodiversity indicators using innovative techniques, to allow in future to assess the effectiveness of management interventions to reduce threats and improve the status of globally important species and their habitats. Alternative finance mechanisms for PAs generated through visitor fees, concessions, land use conservation agreements signed with nature-dependent households (e.g., livestock farmers, fishers) will be designed and piloted under Output 3. Work under this activity will be closely aligned with, and build on, activities planned by the WB/UNEP BCS project, including training of PA staff and authorities on management, implementation, monitoring and reporting on conservation activities, and on applying the Management Effectiveness Tracking Tool (METT). Project support to improving PA management effectiveness will subsequently be monitored by using METT evaluations (Annex 20).

Activity 1.3.5. Development of Key Species Conservation Strategies: Tailored species conservation plans will be developed to inform measures to mitigate threats, combat habitat degradation, secure breeding and feeding sites of priority species. Potential priority species for targeted action might include: Caspian Seal, selected sturgeon species, Saiga antelope and others. During project implementation, consultations will be undertaken to identify 2-3 priority species list for the development of conservation strategies. The long-term expected impact from implementation of these conservation plans and strategies is a reduction of threats to both selected as well as other globally important species at project target sites. The monitoring framework (Output 1.4) will contain indicators that will measure threat reduction to determine the effectiveness of these prescribed conservation plans and strategies.

Output 1.4: Enhanced environmental monitoring of the Kazakhstan part of the Caspian Sea by responsible government entities to inform effectiveness of spatial land use/PA/KBA planning and management

Key deliverables:

- Integrated **environmental monitoring framework** developed for the Zhaiyk Caspian basin

This Output will focus on systematic environmental monitoring, of ecosystem quality and the status of flora and fauna, including of globally important species like Caspian seals, surgeons, saiga antelopes and other mammals, resident and migratory birds, as well as of the impacts from economic development and the causes of environmental degradation, both inside PAs as well as in the surrounding use landscapes and seascapes. Following the disruption of the comprehensive monitoring programs in the 1990s, today monitoring is conducted, although mostly haphazardly, localized, and uncoordinated, by a limited number of government agencies, scientific organizations as well as large private-sector companies engaged in mineral exploitation, while the sharing of data and information is limited. There is no longer a functioning unified system of in-situ monitoring, while real-time integrated satellite monitoring and other modern instrumentations (e.g., research vessels, conductivity-temperature-depth loggers, buoys, drifters, gliders, tide gauge stations) is not widely, continuously and effectively applied[6][55]. Monitoring programs, where existing, are not coordinated by Standard Operating Protocols (SOPs) agreed between specialized organizations, in part due to the lack of expertise and skills, and knowledge of state-of-the-art global best practices, as well as a lack of intra- and intersectoral multi-disciplinary cooperation.

Under agreed complementarity cooperation with the parallel WB/UNEP BCSP, this output will provide incremental support to the recently established Kazakh Research Institute of the Caspian Sea (KRICS). KRICS has, among others, designated responsibilities for the development of a systematic monitoring system for the assessment of the ecological state of the ecosystems of the Caspian Sea and its coastal areas based on the existing monitoring observation network, including topics like the lowering of the sea level, mass mortality of fish and seals, Caspian seal population, and the protection status of coastal and marine biodiversity. Specifically, project support will review the extent, focus and practices of current monitoring programs, and strengthen the KRICS in collecting, processing, evaluating, analyzing, visualizing and storing information on the state of the environment, with focus on biodiversity, while the BCSP will support KRICS in designing the architecture for pollution monitoring, data storage and reporting. This output will include the following indicative activities:

Activity 1.4.1 - **Inventory of current monitoring approaches:** In order to strengthen understanding on current environmental monitoring of aquatic and terrestrial ecosystems and biodiversity by a multitude or organizations, the project will support a comprehensive review of existing monitoring systems to help creating a unified system with clear delineation of functions. Specific attention will be given to standards and SOPs in place, use of state-of-the-art guidelines and instrumentation for analyzing, interpreting, storing and sharing of data and information obtained. Additionally, current human, technical and institutional capacities for monitoring across the relevant national and international public, scientific and educational, non-governmental, as well as private sector entities will be assessed, on methodological basis, comprehensiveness (in time and spatial scale), and usefulness of data and information collection methods.

Activity 1.4.2 - **Support the KRICS in creating an unified information and analytical system:** Based on the gaps assessed under Activity 1.4.1, the project will support the KRICS, in cooperation with other research institutes and organizations, in creating an unified digital information system for collecting, processing, evaluating, analyzing, visualizing and storing information on the state of the environment, with focus on biodiversity. This will include supporting the pilot development of classification systems, including the selection of suitable indicators that represent the state of the environment within priority sectors of the region (pastures, water and fisheries, protected areas, transport and others). Integrating data gathered using remote sensing technology, strengthened with ground-based data, such DSS system will serve as key source for decision making on planning and implementing adaptive measures to protect, manage, and enhance the conservation and protection of ecosystems, biological species, including through measures to avoid or mitigate impacts from socio-economic development practices in the basin, in support of fulfilling international and national liabilities for preserving the Caspian Sea basin's terrestrial and marine ecosystems.

Special attention will be paid to improving institutional coordination by elaborating inter-agency agreements for coordinating the storage, sharing and use of the data and information through the information system.

Activity 1.4.3 - **Develop an integrated environmental monitoring framework:** Based on the inventory of current monitoring (Activity 1.4.1) as well as the overall inventory of georeferenced conservation and development activities ongoing and planned (Activity 1.1.2), the project will support KRICS with developing an integrated plan for the monitoring of the state of the aquatic and coastal environment, biodiversity and ecosystems, as well as negative impacts from state and sectoral development in the Zhaiyk Caspian basin as part of the BECP (Activity 1.3.2). In cooperation with other research institutes and organizations, the project will promote agreement on a unified monitoring framework, including the preparation of manuals, guidelines and SOPs, based on broad stakeholder consultations, coordinated by the KRICS. The monitoring framework shall coordinate targeted monitoring plans, applied by various organizations, preliminary for: number and distribution of seal populations, including diseases, reproduction and population replenishment; populations and migration of sturgeon species, and their habitats; populations and habitat use of selected globally important bird species; others as relevant. Information and data collection will support assessing changes in marine and terrestrial conditions, resources and biodiversity, to inform adaptive conservation and socio-economic planning, and strengthen prevention and control. Achieving integrated environmental monitoring will be promoted by the design and implementation of training and capacity-building programs for staff of relevant departments at KRICS, provincial, district and local agencies, focusing on effective planning, data collection, verification, analysis and interpretation, and information management. Improved capacities will support the design and implementation of harmonized monitoring approaches and networks among state and sectoral stakeholders, with linkages to monitoring by the private sector. Improved capacities will support the design and implementation of harmonized monitoring approaches and networks among state and sectoral stakeholders, with linkages to monitoring by the private sector. Complimentary parallel support work (Activities 4.2.2 and 4.2.3) will be carried out, including preparing guidance notes for the private sector to relay lessons learned that support and enhance the understanding of the private sector on how and why to implement MLSP and NbS to address, e.g., sustainable fisheries and tourism development. Local-level workshops will be organized (Activity 4.2.3) to inform the private sector specifically on project results along with specific opportunities for collaborative leaning (including regional exchanges) as part of Activity 4.3.2.

Activity 1.4.4 - **Provide technical assistance to the KRICS:** To support the implementation of the monitoring framework (activity 1.4.3), the project envisions to provide technical assistance support to selected departments of the KRICS, to strengthen regular biodiversity monitoring. For this, the project will conduct a targeted inventory of the current material base and human capabilities for monitoring at KRICS, based on which the technical support program will be designed. Preliminary, it is envisioned to provide equipment to enhance field survey data collection (mobile data loggers, sampling equipment, inflatable boats, tents, stationary monitoring locations near seal/bird aggregations), laboratory analysis (equipment and consumables), application of state-of-the-art data collection and interpretation methods (remote sensing data, computers for high-volume modeling and statistical analyses) for KRICS as well as relevant PAs based on needs assessments. Special attention will also be paid to provide targeted technical assistance for improving the capacities for rehabilitation and emergency assistance to injured seals, sturgeons, birds, etc., as well as for installing electronic chips in sturgeons, to account for their movements and initiate the introduction of genotyping and genetic passportization, which can confirm the origin of sturgeon fish (natural or artificially grown) as the basis for the legal sales and export of sturgeon products, live individuals, as well as the sale of juveniles for stocking natural reservoirs. To further strengthen environmental monitoring capacities, the project will support the application of modern field-based and remote sensing technologies for water level tracking, soil moisture monitoring, and water quality observation in critical coastal and inland zones of the Zhaiyk Caspian basin. These technologies will provide essential real-time data for assessing hydrological dynamics, climate variability, and environmental stock of water resources. Such tools will enhance data integration into MLSP and ecosystem management systems, contributing to science-based decision-making across sectors.

