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**United Nations Development Programme**

**Project Document for nationally implemented projects  
financed by the GEF Trust Funds**

<b>Project title:</b> Conservation and sustainable management of key globally important ecosystems for multiple benefits		
<b>Country:</b> Kazakhstan	<b>Implementing Partner:</b> Forestry and Wildlife Committee of the Ministry of Agriculture	<b>Management Arrangements:</b> National Implementation Modality (NIM)
<b>UNDAF Outcome:</b> <u>Outcome 1.3.</u> Ecosystems and natural resources are protected and sustainably used, and human settlements are resilient to natural and manmade disasters and climate change		
<b>CPD Outputs:</b> Output 1. Selected settlements have adopted integrated models for sustainable growth Output 2. Disaster risk reduction plans and dedicated multi-stakeholder coordination mechanisms in place in disaster-prone regions Output 3. Natural resources are protected, accounted for and integrated in national and/or sub-national development planning Output 4. National and sub-national institutions have strengthened capacities in environmental governance in protected territories and adjacent settlements		
<b>UNDP Strategic Plan Output:</b> <u>Output 1.3:</u> Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste. <u>Output 2.5:</u> Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation.		
<b>UNDP Social and Environmental Screening Category:</b> Moderate risk	<b>UNDP Gender Marker:</b> GEN2	
<b>Atlas Award ID number:</b> 00097224	<b>Atlas Output ID/Project ID number:</b> 00101043	
<b>UNDP-GEF PIMS ID number:</b> 5696	<b>GEF ID number:</b> 9193	
<b>Planned start date:</b> January 1, 2018	<b>Planned end date:</b> December 31, 2022	
<b>LPAC date:</b> TBD		
<b>Brief project description:</b> Kazakhstan has approximately 12.6 million hectares of forest, which makes it one of the most forest-rich countries in Eurasia, despite the fact that its forests amount to only 4.6% of the national territory. Approximately 95% of Kazakhstan’s forests are managed by 123 state forestry entities, which are overseen by regional governments (akimats). Under the current forest governance system, forestry entities lack sufficient capacity to effectively manage HCVF, including those forests neighboring highly biodiverse protected areas.		

Kazakhstan's protected area system covers approximately 24,018,800 ha, or 8.81% (as of 2015) of the total country, although only 5% of Kazakhstan's forests are included within protected areas. Therefore, forest ecosystems are underrepresented in the national protected area systems. Kazakhstan has three main forest ecosystem types: alpine forests, tugai (riparian) forests, and saxaul landscapes (desert and semi-desert shrubs).

The project strategy is to holistically address the conservation and sustainable use of forest ecosystems in Kazakhstan, through management approaches including both protected areas and sustainable use of associated HCVF landscapes. Many forest ecosystems in Kazakhstan have mixed landcover (forest and pasture) and mixed-use (i.e. pastoralism in forest pastures) characteristics. Therefore, the project is also applying an integrated landscape management approach by targeting sustainable land management practices within forest landscapes.

The project is structured in three components:

- *Component 1.* Improved representation of globally important forest biodiversity and improved management of protected conservation-important forests
- *Component 2.* Better integration of forest PAs in wider landscape, including enabling environment for sustainable management of conservation-important ecosystems
- *Component 3.* International cooperation and knowledge management

On the ground, the project will work primarily in three regions covering multiple landscapes:

- *East Kazakhstan Province:* Altai mountain forests, Saur and Tarbagatai mountain forests
- *Almaty Province:* Zhetysu Alatau mountain forests, Northern/Central Tian Shan mountain forests, Ile river basin tugai forests, Ile river basin saxaul zones
- *South Kazakhstan:* Western Tien Shan mountain forests, Syr Darya river tugai forests

<b>FINANCING PLAN</b>		
GEF Trust Fund		\$8,069,178 USD
UNDP Cash Co-financing		\$200,000 USD
Cash co-financing to be administered by UNDP		\$0 USD
<b>(1) Total Budget administered by UNDP</b>		<b>\$8,269,178 USD</b>
<b>PARALLEL CO-FINANCING (all other co-financing that is not cash co-financing administered by UNDP)</b>		
Forest and Wildlife Committee of the Ministry of Agriculture		\$70,510,507
Institute of Zoology		\$59,249
Almaty Province		\$8,229,217
East Kazakhstan Province		\$7,177,711
CSO - WWF		\$318,992
CSO - ACBK		\$300,000
<b>(2) Total co-financing</b>		<b>\$86,795,676</b>
<b>(3) Grand-Total Project Financing (1)+(2)</b>		<b>\$94,864,854</b>
<b>SIGNATURES</b>		
<b>Signature:</b> Mr. G. Sadibekov Vice-Minister of Energy, GEF FP	<b>Agreed by Government</b>	<b>Date/Month/Year:</b>
<b>Signature:</b> Mr. Y. Nysanbayev Vice-Minister of Agriculture	<b>Agreed by Implementing Partner</b>	<b>Date/Month/Year:</b>
<b>Signature:</b> Ms. M. Altangerel UNDP Deputy Resident Representative	<b>Agreed by UNDP</b>	<b>Date/Month/Year:</b>

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## II DEVELOPMENT CHALLENGE

1. Compared to its overall region, Kazakhstan is a country with low forest coverage. According to the national standards, the forest coverage is approximately 4.6% of the area of the country (Baizakov 2015). However, this percentage amounts to around 11.5 million ha of forest cover, which makes Kazakhstan one of the most forest-rich countries in Eurasia (World Bank 2003). All forests in Kazakhstan are managed under protection functions, falling under several types of HCVF. Currently, the majority of the forest fund in the country is state owned, with only approximately 387 ha of forests being privately owned (data 2013, Baizakov 2015). About 80% of the state forest fund is managed by regional governments (Akimats), and 20% by the Forestry and Wildlife Committee. In total, approximately 5% of forests are protected within PAs, and 95% are managed by the 123 state forestry entities (currently overseen by Akimats).

2. The **Forest Governance** system in Kazakhstan has some controversial attributes that hamper the sound management of the forests in a broad landscape. The central forest governing body (Forestry and wildlife Committee) controls only 20 % of the forested area with the fixed annual budget and relevant competences. These are mainly the forests within the protected areas. While the remaining 80% of forests are managed by the regional governments that are usually have less resources and competences, while the management objectives of both types of managed forests is to maintain of ecological and socio-economic functions of the forest ecosystems. The forests outside the protected areas, having the same protection functions, sometimes are more vulnerable both in terms of natural and human caused threats. For more in-depth explanation of the forest governance system in Kazakhstan see Annex R of this Prodoc. Reassessment and restructuring of the forest governance system could significantly increase the potential benefits of healthy forests ecosystems. The state forest management planning is focused on the instructed processes and production of the formal reports rather than adaptive management with clearly sets science based targets both for individual forest characteristics, and effectiveness of ecosystem functions in a landscape. As a result of such governance, the defined afforestation targets are not realistic and achievable in the existing silvicultural systems, the data on ecological characteristics of the state forests is not available, the existing data is not properly analyzed to recommend feasible measures, the management targets are not specific and accurately monitored, the intersectoral coordination is poor and inefficient to maintain important ecological functions of the forests, the threats monitoring is poorly structured and documented.

3. **Protected areas.** To protect its globally significant biodiversity, Kazakhstan has established a system of protected areas covering 22,121,641 ha (8.1% of the total area of country). At the moment, PA system coverage include only 4.89% of forested areas. Some of the ecosystems which have globally important species remain outside the PA system notably the unique riparian (tugai) forest and floodplain ecosystems (have 0% representation country-wide), which support a number of endemic and threatened species, large stands of valuable coniferous forests in Altai region, representing an important CO<sub>2</sub> pools, and saxaul forests playing critical role in supporting wealth of local communities in a drylands zone. A summary of the capacity of Kazakhstan's forests for carbon storage, sequestration, and emission is included as Annex S to this Prodoc. The current estate does not fully cover the habitat of the snow leopard population groups. Only 30-35% of its range in Kazakhstan is protected within the PA network, which bars effective protection from de-gazettement and poaching. Huge areas that provide a natural bridge and genetic interactions between the Tien Shan, Zhungar and Altai population groups of snow leopard stay outside of the existing protected areas network.

4. The **condition of the valuable forests** and collection/analysis of the relevant data is performed by a number of enterprises on a tender basis depending on the state budget availability. This includes a complex study that is to be done each 10 -15 years and which provides recommendations on measures to be accomplished to maintain the sustainable forests ecosystems. In practice such study is not done on a regular basis, in some areas it was completed only 20-25 years ago. The data that is being collected is stored within the implementing company and is only available through an official request to the FWC. The data is poorly mapped and not interpreted into a long-term management plans on the ground and strategic regional or national plans for forests management. Neither PAs nor forestry entities have sound integrated forest management plans, that would set a desirable ecological and socio-economic targets and clear action plan for their achievement. National legislation also requires annual inventories to be completed by the forest management units. But due to poor capacity and budgeting this inventories are formally implemented and recorded data is not analyzed for adapting management objectives and actions to improve the

ecological status of the forest stands, but simply records the standard characteristics of the forest that are used only for formal reporting purposes. In addition, the silvicultural systems in Kazakhstan have not been evolved since soviet times and do not consider the changing ecological, economic and social context over the time. Silviculture research capacity has degraded and academic curriculum at the relevant faculties also needs revision and upgrade. As a result, the staff of the forestry state agencies and management entities observe and report the negative changes in forest ecosystems, such as conversion of dark coniferous forest into leaf forest, change in tree species numbers and distribution patterns, replacement of valuable tree species with less ecologically important species, change in natural reproduction level of the forest and undergrowth composition, decrease of forest cover and land degradation, change in soil composition and moisture, change in hydro regime, and climate change, increase of forest pests, overharvesting of forests sub products, shrinking of valuable genetic resources distribution areas etc., but they find it difficult to systemize the evidences in a scientific way, as well as align the individual observations with threats reduction needs and methods of doing this. The revision of annual inventory content and procedures, as well as mentoring and training of the staff in completing annual forest inventories that would focus on specific management objectives and threats reduction, is vitally needed.

5. Generally, the overall natural resources management system in Kazakhstan tend to ignore the potential and benefits of integrated **threats assessment** approach as a basis for management planning and monitoring of ecosystems, species and habitats. There is general understanding of all stakeholders that in addition to the poor silvicultural systems, forest ecosystems are heavily impacted by human caused threats, including inappropriate regulation of the water use and releases, overgrazing due to poor pasture management practices and regulatory framework, illegal cutting, overharvesting of forest sub-products, linear infrastructure, unregulated tourism, and fires. But there are no formal mechanisms and sufficient capacities on the ground to properly record, document, and analyze these threats and integrate the reduction measures into the regional and rural development programs, as well as no capacities for identifying the best practices for addressing the threats and successful examples. Considering the climate zoning of Kazakhstan, the forested areas are the most populated areas with dynamically developing agriculture. The existing forest management model is based on “cutting off” and protecting the forests from the human interventions and existing and potential threats, which is sometimes just impossible to complete due to limited agricultural resources, and sometimes hampers the socio-economic development of the region. The project needs to change such paradigm of perceiving the forest resources by capturing the effects of multiple ecosystem services (like pollination, pest control, nutrient cycling, water regulation etc.) on the agricultural indicators (crop yield, soil fertility, pastures’ quality, income) and translate those into comprehensive **landscape plans and regional development programs**.

6. Sustainable forest management requires at the national and local level, especially at the management planning stage. But such practice does not exist in Kazakhstan. There are at least three major sectors with relevant state institutions that are engaged in sustainable forest management – nature resources, agriculture, and water resources. Even though all three are roofed under the same Ministry of agriculture, the practice proved that there is no any long-term or operational inter-sectoral coordination between these sectors; each of them is regulated by a separate program, and there is no any officially approved effective tool for planning and monitoring of crosscutting issues. This is also true for the regional level, where 80% of managed forests belong. Regional government has more authority and wiliness to interact, but they have poor capacity in landscape planning and developing integrated action plans. As a result, the problems and threats to forest ecological functions are mounting up, agricultural resources are affected by land degradation, local communities become deprived of opportunities to increase their income. The changing water regime caused by uncoordinated regulation of water use and water releases at the power station dumps is a good example of how one sector practically destroys the ecosystems and agricultural lands.

7. The government of Kazakhstan declares 10% forest cover level as a target until 2030. This is intended to be achieved through improved afforestation practices with a focus on supporting and stimulating the developing of **private forests**. The study conducted within FLERMONECA project has proved that Kazakhstan wood market has a potential that could drive the development of private afforestation. But some important restrictions were identified that needs to be addressed. Some of these include: 1) Insufficient incentives at a policy level. Incentive of having state support of up to 50 % of the establishment costs for the first ten to fifteen years is indeed a high incentive, but it faces the great challenge of being implemented in a sector lacking successful examples and documented data on the matter. Forest Code was not supported by timely approval of the relevant bylaw containing the economic mechanisms of realization of the support. Also, cost norms per hectare have not yet been determined, and

discussions concerning the recognition of indirect afforestation costs is still ongoing. Additionally, the possible exclusion of investor's in-kind contributions from the support could create a severe obstacle for small scale afforestation carried by private persons or small forest enterprises. 2) Private forest property can only be obtained through afforestation since transfer of existing forest fund to privates is forbidden. Contracts for long-term forest users are limited to 49 years, meaning that investments (e.g. applying silvicultural concepts, improving of roads etc.) do not guarantee future revenues. 3) Cheap wood products currently entering the country have caused the closing of wood production facilities with further reducing forest management activities.

8. Additional information on the relevant **legislative and policy context** for this project in Kazakhstan is included as Annex M to this Prodoc.

9. In relation to the above context and root causes, there are three main barriers to the effective conservation of biodiversity and sustainable management of forest and land resources. First is that there is not currently sufficient technical or financial capacity available to support the necessary process for expanding the protected area system of Kazakhstan to be appropriately representative of Kazakhstan's forest ecosystems. There is government and political will to expand the protected area system, and Kazakhstan is committed to meeting the international target of 10% national protected area coverage, but to actually develop proposals for establishing scientifically and socio-economically rationalized protected areas at a large scale (the project aims to establish new protected areas covering over 1.8 million hectares) requires significant inputs. In addition, there is insufficient capacity for effective management of PAs in many forest PAs, as demonstrated by the average METT score of 45 among PAs with baseline METTs completed for this project. Therefore, the first part of the project's strategy, as described in the next section, is to make a significant contribution to the establishment of new forest PAs and to the strengthening of the management of new and existing forest PAs.

10. The second major barrier is a poorly functioning institutional framework for forest management combined with the lack of experience with modern and innovative forest and land management models and mechanisms. The current institutional framework of forest management units managed by regional governments is inefficient, and does not allow necessary strengthening of capacity for forest management. Ensuring sustainable forest and land management requires creative approaches based on the most scientifically and technically current knowledge about how ecosystems function, and about how people interact with ecosystems. While Kazakhstan, like many former Soviet states, has a long history of forest management, the existing forest management regimes are by and large based on outdated concepts and approaches, from Soviet times. Sustainable forest management requires a diverse array of management approaches, based on the current technology and research. The project will introduce a number of innovative approaches, models, and techniques, including the introduction of HCVF management practices, forest inventory and management planning that incorporates remote sensing data, the use of information technology for effective pasture management, public-private partnerships, economic valuation of ecological resources, and sustainable forest management incorporating climate change.

11. The third major barrier is insufficient data and lack of coordination for biodiversity conservation and sustainable forest and land management. There is currently poor coordination amongst national stakeholders responsible for biological monitoring, and wildlife law enforcement. In addition, data and information on biodiversity monitoring is not aggregated, or analyzed in a comprehensive way. Different bodies are responsible for monitoring biodiversity in different areas depending on the management mandate that each area is under (i.e. state forest fund land, protected areas, hunting concessions, community forest and pasture land, etc.). This situation is exacerbated with respect to certain mountain and forest species that are migratory and transboundary – such as the snow leopard, and its prey. There is currently no sharing of data or coordination between Kazakhstan and its neighboring countries with respect to snow leopard monitoring, despite the fact that all of the snow leopard landscapes in Kazakhstan are transboundary. Therefore, the project will undertake multiple measures to improve coordination amongst stakeholders with respect to biodiversity monitoring and wildlife law enforcement, and improve data management and knowledge dissemination.