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

(Total Cost: USD 24,983,070; GEF project grant requested: USD 1,846,093; Co-financing: USD 23,069,438)

Ecosystems of the Zhaiyk Caspian basin in Kazakhstan are highly arid, making them inherently fragile to anthropogenic disturbances, primarily due to limited water availability, high evapotranspiration rates, and low soil moisture retention, which constrain vegetation growth and conditions the low resilience of ecosystems. Pasture use, cattle overstocking and overgrazing are direct drivers of the degradation of dryland ecosystems, causing changes in plant biodiversity, including the occurrence of invasive species, and loss of biomass reserves, increasingly leading to soil deflation and desertification. The land-based activities can also create negative changes in coastal terrestrial landscapes and marine ecosystems. The significant economic dependence on oil and gas extraction industries, other mining activities, supported by economic incentives for extraction continuing to outweigh environmental concerns, also heavily impact terrestrial and aquatic resources in the basin, causing ecosystem fragmentation and contamination with pollutants.

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 builds on the MLSP and supporting SEA, CRVA, TSA and BAP tools established for, and applied in, the Zhaiyk Caspian basin with project support under Component 1. The intent is that, in addition to strengthening sectoral development planning (output 1.2), the integrated assessments, vision and adaptation planning solutions developed under Output 1.1 are cascaded and

integrated in the planning, decision-making and implementation processes at landscape level. This process will be supported by practical demonstration of how delineated by MLSP zones and landscapes could be sustainably managed and conflicts mitigated through a range of gender-supportive sustainable development practices and scalable approaches in the Zhaiyk Caspian basin. The overall expectation is that through this process, conservation, sustainable resource management and economic decisions and actions are aligned with integrated land planning processes, and later scaled-up to regional levels to help populate a range of gender-supportive sustainable development practices in the land-based area of Zhaiyk Caspian Basin. 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 (livestock farming, fisheries, coastal development and tourism). The following activities are proposed under this Outcome:

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

Key deliverables:

- **Baseline map** of environmental, biological, social and economic features in the landscape of the two coastal oblasts
- **Identification of entry points** in oblast, sector and local development plans for promotion of SLM actions
- A **set of tools** for supporting SLM activities

Overall, land degradation and natural-anthropogenic desertification (especially caused by wind erosion) impose a significant economic burden on Kazakhstan, with annual losses due to land use and cover change estimated at $3.06 billion between 2001 and 2009, which represented approximately 3% of the country's GDP in 2009[7][56]. With the main economic consequences of desertification/land degradation in the Zhaiyk Caspian basin being the decrease in crop and grassland yields, the consequences include a linked decrease in livestock productivity, national sales and export potential, the slow development of food processing industry, and ultimately a sharp decrease in local income as well as tax revenues generated. The sustainable use of natural resources in arid ecosystems is often only possible through establishing cooperation mechanisms between sectors, an approach that opens the possibility for maintaining or improving ecosystem resilience, ensuring continuity in the flow and provision of ecosystem services to interested sectoral stakeholders and local communities. Proposed indicative activities would include the following:

Activity 2.1.1 - Mapping of landscapes in selected pilot districts: The project will support the detailed landscape scale mapping of the environmental, biological, social, cultural and economic features in pilot coastal oblasts in the Zhaiyk Caspian basin to provide detailed information on spatially-explicit baseline conditions (including identifying ecological disruptions and restoration needs, main areas for biodiversity and ecological corridors) that would be contributing to detailing MLSP and the baseline inventory and mapping of the marine and terrestrial environmental, ecological and biodiversity conditions undertaken in Output 1.1. Mapping information will be used to identify, prioritize and inform the planning of on-the-ground actions in target districts to support nature-positive actions in livestock farming, fisheries, tourism, aquaculture and other livelihood options relevant for the pilot districts (activity 2.1.2). Project support both at the planning level as well as at the pilot district actions level will benefit from the development and implementation of comprehensive capacity building and learning programs, engaging state and sectoral organizations as well as non-governmental organizations, the science community, community entities as well as local communities to give place to cultural knowledge and practices, and to strengthen capacity and tools for participation in planning and implementation of these integrated plans and on-the-ground nature-positive investment practices.
Activity 2.1.2 - Review of district and local level land use and/or development plans to identify entry points for promotion of more sustainable development actions: Based on the mapping of landscapes, this Activity will translate the MSLP strategies developed under Activity 1.1.3 to the ground level in the two coastal oblasts and complementing the investment plan developed under Activity 1.2.3 to implement a regional program and pilot alternative green value chains. In particular, this exercise will entail the review of oblast and district public and sectoral development plans, including gaps and weaknesses, to identify entry points for strengthening the sustainable use of natural resources. The objective is to identify the priority actions that could contribute towards achieving Land Degradation Neutrality (LDN) targets based on the response hierarchy (Avoid> Reduce > Reverse land degradation). This will enable the development of district and sector-level plans, or mainstreaming sustainability into existing plans, that will necessitate an open and active dialogue across multiple stakeholder groups (including women, youth and disadvantaged groups) to build a common understanding of priorities, co-benefits and conflicting aspirations, as well as to agree on target setting for biodiversity, ecosystem services and sustainable resource use. The outcome will be integrated plan(s) for promotion of sustainable land management activities that would be implemented under Output 2.3. Continued repeated mapping and strategic planning exercises will provide information on long-term management options for the different economic uses and development activities. In addition, these options will facilitate permitting processes that meet nature-friendly norms, and help develop appropriate governance and enforcement systems.
Activity 2.1.3 – **Strengthened tools for implementation of these integrated sustainable land management plans:** Based upon key gaps and weaknesses identified in each sector's development strategies, plans, as well as practices in regard to SLM and biodiversity (Activity 2.1.2), prioritized recommendations will be formulated for strengthening each sectors' capacity to support SLM and biodiversity towards minimizing further land impacts and, as feasible, reversing/restoring existing degradation. Both

general and sector-specific recommendations may include, but be not limited to the following: (**A**) Protocols for (i) monitoring the three LDN global indicators (land cover / land cover change; land productivity/Net Primary Production; carbon stocks/Soil Organic Carbon) for assessing and monitoring LDN based on global best practices including identifying data sources, frequency of monitoring etc.; (ii) water quality testing, including agreed thresholds; (iii) earth moving, including checklist, permit conditions and land use application forms; (iv) sand dredging (e.g., requiring use of silt curtains); (v) climate-proofed roads and banks, to ensure critical hydrological flows in the freshwater/saltwater interface. (**B**) Guidelines for (i) coastal/beach rehabilitation; (ii) riparian habitat management / rehabilitation; (iii) wetland rehabilitation; (iv) strengthened EIA, including robust monitoring and evaluation. (**C**) Guidebooks for (i) SLM in traditional agriculture, grazing, agroforestry and climate-smart practices for farmers and women; (ii) SLM best practices in the infrastructure sector; and others. The Protocols, Guidelines and Guidebooks will as much as feasible and relevant incorporate detailed information from sector-specific measures to enhance sustainable land management, avoid land degradation and improve biodiversity, as achieved in Kazakhstan, Central Asia or globally, taking the location-specific environmental and land use specifics of the project's target region into account.

Output 2.2: Piloting SLM in the pilot districts

Key deliverables:

- **Inventory of degraded lands** in the two coastal oblasts
- Development of **SLM restoration plans**
- 201,000 hectares of **pastoral lands under improved SLM**
- 25,500 hectares of **degraded agricultural and pastoral lands and shallowing areas** of the Caspian Sea under improved management to benefit biodiversity

The outcomes of Output 2.1 will provide the basis for piloting SLM activities in the pilot districts, which can range from restoration and management of degraded pasture/grasslands, use of water-saving technologies, wind erosion prevention, reclamation of industrially polluted lands, as well as the promotion of alternative livelihoods, e.g., aquaculture/hatcheries, rain/melt water collection for improving livelihoods and land productivity while reducing pressure on limited resources available, etc. This output will demonstrate how sustainable nature-based economic development pathways in livestock production, water management, fisheries and other economic development activities can be engaged by communities (including women and youth), improving livelihoods of men, women and youth. Specifically, activities will focus on the 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 land- and water-based practices to reverse on-going ecosystem degradation and rehabilitate degraded areas, to protects and restore the sustainable flow of ecosystem services, achieve LDN and increase resilience to climate change through SLM/CSA, and improving incomes. This Output will support three indicative activities:

Activity 2.2.1 - Conduct an inventory and assessment of degraded lands: To inform the design and practical approaches for demonstrating location-appropriate SLM solutions, the project will support the identification of vulnerable ecosystems (pastoral, agricultural, riparian, etc.) in need of restoration in the selected districts together with the local communities. Methods to be used during the inventory include scientific/expert opinions, land users' opinions, field observations and measurement, modelling, estimates of productivity changes from remote sensing. To elaborate an opinion on the risks/impacts of expected socio-economic development, also local and regional public and sectoral development plans will be reviewed. Findings of the inventory will be discussed with regional and local public authorities as well as the communities, in combination with initial technical visions elaborated on the type of demonstration activities suitable and appropriate, to identify both the appropriate location for demonstration projects as well as the willingness and support from land/water resources users, the wider community and authorities.

Activity 2.2.2 - Develop SLM restoration plans: In order to support the development and implementation of SLM measures, as well as to upscale in future the results, on selected climate-smart nature-based solutions, the project will support the inclusive development of site-specific restoration strategies/plans involving local communities and local NGOs. These strategies/plans will include specific prescriptions for restoring land productivity/Net Primary Production; stabilizing carbon stocks/Soil Organic Carbon, enhancing hydrological regimes for maintaining water flow patterns that support ecological processes that improve the land's capacity, and to provide guidance for adaptive management practices for continuous assessment and responses.

Activity 2.2.3 - Technical and financial support for location-appropriate demonstration projects for SLM and IWRM: The project will provide technical support through firms/NGOs to work with local natural resources users, including farmers, fishers, women and vulnerable group, to assess suitable resources-use systems, sustainable nature-based economic development pathways and locations for interventions in selected demonstration districts. Traditional knowledge of sustainable land and water management systems will be integrated and promoted; preliminary identified targeted interventions may include improving livestock (sheep, camels) production systems with pasture rotations and restoration of fallow periods, including the restoration of basic infrastructure (watering points) for pasture and wildlife, along with measures to reduce the threats to land degradation. Water-saving hydroponics feed growing pilots could be supported as a valuable supportive activity to prevent livestock loss during

seasonal grazing breaks. Other indicative demonstration activities under this output could include the introduction of shelter belts (saxaul micro-nurseries and planting) and moisture capture measures to reduce wind and water erosion of soils and increase productivity of natural ecosystems and pasture lands; support to regional eco-tourism development, including trails and digital routing mechanisms to manage tourism flows and reduce impacts on sensitive landscapes, ecosystems and biodiversity; the promotion of marine aquaculture, to reduce pressure on fish populations and risks for negative impacts from fishing on Caspian seals, birds, etc. Building on regional and district-level inventories, support will be provided to demonstrating the development of a district-level sustainable development plan, on the example of pasture management, for subsequent upscaling to the regional level. Specifically, land from the reserve fund will be selected, in Mangistau oblast 36,000 ha in the Shetpinsky rural district, and 40,000 ha in the Seneksky rural district, and in the Atyrau oblast 125,000 ha in the Akkystau rural district. Recommendations from the development of integrated plans will inform the designated regional and national authorities for incorporation in legislation and state programs of the country. For each targeted intervention, also a targeted climate risk registry and localized climate risk management plan will be prepared, including the assessment of climate- and disaster-related hazards. This activity supports the implementation of the Concept of conservation and sustainable use of biodiversity in the Republic of Kazakhstan, which promotes the development and implementation of pasture management plans to accelerate the rehabilitation of degraded forage lands, increase carbon sequestration, and preserve biodiversity, in line with the Government 's Model Plan. Development of the plan will also be informed by the good practice results for household and family beef farms of sustainable pasture management and fodder production in Kazakhstan, jointly developed by the WB and the Ministry of Agriculture of Kazakhstan, taking into account peculiarities of Atyrau and Mangistau oblasts (climate, terrain types and prevail types of livestock).

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Output 2.3: Roll out of a comprehensive capacity building and research partnerships

Key deliverables:

- Implementation of **training plan** result in conduct of oblast and sector workshops
- **Training programs institutionalized** and conducted annually

This output is intended to support the planning and implementation of sustainable conservation and land management practices for enhancing sustainable economic benefits of coastal and marine ecosystems, while protecting critical biodiversity and ecosystem services. Informed by the spatial planning (Outcome 1) and planning and demonstration of SLM management and practices (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 planning instruments and 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 and land spatial/adaptation planning at the sectoral, national and local levels, local-scale participatory resources use planning, climate change projection and impact assessment and economic assessment of resources as well as land use planning, sustainable resource use practice, and the use of sectoral EIAs. Indicative activities under this output will include:

Activity 2.3.1 – Targeted national capacity needs assessment: To specify existing capacity gaps across government[8][57], non-government and the private sector, and propose targeted collaborative interventions of capacity transfer in science and technology, a targeted national capacity needs assessment will be conducted. This would involve the identification of capacity needs for data and knowledge generation, collection, use and management; development and use of MSLP, Decision Support Systems (DSSs); knowledge and application of key concepts such as land-sea interactions, integrating the ecosystem-based approach into planning and conducting strategic environmental assessment (SEA); as well as developing institutional capacity for coordination and data sharing among different sectors, agencies and governance levels.

Activity 2.3.2 - Development and undertaking of comprehensive gender-supportive capacity building partnerships on MLSP, SLM, NbS, and finance instruments: Building on the capacity needs assessment (activity 2.3.1), the focus of the training is on: (a) improving institutional capacity to collaborate across sectoral boundaries to apply holistic goal-driven spatial planning; (b) enhancing capacity for using data and knowledge management in MLSP, SLM, NbS and the selection and use of finance instruments; and (c) using national and shared collaboration platforms for long-term networking, cooperation and development in cross-sectoral governance and ecosystem-based spatial planning. The capacity building partnerships are aimed at managers, civil servants, professionals, graduates, postgraduate and professional training students with a background in environmental studies. Training will help to develop the capacities of key marine, coastal and land-based sectors (in water and land-resources management, PA management, tourism, oil and gas industry, coastal development, pastoral and agricultural systems, etc.) and stakeholders to facilitate and support planning and implementation processes, as well as promote the uptake, upscaling and distribution of results, including by, e.g., government ministries and agencies, including politicians. Where needed, separate

training sessions will be conducted to enhance the participation of women and marginalized communities, addressing specific barriers such as language, time availability, caregiving responsibilities, and access to resources.
Activity 2.3.3 – Institutionalization of capacity building program: Following a comprehensive evaluation of design, implementation and impact of capacity building activities undertaken (Activity 2.3.2) the project will identify an appropriate institution to further develop and sustain institutional and human capital building 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 9,400,162; GEF project grant requested: USD 694,613; Co-financing: USD 8,677,599)

Building on the findings of BIOFIN analysis for Kazakhstan, there are a number of innovative financial instruments that emerge and can be piloted to test their viability in the Zhaiyk Caspian basin. However, the application of economic mechanisms/financial incentives needs to be based on the economic valuation of ecosystem services, aimed at determining the value of economic benefits obtained 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 MLSP). The second direction is the implementation of the mechanism of offset/compensation measures for the loss of biodiversity with the participation of users of natural resources in the Zhaiyk Caspian basin and establishment of a Facility to mobilize resources for biodiversity conservation.

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

The availability of appropriate financial solutions for strengthening the flow of ecosystem services and biodiversity conservation is increasingly recognized as a critical component to address the climate-nature nexus, and to implement ecosystem restoration and biodiversity conservation while strengthening the livelihoods of communities (including women in particular) and natural resources users. Economic valuation would serve as the ecosystem approach to natural resource management, the results of which can help in making decisions on the financing of measures for the conservation or restoration of ecosystems. The valuation of ecosystem services can also be used to analyze instruments, e.g. tax incentives for ecotourism development, biodiversity offsets, promotion of organic farming or aquaculture, etc. Additional by-laws and regulations may be necessary to refine such mechanism and ensure their smooth operation; these could include detailed guidelines on application of these instruments. Offset/compensation measures for biodiversity loss as well as payments for ecosystem services (PES) were introduced by the Environmental Code of the Republic of Kazakhstan, signed by the President of the Republic of Kazakhstan in early 2021.

Specifically, PES instruments still need institutionalization and clarification to become a widely used practice in Kazakhstan, as well as guidelines on how payments are calculated, while the effective implementation of PES also requires robust institutional capacity. This includes clear legal guidelines, strong policy support, effective governance systems, and adequate administrative capacity. The project will pilot PES and produce recommendations how to fill the existing gaps and eliminate identified bottlenecks, and design appropriate capacity building measure. For this, the project will analyze, evaluate and build on successful examples of countries and (large) corporations from key industrial sectors engaging in PES schemes, which have contributed to (i) reducing operational risks (e.g., water scarcity, climate impacts); (ii) enhancing their corporate value, improving ESG scores, attracting sustainability-focused investors; (iii) enhancing brand reputation and consumer loyalty; and (iv) creating shared value with local communities, improving social license to operate. While for each PES scheme the dimensions, including valuation methods and the way PES are calculated, structured and implemented, varies, common denominators include fairness and acceptability to all involved stakeholders, visible benefits for all to all involved stakeholders, environmental sustainability of the outcomes, and simplicity and transparency. Initial reflections, to be further elaborated during the Project's Inception Phase, on how the private sector, industry and intensive agriculture relevant to the project region will be involved and targeted in developing PES scheme(s) are elaborated in Annex 22 (' Financial Opportunities for Promoting Nature-Based Solutions (NbS) in Atyrau and Mangistau Regions of Kazakhstan'). An example for potential PES scheme of pastures to develop intense agriculture for Atyrau and Mangistau region: increasing number of sheep will cause pastures degradation and biodiversity loss, but the farmers' payments for grazing may cover the drilling of the water wells, installing solar-powered pumps at the watering points to make the distant pastures usable. Decreasing the pressure on the pastures near the settlements will lead to their natural rehabilitation; this will provide for the growth of the livestock and increased incomes of the rural communities.