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### III STRATEGY

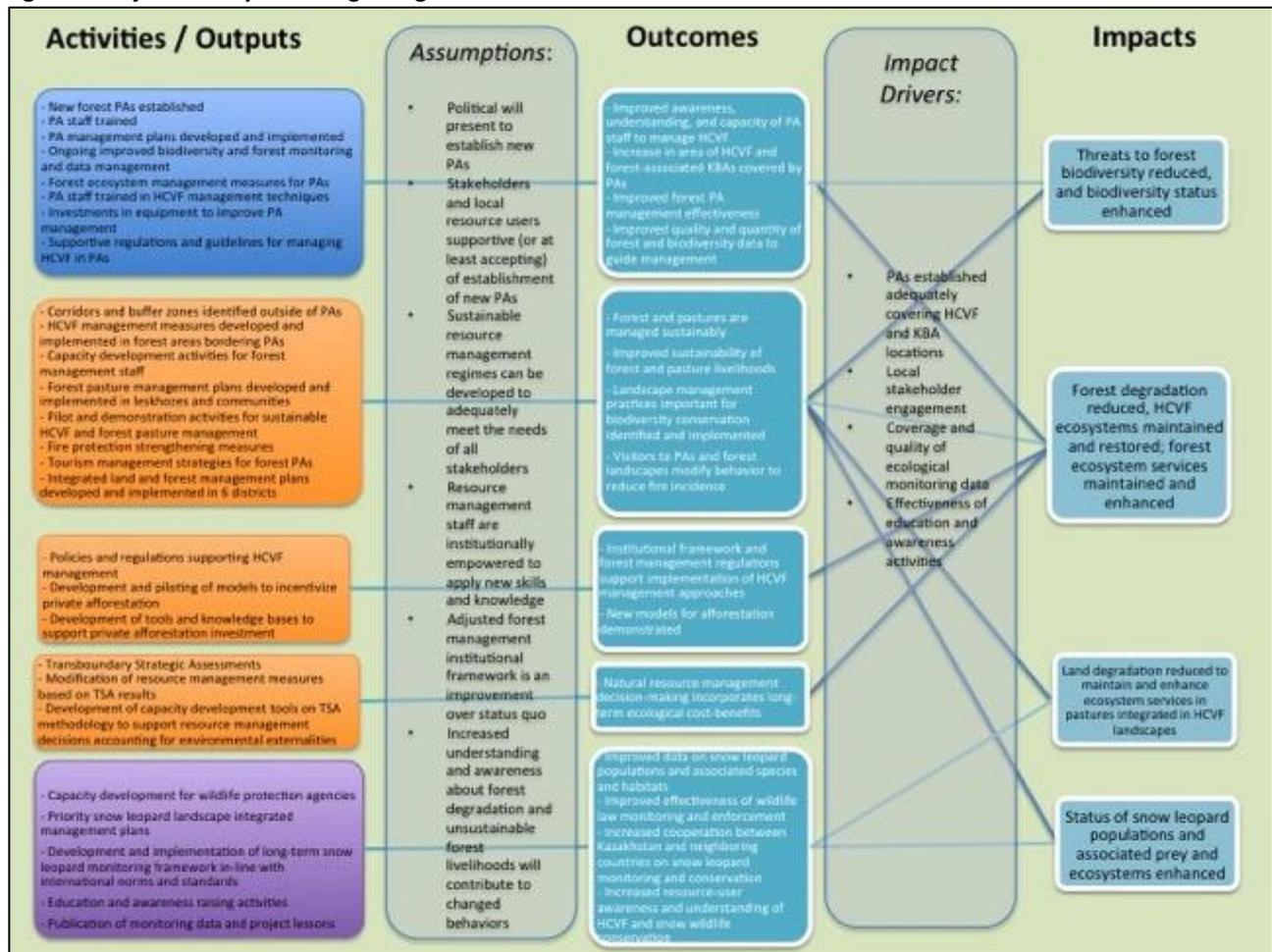
12. The project's theory-of-change (TOC) draws on long-standing foundational approaches to biodiversity conservation and natural resource management, while combining these approaches in new and innovative ways. The project's overall strategy is underpinned by three main theories-of-change, which have been combined to target the effective conservation and sustainable use of forest ecosystems and associated pastures in Kazakhstan. Figure 1 below summarizes the elements of the project's three applied theory of changes.

13. The first main theory-of-change relies on the idea of protected areas as core conservation zones for biodiversity, including rare species and valuable ecosystems. The strategy of protected areas goes back formally more than a hundred years, while the idea of "sacred places" has been part of human development for millennia. The effectiveness of protected areas as a key tool for biodiversity conservation has been supported by numerous scientific studies, and it is this scientific consensus that underpins the GEF's ongoing commitment to protected areas as a core strategic priority in the biodiversity focal area. Protected areas as core conservation zones serve multiple functions that lead to the conservation of species and ecosystems. By being designated as a "protected area", management measures are developed and implemented to serve the purpose of biodiversity conservation – and other functions such as recreation, as well as the potential for sustainable livelihood support. As management measures are implemented (and enforced), habitat loss and degradation is reduced, thereby conserving ecosystems and the individual species associated with them. Even in instances where certain species may travel outside the protected area (e.g. birds, migratory mammals, etc.), protected areas as core conservation zones can function as "source" populations supporting possible "sink" populations outside the protected area. PAs can also serve as valuable tools for increasing the awareness, understanding, and appreciation of nature in local communities, as well as distant populations that may travel to visit PAs. In theory, increasing education and awareness of the importance of biodiversity conservation supports a positive feedback loop whereby stakeholders are increasingly inclined to support nature conservation efforts, while also increasing the likeliness of their willingness to observe environmental laws and regulations.

14. In terms of this specific project in Kazakhstan, the first component of the project employs this theory of change. The project will be working to establish new protected areas that encompass forest and pasture ecosystems, and to strengthen the functioning of existing protected areas. The first step in applying protected areas as core conservation zones is their establishment, which requires an extended process of stakeholder consultation, technical justification, and legal approval. The project will support each of these concurrent steps in order to catalyze the establishment of eight new PAs, and the expansion of three other existing protected areas. The new protected territory will cover critical biodiversity habitats totaling 2.53 million hectares. Protected areas can vary in the degree of conservation approaches applied within their boundaries, and the new and expanded protected areas targeted by the project are expected to range from IUCN category Ia to VI. Once the new PAs are established the project will invest in getting them set up and operational, with the development of appropriate management plans, and the strengthening of management capacity (depending on the timing of the establishment of new PAs during the project's life).

15. To improve the functioning of existing forest PAs, the project must also improve management effectiveness of the PAs through capacity development. This includes the development of high-conservation value forest specific management measures, and the implementation of these measures. This also includes the training of staff, investments in equipment necessary for functioning of the PAs, and the development (and adoption) of additional regulations and legal approaches to facilitate the reduction of threats; for example, it is necessary to develop new regulatory approaches to address the need for active management of invasive species in core conservation zones. In addition, the project will work closely with neighboring communities and stakeholders, to ensure PA management measures are appropriate and reflect nearby resource-user considerations and partnerships.

Figure 1 Project Theory-of-Change Diagram



16. The second theory-of-change applied by the project is based on the recognition that as critical as protected areas are, they are not a complete solution for the effective conservation of biodiversity. Biodiversity conservation must also take place beyond the boundaries of protected areas, and be integrated in the sustainable management of natural resources in the landscapes where moderate to intensive economic activities also take place. There are two purposes to this approach: First, is to support the functioning of protected areas, by providing buffer zones around them that allow a transition of land use management approaches, and establishing corridors between protected areas to ensure that they do not exist as stand-alone islands in the landscape, as it has been proven that most protected areas are not large enough to effectively function this way. The second purpose of the landscape approach is to support the development of land and resource management approaches that recognize the requirements for biodiversity conservation, but also balance these with short-term economic and livelihood needs and requirements.

17. The project plans to implement this theory of change through multiple strategic approaches. The project will support the development of sustainable forest and pasture management plans for HCVF and associated pastures in areas surrounding PAs. The project will work with forest management units (“leskhozos”) to develop forest management plans that reflect HCVF management principles. In addition, the project will work with leskhozos and pasture resource users to develop sustainable pasture management plans for forest pastures. These forest-pasture ecosystems surrounding PAs will help serve as PA buffer zones, as they will apply management approaches that take biodiversity conservation requirements into consideration; for example, nesting or calving sites within the landscape may receive special seasonal protections. Part of this work will include strengthening the capacity of forest and pasture managers through training and technical investments to ensure they are able to implement the sustainable

resource management plans. Key threats to the sustainability of forest management include fires and unregulated tourism, and therefore these issues will receive special consideration under the project to ensure appropriate management measures are developed and implemented, such as raising awareness of tourists about the importance of fire safety, and of using designated tourism infrastructure.

18. The project will also take a landscape-scale approach through integrated resource management and planning at the district level. The project will work with six districts that have forest PAs within their territories to develop land-use plans that recognize PA buffer zones and corridors between PAs. While the project will be working with individual districts on this activity, the project is in-fact applying a landscape conservation approach, as the six districts to be involved have been strategically chosen to form a contiguous reach of territory stretching nearly 1000 km from the southeast corner of Almaty Province to the shores of Lake Balkhash in the northwest of this province.

19. To facilitate improved forest and pasture management on the ground the project will also work to strengthen the national institutional and regulatory framework for forest management in Kazakhstan. While much of the project's work will be at the site-level on the ground, sustainable forest management approaches must necessarily be supported and guided by strategic policy and regulation from above. Therefore, in order to support the implementation of HCVF management measures in individual forest units, the project will also work with the Forestry and Wildlife Committee to improve the institutional oversight structure of leskhozoes, and develop policies that recognize and support HCVF management approaches. The project will also apply a strategic approach of developing incentive based partnerships for reforestation and afforestation, as it is government policy to increase the forest coverage within the country by 2030.

20. To further develop and strengthen the theory of change for improved natural resource management in the wider landscape, the project plans to pilot an innovative approach for identifying and applying cost-benefit analysis that integrates ecological considerations. This is the Targeted Scenario Analysis (TSA) approach developed by UNDP environmental economists in collaboration with other partners. This approach works to analyze the ecological as well as economic costs of certain natural resource management decisions, thereby providing decision makers with improved information and insights. The mechanism for change in this activity is that if environmental externalities are fully accounted for in natural resource management decision-making then this will lead to improved environmental outcomes. In the case of this project, the TSA pilots will focus specifically on natural resource management approaches that directly impact biodiversity and forest management.

21. The third theory-of-change approach relates to coordination and knowledge management for biodiversity conservation activities. This approach is based on the fact that biodiversity outcomes are improved if, a.) stakeholders have quality scientific information to base management decisions on; and b.) if conservation efforts are coordinated among stakeholders. Therefore, the project will carry out a number of strategic activities under the third component to improve the quality of biodiversity monitoring information, in particular in relation to monitoring of snow leopard populations, their prey, and their habitats. In addition, the project will carry out knowledge management activities to disseminate and share biodiversity monitoring information. The project also plans a set of education and awareness raising activities to further engage stakeholders in conservation activities, and improve coordination among stakeholders. The project will also coordinate actors in relation to wildlife law enforcement; there are a wide range of government organizations and institutions involved in various aspects of wildlife law enforcement, and to ensure the effectiveness of enforcement activities these partners must operate in a complementary and synchronized manner. Finally, the project will coordinate among neighboring countries in relation to snow leopard conservation, particularly with respect to snow leopard monitoring. This is critical since snow leopards, and their prey, have large home ranges that can extend across international borders. Therefore, to fully understand and manage these wildlife populations it is necessary to neighboring range states to share monitoring data and other information important for effective management.

22. Key Biodiversity Areas Analysis: Considering that KBA concept is new for Central Asia, in 2016 the Critical Ecosystem Partnership Fund (CEPF) came together with the European Union and other members of its Donor Council to discuss common interests with regard to investments in the Mountains of Central Asia biodiversity hotspot, and donors agreed to fund the ecosystem profile preparation. The profile process was launched in May 2016, and concluded in May 2017. The purposes of the ecosystem profile is to provide an overview of biodiversity conservation in the Mountains of Central Asia biodiversity hotspot, to present an analysis of the priorities for action, and to strengthen the constituency for conservation in the region. The ecosystem profile represents an attempt to collate

the data and make it available to conservationists, decision makers and other stakeholders in the region. It is the first ever experience of application of the newest IUCN 2016 Standard on the Key Biodiversity Areas. The rankings of KBAs followed the CEPF approach – an assessment from the biological point of view to determine the level of threat, and an exploration of the practical factors that determine the feasibility of carrying out a project in a specific place. The country consultations included reviews of preliminary KBA maps and data.

23. The Mountains of Central Asia hotspot consists of two of Asia’s major mountain ranges, the Pamir and the Tien Shan. These are situated within southeastern Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, northwestern China, northeastern Afghanistan, and a small part of Turkmenistan. The mountains of Central Asia are crucial to the maintenance of the natural and agricultural global biodiversity. The vertical distribution of species by elevation results in a wide range of species and ecosystems spread over a relatively small surface area. The region harbors genetic resources of the wild species of several domesticated plants and animals such as wheat, apples, pears, almonds, walnuts and pistachios, as well as horses and goats, and are host to more than 30 distinct ecosystems.

24. Figure 2 below indicates the identified KBAs in the mountain zones of the targeted project areas, in Almaty Province and South Kazakhstan Province. Table 1 below lists the KBAs within Kazakhstan’s portion of the Central Asian Mountains hotspot; the KBAs highlighted in the table are included in the targeted project activities.

**Figure 2 KBAs in the Kazakhstan Part of the Central Asian Mountains Hotspot**



**Table 1 KBAs in Kazakhstan's Portion of the Central Asian Mountains Hotspot (project areas shaded)**

No	KBA	Area, thousand ha	PAs	% of PA coverage
1	Karatau	41,415	Karatau Nature Reserve	83%
2	Kyzylkol	4,16	-	-
3	Arystandy	19,84	-	-
4	Turkestan	119,8	Syrdarya-Turkestan Regional Park	100%
5	Ugam	76,60	Sairam-Ugam National Park	100%
6	Tolebi	45,6	Sairam-Ugam National Park	100%
7	Boraldai	27,0	Sairam-Ugam National Park	100%
8	Aksu-Zhabagly	132,0	Aksu-Zhabagly Nature Reserve	100%

9	Chokpak Pass and Ters-Ashchibulak Reservoir	10,16	-	-
10	Berikkara	17,5	Berikkara Sanctuary	100%
11	Merke	159,0	-	-
12	Aksai	86,7	Ile-Alatau National Park	100%
13	Almaty Reserve	71,7	Almaty Nature Reserve	100%
14	Issyk	99,8	Ile-Alatau National Park	100%
15	Assy Plateau	542,4	Almaty Sanctuary	100%
16	Kolsai	161,0	Kolsai-Koldary National Park	100%
17	Toraigyr	267,7	-	-
18	Narynkol			
19	Tuzkol	3,194	-	-
20	Charyn Park	127,0	Charyn National Park	100%
21	Altyn-Emel	460,2	Altyn Emel National Park	100%
22	Koksu	240,0	Verhnekoksuski Sanctuary	100%
23	Zhongar Alatau	356,0	Zhongar-Alatau National Park	100%

25. *Innovativeness*: The project has multiple innovative elements. The concept of HCVF is not currently applied in Kazakhstan, and therefore the introduction and implementation of this management approach for forests in Kazakhstan will be innovative at the national level. The project strategy is forward looking in that it seeks to apply a fully integrated landscape management approach to address the interdependent and complementary issues of biodiversity conservation, sustainable forest management, and sustainable land management. The fact that the project will focus on these three integrated environmental issues will allow the project to actually carry out on-the-ground activities in an integrated manner, rather than as separate and disparate activities. Through the Incentive-based Ecosystem Management Partnership this project is promoting engagement of communities and particularly the private sector in sustainable management and restoration of ecosystems important for their biodiversity and land integrity functions. Furthermore, this project is the first in the region that will promote full valuation of mountain, tugai and saxaul ecosystem services, and integration of the ecological values into the economic land use decision-making. In addition, with respect to biodiversity monitoring, including snow leopard and prey monitoring, the project expects to apply the latest and most current technological approaches available, including camera traps, GPS tracking, DNA analysis, and other similar technologies. A standardized monitoring approach that would be compatible with research, monitoring and surveillance standards in the neighboring countries will enable a full picture on the status of snow leopard and quick and effective action taken to remove or avoid threats to it, paving the way to the stability of the species, not only in Kazakhstan but throughout its range.

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## IV RESULTS AND PARTNERSHIPS

### IV.i Expected Results:

26. *Project Goal, Objective, Outcomes and Outputs/Activities*: The project objective is to improve conservation status and management of key forest and associated grassland, riparian and arid ecosystems important for conservation of biodiversity, land resources and provision of livelihoods for local communities. The project also seeks to promote gender equality and women's empowerment, to the extent relevant and feasible within the scope of the project. In order to achieve the project objective, and address the barriers, the project's intervention has been organized into three components:

- *Component 1*: Improved representation of globally important forest biodiversity and improved management of protected conservation-important forests.
- *Component 2*: Better integration of forest PAs in wider landscape, including enabling environment for sustainable management of conservation-important ecosystems.
- *Component 3*: International cooperation and knowledge management.

27. On the ground the project will work in regions with key areas of Kazakhstan with alpine forest, tugai forest, and saxaul forest ecosystems. These ecosystems (and particularly alpine ecosystems, the main habitat of the snow

leopard) are encompassed in the three administrative regions targeted by the project: East Kazakhstan Province (Altai and Saur-Tarbagatai mountain zones); Almaty Province (Zhonggar Alatau, North and Central Tien Shan mountains, Charyn and Ile river and Ile-Balkhash delta floodplain forests, and associated saxaul ecosystems); and South Kazakhstan Province (West Tien Shan mountain ecosystems, and Syr Darya river floodplain forests, and associated saxaul ecosystems).

28. Institutionally the project will work with 11 newly planned PAs, 12 existing PAs, 10 forestry units, 12 rural districts, 4 villages, and 6 districts of Almaty region for landscape planning output. The project works at both the national level and at the site level, at multiple planned demonstration sites.

29. **Project maps**, and details on the targeted project sites are provided in Annex L of this Prodoc.

30. The proposed project is a multi-focal area project, and does not have the conservation of snow leopards as its primary objective. However there are multiple linkages to Kazakhstan’s national snow leopard and ecosystem protection program (NSLEP), particularly under Component 1 and Component 3 of the project. The project supports the establishment of multiple new protected areas, many of which will include snow leopard habitat. The Global Snow Leopard and Ecosystem Protection Program (GSLEP) has a goal of securing 20 snow leopard landscapes among the 12 range states by 2020. Kazakhstan’s NSLEP identifies its two national snow leopard priority landscapes as 1.) The Zhonggar Alatau (see Figure 3 below); and 2.) The North/Central Tien Shan (see Figure 4 below).

**Figure 3 Zhonggar Alatau Snow Leopard Landscape** (Source: Kazakhstan NSLEP, 2013)



Figure 4 North/Central Tian Shan Snow Leopard Landscape (Source: Kazakhstan NSLEP, 2013)



Table 2 Current and Expected New PA Coverage of Priority Snow Leopard Landscapes in Kazakhstan<sup>1</sup>

	Zhongar Alatau Priority Landscape	North/Central Tian Shan Priority Landscape	Total
<i>Snow leopard range</i>	1,000,000+ ha	1,100,000+ ha	2,100,000 ha
<i>Current PA coverage of snow leopard landscape</i>	Zhongar Alatau National Park: 227,149 ha Tuktinskogo Reserve: 82,179 ha Total: 309,000 ha	Kolsay Kolderi National Park: 155,487 ha Almaty Zapovednik: 67,455 ha Ile-Alatau National Park: 112,363 ha Almaty Zakaznik: 188,688 ha Total: ~524,000 ha	833,000 ha
<b>Current PA % coverage</b>	<b>30%</b>	<b>48%</b>	<b>40%</b>
<i>Expected new PA coverage of snow leopard landscape</i>	Koksu Reserve: 514,106 ha Zhongar Alatau National Park expansion: 131,477 ha Total: ~645,000 ha	Ketmen Ridge Reserve: 126,847 ha Terskey Reserve: 215,478 ha Kolsay Kolderi National Park expansion: 99,360 ha Total: ~441,000 ha	1,087,000 ha
<i>New PA area % coverage of snow leopard range</i>	61%	40%	50%
<i>End-of-project total PA coverage of snow leopard landscape</i>	955,000	965,000	1,920,000
<b>End-of-project total PA % coverage of snow leopard range</b>	<b>90%</b>	<b>88%</b>	<b>89%</b>

31. The exact boundaries of the snow leopard range in these landscapes have not been comprehensively mapped, and the boundaries of these snow leopard landscapes are approximate; however, based on the approximate boundaries, these two landscapes total 2,100,000 hectares of snow leopard habitat – 1,000,000 ha in the Zhongar Alatau, and 1,100,000 ha in the North/Central Tian Shan. Currently, in the Zhongar Alatau landscape just ~30% of the landscape is protected. In the North/Central Tian Shan ~48% of the landscape is protected. By the

<sup>1</sup> Note: The area of new PAs is estimated via GIS-analysis, based on current approximate proposed PA boundaries. However, all hectares figures related to the new PAs are approximate, as the exact boundaries of any proposed PAs cannot be determined until (and if) they are formally approved.

end of the project, it is expected that more than 500,000 ha additional hectares will be protected in the Zhongar Alatau, bringing the total PA coverage of snow leopard habitat in this landscape to ~80%. In the North/Central Tian Shan an additional 500,000+ ha is expected to be secured, which should bring PA coverage of snow leopard habitat in this landscape to ~99%. If the project is able to achieve this new PA coverage, this will represent a major achievement and significant milestone for the conservation of snow leopards in Kazakhstan. Table 2 above summarizes the current and expected new PA coverage of the two national priority snow leopard landscapes.

32. The project seeks to achieve seven main outcomes:

- **Outcome 1.1:** Prevention of loss of conservation important forest and associated non-forest ecosystems and their biodiversity:
  - New protected areas established covering 1,830,389.7 ha
  - Initial METT scores improved 30% over baseline by end of project
  - Increased coverage of 1,284,286 ha of mountain forests, tugai, and saxaul ecosystems in PA system
  - Improved trend of populations of globally significant biodiversity indicator species, such as snow leopard, argali, goitered gazelle and other species within the expanded PA estate
- **Outcome 1.2:** Improved management of protected conservation important forests, through HCVF-specific management measures under implementation for 1,899,134 ha of protected conservation-important forests
- **Outcome 2.1:** Improved management of high conservation value forests and pastures in forest PA landscapes with direct community benefits:
  - 1,895,700 ha of pastures and forest pastures under sustainable management
  - 4 community pasture management plans developed and under implementation
  - 4 models of private-public partnership afforestation piloted (**partner co-financed**, covering 200 ha) and results documented and disseminated
  - 6 district level integrated land-use management plans developed indicating PA buffer zones and corridors, and under implementation
  - PA tourism management plans developed and under implementation in 9 PAs facing greatest impacts from unmanaged tourism
  - 2,836,037 tons CO<sub>2</sub> equivalent direct emissions avoided
- **Outcome 2.2:** Strengthened enabling environment to support SFM objectives through updated national policies, regulations, and knowledge management systems supporting improved management of 12,652,400 ha of national forest territory
- **Outcome 2.3:** Integrated economic and environmental valuation of ecosystem services and SFM criteria and indicators embedded in decision making in natural resource management, through piloting of innovative sustainable economic development planning mechanisms:
  - 127,050 ha of conservation-important forest ecosystems benefit from improved natural resource management
  - 3 TSA analyses conducted with results integrated in natural resource-management planning and decision-making
- **Outcome 3.1:** Increased capacities of Kazakhstan to monitor its wildlife, ensure law enforcement, and share knowledge.
  - Capacities and awareness of at least 100 staff of law enforcement authorities, transport police and customs services raised to handle in trafficking and trade crime in sub-regional context
  - Snow leopard monitoring system improved in order to accurately report on Kazakhstan's snow leopard population on an annual basis
  - Knowledge of importance of biodiversity rich forests shared across the country and beyond

33. These outcomes will support systemic transformations in forest management practices in Kazakhstan and demonstrate practical approaches and tools to achieve sustainable functioning of important forests ecosystems for the benefits of local communities and national economy.

34. The planned project outputs and activities under each of the three components are described in detail below.

**Component 1. Improved representation of globally important forest biodiversity and improved management of protected conservation-important forests.**

35. This component consists of two outcomes, which will be achieved through three outputs. The first outcome under Component 1 is **Outcome 1.1. Prevention of loss of conservation important forest and associated non-forest ecosystems and their biodiversity.** The outcome will be achieved through activities under two outputs, described in detail below:

Output 1.1.1 Protection regimes approved for globally important forest ecosystems (saxaul, floodplain forest, and mountain forest), and their associated SLM and biodiversity ecosystem services, in cooperation with local communities.

36. The project will support preparation of the scientific studies, feasibility studies, land use design study and broad consultations with neighboring communities and other stakeholders to increase the representation of important forests and biodiversity within the PAs system of Kazakhstan up to 2,531,082.7 ha in order to maintain forests ecological functions. The proposed activities will be implemented for 11 new PAs:

1. Saur Manrak Reserved zone (332,160 ha)
2. Tarbagatai National Park (143,550.5 ha)
3. Ecological corridor Ili river floodplain forests (197,684 ha)
4. Koksus Reserve / regional park (586,796 ha)
5. Expansion of Zhongar-Alatau National Park (218,278 ha)
6. Ketmen Complex Zakaznik (218,474 ha)
7. Terskey Reserved zone (189,407 ha)
8. Merke Regional Nature Park (88,554 ha)
9. Expansion of Karatau Reserve (19,700 ha)
10. Expansion of Kolsai Koldery National Park (121,315 ha)
11. Planned reserve Ile-Balkhash (415,164.20 ha)

37. The proposed activities are:

1. Completion of technical justification documents
2. Local stakeholder consultations
3. National stakeholder consultations
4. National approval of protected areas

Output 1.1.2 Newly established forest PAs are operationalized with improved management effectiveness, including community management mechanisms.

38. To achieve this output the project will develop the management plans for newly established PAs including inventory of the biodiversity values, setting key management tasks and monitoring targets to address the human caused and natural threats, defining zoning arrangements, and budget and business planning. The project will also support consultations and participatory discussions with local stakeholders to get them engaged in the PAs management planning through the Community Councils to be set up by the project. The biodiversity and ecosystems services values inventory will specifically cover the forests ecosystems current status and management goals and invest into basic infrastructure to foster research and fire prevention measures. To support the strategic planning of this output, during the project development phase a protected areas capacity needs assessment was completed, with the summarized results included as Annex O of this Prodoc. The proposed activities are:

1. Drafting management plan, including zoning, staffing plans, and business plan-based budget

2. Specific planning for management of forest resources within PA management plan
3. Comprehensive field assessment of biodiversity values followed by monitoring
4. Field validation of boundary demarcation
5. Establishment of community management board
6. Initial investment in critical infrastructure and technical capacity to operationalize new PAs
7. Forest ecosystem restoration in Ile-Balkhash tugai forest for ecosystem functioning and biodiversity conservation

39. The second outcome under Component 1 is **Outcome 1.2. Improved management of protected conservation important forests, through HCVF-specific management measures in target PA forests.** Within this outcome the project will work with existing PAs in priority project sites: Altai-Saur-Tarbagatai (East Altai Reserve, Katon-Karagai National Park), North Tien Shan – Zhetysu Alatau (Almaty Reserve, Ile-Alatau National Park, Kolsai Koldery National Park, Zhongar-Alatau National Park), Western Tien-Shan (Aksu-Zhabagly Reserve, Sairam Ugam National Park). The project sites also include important flood plain forests within existing PAs (Syr Darya-Turkestan Regional Park, Ile-Balkhash Reserve, Charyn National Park).

Output 1.2.1. Development and implementation of forest-specific management measures in PA management plans for PAs.

40. The activities under this output will focus on the identified gaps in management planning of the PAs and will aim at improving correlation between identified PA's values, management goals, and monitoring programs; incorporation of the threats reduction analysis tools into management planning processes; integration of specific HCVF management targets into monitoring and research activities with measurable and science-based indicators and adequate funding. To achieve this output the project will review the operational MPs of the 12 existing PAs to identify and incorporate the SFM measures to minimize existing and potential threats to the forest ecosystems, such as forest pests and diseases, fires, fluctuations in hydro regimes, climate change, low natural reproduction rate, and poor survival indicators of reforestation plans. The project will review and improve the existing reforestation standards, target indicators and practices within PAs based on the best international practices. Some activities will address the problem of shrinking range and hybridization of endangered wild fruit forests to the extent that may drive to complete loss of important genetic diversity of the mountain forests. The capacity building program will be implemented based on the recommendations from the capacity needs assessment conducted by PPG team (included as Annex O of this Prodoc), which also looked at capacity gaps related to HCVF forest-management related aspects. The proposed activities are:

1. Revision of PA management plans to appropriately reflect needs of managing HCVF
2. Conservation and SFM measures in PAs for high priority forest management issues
3. Investment in PA technical capacity strengthening for forest and biodiversity management
4. At national level - amendment to PA legislation to allow ecosystem restoration of native species within specially protected zones
5. Management plans for globally endangered species and habitats
6. Management plan for globally important genetic resources of forest ecosystems
7. Training PA staff on HCVF management principles and practices, including special training on local stakeholder and community engagement and participation
8. Introduction and piloting of Assessment for Protected Areas IUCN Green List Standard in at least 1 forest PA

**Component 2. Better integration of forest PAs in wider landscape, including enabling environment for sustainable management of conservation-important ecosystems.**

41. Component 2 consists of three outcomes. The first outcome under Component 2 is **Outcome 2.1. Improved management of high conservation value forests within ecological and economic landscapes with direct community benefits.** The outcome will be achieved through testing of new approaches in district level planning of land use and infrastructure development within important natural landscapes that will account for a complex of ecological, social and economic benefits at the local and national level with implication of GIS based tools and relevant data

management systems. The existing practice does not allow for effective inter-sectoral coordination between land users, resource users and decision makers at the local level, which negatively impacts the forests ecosystems and biodiversity. The planning processes do not consider the natural capital as an asset and does not include forest ecosystem services into environmental impact assessments or estimation of capital investments. The project will address the most prominent threats to forests and biodiversity, such as regulation of hydro regimes of rivers, pasture management, construction of linear infrastructure (roads, fences), and inefficient reforestation and afforestation practices. Outcome 2.1 consists of six outputs, as described below.

Output 2.1.1. Revision and implementation of forest management and monitoring standards and processes and for 8 forestry units bordering forest PAs, including community input mechanisms.

42. Within the current management system the forests are managed based on complex study carried out by the outsourced organization each 15-25 years. This document prescribes mainly sanitary loggings, but the changes in ecosystem usually require more frequent and more targeted monitoring. The project will complete inventory of forests conditions within 6 target forestry units with the 1.18 million ha of forested area to define the HCVFs and key biodiversity areas outside the PAs, where appropriate zoning and additional conservation measures are needed. Based on the inventory results HCVFs monitoring will be revised so that the key forest characteristics are recorded on a regular basis. The project will also review the current silvicultural practices and standards and implement science-based measures enabling effective reforestation standards, including nursery operations and reforestation targets. The staff of the target forestry units will be trained in management of HCVFs to minimize the existing and prevent potential threats. The project will also address the problem of newly constructed autobahn that crosses the forested areas disabling natural migrations and fire prevention operations of the forestries. The project will design and prepare feasibility study for constructing the wildlife passages to demonstrate and scale up a new practice in infrastructure planning to a national level. The proposed activities are:

1. Updated leskhoz forest inventories
2. Identification of and agreement on key biodiversity areas - corridors and buffer zones surrounding PAs
3. Updating leskhoz Forest Management Plans based on inventory and biodiversity data
4. Training on HCFV principles and practices for leskhoz staff, including special training on stakeholder participation and community engagement
5. Saxaul protection and restoration - Research and training on improved saxaul reforestation techniques; improved reforestation techniques; include in development of SLM measures through improved forest pasture management; extend the cutting ban; feasibility assessment of alternative fuel sources; community awareness raising relating to saxaul protection
6. Development of leskhoz grazing plans for sustainable use of forest pastures in agreement with local communities
7. Establishment of genetic bank and nurseries for wild relatives of fruit and nut plants (North Tian Shan, West Tian Shan)
8. Fire protection strengthening measures
9. Feasibility assessment of major infrastructure wildlife crossing points
10. Strategy for removal of non-native invasive tree/bush species in HCVF zones
11. Revision and improvement of silvicultural standards, targets and practices
12. Development of methodology for monitoring system of climate change effects on woody species

Output 2.1.2. Forest pasture management plans developed and implemented with local community engagement.

43. Overgrazing remains key threat to forests outside the PAs especially in areas with limited pastures and growing livestock. Recently approved Law on Pastures was enacted and intends to regulate the grazing loads and pastures rotation based on Pasture Management Plans at a district level as an obligatory tool. The project has selected 11 villages neighboring PAs (with a total pasture area under management of approximately 73,000 ha) where the problem of forest degradation caused by livestock is scaling up and requires urgent interventions. The project will assist in developing methodological base and will demonstrate the procedures and approaches in land use planning and designing the MPs, as well as technical opportunities solving site-specific problems and building

relevant capacities within the target groups. The project will support at least 4 pilot projects within the target districts. The proposed activities are:

1. Pasture inventory - condition and degradation assessment, definition of carrying capacity - in community forest-pasture lands surrounding leskhozoes and PAs.
2. Stakeholder consultations with Pasture Management Committees
3. Development of sustainable pasture management plan, including grazing plan
4. Implementation of SLM via pasture management plan - mechanism for monitoring and enforcement to be defined
5. Four community-driven SLM pilot projects: demonstrating seasonal rotational grazing practices for SLM, and improvement of pastures by complementary seeding of forage herbs
6. Pilot program of installing water points in areas near key tugai forest ecosystems used by livestock.

Output 2.1.3. Incentive-based Forest Ecosystem Management Partnership: Four models of afforestation investments are designed and tested within different ownership patterns, including local community engagement.