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

Key deliverables:

- **An assessment of the finance needed** to achieve biodiversity conservation and the sustainable flow of ecosystem services in the Zhaiyk Caspian basin

Better availability and quality of information on the value of ecosystem services can significantly improve the quality of decisions on ecosystems use, related investments, biodiversity and ecosystems conservation and restoration of natural capital. Among the diverse conceptualizations of value, economic value provides a measure of resources and services to human wellbeing. The value may be assigned to the stocks of the nature capital (same as assets in accounting balance sheet) and the cash flows derived from the use of the ecosystems. There are several methodologies on how the economic values of the natural capital and the ecosystem services may be evaluated. However, the project will work on the selection and/or development of the methodologies that are most relevant to its target region and the types of investment activities that are most common. Information on the economic value of ecosystem services will be used in a variety of decision-making contexts including (i) raising awareness among stakeholders regarding ecosystem services for human well-being; (ii) setting priorities across policy targets; (iii) designing policy instruments for environmental management, such as taxes, transferable quotas, certification and labelling, and trade restrictions; (iv) formulating sustainable financing mechanisms for PES; (v) informing alternative investments solutions by means of cost-benefit analysis; (vi) quantifying the distribution of costs and benefits of management decisions among different stakeholders; (vii) setting compensation for damage to nature; and (viii) enabling the generation of monetary ecosystem service accounts[9][58]. Activities under this output will include:

Activity 3.1.1 – Identify an appropriate, but standardized methodology for economic valuation of ecosystem services: In order to identify and quantify opportunities for development of a blue/green economy in the Zhaiyk Caspian basin in Kazakhstan, the project will draw on international economic valuation experiences to identify, adapt or develop, based on existing examples, the most suitable methodology for the valuation of ecosystem services of coastal and marine ecosystems. A range of methods are available for assessing ecosystem services, which differ in their aims; from mapping and modelling the supply and demand of ecosystem services to appraising their economic and non-economic importance through valuation techniques. Counterbalancing the traditionally strong focus on economic valuation and measurement in NbS design, key considerations in selecting an appropriate method shall include stakeholder participation, inclusion of local knowledge and ease of use and communication. In selecting the method, also the purpose and the specific ecosystem services at stake will be considered, as will be pragmatic considerations with respect to the data, resources and available expertise among local, regional and national stakeholders and the practical needs in such methodologies.
Activity 3.1.2- Application of methodology for economic valuation of ecosystem services: Based on the agreed methodology, the valuation of the regionally appropriate ecosystem services for the Zhaiyk (Ural) river delta will be demonstrated, including provisional services (e.g., water for irrigation, industry and communal use, terrestrial and aquatic food and fodder supply, materials, medicinal resources), regulating services (e.g., climate regulation, carbon storage, flood management, pollution control, pollination), supporting services (e.g., nutrient cycling, soil formation and health, biodiversity) as well as cultural services (e.g., tourism and recreation, spiritual benefits) to enable informed decision-making. Economic justifications of agreed approaches to the development of natural resources use will also support the identification of finance mechanisms to compensate / offset negative impacts on ecosystem services by economic investments. This economic valuation will enable identification of approaches to assess shifts in social vulnerability, equality, knowledge, power, empowerment and political capabilities related to existing development and investment plans by both the public and private sector, taking into account the current financial, social, environmental and economic constraints to achieving more sustainable and environmentally friendly economic solutions. This will help to analyze, identify and strengthen mutually beneficial sustainable use of resources by all interested parties, to stimulate investments in environmentally friendly technologies, and to achieve nature-positive outcomes and strengthen opportunities to achieve the more effective cross-sectoral management of natural resources conservation and use. As part of the demonstration project, also the current regulatory framework will be analyzed, and proposals will be developed for adopting or revising regulatory acts that will strengthen the legal basis for the valuation of ecosystem services in cross-sectoral planning to promote the conservation and sustainable use of natural resources in the Zhaiyk (Ural) delta and across the basin. It will also facilitate modifying interstate agreements at the transboundary level, between Kazakhstan and Russia as the riparian states of the Zhaiyk (Caspian Basin as well as between all riparian states of the Caspian Sea as the joint users and custodians of its common pool of natural resources, including of threatened Caspian Seal and sturgeon populations.
Activity 3.1.3 - Conduct a preliminary resource gap assessment: An assessment of the finance needed to achieve biodiversity conservation and the sustainable flow of ecosystem services in the Zhaiyk Caspian basin builds on stock-taking of current financing, needs and gaps in the region, prior to developing an integrated holistic financial strategy to estimate the budget needed, comprising the financing needs (potential projects and programs) and the public funding sources and other sources to achieve agreed goals. The assessment will pursue four strategic approaches, namely: (a) avoidance of future unnecessary expenditures by employing strategic biodiversity and ecosystem services investments and policy changes to generate nature-positive development as well as 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 investigate current practices as well as options for strengthening the existing partnerships and realistic mechanisms, as well as financial instruments that exist in Kazakhstan (e.g., green loans, green bonds, loan guarantees, blended finance schemes and different types of subsidies), or instruments that may be designed and launched with a high degree of certainty and/or agreed for use under adopted legal framework (e.g., blue bonds, PES). 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.

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

Key deliverables:

- Development of a **portfolio of nature-based solutions** linked to financial instruments for the Zhaiyk Caspian basin
- Support to facilitate the establishment of an **International Fund for the Conservation of Biological Diversity**
- Identification of a **smart set of fiscal incentives** to promote private sector engagement in NbS

Marine, coastal and terrestrial ecosystems are life-support systems for species and local communities living in the Zhaiyk Caspian basin of Kazakhstan, providing a wide range of coastal, marine and terrestrial ecosystem services. While the oil and gas sectors and other mining and processing industrial activities are the cornerstone of the regional and the national economy, many local communities, including men, women and youth, continue to be dependent on natural resources-based livelihoods, their well-being for generations being dependent on ecosystem services, including livestock, milk, wool, fishes and other marine products, as well as other tangible and intangible benefits provided by nature. Ecosystems of the basin also attenuate pollution, sequester carbon, offer ecotourism and recreational opportunities, as well as coastline protection. At the same time, unsustainable practices in industrial, social, and livelihood development and population growth, have led to the degradation of ecosystems, biodiversity and their capacity to provide ecosystem services. In order to continue receiving benefits from these ecosystems in the future, in addition to adopting sustainable land and ecosystem management mechanisms, there is a need for reliable finance mechanisms to bolster such efforts. The rationale behind innovative and reliable financing is to overcome the significant gap in nature financing and related green investments that can help protecting and improving ecosystem health, towards avoiding and reversing the current degradation from unsustainable use. However, while funding for ecosystem conservation and management comes from various sources in Kazakhstan, including the public budget, international organizations and private companies, experts interviewed during the PPG unanimously confirmed that funding is not sufficient. The following financing instruments may be applied in Kazakhstan for the projects in biodiversity and ecosystem conservation, namely:

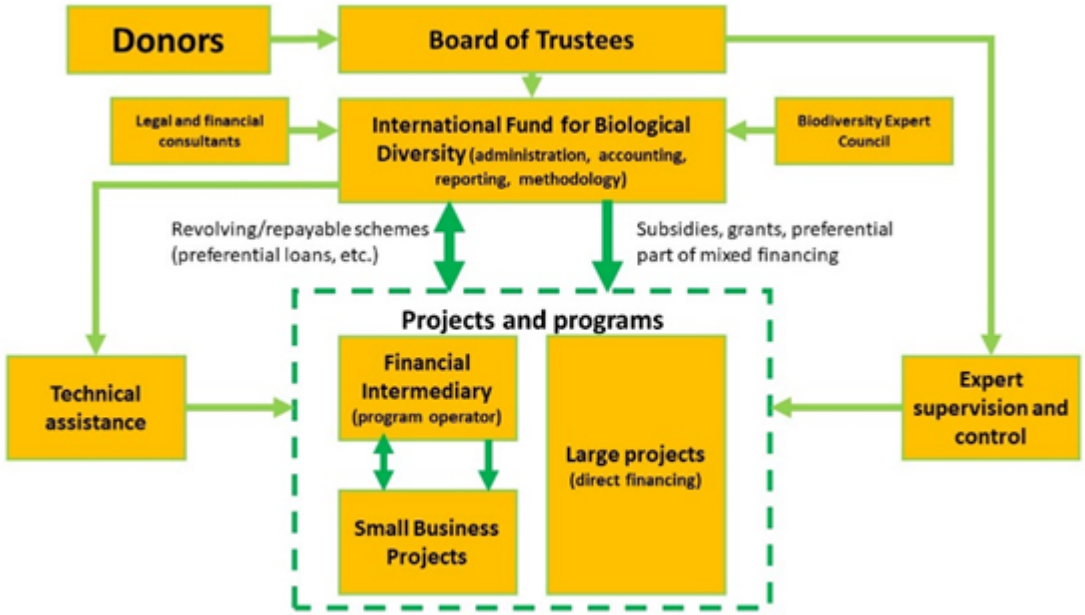
- Grants, budget financing
- Green Loans
- Green/blue bonds
- Concessional loans
- Guarantees for loans or bonds
- Biodiversity offsets (compensations)
- Payments for ecosystem services
- Investments de-risking instruments

These and other instruments will stay at the focus of the project. Where needed, during project initiation separate consultations with women and marginalized groups will be conducted to better capture their perspectives, capacity and interests. The project will attempt piloting some of them and identify required regulatory and institutional changes, as well as capacity building needs, to introduce these and other financial instruments to enable biodiversity and ecosystem protection investments from a wide range of actors. This output will be achieved through the following activities:

Activity 3.2.1 – Analysis of potential innovative financing options for NbS: This activity will support the identification of potential innovative financing options to support the resource needs identified in Activity 3.1.3. The findings of the BIOFIN analysis for Kazakhstan shows that are a number of existing as well as innovative financial instruments that can be piloted to demonstrate their viability in the Zhaiyk Caspian basin. Building on the baseline inventory of innovative finance solutions (Annex 22) for filling any funding gap identified (Activity 3.1.3), the project envisions to further elaborate detailed descriptions of scalable financial solutions with potential for financing ecosystem/biodiversity conservation or for nature-positive investment activities, either

from increasing public financing as the current mainstay of biodiversity finance in Kazakhstan or from blended finance schemes. Preliminary potential finance solutions identified during the PPG include, among others (i) Offset measures/compensation mechanism; (ii) Local budget funds (environmental payments) directed towards biodiversity / land restoration / protection; (iii) Insurance systems; (iv) Subsidies and/or fiscal incentives; (v) Green loans and guarantees; (vi) Green/blue bonds issued by governmental or international financial institutions used to provide concessional loans with reduced interest through national banks; (vii) Grants from private sector companies; and (viii) Payments for ecosystem services; among others. In any model, the project will strive to support blended mechanisms, combining project / public / international concessional investments with financing from other sources, and opportunistically attempt potential piloting of the innovative financial instruments. The project will develop a tailored financial support mechanism to support an innovative financial instrument, based on a blended financing approach and leveraging private and/or public investments with such financial support mechanism. Comprehensive descriptions will be prepared, using language and level of details appropriate to potential users - recipients of finance, finance intermediates as well as public and donor organizations - of each mechanism.

Activity 3.2.2 - Support the creation of an International Fund for the Conservation of Biological Diversity, initiated by the President of Kazakhstan: Biodiversity Conservation Funds (BCFs) commonly are legally independent institutions that provide sustainable financing for biodiversity conservation through mobilization of resources from diverse sources - international donors, national governments, the private sector, etc. - for directing them, primarily through grants or concessional loans, to governmental bodies (such as protected areas agencies), NGOs, and community based-organizations to support achieving the biodiversity targets set in the country or region. In consultations with the government of Kazakhstan, the project would provide assistance to the BCF establishment, initially supported by government funding: (i) recommendations and assistance for the design and structuring, governance and internal document flow, so that the BCF could become an attractive and low-risk counterparty for the international donors, as well as a transparent and efficient channel for the national public funding; (ii) assist in initial pipeline building for the BCF, as a natural development of the project's own pipeline, including pilot and perspective projects already identified and the additional potential opportunities that may emerge during the project life, in such a way that these projects could be proposed to potential donors when the BCF is starting its fundraising; (iii) capacity building for the BCF's team, for its smooth start with a special focus on the specifics of biodiversity-themed projects and investments, NbS financing, application of biodiversity-themed financial instruments and schemes.



Activity 3.2.3 - Prepare a portfolio of NbS linked to finance solutions: In order to catalyze specific investments in NbS to strengthen ecosystem and biodiversity conservation and promote nature-supportive (alternative) revenue-generation investment-models, building on the analysis of potential innovative finance options for NbS (Activities 3.2.1 and 3.2.2), the project will develop a portfolio of comprehensive Concept Notes of location-suitable nature conservation and nature-positive investment opportunities, which can be supported by appropriate finance mechanisms as a proof-of concept. The portfolio of detailed Concept Notes will be prepared as part of local capacity building and consultation campaigns with the active participation of local communities, finance intermediates and the private sector, to build linkages between potential technical on-the-ground solutions and providers of appropriate finance mechanisms. In elaborating detailed Concept Notes for specific NbS solutions, screening tools for financing solutions, and guidelines will be developed to assess and value the benefits of the proposed NbS, risks vs opportunities, expectations around economic/financial/social and environmental safeguards impacts and (in)tangible benefits or externalities especially with regards to ecosystem and biodiversity impacts, gestation period for derivation of benefits to develop, methodologies and partnerships involved. Other key issues to be reviewed include the assessment of the sustainability of initiatives, the capacity of the relevant government entities to provide support and/or mobilize resources, the potential for mobilizing private sector involvement and finance, the role of finance intermediates, and

the availability of mechanisms to ensure accountability and transparency. In this, special attention will be also paid to identify specific financial solutions and resource mobilization strategies that promote the engagement of women, youth and disadvantaged groups in business development and improving livelihood, to ensure that they have opportunities to engage in project activities, share in the benefits and participate in decision-making. Furthermore, specific financial solutions and resource mobilization strategies will be identified that promote the engagement of women, youth and disadvantaged groups in business development and improving livelihood, to ensure that they have opportunities to engage in project activities, share in the benefits and participate in decision-making.

Activity 3.2.4 - Develop a set of smart fiscal incentives to promote private sector engagement: To boost the transition towards sustainable business models, including making the best use of industry revenues and existing development finance to support NbS, including private-public and private-community partnerships, a set of smart fiscal incentives will be developed. In particular, this output will focus on the strategies, plans and guidelines to generate, incubate, and finance sustainable enterprises (including in oil and natural gas development, fisheries, tourism, mining, navigation, etc.) that measurably contribute to the long-term health of the wider environment and its associated communities and economies. Such fiscal incentives might include: (a) commercialization and licensing of innovative technologies; (b) business incubation and other support services for micro, small, and medium-sized enterprises (MSMEs) with attention to women-run business and youth opportunities; and (c) Blended finance including grants, technical assistance, and concessional loans for MSMEs and sustainable finance solutions. Two specific tasks are proposed to support this as follows: (i) project concepts for private public partnership (PPP) shall be prepared for potential funding (within the proposed Cost-Benefit Analysis (CBA)) as part of pipeline preparation for future incubation financing for projects; and (ii) identifying and implementing a defined gender sensitive entrepreneurial "start-up" program to address the under-representation of women in entrepreneurship. It will also entail demonstrating PES instruments in either tourism, oil and gas or mining, that would be piloted after an analysis is done on their feasibility.

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

Key deliverables:

- **Improved capacity of stakeholders** to incorporate and participate in innovative and new livelihood and economic investments
- **5-7 livelihood and business ventures** operational, including women-specific options

Output 3.3 will demonstrate how diversification into blue/green finance solutions can support the emergence of new business opportunities, including nature-based livelihoods and sustainable, nature-positive economic development in key sectors, which, at the same time, contribute to ecosystem services provision and species and habitat recovery. Preliminarily identified sectors include livestock production and pasture management to reduce pressure on coastal regions, other projects that remove ecosystem pressure and strengthen protection, such as fisheries and aquaculture, ecotourism, water management, and others. Opportunities for accelerating new green businesses and resilient green livelihood options will be prioritized for the coastal districts in the Zhaiyk Caspian basin, building on specific local context and opportunities identified. 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. Sector-specific sustainable financing mechanisms to incentivize green livelihoods aligned with the blue/green economy strategy will be selected from the portfolio identified under Activity 3.2.2. Training, capacity development and market/value chain assessments to support green business development will be provided. The project will support the design and implementation of 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:

Activity 3.3.1 – Capacity building to support promotion of NbS for blue/green business development: Building on the portfolio of NbS developed (Activity 3.2.2) and financial incentives defined (Activity 3.2.3), this Activity will strengthen the awareness and capacity of the wider stakeholder community on the concepts and principles for applying and incorporating NbS in livelihood and economic investments (value chains and SMEs) in the Zhaiyk Caspian basin to achieve sustainable socio-economic benefits accompanied by ecosystem and biodiversity outcomes. Building on a detailed capacity needs assessment to develop an understanding on the level of knowledge, gaps and weaknesses among provincial and local authorities, sectoral institutions, private sector companies, scientific and educational institutes, as well as community organizations, a comprehensive capacity and training program will be developed. The program will improve stakeholders' understanding on the incorporating the NbS approach in livelihood and economic investments, pathways for mainstreaming NbS into decision-making and policy processes, stepwise guidance on aspects for effective NbS interventions, including investment planning, design and budgeting, incubation, leveraging finance and rolling out of targeted NbS solutions. Particular attention will focus on providing tailored training programs for the promotion of women-friendly enterprises and business opportunities, including business planning, financial management and risk management. The training program will also cover monitoring, evaluation and verification of benefits (financial, ecosystem services, biodiversity, jobs, other social benefits, sustainability), and guidance on designing strategies for sustainability and upscaling. Specific attention will be paid to presenting an overview of financial and investment instruments,

opportunities and mechanisms available that promote investments in NbS, negotiation of investment proposals with international donor funds, national funds, banks, high-wealth individuals, etc. Topics on governance, gender-responsive approaches, social inclusion and justice will be incorporated as cross-cutting elements.