44. This output mainly results from the recommendations of the EU funded FLERMONECA program ended in 2015. The forest component of the program in Kazakhstan assessed the opportunities and incentives for different investment and partnership models of afforestation. Four such models were identified as the most feasible for Kazakhstan context (fast growing poplar, reforestation of destroyed stands of forests into productive plantations, improvement of existing forests, afforestation for environment and protection purposes, fruit forests). Additional information on these models is summarized in Annex P of this Prodoc. Potential partners/investors may include forest users, local communities, individual entrepreneurs, households, farmers, cooperatives of forests users, wood industry, large industry (oil, gas, construction). The project will facilitate, support, and document the pilot partnerships demonstrating benefits, gaps, and market opportunities for the modeled afforestation/forest management partnerships. The results of the pilots will be accurately documented and serve as a basis for development of amendments to the relevant regulatory acts and by laws. The information will be posted on available resources and made available to potential investors for scaling up the results. The proposed activities include:

1. Roundtable forum on models, approaches, financial incentives mechanism, potential sites, and identification of partners.
2. Agreement with four partners on the afforestation models to be implemented.
3. Completion of afforestation studies and activities (partner co-financed).
4. Documentation of results, identification of good practices, scaling up and development of information management tools.
5. Draft regulations to implementation experience and amendments to the appropriate legislation.

Output 2.1.4. Integrated land and forest management plans developed and implemented in six administrative districts through community consultation, surrounding newly established PAs, including designation of buffer zones and corridors.

45. Maps of the districts targeted under this output are included in Annex L of this Prodoc. The existing approach in land use planning does not allow for adequate consideration of ecological functions of the landscape due to inefficient data management, uncoordinated operations of infrastructural facilities, nontransparent procedures of environmental impact assessment, and lack of participatory mechanisms allowing for comprehensive and open environmental impact assessment and decision making. In addition local governments do not always have enough technical capacity and equipment to implement the planning of the territory in an integrated way. The project has identified 6 district of Almaty region where the forest ecosystems are heavily impacted by agricultural activities, tourism, infrastructure, and other human caused disturbances. The project will carry out broad consultations with all stakeholders to agree and get relevant commitments and agreements, collect and map the data on ecological functions of the region and anthropogenic layer, and produce zoning recommendations with description of regulations and measures needed to sustainably maintain forests and associated ecosystems' functions and revive the degraded or lost functions. The project will support and create appropriate institutional and individual capacity within local governments and other stakeholders in development of district management plans,

budgets, and distribution of roles and responsibilities of engaged institutions and land users. The proposed activities are:

1. Series of stakeholder consultations within the target districts and at the regional level.
2. Aggregation of relevant data on the current land use practices, condition of the forest ecosystems, threats and causes, infrastructure and on the planned development targets of six districts of Almaty region.
3. Digitization of relevant data into geo-referenced database.
4. Stakeholder consultations to identify key biodiversity areas, corridors, and buffer zones, and corresponding management requirements.
5. Production of final integrated land and forest management plans, with associated management planning guidelines, and public dissemination.
6. Training of local government staff in use of geo-referenced database.

Output 2.1.5 Tourism management strategies developed for forest PAs in cooperation with local communities, strategies integrated in PA management plans under implementation.

46. The tourism activities within important natural systems and especially within PAs are still not sufficiently regulated at the national level, methodological approaches and standards for estimation of visitors loads, infrastructure development, and monitoring of impact on ecosystems is not developed and used by PAs staff. The planning and reporting on revenues from tourism activities do not consider the investments and economic valuation of natural ecosystems services, as well as benefits to local communities. In this context the project will address these challenges on the basis of the most biodiversity rich, ecologically vulnerable and attractive for visitors and investors forest ecosystems – floodplain forests and mountain forests. The project will review the existing practices of planning and monitoring of tourism activities in Ile-Alatau National Park, Charyn National Park, Sairam-Ugam National Park, and Syr Darya-Turkestan Regional Park to accurately document and analyze the gaps. The project will provide expertise in development of methodological base for tourism planning at the level of individual PAs and regional level using available international standards. The results will be integrated into the PA's Management Plans and into the landscape planning methodology of territorial planning in Almaty region Akimat. The proposed activities are:

1. Completion of detailed analysis of tourism loads and impacts on forest ecosystems in each of the listed PAs, including future projections in visitors' number and infrastructure development.
2. Analysis of revenue options from tourism considering the carrying capacity of forest ecosystems.
3. Development of tourism management plan, and integration with existing PA management plan.
4. Construction of basic tourism infrastructure according to management plan.

Output 2.1.6. Hunting regulations developed to fully incorporate biodiversity considerations and economic benefits to local communities, and implemented with strengthened monitoring and enforcement capacity.

47. It is a usual practice in Kazakhstan that hunting concessions operate within the borders of forest fund lands that are managed by the Forestry Units. Although formally the operational plan and zoning of hunting concessions are aimed at conservation of wildlife and forest ecosystems, the existing practice of wildlife monitoring and reporting requires does not provide for comprehensive distribution of responsibilities and mechanisms for coordination between Forestry Units and hunting concessions, the forestries do not have access to wildlife data reported by hunting concessions. As a result the inspectors of forestries observe the decrease of wildlife populations and incorrect reporting of populations' numbers by hunting concessions so that they would get more annual permissions for hunting. The project will support the process of alignment wildlife monitoring and reporting procedures to allow for coordinated wildlife and forests conservation and reproduction. The project will also complete inventory of hunting concessions within the project target forestry units and revise the zoning arrangements at a landscape level, so that for example, wildlife reproduction zones would match the hunting operational plans within the forest fund lands. Additional information on the context of the hunting sector in Kazakhstan is included as Annex T to this Prodoc. The proposed activities are:

1. Inventory of operational hunting areas and biodiversity inventory analysis in forest hunting areas in three regions (Almaty region, South Kazakhstan region, East Kazakhstan region)
2. Research and analysis on effectiveness of current regulations on hunting areas within forestry units, and coherence with biodiversity needs and priorities.

3. Proposal developed and adopted for revised regulations and management approaches in hunting areas operational within the forestry units borders.
4. Strengthened enforcement of hunting regulations - training, equipment for wildlife inspectors.
5. Education and awareness of stakeholders about regulations - local communities near hunting areas, hunting service providers, etc.

48. The second outcome under Component 2 is **Outcome 2.2. Strengthened enabling environment to support SFM objectives through updated national policies, regulations, and knowledge management systems.** Within this outcome the project will accumulate the results of the activities that required amending legislation or other regulatory documents, guidelines, and methodological instructions and tools. This will allow having a set of recommended amendments related to SFM, landscape planning, wildlife monitoring etc. generated within the project outcomes for the next legislation review cycle that will start in 2020 in a coordinated and integrated manner. This outcome will also address the problem of institutional arrangements in forest management. Outcome 2.2 consists of five outputs, as described below.

Output 2.2.1. Review of and modifications to existing forest governance system to ensure that the HCVF managed by 123 forestry entities (12,452,000 ha) are covered by policy objectives to be managed as an integral component of the national ecological network (IUCN VI PA category managed resource protected area).

49. The project will complete a complex assessment of existing system of HCVFs governance to ensure that: the appropriate distribution and understanding of roles of involved institutions is clear and effective within local, regional and central authorities; institutional capacities of those authorities to implement the set tasks are in sufficient to sustainably manage the HCVFs; forest conservation and sustainable use is perceived as a priority goal by all involved institutions; mechanisms for conflict resolution and participatory decision making are in place. The project will also revise the practice of regulation of sanitary logging, that has just recently become banned, but need more justification and research for a long-term planning for different types of forests and locations. Forest data management from the local up to the national level will be another focus of the project, since all stakeholders agree that the existing system of information management on forests condition, threats, and ecosystem status. Based on the piloted partnerships in afforestation models the project will develop amendments to Forest Code detailing the sections on financial incentives for diversification of forest management investors. The project will follow up the achievements of the UNDP BIOFIN project on enabling access and financial incentives to forest certification. The project will focus on market study on forests by-products that may be attractive for the foreign markets. The proposed activities are:

1. Development and endorsement of the HCVF conservation and sustainable management strategy and national plan supported with adequate budget.
2. Assessment of the existing HCVF governance system as to ensure coordinated and effective implementation of the HCVFs Strategy and Action Plan within the available capacities and policy mechanisms between central and local governments.
3. Review the existing technical, ecological and policy regulations on principal, sanitation and other felling in HCVFs based on inventories and threats analysis.
4. Improvement of data management flows and storage with implementation of standardized reporting and database system.
5. Revision and improvement of the existing regulations and tools of HCVF inventories and systemic monitoring.
6. Improve financial and technical regulations for incentive-based private-state partnerships in forest sector
7. Policy and mechanisms for SFM certification are developed and endorsed

Output 2.2.2. HCVF standards, tools, and practices are integrated into national forest management guidelines and regulations to improve the management effectiveness of HCVF

50. The project will summarize the results of the SFM related activities and form a package of recommendations to relevant legislation supported with background and justification information, that will be included into the revision cycle in 2020-2021 for the Parliament hearings. And will support the lobbying and consultations as needed

during the cycle. The project will also investigate the causes and institutional capacity needs for such significant threats to forest biodiversity as forest fires and pests and diseases to further revise the relevant methodological and regulatory arrangements. The proposed activities are:

1. Assessment of the operational policy and guidelines for HCVPs management as to compliance with internationally set standards, tools and practices
2. Develop comprehensive guidelines for HCVPs management planning based on threats assessments, identification and measuring of ecological and socio-economic characteristics and functions of the forests with appropriate inter-sectoral coordination and community engagement mechanisms in place
3. Development of the general scheme of fire early detection, prevention and extinguishing within the forest fund lands.
4. Revision of infrastructure and machinery standards for fires management and integration updated standards into management planning processes.
5. Revision of forest health monitoring system and supported with relevant capacity and policy framework.
6. Research on climate change adaptation measures and setting up a national system of monitoring climate change indicators in forest ecosystems.

Output 2.2.3. Training program and improved forest research and data analysis capacities to support implementation and uptake of HCVP management approaches.

51. Based on the project practices and international experience the project will develop 15 training modules: Sustainable Forest Management, Forest Inventory, Forest Monitoring, Forest Rehabilitation, Silvicultural Practices in Natural Forests and Plantations, Fire Management, Water in Forest Ecosystems, Forest sub-Products Economy, Climate Change Monitoring and Adaptation in Forest Ecosystems, Tourism in Forest Ecosystems, Forest Certification, Wildlife Management in Forest Ecosystems, Land Use Planning in Forest Ecosystems. These modules will be tested in target PAs and Forestry Units during the project course and partner with the relevant educational institutions. The Forestry and Wildlife Committee plans to establish a Forest Center that will be engaged in on-going monitoring of forests, research programs in forest management, data accumulation and analysis. To address the problems of forest related monitoring, research and data management, the project will support the feasibility study and training for the staff of the Center. Proposed activities are:

1. 15 Training models are developed: forest management planning, Forest inventory, Forest management monitoring, Forest restoration and rehabilitation, silviculture in natural and planted forest, fire management, forest and water, non-timber products management, forest pests, forest genetic resources, CC adaptation and mitigation, forest tourism and recreation, forest certification, wildlife management, land use planning.
2. 15 training programs are organized for the target organizations – PAs and forestry units.
3. Design plans for forest research and monitoring center.
4. Forest research and monitoring center is set up and equipped with relevant equipment and software.
5. Training for the staff of the forest research and monitoring center on application of new remote sensing technologies for forest monitoring and inventory.

Output 2.2.4. Based on afforestation pilot activities, relevant by-laws and amendments to the existing legislation are developed and approved.

52. Based on the afforestation pilot activities the project will support the government to adjust the enabling environment to reflect the lessons and experience of the **partner co-financed** afforestation activities, to ensure scaling-up and further replication.

1. Regulations on state co-financing in infrastructure investments for afforestation projects
2. Regulations on subsidized maintenance of forests and SFM practices
3. Regulations on tax reduction
4. Regulations on land provision
5. Regulations on wood and processing sector incentives
6. Regulations on development of carbon credit market and access to international markets

Output 2.2.5. Technical knowledge bank for the private afforestation is set up and maintained by FWC, and accessible by potential interested groups and individuals

53. This output will ensure the information and technical support is further available for interested partners to support the afforestation pilot activities.

1. Definition of the suitable lands for afforestation
2. Cost-benefit analysis for different business cases
3. Setting up a database on afforestation regulations, technical information, and silvicultural systems
4. Marketing of the afforestation business cases and opportunities among potential investor groups.

54. The third outcome under Component 2 is **Outcome 2.3. Integrated economic and environmental valuation of ecosystem services and SFM criteria and indicators embedded in decision making in natural resource management, through piloting of innovative sustainable economic development planning mechanisms.** Outcome 2.3 consists of three outputs, as described below.

Output 2.3.1. Integrated economic and environmental resource management optimization assessments (Targeted Scenario Analysis (TSA)) demonstrated in three resource-management scenarios for improved conditions of mountain forests and grasslands, tugai and saxaul forest ecosystems.

55. The project will recommend the TSA as a tool for assessing economic viability of change in forest resource use through comparing BAU scenario and proposed approach when economic values of forest ecosystem services are integrated into cost benefit and long-term investment analysis and environmental impact assessment. The project will select the most feasible demonstration cases from a proposed list of the following cases: regulation of water supply and consumption regulated by of Moinak hydropower station considering the environmental functions of Ili river floodplain forests in a long-term period; implication of landscape planning methodology in 6 districts of Almaty region; nature-based Tourism Development Program in Almaty region; regulation of harvesting of valuable medical herbs in forests; stabilization of sands to protect roads and villages; introduction of sustainable pasture management methods; forest management practices preventing conversion of coniferous forests into the broadleaf forest (CO<sub>2</sub> pools). An initial feasibility assessment was carried out during the project development phase and is included as Annex U to this Prodoc. The project will conduct TSA for three demonstration projects. The proposed activities are:

1. TSA process completion in three selected demonstration projects.
2. Study tour for hydropower TSA for sharing practical experience.
3. Integration of the results of the TSAs exercises in resource management planning for conservation of three types of forest (mountain forests and grasslands, tugai, and saxaul).

Output 2.3.2. Methodology and guidance for TSAs related to mountain forests and grasslands, tugai and saxaul forest ecosystems, are integrated in Kazakh legal context.

56. Based on the demonstration cases the project will summarize the recommended incentives for implementation of TSA as a tool for graduate integration of natural assets into national policy on investments valuation within natural landscapes. i.e. compensation schemes, tax exemptions, subsidies, certifications, national accounts, EIA procedures, investment regulations, national budget planning. The proposed activities are:

1. Identify and revise sectoral policies relevant for TSA approach and relevant stakeholders.
2. Identify existing mechanisms and gaps for including ecosystem services as inputs into sectoral outputs.
3. Improve the guidance for regional planning by proposing TSA tools.
4. Revise the regulations for EIA for the infrastructure development projects within the regions containing HCVFs
5. Consider the TSA application for development of financial incentives for afforestation projects and agroforestry projects (subsidies, tax exemptions, certifications).

Output 2.3.3. TSA is integrated into capacity development and professional training courses.

57. The project will strengthen the national capacity to conduct this type of economic and environmental evaluation within Kazakhstan to support further scaling-up, replication and stronger future integration of this approach into natural resource management policy making, particularly in relation to forest ecosystems.

1. Agreements with training partners on mechanism, curriculum, and process for training on TSA
2. Development of TSA training materials and courses
3. Adoption and integration by training partners of TSA training materials and courses
4. Piloting "test class" first round of TSA national training

### **Component 3. International cooperation and knowledge management**

58. Component 3 consists of one outcome: **Outcome 3.1 Increased capacities of Kazakhstan to monitor its wildlife, ensure law enforcement and share knowledge.** Outcome 3.1 consists of four outputs, as described below.

#### Output 3.1.1. Enhanced enforcement capacities of wildlife protection agencies

59. The project will provide suitable and sufficient equipment and supplies, appropriate terms and conditions of service, and supported and incentivized patrol staff in order to optimize the effectiveness of law enforcement patrols to ensure skilled and knowledgeable rangers, experienced and competent patrol leaders. In addition the project will review the existing system of patrols planning and pilot the SMART tool for introducing proactive and dynamic patrol strategies, collection and use of patrol data, effective management systems and infrastructure, and clear and consistent standards and procedures to maximize effectiveness of management and will enable Improved investigation collaboration mechanisms with other law enforcement agencies and with prosecutors, ensuring the investigative process leading to prosecution in court. The proposed activities are:

1. Provide support to ensure suitable and sufficient equipment and supplies, appropriate terms and conditions of service, and supported and incentivized patrol staff in order to optimize the effectiveness of law enforcement patrols to ensure skilled and knowledgeable rangers, experienced and competent patrol leader by assessing the current systems, gap analysis, and capacity building measures.
2. Development of proactive and dynamic patrol strategies, collection and use of patrol data, effective management systems and infrastructure, and clear and consistent standards and procedures to maximize effectiveness of management.
3. Improvement of investigation collaboration mechanisms with other law enforcement agencies and with prosecutors, ensuring the investigative process leading to prosecution in court.
4. Training of the senior rangers and patrol rangers in operational planning and deployments, patrol management, care and maintenance of equipment, information and data handling, standard operating procedures, crime scene training, fitness training.