Activity 3.3.2 Promotion of livelihood and business ventures: The project will provide technical assistance to state organizations, NGOs, private sector entities, and local communities (including women and disadvantaged groups) to plan, finance and implement the demonstration of targeted NbS interventions in products and services that effectively support maintaining and strengthening ecosystems services and biodiversity in the coastal provinces of the Zhaiyk Caspian basin in Kazakhstan, while providing clear commercial benefits and potential. Potential livelihood and business ventures will be assessed and supported, with consideration of women's interests. Some of the potential ventures might include: h**ydroponic fodder production** to reduce seasonal grazing shortages; **vegetable production** in solar-powered greenhouses as alternative livelihood (particularly for women) to reduce household dependencies on livestock production; investment in **production and processing facilities (for meat, milk, wool, fish, etc.)** to increase value from nature-based products and reduce pressures on marine and land ecosystems; **aquaculture investments** to reduce pressures on (sturgeon) fish resources while avoiding negative impacts on bycatch of Caspian seals; **community-based ecotourism**, **green grass/honeycomb conveyor** to conserve land resources, provide sustainable forage for livestock and bees, and sustain pollinators, **precision agriculture technologies** to optimize use of water, fertilizers, and other resources, leading to improved yields and reduced environmental impact and others. For shortlisted livelihood and business ventures, also a targeted climate risk registry and localized climate risk management plan will be prepared, including the assessment of climate- and disaster-related hazards. To support selected blue/green business opportunities as well as sustainable livelihood activities, the project will facilitate credit, marketing and cooperative agreements. Selection of specific investments will be based on in-depth analyses of benefits and positive externalities of NbS, such as reduction of financing / insurance costs for corporations from reduced risks, long-term fiscal effects of the increased productivity of the ventures and utilizing the results of these analyses for mobilizing funding. Activities by the project would include modelling of typical cases, including analysis of their economic and support needs (subsidies, guarantees, other concessional elements), review of pilot project proposals, working with potential investment beneficiaries to elaborate technical specifications, estimation of environmental and biodiversity benefits, cost benefit analysis, and promoting the business case for pitching proposals to potential investors. Through these activities, the project will support: (i) building the capacity of stakeholders in the value chain: (ii) providing limited low-cost infrastructure in collaboration with national, provincial and private institutions to equip producers and service providers with both technical and infrastructural elements (small-scale processing, storage and marketing facilities); (iii) providing market support to enable producers and service providers to obtain maximum value for their goods and services; (iv) developing PPPs to support blue/green businesses, with appropriate rules and policies for such partnerships; (v) identifying specific business ventures for women and disadvantaged groups; (vi) identifying and supporting sustainability financing mechanisms as incentives to promote blue/green businesses; (vii) supporting the implementation of 1-2 nature friendly and economically feasible projects though green finance and/or de-risking instruments, and (viii) assessing the potential to pilot a PES scheme for ecosystem support / conservation or restoring, to identify its scaling up potential and regulatory, institutional and knowledge gaps and bottlenecks. A final list of demonstration investment pilots to be supported by the project will be agreed during year-1 of the project.

Activity 3.3.3 Promotion of private sector-community partnerships: This will entail mapping of private sector entities operating in tourism, agriculture, fisheries, and related sectors to assess their potential to partner with, and support community-based livelihood and business ventures. The mapping will evaluate their market size, business capacity, and track record in biodiversity-friendly practices and assess their interest and readiness to participate in community-based NbS promotion, potential financial contributions, and the technical and capacity-building support required. Additionally, this activity will analyze relevant regulations, policies, and local contexts to ensure investments are aligned with conservation objectives, social equity, and gender equality. Recommendations will be developed to link private investments with local beneficiaries while ensuring ecosystem restoration and economic benefits, identifying a potential list of nature-based SMEs and value chain options (including targeted investments for women and disadvantaged groups), pre-screening for financial and technical support availability, timeframes for maturity, ecosystem benefits, climate risks, and gender equity considerations.

COMPONENT 4: KNOWLEDGE MANAGEMENT, AWARENESS RAISING AND GENDER MAINSTREAMING

(Total Cost: USD 5,453,670; GEF project grant requested: USD 402,992; Co-financing: USD 5,032,757)

The objective of this component is to improve the availability and quality of learning and knowledge sharing to inform policy and decision-making processes on strengthening integrated planning processes and practices to enhance sustainable economic development with proper considerations for maintaining and restoring the ecological conditions of landscapes and seascapes and their valuable biodiversity in the Zhaiyk Caspian basin and across Kazakhstan. This will be primarily accomplished through the development or update of an existing public, open access web-based platform that consolidates all data collected during project implementation, including data, knowledge, case studies and best practices, as well as existing data from government entities as the partners of the project. Eventually the platform could also serve to include data from NGOs, research and educational institutes and the private sector, as well as communities. The platform will also specifically contribute to the analysis and sharing of data and knowledge, while also offering open-access to protocols and tools for spatial planning, the integration of landscape features with sectoral economic development drivers, and the planning of rational use of natural resources with focus on the conservation and

restoration of ecosystems and biodiversity. Learning and knowledge sharing by the project supports adaptive management by providing better insights into what works, fostering continued learning, and enabling the refinement of strategies and objectives in response to future monitored outcomes as well as changes in environmental, social or economic conditions. As such, adaptive management allows for collaboratively achieving more effective, long-term results beyond the project's initial timeline, as it strengthens personal capacities, builds institutional memories, and enhances a culture of learning and sharing that can be applied in future after the project formally ends.

Further, this component will support education and awareness enhancement about the importance of marine, coastal and terrestrial ecosystems for human and biodiversity well-being, engaging public sector entities, private sector partners, and the public at the local, regional and national levels. Gender mainstreaming that is integral to ensure equitable participation and benefit-sharing among all stakeholders, particularly women and marginalized groups, will be achieved through targeted support to implementation of the gender mainstreaming action plan that includes specific actions to ensure that women, youth and disadvantaged groups directly participate in benefit sharing activities related to livestock production, fisheries, land and water management, alternative livelihood enhancement and potential value chain activities, based on gender data gaps identified. This component will also support Kazakhstan in improving its capacity and outreach for communication and exchange of knowledge on terrestrial, coastal and marine issues. Communications and knowledge management are key gaps that hinder the broad uptake of sustainable management practices in the Zhaiyk Caspian basin. Therefore, this component will specifically support a communications and knowledge management strategy to promote the dissemination of relevant information and lessons learned.

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

This outcome will seek to strengthen awareness and communication fostering inclusive, gender-responsive awareness and capacity-building to ensure that the project's innovative practices, lessons and knowledge generated are identified, documented and disseminated, in support of the replication and upscaling of MLSP and implementation approaches for strengthening the sustainable use of marine and terrestrial natural resources, including based on the application of biodiversity conservation practices, SLM and NbS, as well as improved financing and a better understanding among resource users, other stakeholders and the society at large of the relationship between economic development, related threats posed by the unsustainable use of natural resources, and the importance of maintaining ecosystem services and biodiversity across the Zhaiyk Caspian basin. For this, the project's approach includes developing tailored communication messages and educational instruments, strengthening the collection and sharing of information and knowledge among state entities, sector agencies, communities and other stakeholders, and improving cooperation and learning based on exchange of information at the national and international levels. 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

Key deliverables:

- Develop and **disseminate an awareness raising and communication strategy** aimed at achieving a improvement in awareness of the value of the Caspian Sea and its biodiversity among key target groups.
- Implement a **gender action plan** to improve inclusion, decision-making and benefit sharing with women and disadvantaged groups

To ensure improved awareness and enhanced understanding on marine and terrestrial ecosystems, their ecosystem and biodiversity values, and their sustainable economic potential for use by a range of stakeholders, the project will develop a range of gender-sensitive communication and learning tools to mainstream knowledge sharing about biodiversity in coastal and marine development activities across society. Given that women and disadvantaged groups are among the first to experience the devastating impact of 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 sustainable natural resources use and conservation processes, 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. This output will be achieved through three activities:

Activity 4.1.1 - Implement a gender-sensitive awareness raising and communication strategy: Through education, awareness and evidence-based communication activities, including tailored communications plans and materials for different stakeholder audiences, the project intends to ensure that the diverse stakeholders, including government authorities, sectoral agencies, conservation authorities, private sector entities and the wider public, including women, youth and disadvantageous groups, become more aware of the needs for biodiversity conservation actions, and take an active role in the conservation and sustainable management practices across the project region. In addition, engaging women and disadvantaged groups is envisioned to contribute to advancing their rights and empowerment, helping women, youth and disadvantaged groups to be full and equal participants in society and change agents for biodiversity conservation. Design of the awareness raising and communication strategy (i) adopts global best practices in Social Behavior Change Communications (SBCC) in line with recent GEF STAP guidance and advisory documents on developing behavior change campaigns targeting certain key stakeholders; (ii) is based on stakeholder analyses to identify the key audiences for the strategy, including policymakers, decision-makers, civil society organizations and local communities, women and youth, and the private sector; (iii) includes a clear messaging

framework and brand identity for the project that communicates effectively the importance of Zhaiyk Caspian basin and its biodiversity, as well as the project's objectives, outcomes, and impacts; (iv) includes the development of 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; (v) fosters partnerships with media outlets and influencers to amplify the project's messaging and engage wider audiences; (vi) includes a system for collecting, synthesizing, and disseminating knowledge, tools, and best practices emerging from the underlying project and other projects in the country, including using geospatial decision support tools; and (vii) provides a recognition program to celebrate local conservation heroes and promote collaboration with regional celebrities and organizations. The awareness and communication activities will emphasize specific focus to: (i) incorporate inclusive gender perspectives across all activities; (ii) ensure equitable distribution of benefits through research on gender and social roles; (iii) collect and share gender-disaggregated information; and (iv) provide training for project staff to effectively apply gender mainstreaming in communications and project implementation.

Activity 4.1.2 Implement a gender analysis and mainstreaming action plan. To make the project's interventions more socially inclusive, by ensuring a close fit with local contexts, culture, environment and livelihoods, a mainstreaming action plan based on gender analysis has been prepared. The objectives of the gender analysis and action plan (GAAP) is intended to promote gender equity in all practices aimed at addressing environmental and nature resources degradation in the target oblasts given the significant role of women in agricultural and rural livelihoods, to ensure that they are active participants in decision-making on integrated natural resource management and productive activities. The GAAP will also help monitor the progress of project outcomes disaggregated by gender. The GAAP provides gender-responsive measures to be implemented to address gender gaps or promote gender equality and women empowerment by closing gender gaps in access to and control over natural resources, improving women's participation and decision-making; and generating socio-economic benefits or services for women. For this, the project's results framework or logical framework includes gender-sensitive indicators.

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

Key deliverables:

- **Documentation and dissemination** of 8 knowledge products (at least 5 focusing on women's / marginalized people's roles and participation)
- Preparation of **a Replication and scaling up strategy**

This Output will ensure that the successes (and failures) from the implementation of project activities in the project's target regions will be documented and disseminated, and that learning and experiences are shared in regional, national and international fora. As part of an effort to promote scaling up, this output will be supported by the following activities:

Activity 4.2.1: Documentation and dissemination of case studies, best practices, and lessons learned from the project: Through technical reports, publications, and other knowledge management (KM) products, case studies, best practices, and lessons learned from the project shall be documented and disseminated in local languages, using non-technical terms for community use. Documentation will also focus on specific gender-related lessons emanating from the project. The project shall further facilitate participation in national and regional events to share information and lessons on MLSP, SEA, CRVP and NbS through: (i) hosting lessons sharing, including joint activities with the World Bank project in the area of the Caspian Sea and other projects with the focus on biodiversity and ecosystem protection; (ii) participation in relevant regional events for learning and knowledge exchange; and (iii) promoting best practices through networks, study visits, and regional/global communication channels.

Activity 4.2.2: Develop policy guidance notes: To address constraints and gaps in existing policies and legislation, promoting integrated, inclusive planning approaches and the promotion of best practices to protect the Caspian Sea and its critical species, the project will prepare a set of relevant policy guidance notes. The policy guidance notes could focus on learning and lessons from application of SEA, MLSP, CRVP and nature-based solutions that can lead to improved policy guidance on address sustainable pasture management, PA and eco-corridor management, sustainable fisheries and tourism development, as well as on multi-sectoral and integrated planning approaches at the basin level.

Activity 4.2.3: Oblast level workshops to facilitate dissemination of field lessons: To promote integrated planning relevant at a basin level, oblast level workshops will be organized to inform the audience on the project's field results that support planning and policy changes. The initial documentation of these lessons will be included as part of the participatory monitoring process, that would be complemented by additional national technical support to distil and document lessons and experiences. The project will support workshops at the landscape level (Year 4) to share lessons and experiences and a national workshop at the end of Year 5 to facilitate the sharing of lessons more widely and be able to further develop and refine successful approaches for replication nationally.

Activity 4.2.4: Preparation of a replication and long-term sustainability plan/strategy: Based on project experiences and best practices for promotion of integrated and inclusive, gender-sensitive basin planning and management approaches, conducting of SEA and MLSP and promotion of NbS, the project will prepare a replication and long-term sustainability plan/ strategy. The sustainability plan will outline how the involved institutions and actors are to ensure that the project developed approaches,

institutional setups and deliverables will be maintained following the end of the project. The plan should ensure that the relevant entities have agreed to and have the capacity (including financial/funding) by the end of the project to ensure that these entities can continue the project's engagements after the project. Examples would be continued database management and upgrading, continued capacity building development and delivery, continuation of the Biodiversity Conservation Funds etc.

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

Key deliverables:

- 10 **knowledge sharing events** among Caspian Sea countries

With the Caspian Sea being an ecosystem shared between 5 Caspian states - Azerbaijan, Iran, Kazakhstan, Russia and Turkmenistan - in 2006, the riparian states signed the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran Convention)[12][59]. The Convention serves as an umbrella governance framework which lays down the general requirements and the institutional mechanism for the preservation, restoration, and protection of species and habitats, for environmental protection from pollution, and for the rational use of living resources and sustainable economic development in the Caspian Sea region. To reach these objectives, the Convention promotes internationally acknowledged environmental principles, including the precautionary principle, the polluter pays principle, the principle of access to information, the principle of environmental impact assessment and environmental monitoring, and the principle of research for conservation and development. As parties to the Tehran Convention, the riparian states are required to take all appropriate measures to achieve these objectives individually or jointly and to cooperate with international organizations. Since its signing, the Tehran Convention has supported the development of regional legal frameworks, including measures, procedures, and standards for the implementation of the Convention. The Convention also formulated an Environmental Monitoring Program (EMP) to facilitate and coordinate marine environmental monitoring, established the Caspian Environment Information Centre (CEIC), and engaged in updating the Strategic Convention Action Plan (SCAP) and aligning National Convention Action Plans (NCAPs) for improved Caspian Sea environmental protection. To increase awareness on environmental problems among stakeholders, annually Caspian Days are organized.

In order to promote sharing of best practices and lessons learned from the project, and to receive information on best practices from other Caspian Sea nations and the global community, including UNDP, World Bank, UNEP and other donors, and support Kazakhstan with the implementation of its obligations under the Tehran Convention, this Output will explore opportunities for meaningful participation in specific regional and global events that aim to improve transboundary coordination in the Caspian region, on strengthening biodiversity conservation, ecosystem restoration, pollution control, and other relevant topics. This Output would be supported the following indicative activities:

Activity 4.3.1 - Regional cooperation and exchange: To promote strengthening transboundary policy harmonization, strategic planning, and collaboration on marine, coastal and terrestrial ecosystem management, biodiversity conservation and other critical transboundary issues among Caspian riparian states, the project envisions supporting Kazakhstan stakeholder participation in high-level missions and workshops under the Tehran Convention and other international conventions, as well as scientific exchange visits between collaborative institutions in the Caspian basin. In strengthening such national stakeholder engagement, the project achieves strengthened dialogue and knowledge on lessons learnt and best practices demonstrated across national boundaries in the Caspian basin as well as globally, while promoting the transfer of regional and global best-practice knowledge for improved implementation of relevant activities under the project. Specific attention will be paid to close collaboration, knowledge sharing and exchange visits with other regional countries that are implementing similar projects. As relevant and opportune, presentations on project results may be considered at global platform meetings.

Activity 4.3.2 - **Collaborative learning program:** In order to strengthen impact from improved regional cooperation and exchange, the project will design and implement a collaborative learning program as approach for supporting more emotionally aware, informed, motivated and cooperative stakeholders that ensure knowledge development and retention, as well as the practical application and scaling up of innovative solutions from the local levels to the Caspian basin level, through integration of stakeholders' diverse perspectives. A collaborative learning strategy (CLS) will be developed in year-1 of the project, describing in depth the type of instruments applied to reach and engage various stakeholder groups, including through formal networks under the Tehran Convention as well as informal networks and communication channels at the local, regional and international levels. The CLS will build on adaptive demonstration experiences that enable individuals to expand their knowledge through acquaintance with hands-on experiences on integrated conservation planning as well as nature-positive economic development from across the Caspian basin and beyond, stimulating critical thinking and enhancing cognitive development through practical, contextual experiences. To achieve basin-wide impact on improved knowledge from learning, the CLS will be designed and implemented in close coordination with the transboundary WB-UNEP BCS project, specifically with regards to regional workshops and training sessions of institutions in the riparian countries, transboundary exchanges between practitioners on best practices

for biodiversity monitoring, protected areas planning and strengthening management of pollution and biodiversity, policy harmonization, MLSP processes for cross-sector planning, and other relevant topics.

COMPONENT 5: MONITORING AND EVALUATION

(Total Cost: USD 1,830,331; GEF project grant requested: USD 135,250; Co-financing: USD 1,695,081)

This Component will design and operate a monitoring and evaluation system, with focus on providing technical support with limited financing to establish monitoring protocols and conduct monitoring of the project outcomes in terms of integration of biodiversity conservation, gender and sustainable economic development at the Zhaiyk Caspian basin landscape/seascape level. The M&E system will follow UNDP and GEF M&E policies, and will aligned with the NBSAP and KMGBF.

Outcome 5. Enhanced monitoring for adaptive management.

This Outcome will support an effective M&E system that enables effective monitoring and evaluation of project progress and impact, in such way that it is inclusive of the needs of women and opportunities to strengthen gender mainstreaming through project activities. The system will include monitoring protocols to assess project progress and impacts, enabling evidence-based decision-making by government resource managers, private resource users, and other stakeholders. It will also facilitate mid-term and terminal evaluations, with revisions to the monitoring protocols as necessary to ensure relevance and alignment with project goals. Monitoring and evaluation will include gender disaggregated data collection to capture the impacts and benefits of the project on women. During the monitoring process, the project management unit (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. Results from the M&E system will inform adaptive management to optimize project performance. This Outcome has one Output. This Outcome has one Output.

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

Key deliverables:

- **Development and Implementation of Monitoring Protocols** designed to track integration and impacts of biodiversity conservation, gender, and sustainable economic development outcomes at landscape and seascape levels.
- **Mid-term and Terminal Evaluations** to assess project efficacy and outcomes, leading to timely adjustments in strategies and approaches.
- Yearly based Annual Project Implementation Reports (PIR) to track and assess the progress of development projects against their planned objectives, ensuring accountability and transparency in the use of resources.

The project will design and operate a monitoring and evaluation system to track environmental and socio-economic benefits generated by the project. The M&E system will follow UNDP and GEF M&E policies. The monitoring system can be used to inform decision-making by government resource managers and private resource users. It would include the following activities: (i) development and validation of the monitoring framework for the project, including methods and responsibilities for monitoring, data standardization and reporting, accuracy and reliability, etc.; (ii) undertake monitoring and compliance in relation to safeguard, gender, stakeholder engagement and Grievance Redressal Mechanism (GRM); (iii) regular update of safeguard, gender and stakeholder engagement plans and approaches; (iv) prepare regular progress reports for sharing among partners, GEF and government and non-government entities; (v) conduct mid-term evaluation, make adjustment and adapt as required to ensure achievement of project outcomes and (vi) conduct terminal evaluation and disseminate findings.

Activity 5.1.1 - Conduct an inception workshop within three months of project approval, following UNDP-GEF guidance. During the course of project implementation, Project Steering Committee/Project Board meetings shall be convened at least twice annually to review progress and provide strategic direction.
Activity 5.1.2 - **Prepare and submit regular project reports**, including the Annual Project Implementation Review (PIR) and UNDP annual performance reports, to ensure accountability and transparency in project implementation.
Activity 5.1.3 - **Monitor and ensure compliance with project implementation plans**, including the Gender Action Plan, Stakeholder Engagement Plan, and Social and Environmental Safeguards. Periodically project risks shall be reviewed and assessed for compliance with safeguards, to ensure inclusive and equitable implementation.
Activity 5.1.4 - **Track progress against all indicators** in the project Results Framework, and prepare regular updates to measure and report on the achievement of project outcomes.
Activity 5.1.5 - **Commission independent mid-term and terminal evaluations** in accordance with UNDP-GEF guidelines. Implement recommendations from these evaluations to enhance project performance and inform adaptive management strategies.

[1] Eco-corridors are formally recognized in the country's Law on Specially Protected Areas (2006) https://adilet.zan.kz/rus/docs/Z060000175_#z325

[2] These include the Kyzylsay Regional Nature Park (68,445 ha; WDPA-ID n/a), the Adamtas State Nature Sanctuary (68,374 ha; WDPA-ID n/a), the Zhabayushkan State Nature Sanctuary (316,141 ha; WDPA-ID n/a), the Tasorpa State Nature Sanctuary (160,086 ha; WDPA-ID n/a), the Yeset State Nature Sanctuary (complex) (146,790 ha; WDPA-ID n/a), the Manashy State Nature Sanctuary (complex) (228,028 ha; WDPA-ID n/a) and the Kolenkeli State Nature Sanctuary (complex) (58,923 ha; WDPA-ID n/a).

[3] https://doi.org/10.2305/IUCN.CH.2020.PAG.30.en

[4] Terrestrial protected areas include the Akzhayik State Nature Reservation (111,500 ha; WDPA-ID 342650), Karakiya-Karakolsky State Nature Sanctuary (137,500 ha; WDPA-ID 62600), Novinsky Nature Sanctuary (45,000 ha; WDPA-ID 62615), Aktau-Buzachinsky State Nature Sanctuary (170,000 ha; WDPA-ID 62578), Ustyurt State Nature Reserve (223,342 ha; WDPA-ID 11827), Kenderli-Kayasanskaya State Nature Zone (1,230,290 ha; WDPA-ID 342649), Kyzylsai State Regional Nature Park (68,445 ha; WDPA-ID n/a), and 'stepping stone" PAs along the terrestrial eco-corridor (978,342 ha; WDPA-ID n/a).

[5] Marine protected areas include the Northern Caspian Sea State Nature Zone (662,630 ha; WDPA-ID 342651) and the recently established marine PA 'Seal Island State Nature Reservation' (108,632 ha; WDPA n/a).

[6] *Kostianoy A.G and V. Pesic, 2024. Advances in Environmental Monitoring of the Caspian Sea. Ecologica Montenegrina 76: 201-210; https://dx.doi.org/10.37828/em.2024.76.12*

[7] Mirzabaev A. et al., 2016. Economics of Land Degradation in Central Asia; http://dx.doi.org/10.1007/978-3-319-19168-3_10

[9] Brander L.M. et al., 2024. Economic values for ecosystem services: A global synthesis and way forward; https://doi.org/10.1016/j.ecoser.2024.101606

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

[2] Primarily SDG15 Life on Land and SDG 14 Life below Water; but also SDG 13 Climate Action, SDG 3 Good Health and Wellbeing, and SDG 5 Gender Equality.

[3] Eco-corridors are formally recognized in the country's Law on Specially Protected Areas (2006) https://adilet.zan.kz/rus/docs/Z060000175_#z325

[4] These include the Kyzylsay Regional Nature Park (68,445 ha; WDPA-ID n/a), the Adamtas State Nature Sanctuary (68,374 ha; WDPA-ID n/a), the Zhabayushkan State Nature Sanctuary (316,141 ha; WDPA-ID n/a), the Tasorpa State Nature Sanctuary (160,086 ha; WDPA-ID n/a), the Yeset State Nature Sanctuary (complex) (146,790 ha; WDPA-ID n/a), the Manashy State Nature Sanctuary (complex) (228,028 ha; WDPA-ID n/a) and the Kolenkeli State Nature Sanctuary (complex) (58,923 ha; WDPA-ID n/a).

[5] https://doi.org/10.2305/IUCN.CH.2020.PAG.30.en

[6] Terrestrial protected areas include the Akzhayik State Nature Reservation (111,500 ha; WDPA-ID 342650), Karakiya-Karakolsky State Nature Sanctuary (137,500 ha; WDPA-ID 62600), Novinsky Nature Sanctuary (45,000 ha; WDPA-ID 62615), Aktau-Buzachinsky State Nature Sanctuary (170,000 ha; WDPA-ID 62578), Ustyurt State Nature Reserve (223,342 ha; WDPA-ID 11827), Kenderli-Kayasanskaya State Nature Zone (1,230,290 ha; WDPA-ID 342649), Kyzylsai State Regional Nature Park (68,445 ha; WDPA-ID n/a), and 'stepping stone" PAs along the terrestrial eco-corridor (978,342 ha; WDPA-ID n/a).

[7] Marine protected areas include the Northern Caspian Sea State Nature Zone (662,630 ha; WDPA-ID 342651) and the recently established marine PA 'Seal Island State Nature Reservation' (108,632 ha; WDPA n/a).

[8] *Kostianoy A.G and V. Pesic, 2024. Advances in Environmental Monitoring of the Caspian Sea. Ecologica Montenegrina 76: 201-210; https://dx.doi.org/10.37828/em.2024.76.12*

[9] Mirzabaev A. et al., 2016. Economics of Land Degradation in Central Asia; http://dx.doi.org/10.1007/978-3-319-19168-3_10

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[12] https://tehranconvention.org/en/home