#### Output 3.1.2 Implementation of Kazakhstan's National Snow Leopard Ecosystem Conservation Plan Through Development of Integrated Landscape Planning in National Priority Snow Leopard Landscapes

60. The main constraints for the snow leopard activities in Kazakhstan include uncoordinated monitoring and research, poor data management, inactive engagement in regional cooperation with the neighboring range countries, insufficient capacity of research institutions and governmental bodies to proactively participate and take advantage of the internationally tested practices through GSLEP. To address this the project will conduct coordinated research and mapping of snow leopard population bio-ecological characteristics, habitat, prey, and predators and competitors in two priority landscapes; complete threats reduction analysis and mapping in two priority landscapes; revise the National Snow Leopard Conservation Plan; carry out Information and awareness activities (conferences, international meetings, publications) to engage Kazakhstan in the regional activities on a regular basis. Planned activities include:

1. Research and mapping of landscape-wide occupancy surveys to determine snow leopard and prey occurrence
2. Snow leopard and prey population assessments in at least 50% of the landscape area
3. Threats reduction analysis and mapping in two priority landscapes, including short action research projects to understand threats

4. Landscape management plan developed and under implementation for each priority landscape
5. Information and awareness activities (conferences, international meetings, publications), including capacity development activities to strengthen national ownership by local government and community members

Output 3.1.3. System for long-term regular monitoring of snow leopard in Kazakhstan put in place applying internationally certified quality standards (GIS-based), including transboundary monitoring arrangements with key neighboring countries.

61. An overview of snow leopard monitoring in Kazakhstan was carried out during the project development phase, and is included as Annex N to this Prodoc. The project will update the monitoring methodology considering the methods and techniques recommended by global monitoring framework guidance and improve data accuracy and reliability. The project will also invest into basic research and field equipment as well as establishment of a virtual snow leopard research and monitoring center to be hosted by the Institute of Zoology. This will consist of a centralized geo-referenced database with snow leopard monitoring data, accessible by all relevant stakeholders. The center will also consist of a multi-stakeholder working group, chaired by the Institute of Zoology. To support the center the project will conduct training on GIS, RTA tool, snow leopard, prey and habitat monitoring techniques, and community engagement tools. To start the DNA markers program the project will train the staff of 1 laboratory in Almaty in sampling, analysis, interpretation and storing of DNA. An MoU on monitoring data sharing with the bordering snow leopard range countries will be facilitated by the project.

1. Monitoring methodology update considering the methods and techniques recommended by global monitoring framework guidance.
2. Monitoring equipment investments.
3. Establishment of a "virtual" snow leopard research and monitoring center
4. Demonstration of satellite collaring of snow leopards in Almaty zapovednik
5. GIS training for PA and monitoring center collaborators.
6. Training for PA staff and other stakeholders on RTA, snow leopard, prey and habitat monitoring techniques, community engagement.
7. Training of 1 laboratory in sampling, analysis, interpretation and storing of DNA materials for 1 laboratory in Almaty.
8. DNA analysis in Almaty laboratory with international expert to mentor the process.
9. MoU on monitoring data sharing with the bordering snow leopard range countries.

Output 3.1.4 Knowledge products disseminated and education and awareness activities completed to enhance understanding of natural resource managers and communities about SFM, SLM, and biodiversity conservation

62. The project will apply a variety approaches to ensure knowledge management and learning of key lessons. These will include national reporting on snow leopard populations, based on the monitoring data collected via Output 3.1.3. The project will also undertake education and awareness activities for stakeholders at the site level. In terms of regional knowledge sharing, the project will support regional meetings on transboundary snow leopard conservation with Uzbekistan and Kyrgyzstan (facilitated by UNDP, which is also the implementing agency for related projects in these countries). In terms of regional knowledge sharing on SFM, SLM and other similar issues faced by neighboring countries, the project will produce knowledge products in various forms, including lessons notes, good practice guidelines, etc. These will be published on the FWC website in order to be available to practitioners in neighboring countries. The project will also support the participation of experts in regional meetings and conferences on relevant issues, where experience will be shared with neighboring experts. This will be done in coordination and collaboration with other relevant regional initiatives (e.g. GSLEP, and previously FLERMONECA and CACILM). UNDP is well positioned to facilitate this regional knowledge exchange, since it is working on SLM and SFM issues with the key government agencies in multiple countries in Central Asia.

1. National annual State of the Snow Leopard report
2. Education and awareness raising activities on fire prevention in targeted high priority sites (e.g. public awareness signs in key sites, radio advertisements, brochures disseminated at key locations such as local government offices, tourism facilities, schools, and at public meetings)

3. Education and awareness raising activities (e.g. publication of regulations in easily readable formats, on enforcement of forest sustainable use regulations (i.e. grazing regimes, medicinal plant and other NTFP collection))
4. Education and awareness raising activities on implementation and enforcement of hunting regulations (e.g. publication and dissemination of hunting regulations in easily understandable formats to hunting associations and to registered hunters, posting of signs in key locations, training of local law enforcement, rangers, and environmental inspectors about hunting regulations, etc.)
5. Development and publication of good practice knowledge products targeted at various stakeholder groups (i.e. HCVF good practices for forest managers, grazing good practices for pasture management committees, wildlife management good practices for resource users and wildlife managers)

#### IV.ii Partnerships

63. UNDP Kazakhstan, as the project implementing partner, will coordinate all project activities with the key partners. UNDP with its long lasting experience in GEF project management will benefit from its experience with previous GEF projects. Specifically, the Kazakhstan Forests project will be leveraged by the experience created during the implementation of multiple previous GEF projects, including the “Steppe Conservation and Management” (GEF ID# 3293) and “Desert PAs” (GEF ID# 4584). In particular, the experiences, infrastructures and systems created for biodiversity monitoring data and site-specific knowledge of the projects will be applied.

64. **UNDP-GEF project “Improving Sustainability of PA System in Desert Ecosystems through Promotion of Biodiversity-compatible Livelihoods in and around PAs”.** The project period ends in 2018. The proposed project will build on and address a number of crosscutting issues that were deliberated within the desert project, such as PA management and conservation planning, wildlife management, threats and risks mitigation. The project will build on the following achieved results:

- Improved methodology of the PAs effectiveness assessment has been developed and piloted. As a result it became clear that the current management planning system does not provide for the IUCN recommended standards and processes. The key biodiversity values are underestimated and are not properly monitored. The proposed project will deliberate the procedures and tools for conservation planning and data management within the forest PAs to enable effective protection of HCVFs based on threats analysis and improved ecological monitoring of ecosystems.
- PAs capacity gaps were mainly focused on technical issues rather than on policy changes that would enable continuous capacity development system under the existing institutions. Such approach was justified at that stage, but need further improvements with a focus on forest ecosystems.
- The project put a lot of effort toward establishing a new Ile-Balkhash Reservat that includes huge areas of important tugai and saxaul forests, but the timeframe of the project will not allow for creating the management capacity of a new PA, which will be targeted within the new project.
- The project also carried out basic studies on silvicultural approaches to improve deforestation in saxaul and tugai forests as part of desert ecosystems. Some nursery technics were tested, but more detailed and complex studies on silvicultural practices are needed.
- The project has demonstrated several improved land use practices to prevent land degradation that within new project. The project has made some basic insight into the problem of Syr Darya River at a local level water consumption and regulation issues. That can be further elaborated to a policy level.
- The project has also established a strong partnership with the financial institution that will help to enable funding for demonstration and pilot projects in the new project as well.

65. **UNDP project “Building financial frameworks to increase investments in biodiversity management”.** The project has studied opportunities for mainstreaming biodiversity into national development and sectoral planning to reduce negative impacts resulting in biodiversity loss and to achieve economic efficiency. New methodological tools were developed and piloted, including PES, compensations, tax incentives, subsidies, certifications. The project has prepared a theoretic basis for PES schemes within forest ecosystems through studying and calculations of forests’ CO<sub>2</sub> sequestration functions. The results of this study will be applied in proposed project.

66. **UNDP-GovKz “Improvement of wildlife management planning and monitoring system”.** The project is focused on policy and institutional capacity of the hunting concessions to ensure that they are economically viable and are managed in an ecosystem friendly way. The project has revised the existing policies and management practices, identified gaps and amended relevant bylaws on the national and local level. The project has brought various types of international expertise in managing and monitoring of game species and protection of endangered species within different ecosystems, including forests. The project has also developed a methodology for Snow leopard monitoring, which was briefly compared during the PPG to the global recommendations and will further be revised accordingly.

67. **Forest and Biodiversity Governance Including Environmental Monitoring (FLERMONECA)** is being implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, the German forestry agency Hessen-Forst, the Austrian Environment Agency (UBA) and the Regional Environmental Centre for Central Asia (CAREC) in all five Central Asian countries. The project was finished in 2015 and has produced a number of valuable recommendations that can be implemented with a new project. In Kazakhstan the main focus was forest and biodiversity governance, including environmental monitoring. Responding to the Government’s request the main outcome of the project was assessment of the potential for the private forests development in Kazakhstan. A basic study was carried out but the lack of accurate and systemized data on forest ecology was a key barrier for producing more specific recommendations. The new project will consider all the reports of FLERMONECA initiative from the five Central Asian countries to address the policy and institutional capacity gaps as well as forest data management systems by introducing SFM standards.

68. **Fund for Financial Support of Agriculture (FFSA)/DAMU Program** was defined as a most appropriate fund for the project’s activities under the Outcome 2 targeted at demonstration of resource use and management practices that would minimize the impact on the valuable forest ecosystems caused by local communities, agricultural businesses, tourism, hunting, non-timber forest products, and water use. FFSA has been operational in Kazakhstan since 1994 and is one of a few organizations that render microcredit services to residents of rural areas. FFSA focuses on providing and expanding the access of rural businesses and individuals to financial services of the microcredit market. The Fund carries out its activities through its widespread network of representative offices in 14 administrative regions of Kazakhstan, thus covering about 100% of rural territories of the country. FFSA has successfully implemented the micro-credit program for support of rural communities in variety of livelihood activities. The loan portfolio of FFSA as of January 2017 is 82.6 billion KZT. In 2016 the loan portfolio increased by 120%. Number of active borrowers is 36,600 people. In 2016, the Fund issued 11,000 loans totaling 35 billion KZT. The project will work with "Eco-Damu" Program of the FFSA offering the lowest interest rate 4% with the average in Kazakhstan – 14-20%. The program goal is to fund the alternative types of activities and implementation of sustainable methods of agriculture, forestry, fishery and hunting within the area of 50 km around the protected areas. The program will last until 2024 under the Agreement between UNDP-GEF portfolio and the Ministry of Agriculture.

69. **WWF active initiatives in Kazakhstan: Caspian Tiger Re-establishment.** The second region outlined as a potential site for the restoration programme is the southern shore of Lake Balkhash in Kazakhstan, around and to the east of the Ili River delta. Wild boar are found here in vast tugai woodlands and reed thickets, and Bukhara deer could be reintroduced. During site preparation, new Protected Areas must be created with strict enforcement over at least half of the proposed future habitat. It is also critical to ensure that economic use of the areas aligns with programme goals and limits human presence by stimulating relocation, especially with regard to residents engaged in grazing domestic livestock. A comprehensive management plan for the area must be developed and implemented, including a plan to stop poaching and prevent banned natural resource use activities. It is simultaneously necessary to increase the population density of wild boar by an order of magnitude through intentional breeding, potentially accomplished by engaging existing leaseholders of hunting territories. The proposed project will enable required conditions for successful reintroduction by supporting the following targets of the reintroduction program: a) Anti-poaching measures; b) Strengthening enforcement and management agency infrastructure and capacity; c) Engaging local residents in alternative activities to improve living standards through community-based anti-poaching enforcement programmes on their land; d) Organization of new PAs and reorganization of existing PAs to incorporate ungulate habitats in the region; e) Overall improvement of ecosystems and organizing regular monitoring of wildlife populations in the region.

70. The **Global Snow Leopard and Ecosystem Conservation Program (GSLEP)** is an important international baseline program, which this project directly builds upon. Although this is not a financing project, rather a conventional framework, it unites governments, UN agencies, NGOs and researchers of the snow leopard range in the effort to conserve this species, as postulated by the International Agreement on snow leopard signed in Bishkek in 2013. GSLEP and the Working Secretariat are supported by the international NGO Snow Leopard Trust.

71. **United Nations Development Account (UNDA) project 2016-2019.** The objective of this project is to strengthen the national capacity of five target countries (Armenia, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan) to develop national criteria and indicators (C&I) and reporting, or accountability systems, for sustainable forest management (SFM). The project is expected to enable the target countries actively participate in international processes related to forests, and contribute to the sustainable development of the sector towards a green economy. National criteria and indicators for SFM will serve as a tool to communicate the relevance of forests as they relate to the environment as well as socioeconomic situation at national, regional and international levels. In Kazakhstan the project is implemented by the Forestry and Wildlife Committee that will ensure effective partnership with the proposed project. In Kazakhstan the project is mainly focused on the development of the National SFM Criteria and Indicators supported with capacity building activities within the relevant governmental bodies.

72. **Forest Protection and Reforestation Project implemented by the World Bank** was closed in 2014. The project has supported the environmental rehabilitation of Irtysh Pine forest and re-vegetation of 48,000 ha in the Dry Aral Seabed. In addition, it is supported sustainable resource-led grazing management in saxaul rangelands. Significant progress has also been achieved in enhancing firefighting capacity in Semey Ormany, with comprehensive fire protection/management investments that include a state-of-the-art forest fire control information system (FFCIS), enabling faster forest fire detection as well as much quicker response times. Participatory Forest Management as well as Saxaul Rangelands Management have been piloted for the first time in Kazakhstan under the project. The new project will build on the lessons and practices demonstrated for improved management of other types of forests in Kazakhstan.

73. **Critical Ecosystem Partnership Fund (CEPF).** In 2016 CEPF together with the European Union and other members of its Donor Council agreed to fund the ecosystem profile preparation in the Mountains of Central Asia biodiversity hotspot. The profile process was launched in May 2016, and concludes in May 2017. The purposes of the ecosystem profile are to provide an overview of biodiversity conservation in the Mountains of Central Asia biodiversity hotspot, to present an analysis of the priorities for action, and to strengthen the constituency for conservation in the region. In doing so, the profile lays out a framework for the implementation of the CEPF grant-making program, which will run for about five years from 2017 to 2022, and which defines a broad conservation agenda in the region. The GEF project's geographic and thematic focus overlaps with the proposed profile priorities. The project will be engaged in designing and implementation of the grant program to be launched in Kazakhstan as a part of trans-regional partnership.

#### IV.iii Beneficiaries

74. It is estimated that the project will have approximately 41,000 direct beneficiaries, including more than 2,000 staff of forest protected areas in Kazakhstan, more than 450 forestry staff, and more than 38,500 local resource users in the targeted project areas. The number of indirect beneficiaries is calculated as 397,000, which is the population of the six districts most involved in the project activities. The project will contribute to socio-economic benefits in a variety of ways. On the whole the project will improve the sustainability of forest and land use in the targeted area, which will improve the sustainability of rural livelihoods. Specifically, the project will: i.) Undertake pilot activities for improved forest and forest pasture use, including installation of livestock watering points located in strategic locations away from critical habitat areas; ii.) improved wildlife management for local sustainable use, as well as improved revenue from trophy hunting; iii.) Targeted Scenario Assessments conducted for forest, land and water resources to improve sustainability of resource planning and management, to benefit sustainable livelihoods; iv.) provide technical and financial support to local communities for improved pasture management; v.) implement pilot community-based forestry activities with local livelihood benefits; and vi.) strengthening of community-based management mechanisms for PAs, forests and pastures. The project will develop local pasture management groups in any targeted areas that do not already have such mechanisms in place. The project will improve the

communication, collaboration and cooperation between tenure holders, rights holders, natural resource users and the relevant state, regional and local administrations.

#### IV.iv Stakeholder engagement

75. The participation and contribution of key stakeholders is critical for the success of the project, for stakeholders at both the national and local levels. Table 3 below summarizes the key project stakeholders. A brief stakeholder engagement and communication plan is included as Annex G to this Prodoc. The project is applying multiple strategies and mechanisms to ensure stakeholder engagement. First and foremost is the Project Board (as discussed further in Section VIII on Management Arrangements), involving the FWC as the primary beneficiary, and UNDP as the supplier. UNDP and FWC have a long history of collaboration and successful project completion, including multiple previous GEF-funded projects. The project team will ensure gender-mainstreaming aspects are addressed and integrated throughout all aspects of the project’s stakeholder engagement activities.

76. There are multiple stakeholder types at the local level in the planned project field sites. These include representatives of regional, district, and rural governments, administrations of PAs and forestries, community -based groups, individual and cooperative farms, agricultural businesses, and NGOs. The project will facilitate participatory planning processes and support the establishment of Community Councils in each of the demonstration sites, which will include local government representatives, PA managers, forest managers, local pasture committees and other site-specific key stakeholders. In addition, the project has multiple education and awareness activities planned that will engage local communities and stakeholders in addressing sustainable forest and land management, and conservation of biodiversity. Formal and informal partnerships will be developed and established with gender balance, and gender mainstreaming approaches in mind.

77. Note that there are no recognized indigenous peoples in Kazakhstan. The only relevant minority, or categorically underprivileged stakeholder group in the project focus areas is the Uyghur population in the southeast of Almaty province. The Uyghur community is concentrated in the districts bordering China (i.e. Uyghur district), but Uyghurs can be found throughout Kazakhstan. The project will highlight at various points the mechanisms and channels of communication that stakeholders may employ if they have any grievances related to the social and environmental impacts of the project. For example, this point will be indicated during the project inception workshop, and through the project education and awareness activities.

**Table 3 Project Stakeholder Assessment**

Stakeholder	Role
Government agencies	
Forestry and Wildlife Committee (FWC) of the Ministry of Agriculture	Implementing Partner for the project. It is the key government institution responsible for SFM, regulating biodiversity, including the establishment and management of protected areas, hunting areas and forests. It oversees and seeks state funding for the establishment/ expansion of PAs, including negotiations with local authorities and stakeholders, through its regional offices, preparation and justification of the relevant budgets. FWC ensures conservation and recovery of the threatened and endangered species and that efficient information management system is in place. FWC will initiate and lobby all policy amendments within the ministries and the Parliament.
Committee of Water Resources	This Committee and its regional branches are responsible for management of water resources to meet the needs of water users of different sectors of the economy in a sustainable way. The Committee and its branches will contribute to development of landscape-level planning frameworks and development and implementation of the sustainable water use models at the regional and district level.
Ministry of Agriculture	Develops and implements state policy and programs in agriculture sector. The Ministry will contribute to development of landscape-level management plans and implementation of sustainable use alternatives in rangeland and agricultural productive landscapes.
Ministry of Energy	Inherited the mandate of the Ministry of Environment after it was abolished. Current role of the Ministry of Energy is to develop state policies and programs on environmental conservation and sustainable development, and coordinate with the Secretariat of the CBD. One of the key players in development of planning frameworks that focus on the economic potentials (rather than the constraints) of safeguarding and maintaining ecosystem services in the districts. Ensure that its monitoring and data collection systems under its Environmental Information Center are harmonized with the decision support systems developed by the project. MEP and its Oblast branches are responsible for Environmental

Stakeholder	Role
	impact assessments, which are needed for any of the planned activities related to conservation or use of nature resources.
Ministry of National Economy, Ministry on Investments and Development, Ministry of Finance	These three ministries will be engaged in economic valuation of the ecosystem services, development of the PES schemes, demonstration of TSA project, and drafting and lobbying the relevant policies and regulations.
JSC “Samrul Energo”	Is a 100% shareholder of the Hydro Power Stations that impact the floodplain forests of Ili and Syrdarya Rivers by regulating their hydrological regime. The project will engage the company for implementation of the threats analysis for floodplain forests and development of recommendations on integrated water use planning with the relevant PAs and forestries through the TSA tools.
<b>Local communities and local administrations</b>	
Land Management Committee (oblast and rayon-level branches)	At a national is responsible for development and implementation of state policy and programs on land use planning and land management, geodesies and cartography. Oblast branches are responsible for key decisions related to zoning and allocation of land use permits for agriculture, mining, etc at oblast level. One of the key players in development of planning frameworks that focus on the economic potentials (rather than the constraints) of safeguarding and maintaining ecosystem services in the districts.
Administrative Units of 12 existing PAs and new PAs	These are the key beneficiaries of activities on protected area expansion and strengthening management effectiveness. Coordinate negotiations with oblast/ rayon administrations and other relevant government agencies regarding zoning arrangements and the creation of buffer zones and corridors, as well as adaptive landscape management to ensure that the PA is managed in tandem with the management of production activities occurring in the larger landscape.
Forestry Administrations of the target areas	Forest units are state funded legal entities operating under the regional administrations aimed at management of the forest fund lands outside the protected areas system comprising about 80 % of forested area in Kazakhstan. The project will focus on improving capacity of the the forestries within the boundaries of the project sites.
Oblast Akimats	Grant official endorsement of land use projects for PAs of local importance. Allocate land for planned PAs. Disseminate the project’s lessons learned related to landscape-level planning and management and advocate for replication of this ecosystem approach throughout Oblast. Assist in community mobilization and awareness activities.
Rayon akimats	Lead the development and implementation of the landscape-level management plans by providing coordinating inputs of all stakeholders
<b>Non-government organizations</b>	
There is a number of NGOs that are already engaged in conservation actions in the selected regions. The tentative list may include: Association for the Conservation of Biodiversity of Kazakhstan, Eco-Altay, Biosphere, Eco-Museum, Green Salvation, Snow Leopard Fund, Avalon. All these NGOs will be engaged in variety of activities relevant for their field of expertise.	
<b>Research institutions</b>	
Institute of Zoology	Is already implementing a camera trapping project, but still no data and publications are available. The institute will not only provide expertise related to biodiversity in Kazakhstan, but will also be a beneficiary of the project through improved capacity in using new tools of data processing like biostatistics and population/habitat modeling.
Institute of Geography	Has vast experience in producing data maps for landscape planning and management. So considering the vast and complicated areas of four landscapes of the project, this institute will contribute to this work.
Institute of Botany	Will be engaged in surveys and research on habitat status to be integrated into the SL habitat management plans and establishment of new PAs. Will also be involved in the landscape planning activities.
Forestry Institute and Kazlesproekt (State project design institute under CFH)	Will contribute their research, experience and expertise for training and site visits related to monitoring of the habitat and introduction of new information management systems.
State enterprise “Science & Production Center on Land Resources Management”	Will support project activities related to implementation of demonstration projects on sustainable land and pasture management, and monitoring land degradation

Stakeholder	Role
Kazakh Research Institute of Livestock Breeding and Fodder Production	Will support project activities related to implementation of demonstration projects on sustainable land and pasture management, and monitoring land degradation
Private sector	
Local industries and entrepreneurs	Will participate in consultations and provide inputs to the development of the landscape-level management plans for further implementation.
Hunting and Fishery Managers	Will contribute to the development and implementation of the landscape-level management plans as being key repositories of ecological information on biodiversity, land resources, wildlife, and habitats. Will ensure that monitoring and data collection and processing systems are harmonized with the decision support system. Will engage patrolling rangers of existing hunting areas for introduction of the new spatial monitoring and reporting tool.
Rural consumer cooperatives and communities	Will be actively engaged in the development of income-generation activities (through Public Councils) at the PAs and corridors that are a focus of the project, as well as in sustainable use demonstrations at project territories.

#### IV.v Mainstreaming gender

78. According to the 2015 Global Gender Gap Report of the World Economic Forum, Kazakhstan is ranked 47th (scored 0.719) in the Gender Gap Index (out of 145 countries). While education attainment is assessed well (28th position), political empowerment of women is rather low (ranked 78th). It is worth noting that the ranking has been gradually improving over the years, for example, the score in 2006 when the ranking was first calculated was 0.693 only. The rating has mainly been improving due to data on education. By another measure, UNDP's Gender Development Index, according to the latest available statistics (2015), Kazakhstan ranked 11<sup>th</sup> out of 160 countries with data, with a GDI score of 1.006.

79. Over the last years Kazakhstan has made tangible progress in reducing the gender inequality from 0.459 in 2008 to 0.369 in 2015. The situation has mainly improved through reduction of maternal mortality from 31.2 in 2008 to 12.8 in 2015 and increased representation of women at law-making level, in the Majilis of the Parliament, from 0.170 in 2008 to 0.267 in 2015.<sup>2</sup> The latter suggests that the efficient promotion of gender equity is possible at the level of legislation and can be achieved at the level of implementation of the national gender policy.

**Table 4 The Gender Gap Index in the Republic of Kazakhstan\***

Year	Gender Gap Index	Determining Indicators							
		Maternal mortality	Fertility rate (per 1000 women aged 15-19 years)	Seats in the Majilis of the Parliament, ratio of men and women		Proportion of the population aged 15 and older, with at least higher education		Proportion of the economically active and working-age population	
				Males	Females	Males	Females	Males	Females
2008	0.459	31.2	31.12	0.830	0.170	0.806	0.806	0.832	0.788
2009	0.463	36.8	28.84	0.822	0.178	0.814	0.815	0.831	0.785
2010	0.428	22.7	28.30	0.823	0.177	0.822	0.824	0.840	0.788
2011	0.395	17.6	29.46	0.757	0.243	0.829	0.832	0.839	0.788
2012	0.379	13.5	31.35	0.757	0.243	0.837	0.841	0.842	0.792
2013	0.375	12.6	33.64	0.738	0.262	0.845	0.849	0.842	0.794
2014	0.372	11.7	34.72	0.738	0.262	0.853	0.858	0.845	0.788
2015	0.369	12.8	30.83	0.733	0.267	0.860	0.866	0.849	0.792

\*Calculations are based on the official statistical data according to the UNDP methodologies, published in the Human Development Report 2011.

<sup>2</sup> According to the data of the Ministry of National Economy's Committee on Statistics <http://stat.gov.kz>

80. The leading document in the gender area is the Strategy for Gender Equality in the Republic of Kazakhstan for 2006-2016 approved by the Decree of the President of the Republic of Kazakhstan dated November 29, 2005 number 1977 is a document of national importance, consolidating a set of interrelated measures and actions aimed at achieving the common goal of plans - the creation of conditions for the realization of equal rights and opportunities for men and women enshrined in the Constitution of the Republic of Kazakhstan and international documents, adopted by Kazakhstan.

81. It should be noted that this Gender Equality Strategy was the first ever adopted in the history of independent Kazakhstan. At that time point the document was an innovative instrument opening a new stage in the social policy of the state to ensure a stable balance on the level of gender relations of the social sphere in general and provides, inter alia, the introduction of gender knowledge society education and awareness of the system of the necessity of legal and gender equality. Development of the project was the result of the constructive cooperation between the women empowerment CSOs, state bodies and international stakeholders (UN agencies and OSCE).

82. 2016 marks a decade of implementation of the strategy and UNDP in the framework of the gender project provides technical support to conduct its evaluation, a comprehensive assessment of the implementation of the strategy, results, problems and limitations, as well as the determination of the effectiveness of implemented activities compared to envisaged goals and objectives, develop proposals for the improvement of gender policy in Kazakhstan.

83. UNDP is assisting the Government of Kazakhstan, represented by the National Commission for Women Affairs, Family and Demographic Policy under the President of the Republic of Kazakhstan, to develop a new program of country-level document, based on a comprehensive gender-based campaign with a clear detailing the implementation of its instruments at all levels of government and all actors interact, defining the conditions for the formation of gender policy: the state; civil society; international organizations and the donor community.

84. Current development of the gender and family policy in the Republic of Kazakhstan is embodied in the Family and Gender Equality Policy 2016-2030, which is the follow-up of the Gender Equality Strategy for 2006-2016. The policy has been developed based on the Constitution of the Republic of Kazakhstan, Development Strategy of Kazakhstan until 2050, National Action Plan on Advancement of Women in the Republic of Kazakhstan, United Nations Convention on the Elimination of All Forms of Discrimination Against Women, UN's recommendations on how to implement it in Kazakhstan, other ratified international treaties and agreements, Plan of the Nation "100 Concrete Steps". The implementation of the policy is planned for the current period of socioeconomic development and sustained growth of country's economy (until 2020), as well as for the long-term until 2030. The policy includes a few key priorities that are relevant to the project, including increased participation of women in economy and labor market, increased ownership of women (land, assets etc.), involvement of women in local planning mechanisms including budgetary allocation mechanisms etc.

85. As per the Family and Gender Equality Policy 2016-2030 in the Republic of Kazakhstan: *"Economic empowerment for rural women who do not have access to public resources and services continues to be an urgent matter. According to national statistics, one in three rural women in Kazakhstan is self-employed and lives on incomes from subsistence farming, which includes personal consumption. Incomes, which include personal consumption initially deprive women of the opportunity to invest money in human capital for return to real sector of economy"*.

86. The new document integrates the gender mainstreaming in the policies of central government bodies and regions on gender equality policy format project development level and will consist (but not limited) following focus areas:

- The effect of gender inequality on economic and demographic loss
- Gender-oriented economic policy
- The empowerment of women in social and political life
- A gender approach to planning in the field of social policy
- Gender criteria for the development of culture, science and education
- Gender issues in the health and prospects of their solutions
- Achieving gender equality in the family
- Strengthening the family and the role of the father in the upbringing
- Prevention of gender-based violence

- Gender requirements for information policy
- Women's participation in peace and security

87. However, it should be mentioned that currently there is limited access of women to financial resources, especially in rural areas for engaging in entrepreneurship, which forces them to start small businesses, mainly in the informal sector of economy that generate low income. Women's limited access to capital, financial resources and information significantly contributed to restriction of rights of rural women – only 10% of households are led by women, owning only 2.9% of agricultural lands whose qualitative characteristics (fertility, volumes and location) are low, due to scarcity of loans and credits taken by women. The lack of property (collateral) among women makes it difficult to obtain credits for farming and therefore makes their entrepreneurial activities less efficient than men's.

88. The policy of employment expansion in Kazakhstan, being still gender-neutral, does not fully address the factor of inclusiveness of gender component and in particular improvement of the level of engagement of women from vulnerable groups in activities related to implementation of current state programs in the field of employment. The situation on the labor market of Kazakhstan today is such that women continue to hold weaker positions than men on the labor market: the level of their professional qualifications and salaries are lower; professional and sectoral segregation is high.

89. A no less important factor in shaping an effective gender policy in Kazakhstan is the use of the integrated gender mainstreaming approach (IGMA) as underlying, including gender-responsive budgeting, which is the main mechanism to implement the gender policy at all levels of socioeconomic development of advanced nations of the world. In Kazakhstan the use of the IGMA is not consolidated at the country gender policy level and is based on separate components whose quality dimensions are very different from each other.

90. During the PPG basic gender analysis was carried out to identify the trends in gender policy and practices within the project areas and thematic focus to develop recommendations for the project on mainstreaming the gender issues into the project activities and monitoring, and to define the project specific gender indicators, that will demonstrate how the project contributed to the implementation of the gender equity policy in Kazakhstan. The study provided overview of three main profiles demonstrating the status, gaps and opportunities for achieving gender equality of project target group (rural communities), including employment, access to financial and natural resources, and role in the society.

91. Summary of gender context Issues for consideration in project development and implementation is as follows. For more details see Annex H of this Prodoc.

- The current demographic situation in the project areas is balanced with almost 1:1 ratio of female population to male population. The traditional economic activities undertaken are livestock breeding, farming, and household keeping mainly run by man while women are engaged in keeping family and household.
- Female population constitutes half of the population of the region where the key production sector is agriculture: crop farming and livestock breeding. Since women are mainly represented in the employee category, in the agricultural sector they are usually self-employed and produce agricultural products themselves, including in the private backyards (households), thus making significant contributions to the agricultural sector of the region through provision of labor for planting, weeding, harvesting and processing of products in addition to reproductive activities and public work. It is worth noting that women also produce and sell vegetables from home gardens or forest products whereas incomes generated by this are used for family consumption, sustaining the level of food supplies, health services and access to education. However, the latter is not yet reflected at the national statistics level and is rarely recognized at the level of domestic relations.
- Women continue to hold weaker positions than men in the labor market: the level of their professional qualifications and salaries are lower while occupational and sectoral segregation is high.
- Women are often socially vulnerable and have been increasingly involved in informal employment and as a consequence no decent involvement in the social protection system and no pension provision in particular.
- Women have fewer chances to find work through their own efforts in case of unemployment, thus forcing them more often than men to contact the employment services so that they can be registered as

unemployed, receive the allowance and find a job. It should also be noted that women with higher and specialized secondary education, at 45 and older have less chances for employment.

- Women's limited access to financial resources, especially in rural areas in order to be engaged in entrepreneurship, forces them to start small businesses, mainly in the informal sector of economy, which generates low income.
- Being deprived of individual ownership right on capital assets (livestock, house, land), women are more often engaged in informal economic activities with low income and social security.
- Having limited access to information about financial resources and business opportunities, women are less often initiate small business or have fewer opportunities in decision making about the households economy.
- Forest dependent rural communities (men and women) have limited knowledge and understanding of connections between the current agricultural activities and condition of forest ecosystems, their potential impact on limited forest and land resources, economic implications of such resource use practices in a longer term, and access to information and knowledge on how it can be improved. As well as they do not have sufficient technical and financial capacity to transfer to a better management agricultural practices. There is no system in place that would provide such support, information, and funding. Most people are not aware of the threats to forest ecosystems and the impact of forest degradation on the fundamental ecological functions important to sustain livelihoods of local rural communities.
- There is no inter-sectoral management mechanism in the villages neighboring PAs or forest stands, that would enable all stakeholders' (including community members – men and women) to be engaged in planning and decision-making in relation to the status of the natural resources, Such non-integrated management approach does not allow planning and management of the different sectors on a landscape level in a sustainable way to maintain fair and equal access to forest and land resources.
- Women's inadequate access to capital, financial resources and information was the major factor in disempowerment of rural women – only 2.9% of agricultural lands whose qualitative characteristics (fertility, volumes and location) are low due to scarcity of loans and credits taken by women. The lack of property (collateral) among women makes it difficult to obtain credits for farming and therefore makes their entrepreneurial activities less efficient than men's.
- The local governments, PAs and forest entities do not have sufficient capacity and integrated system of data collection and analysis in relation to land and forest use, changes in ecosystems, and threats analysis, which hampers their role of resource managers and information and services providers to local households that would enable sustainable management of important forest resources in a long-term perspective.
- Gender-specific and gender-sensitive indicators are not integrated into the local and district planning and reporting systems, which impairs the statistics-based component of the gender analysis and demands more efforts to be implied to the survey-based analysis to develop and measure relevant indicators over the project span.

92. Considering the above the project will strive to:

- Minimize the negative impact of certain economic and social activities on the important forest ecosystems and limited agricultural lands by raising awareness among men and women regarding the links between their established patterns of production and consumption and the effects of those patterns on the forest ecosystems and biodiversity. To achieve this the project will consider specific roles of women and men in performing social and economic activities and design advocacy approaches that will take into account specific women's and men's roles;
- Ensure sustainable use of natural resources by promoting innovative gender-responsive solutions based on improved capacity, knowledge, new self-employment opportunities, and access to planning and decision-making. These solutions will produce changes in status and role of women and men and to some extent transform gender relations to make them more equal. For example, improved access of women to knowledge on PA management -since they are mainly responsible for those activities, improved access of women to local decision-making which will have empowering impact on their status and consideration of their role in community affairs, improved access of women to job opportunities which will improve their economic situation and consequently their role and status in family decision-making etc.;

- Increase women’s participation in development of environmentally sound, cost-effective practices and methods of sustainable forest and pasture management, agroforestry, fuel forests development, and water resource management and their wide spread use by men and women. In this context the project will consider the roles played by women and men in finding alternatives when water, other resources are deficient; and
- Improve local and regional policy in nature resource related sectors to ensure that integrated gender mainstreaming approach (IGMA) is applied, including gender-responsive budgeting, which is the main mechanism for implementing the gender policy at all levels of socioeconomic development. Gender mainstreaming at the level of local budgeting means incorporation of the gender-responsive budgeting elements in the range of management processes. Theoretical and practical experiences of advanced countries of the world has shown that putting gender-responsive processes in place contributes, first of all, to faster economic growth; improvement in the quality of services for people; more sustainable resource management aiming to promote the policy of equal opportunities and ensure sustainable development of the region.

#### IV.vi South-South and Triangular Cooperation (SSTrC)

93. The project has multiple activities that relate to and support South-South cooperation. A primary focus in this direction is under Component 3, which includes the project activities related to snow leopard conservation, which links to the Global Snow Leopard Ecosystem Conservation Program (GSLEP). Through various activities under this component the project will support Kazakhstan’s collaboration and engagement on issues related to snow leopard conservation. For example, it is expected that the project will support Kazakhstan and Kyrgyzstan to establish a cooperation agreement for sharing snow leopard monitoring data in border regions. The project also provides some support for Kazakhstan to engage in international events and activities related to snow leopard conservation, which involve all of the snow leopard range states.

94. Other aspects of the project will also build on regional good practices and examples related to HCVF management, and related activities. For example, the project will be using guidance from Russia related to HCVF management, and will draw on examples from Tajikistan and Uzbekistan to develop a methodology for monitoring climate change effects on forests.

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## V FEASIBILITY

### V.i Cost efficiency and effectiveness

95. The project strategy and design has been specifically chosen to ensure cost-effectiveness. First, in terms of the implementation arrangements, UNDP and the FWC have established a history of successful collaboration and partnerships, including working jointly on past GEF-funded projects that were successfully implemented. There are two recent notable examples include the Desert Ecosystems Protected Areas project (GEF ID#4584), and the Steppe Conservation and Management project (GEF ID#3293). The Desert Ecosystems project is still ongoing, but the independent external mid-term review of this project stated: *“There are many factors that have contributed to the success of the project to date... In summary, though, it appears to hinge on the good collaboration and cooperation among the project’s key stakeholders and, most particularly, in the relationship between the [FWC] and the UNDP-CO. This is based on mutual trust and confidence.”* In its terminal evaluation, the Steppe Conservation and Management project received a “HIGHLY SATISFACTORY” rating in terms of efficiency. These two example projects testify to the efficiency and cost-effectiveness of GEF-funded projects implemented in Kazakhstan with the FWC and UNDP as the two main implementation and execution partners.

96. This project will also be implemented under standard UNDP and Government of Kazakhstan financial management procedures and requirements, which will ensure cost-effectiveness of aspects such as procurement. Project management will include structured and consistent project workplanning and financial planning, with annual budgeted workplans approved by the Project Board. In addition, project management expenditures are planned at 5% of the project activities budget (in accordance with GEF requirements). Co-financing is also expected in an amount nearly three times the GEF financing.

97. The project's strategy has been reviewed during the project development phase and has been identified as being the most cost-effective (least cost) method to achieving the planned project objective. The strategy relies on multiple approaches to ensure efficiency. The first part of the project strategy focuses on the establishment of protected areas as mechanisms to conserve biodiversity, improve sustainable forest and land management, and preserve other key ecosystem services supporting sustainable livelihoods. The project is taking a highly cost-effective approach to establishing protected areas by leveraging national technical resources as much as possible – for example, the National Academy of Sciences has already contributed significantly to the identification of proposed protected areas, and to the collection of biodiversity inventory data in targeted areas. The national government – through the FWC – will also be contributing significant resources to the establishment and operationalization of protected areas, as indicated by the significant government co-financing for the project. Only protected areas that the government will be able to sustainably finance after the project will be established. To further ensure cost-effectiveness the project directly builds on and replicates the experience of previous UNDP-GEF projects in Kazakhstan that have worked on establishing protected areas – in particular the steppe and desert ecosystem projects identified above.

98. The project strategy also focuses on a variety of methods and management approaches to conserve forest resources that provide valuable ecosystem services. It has been widely demonstrated and calculated that conserving ecosystems is much more cost-effective than restoring them after they have been unsustainably diminished and depleted. The project will work with the institutional authorities designated for management of forest resources (i.e. forestry units called “leskhozoes”) to enhance capacity and ensure that they have the know-how and technical ability to conserve and sustainably manage HCVFs. The project will also ensure efficiency by engaging local communities and leveraging local knowledge to apply site-appropriate management measures that support sustainable livelihoods.

99. At the national level the project will support the enabling environment for improved forest management, through policies, laws and regulations that reduce bureaucracy and transaction costs for implementing HCVF management principles. One important cost-effectiveness strategy will be the re-organization of the national forest management institutional structure (under Output 2.2.1). Currently leskhozoes are under the institutional authority of district-level governments (akimats), and depend on them for funding, policy direction, etc. However this integration has not functioned well since it is implemented, as it reduces the potential for systematized, coordinated, and comprehensive national approaches to forest management, and to capacity development for forest management. Therefore the stakeholders involved (akimats, leskhozoes, and FWC) have determined that the best course forward is to re-organize the leskhozoes under the FWC. This will reduce budget requirements on leskhozoes, and will facilitate better institutional capacity for forest management at the national level.

100. The third component of the project focuses on international cooperation and knowledge management. This component of the project draws on and feeds into international efforts related to snow leopard conservation in order to ensure efficiency. The activities under this component will directly support implementation of Kazakhstan's previously defined national snow leopard conservation plans (in turn linked to the GSLEP). Therefore the project will be able to invest directly in on-the-ground conservation measures, without extended planning and consultation processes (which have already been completed). The project will also draw on other similar experiences in other countries in the region, such as Kyrgyzstan and Tajikistan. For example, the project will work on enhancing wildlife law enforcement, applying the SMART patrol approach, and using the example of wildlife law enforcement agency coordination established in Kyrgyzstan.

#### V.ii Risk Management

101. A risk analysis was conducted during the PPG phase, and the project Risk Assessment and Mitigation table in UNDP format is included as Annex I of this Prodoc. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual PIR.

102. Five of the six risks identified in the SESP were assessed as low risk, with the SESP risk 6 related to SESP Standards 5.2 and 5.4 (possible economic displacement, or possible change in customary land use) assessed as

“moderate” (Impact = minor, probability = moderately likely). Therefore the project overall in relation to SESP measures is considered moderate risk. This is consistent with the UNDP-GEF approach that **all** UNDP-GEF projects that include on the ground activities related to protected areas **must** be classified as at least “moderate” risk.

103. The risks identified in the SESP mainly relate to the fact that the project will be supporting the establishment of protected areas. When protected areas are established in any place in any country, there are possible risks related to land use regime change, and the potential for social or economic displacement. In some instances globally there is also a risk of physical displacement, although there is no risk of physical displacement in this particular project. As discussed in the SESP, the project will work closely with all stakeholders throughout the project to ensure that potential risks related to the establishment of protected areas are minimized and mitigated. The project will also ensure that all legal policies and procedures in Kazakhstan related to the establishment of protected areas are respected and followed, as well as international norms relating to the establishment of protected areas.

#### V.iii Social and Environmental Safeguards

104. Environmental and social grievances will be reported to the GEF in the annual PIR.

105. The project has received an overall “moderate risk” rating in the UNDP Social and Environmental Screening Protocol (SESP), which is included as Annex F to this Prodoc. As stated above, this is consistent with the UNDP-GEF approach that **all** UNDP-GEF projects that include on the ground activities related to protected areas **must** be classified as at least “moderate” risk. The project is only relevant to 12 of the risk principles and standards (which have been grouped into six risks in the SESP), with five of the six risks assessed as “low”, and the sixth risk assessed as “moderate” (as discussed in Section V.ii above on Risk Management). Full explanations related to each of the identified standards are available in the SESP in Annex F.

106. Any environmental or social grievances raised may be reported to any of the following three channels, in person, by phone, by email, or by regular mail: 1.) Directly to the FWC (either to central administration, or to local branch office in any region); 2.) Directly to UNDP through the project team, or directly to UNDP Kazakhstan Country Office senior administration; 3.) To local government representatives, who will then raise the issue with UNDP and FWC. The procedures for lodging grievances will be emphasized to all stakeholders during the project inception workshop. Any grievances will be handled in accordance with UNDP and Government of Kazakhstan procedures. Any environmental or social grievances will be reported to the GEF in the annual PIR.

#### V.iv Sustainability and Scaling Up

107. The implementation of the regulatory and policy activities piloted under Component II will be carried out beyond the project with funding from the FWC, as the SLM and SFM practices will by then be built into the routine system of management planning for mountain, tugai and saxaul ecosystems. The expanded PA estate (Component I), with updated management and business plans, will be fully supported by state PA budget after project closure; the business plans will expand the budget income from non-government sources that thus make PAs less dependent on government financing (this element will be measured through the METT section on budget management of the targeted PAs). The post-project implementation of the adjusted six land use plans (Output 2.1.4) will be vested with the responsibility of local authorities and relevant communities, who will receive the training support and technical assistance through the project.

108. Scaling-up of the project results will be ensured by the vocational training activities incorporated in Component I and Component II. Component III will further contribute to replication and dissemination of project results, by resolving the threats to snow leopard in a wider context (i.e. throughout the whole range of the snow leopard in Kazakhstan and in the transboundary context) through an efficient law enforcement system, as well extensive trainings, and adoption of international standards in snow leopard monitoring, research and patrolling. The replication of the Incentive-based Ecosystem Management Partnership tested under Component II will be assisted through the amended policies and regulations that remove barriers to wider engagement of communities and private sector in ecosystem management. A replication strategy will be elaborated by the project in the last year of operation, to ensure the wide and efficient coverage of the potential beneficiaries. The strategy will detail actions targeted at the audience outside the immediate project scope with the focus on those who hold the power to

influence the decision making processes and those who have the interest to scale up the results, but are limited in power in decision-making.

## VI PROJECT RESULTS FRAMEWORK

**This project will contribute to the following Sustainable Development Goal (s):**

Goal 1: No Poverty

Goal 2: Zero Hunger

- By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
- By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed

Goal 5: Gender Equality

- Adopting and strengthening sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.[27]
- Putting a stop to all forms of discrimination against all women and girls globally.
- Listen to girls: SDGs can deliver transformative change for girls only if they have been consulted and their priorities and needs have been taken into account.

Goal 12: Responsible Consumption and Production

- By 2030, achieve the sustainable management and efficient use of natural resources
- By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

Goal 13: Climate Action

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Goal 15: Life on Land

- By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
- By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
- By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
- By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development
- Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species
- Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products
- By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
- Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
- Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation
- Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

**This project will contribute to the following country outcome included in the UNDAF/Country Programme Document:**

UNDAF Outcome:

Outcome 1.3. Ecosystems and natural resources are protected and sustainably used, and human settlements are resilient to natural and manmade disasters and climate change

CPD Outputs:

- Output 1. Selected settlements have adopted integrated models for sustainable growth
- Output 2. Disaster risk reduction plans and dedicated multi-stakeholder coordination mechanisms in place in disaster-prone regions
- Output 3. Natural resources are protected, accounted for and integrated in national and/or sub-national development planning
- Output 4. National and sub-national institutions have strengthened capacities in environmental governance in protected territories and adjacent settlements

**This project will be linked to the following output of the UNDP Strategic Plan:**

UNDP Strategic Plan Output:

Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.

Output 2.5: Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation.

**NOTE:** Additional data underlying the indicator baseline and target data is included in Annex J of this Prodoc.

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
<b>Project Objective:</b> <i>Improve conservation status and management of key forest and associated grassland, riparian and arid ecosystems important for conservation of biodiversity, land resources and provision of livelihoods for local communities</i>	1. Area of critical ecosystems with improved management, including tugai, saxaul, and mountain forests, and associated grasslands	N/A (zero hectares improved)	4,000,000	9,127,071 hectares	Project reports and documentation; Successful completion of project activities for relevant project components, as verified by the MTR and TE.  GEF-6 Corporate Results Indicator 1: <i>“Improved management of landscapes and seascapes covering 300 million hectares”</i>  GEF-6 Corporate Results Indicator 2: <i>120 million hectares under sustainable land management</i>	<ul style="list-style-type: none"> <li>- Project does not encounter critical risks that derail implementation</li> <li>- New threats do not emerge</li> </ul>
	2. Forest area in Kazakhstan under <u>indirectly</u> improved management	N/A (zero hectares indirectly improved)	N/A (zero hectares indirectly improved) <i>(achievement of result not expected at mid-point)</i>	Forests managed by 123 forestry entities = 12,652,400 ha of forest landscapes (within 29,318,750 total ha of national forest fund land); as indicated by status of HCVF management regulations	Project reports and documentation; Successful completion of project activities for relevant project components, as verified by the MTR and TE	<ul style="list-style-type: none"> <li>- Stakeholders remain interested in large-scale forest sector reform</li> <li>- Large scale sector reform can be achieved in the timeframe available for the project</li> <li>- Changing the institutional framework</li> </ul>

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
				(adopted at national level); Status of national institutional framework for forest management (plan for restructuring leskhozoes under FWC instead of akimats adopted at national level)		of the forest sector is not too complex for the scale and scope of the project
	3. a. # direct project beneficiaries b. # of PA staff with enhanced individual capacity c. # of forestry staff with enhanced individual capacity d. # of local resource users with improved sustainability of livelihoods	N/A (zero beneficiaries)	a. Total: ~1,100 : b. PA staff: >1,000 PA staff with enhanced capacity c. Forestry staff: 100 leskhoz staff d. Local resource users: Total: 0 (0 men; 0 women) (achievement of result not expected at mid-point)	a. Total: ~41,000 : b. PA staff: >2,000 PA staff with enhanced capacity c. Forestry staff: 457 leskhoz staff d. Local resource users: Total: 38,753 (19,382 men; 19,371 women) (figures official from 2009 census)	Number of staff employed at PAs targeted by the project  Number of staff employed at leskhozoes directly targeted by the project  Number of people living in rural districts directly targeted by the project	- All staff in targeted PAs and leskhozoes will benefit from project investments in capacity strengthening - No large-scale staff turnover in targeted PAs and leskhozoes - All community members in targeted districts depend at least partially on pastoralism for livelihoods, and therefore will benefit from project activities on sustainable land management
	4. Population trends for globally significant species, such as snow leopard, argali, goitered gazelle, and other threatened species within the expanded target PA estate:  <u>Alpine forest and associated ecosystems, flora:</u> - <i>Picea schrenkiana</i> - <i>Malus sieversii</i> - <i>Malus niedzwetzkyana</i> - <i>Juniperus sp. (turkeстана, semiglobosa, seravschanica)</i> - <i>Betula tianschanika</i> - <i>Populus tremula L.</i>	Please see GEF-6 BD Tracking Tool METT scorecards for all PAs, cells C38 and C39  <u>Alpine forest and associated ecosystems, flora:</u> - <i>Picea schrenkiana</i> - 65,321 - <i>Malus sieversii</i> - 5,100 - <i>Malus niedzwetzkyana</i> - no data - <i>Juniperus sp. (turkeстана, semiglobosa, seravschanica)</i> - 7,572 - <i>Betula tianschanika</i> - 1,522 - <i>Populus tremula L.</i> - 4,788	<u>Flora:</u> N/A (project activities will not affect ecological status by midpoint) <u>Fauna:</u> N/A (project activities will not affect ecological status by midpoint)	<u>Flora:</u> Non-deterioration of baseline status <u>Fauna:</u> Increase relative to baseline	Annual PA flora and fauna monitoring, as summarized in METT scorecards cells C38 and C39	- Project lifetime is sufficient to allow impacts to be generated and monitored - New threats do not emerge

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
	<p>- <i>Abies siberica</i>  - <i>Crataegus turkestanica</i>  - <i>Picea obovata</i></p> <p><u>Alpine forest and associated ecosystems, fauna:</u>  - <i>Uncia uncia</i>  - <i>Ursus arctos (incl. ssp isabellinus)</i>  - <i>Ovis ammon ssp (karelini, nigrimontana)</i>  - <i>Capra sibirica</i>  - <i>Cervus elaphus</i>  - <i>Capreolus pygargus</i>  - <i>Canis lupus</i>  - <i>Marmota sp. (baibacina, caudate, menzbieri)</i></p> <p><u>Floodplain (tugai) forest and associated ecosystems, flora:</u>  - <i>Populus pruinosa</i>  - <i>Ulmus sp.</i>  - <i>Fraxinus sogdiana</i>  - <i>Elaeagnus oxycarpa</i>  - <i>Tamarix ramosissima</i></p> <p><u>Floodplain (tugai) forest and associated ecosystems, fauna:</u>  - <i>Capreolus pygargus</i>  - <i>Sus scrofa</i>  - <i>Cervus elaphus bactrianus</i>  - <i>Hemiechinus auritus</i>  - <i>Columba eversmanni</i>  - <i>Falco cherrug</i>  - <i>Aegypius monachus</i></p> <p><u>Saxaul forest and associated ecosystems, flora:</u>  - <i>Populus pruinosa</i>  Schrenk</p>	<p>- <i>Abies siberica</i> - 76,859  - <i>Crataegus turkestanica</i> - 1,100  - <i>Picea obovata</i> - 18,580</p> <p><u>Alpine forest and associated ecosystems, fauna:</u>  - <i>Uncia uncia</i> - 110-130  - <i>Ursus arctos (incl. ssp isabellinus)</i> - 507  - <i>Ovis ammon ssp (karelini, nigrimontana)</i> - 685  - <i>Capra sibirica</i> - 6,039  - <i>Cervus elaphus</i> - 3,306  - <i>Capreolus pygargus</i> - 7,072  - <i>Canis lupus</i> - 561  - <i>Marmota sp. (baibacina, caudate, menzbieri)</i> - 21,045</p> <p><u>Floodplain (tugai) forest and associated ecosystems, flora:</u>  - <i>Populus pruinosa</i> - 172  - <i>Ulmus sp.</i> - 280  - <i>Fraxinus sogdiana</i> - 1474  - <i>Elaeagnus oxycarpa</i> - unknown  - <i>Tamarix ramosissima</i> - unknown</p> <p><u>Floodplain (tugai) forest and associated ecosystems, fauna:</u>  - <i>Capreolus pygargus</i> - &gt;68  - <i>Sus scrofa</i> - &gt;241  - <i>Cervus elaphus bactrianus</i> - 126  - <i>Hemiechinus auritus</i> - unknown</p>				

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
	<p>- <i>Elaeagnus oxycarpa</i>  - <i>Haloxylon aphyllum</i>, <i>H. persicum</i>  - <i>Berberis iliensis</i> M. Pop  - <i>Lonicera iliensis</i> Pojark  - <i>Tamarix ramosissima</i></p> <p><u>Saxaul forest and associated ecosystems,</u>  <b>fauna:</b>  - <i>Gazella subgutturosa</i>  - <i>Capreolus capreolus</i>  - <i>Aquila rapax</i>  - <i>Aquila chrysaetos</i>  - <i>Lepus tolai</i></p>	<p>- <i>Columba eversmanni</i> - &gt;518  - <i>Falco cherrug</i> - 24  - <i>Aegypius monachus</i> - 4</p> <p><u>Saxaul forest and associated ecosystems,</u>  <b>flora:</b>  - <i>Populus pruinosa</i>  <i>Schrenk</i> - unknown  - <i>Elaeagnus oxycarpa</i> - unknown  - <i>Haloxylon aphyllum</i>, <i>H. persicum</i> - &gt;447  - <i>Berberis iliensis</i> M. Pop - unknown  - <i>Lonicera iliensis</i> Pojark - unknown  - <i>Tamarix ramosissima</i> - unknown</p> <p><u>Saxaul forest and associated ecosystems,</u>  <b>fauna:</b>  - <i>Gazella subgutturosa</i> - 161  - <i>Capreolus capreolus</i> - unknown  - <i>Aquila rapax</i> - 7  - <i>Aquila chrysaetos</i> - 16  - <i>Lepus tolai</i> - 472</p>				
<p><b>Component</b> 1.  Improved representation of globally important forest biodiversity and improved management of protected conservation-important forests  <b>Outcome</b> 1.1:  Prevention of loss of conservation</p>	<p>5. Incremental area under conservation management through establishment of new PAs</p>	<p>N/A (only existing PAs)</p>	<p>N/A (only existing PAs)</p>	<p>1,830,000 net new hectares under protection, which:  - Increases the national PA coverage 0.67% from 8.81% to 9.49%,  - Secures protection of 761,693 ha of alpine forest ecosystems and 522,593 ha of tugai and saxaul forest ecosystems;  - Provides PA coverage for more than 1,000,000</p>	<p>Area of newly established PAs, according to government approval decree documents, as reported in annual PIR, and verified by MTR and TE</p>	<p>- National political commitment to expanding the PA system remains firm  - Project does not encounter critical risks related to stakeholders in establishment of new PAs  - Various forms of PAs provide for improved conservation of biodiversity</p>

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
important forest and associated non-forest ecosystems and their biodiversity <b>Outcome 1.2:</b> Improved management of protected conservation important forests, through HCVF-specific management measures in PA forests				ha of snow leopard range, which increases PA coverage of the two priority national snow leopard landscapes (Zhongar Alatau, and North/Central Tian Shan) from ~40% to ~90% (Zhongar Alatau = ~1,000,000 ha of snow leopard habitat, with current PA coverage of ~30%, which will increase by approximately 645,000 ha or 61% of snow leopard range; North/Central Tian Shan = ~1,100,000 ha of snow leopard range, with current PA coverage of ~48%, which will increase by approximately 440,000 ha, or 40% of snow leopard range)		
	6. Forest PA management effectiveness	Baseline METT Scores: <u>Alpine forest ecosystems:</u> Almaty Zapovednik: 67 Ile-Alatau NP: 66 Kolsay Kolderi NP: 80 Kolsay Kolderi NP Expansion: 24 Zhongar Alatau NP: 59 Zhongar Alatau NP Expansion: 27 SW Zhongar Alatau ("Koksu Reserve") (proposed): 23 Sairam-Ugam NP: 71 Aksu-Jabagly Zapovednik: 81 Karatau NP: 81 Karatau NP Expansion: 17 Katon Karagay NP: 20 Markakol Reserve: 48	<u>Increase in METT Score:</u> <u>Alpine forest ecosystems:</u> Almaty Zapovednik: 68 Ile-Alatau NP: 67 Kolsay Kolderi NP: 81 Kolsay Kolderi NP Expansion: 25 Zhongar Alatau NP: 60 Zhongar Alatau NP Expansion: 28 SW Zhongar Alatau ("Koksu Reserve") (proposed): 24 Sairam-Ugam NP: 72 Aksu-Jabagly Zapovednik: 82 Karatau NP: 82 Karatau NP Expansion: 25 Katon Karagay NP: 21 Markakol Reserve: 49	30% improvement in score gap ((1 – METT value)*0.3) over baseline Target METT Scores: <u>Alpine forest ecosystems:</u> Almaty Zapovednik: 77 Ile-Alatau NP: 76 Kolsay Kolderi NP: 86 Kolsay Kolderi NP Expansion: 47 Zhongar Alatau NP: 71 Zhongar Alatau NP Expansion: 49 SW Zhongar Alatau ("Koksu Reserve") (proposed): 46 Sairam-Ugam NP: 80 Aksu-Jabagly Zapovednik: 87 Karatau NP: 87 Karatau NP Expansion: 42	GEF-6 BD Tracking Tool METT for each PA	- Project activities are sufficiently targeted to increase PA METT score - Project results, in terms of increase METT score, can be documented within the timeframe of the project - Proposed PAs are established in time to begin implementation of PA including strengthening of management

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
		Zapadno-Altay Reserve: 77 Ketmen Reserve (proposed): 21 Terskey Reserve (proposed): 21 Merke Reserve (proposed): 18 Saur-Manrak Reserve (proposed): 17 Tarbagatai NP (proposed): 18  <u>Floodplain (tugai) and saxaul forest:</u> Charyn Canyon NP: 68 Syr Darya-Turkestan Reserve: 73 Ile-Balkhash Reserve (proposed): 15 Ile Floodplain Reserve (proposed): 16	Zapadno-Altay Reserve: 78 Ketmen Reserve (proposed): 22 Terskey Reserve (proposed): 22 Merke Reserve (proposed): 19 Saur-Manrak Reserve (proposed): 18 Tarbagatai NP (proposed): 19  <u>Floodplain (tugai) and saxaul forest:</u> Charyn Canyon NP: 69 Syr Darya-Turkestan Reserve: 74 Ile-Balkhash Reserve (proposed): 16 Ile Floodplain Reserve (proposed): 17	Katon Karagay NP: 44 Markakol Reserve: 64 Zapadno-Altay Reserve: 84 Ketmen Reserve (proposed): 45 Terskey Reserve (proposed): 45 Merke Reserve (proposed): 43 Saur-Manrak Reserve (proposed): 42 Tarbagatai NP (proposed): 43  <u>Floodplain (tugai) and saxaul forest:</u> Charyn Canyon NP: 78 Syr Darya-Turkestan Reserve: 81 Ile-Balkhash Reserve (proposed): 41 Ile Floodplain Reserve (proposed): 41		
	7. Level of achievement of Kazakhstan's forest PAs in securing their biodiversity and other associated values	No forest PAs in Kazakhstan have achieved "Green List" certification	Green List certification assessment process initiated	At least 1 forest PA has had a preliminary Green List assessment	Presence of Green List assessment, as verified by MTR and TE	- Criteria of Green List standard are suitable for Kazakhstan context
<b>Component 2.</b> Better integration of forest PAs in wider landscape, including enabling environment for sustainable management of conservation-important ecosystems  <b>Outcome 2.1:</b> Improved management of high conservation value forests and pastures in forest PA landscapes	8. Change in area of sustainably managed forest in forest ecosystems bordering protected areas	N/A	N/A (achievement of result not expected at mid-point)	>1,000,000 ha, as indicated by adoption of improved HCVF management practices in 6 targeted leskhozoes	GEF-6 SFM Tracking Tool cell C18	- Forest managers are open and willing to implement HCVF management measures - Institutional framework re-alignment in the forest sector does not interfere with forest management planning at the site level
	9. Reduction in degraded and deforested area in targeted forestry territories bordering protected areas	11,305.60 ha Leskhoz: degraded ha, deforested ha Bakanas: (no data for degraded area, lack of monitoring capacity), 7,104 ha	No net degradation area beyond baseline	>5% improvement over baseline	Reporting by targeted leskhozoes (Note: Baseline determined as per existing methodology and data (area of sanitary cutting and other technical activities),	- Forest degradation is not significantly worse than currently known - Forest degradation can be changed and documented within project lifetime

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
with direct community benefits <b>Outcome 2.2:</b> Strengthened enabling environment to support SFM objectives through updated national policies, regulations, and knowledge management systems supporting improved management of 12,652,400 ha of national forest territory <b>Outcome 2.3:</b> Integrated economic and environmental valuation of ecosystem services and SFM criteria and indicators embedded in decision making in natural resource management, through piloting of innovative sustainable economic development planning mechanisms		Narynkol: 70.6 ha, 67 ha Uygur: 986.4 ha, 3.2 ha Zaysan: 786 ha, 1646 ha Zharkent: 453.4 ha, 189 ha Zhongar: No data, lack of monitoring capacity.			<i>which is not comprehensively reflective of forest characteristics. An updated methodology for calculating forest degradation and deforestation will be determined at the inception phase and described in inception report.)</i>	- New threats do not emerge (or rate of impact of threats does not significantly change)
	10. Change in area of degradation in pasture and forest pasture landscapes bordering protected areas	Total: 0 ha with reduced degradation out of 73,000 degraded ha of pastureland	N/A (achievement of result not expected at mid-point)	Total: 73,000 ha with reduced degradation	GEF-6 PMAT (Land Degradation) Tracking Tool, sheet 2 ("Project Context") cell C17.	- Implementation of improved pasture management planning leads to reduced degradation
	11. Area outside PAs with enhanced conservation management (PA corridors and buffer zones identified in district integrated management plans)	N/A (no conservation measures planned in targeted districts)	N/A (achievement of result not expected at mid-point)	350,000 ha	GIS analysis of integrated management plan maps, validated by terminal evaluation	- District authorities are able and willing to apply and implement integrated management plans in other district land use planning policies and procedures
	12. Number of good practice models for private afforestation established in Kazakhstan	N/A (no models yet established by project)	Afforestation initiated in four pilot models with identified key partners	Two functional and replicable models demonstrated as feasible to meet key gaps in private afforestation regulatory framework: One private-sector based, and one community-based	Project documentation, assessment by terminal evaluation	- Potential private afforestation partners remain willing and interested based on terms to be defined for afforestation pilot models
	13. Degree to which policy and regulatory context for managing natural resources incorporates ecosystem services	No methodology for considering full cost-benefit of ecosystem services incorporated in natural resource management policy and regulatory framework	One TSA initiated	At least one regulation adopted at provincial or national level that recognizes and incorporates TSA methodology	Project documentation, assessment by terminal evaluation	- Piloting of TSA in Kazakhstan context is successful, and deemed valuable by stakeholders
<b>Component 3.</b> International cooperation and knowledge management	14. Quality and coverage of snow leopard monitoring data in Kazakhstan as indicated by estimated accuracy	Latest population estimate 15 years prior (2001) with a 91% confidence level (lowest possible estimated	Updated snow leopard population estimate for 2019	Publishing of annual population estimates with a 95% or greater confidence level	Annual national snow leopard monitoring database	- Accurately estimating snow leopard population can be done within a 12-month period

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
<p><b>Outcome 3.1</b> Increased capacities of Kazakhstan to monitor its wildlife, ensure law enforcement and share knowledge.</p>	and timeliness of national snow leopard population estimate	population / highest possible estimated population, i.e. 100/110 = 91%)				<ul style="list-style-type: none"> <li>- It is in the national interest to report an accurate level of snow leopard population on an annual basis</li> <li>- The project, along with other partner initiatives, can provide full national coverage for snow leopard monitoring</li> </ul>
	15. Level of international cooperation and coordination with Kazakhstan border countries regarding illegal wildlife trade, biodiversity management in borderland protected areas, and snow leopard monitoring	No formal international agreement between Kazakhstan and neighboring countries related to snow leopard conservation	At least one regional meeting held related to cooperation and coordination for snow leopard conservation	International agreement between Kazakhstan and at least one bordering country under implementation regarding at least one of the below issues: <ul style="list-style-type: none"> <li>- Cooperation on law enforcement at border points regarding illegal wildlife trade</li> <li>- Illegal hunting by border guards</li> <li>- Data sharing on snow leopard monitoring</li> </ul>	Existence/absence of agreement	<ul style="list-style-type: none"> <li>- Political will exists between Kazakhstan and at least one bordering country to cooperate on snow leopard conservation</li> <li>- An agreement can be negotiated and adopted within the life of the project</li> <li>- Cooperation on snow leopard conservation presents the opportunity for a non-politically threatening issue for international cooperation</li> </ul>
<p><b>Cross-cutting:</b> <i>Gender mainstreaming during implementation</i></p>	16. Consistency of project gender mainstreaming approach with project plans	N/A – Project not under implementation; project design includes multiple elements designed to mainstream gender	Project gender mainstreaming action plan completed by end of 1 <sup>st</sup> year of project implementation	Gender mainstreaming carried out during project implementation, as indicated by: <ul style="list-style-type: none"> <li>a. Project Board and local stakeholder working groups have gender balance and/or include a gender expert;</li> </ul>	Monitoring via annual project reporting (PIR) by project team; Verification at mid-term review and terminal evaluation by independent external experts	<ul style="list-style-type: none"> <li>- All relevant stakeholders support or are in accordance with gender mainstreaming efforts undertaken by the project</li> </ul>

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verification	Assumptions
				<ul style="list-style-type: none"> <li>b. Policies, laws, and regulations developed with project support include gender perspectives, as relevant</li> <li>c. Project events and activities (e.g. trainings) promote gender balance among invited participants, as feasible</li> <li>d. Project education and awareness activities are developed and carried out incorporating gender perspectives, as relevant</li> </ul>		

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## VII MONITORING AND EVALUATION (M&E) PLAN

109. The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results.

110. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the [UNDP POPP](#) and [UNDP Evaluation Policy](#). While these UNDP requirements are not outlined in this project document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the [GEF M&E policy](#) and other relevant GEF policies.

111. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Tracking Tools) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.

### **M&E Oversight and Monitoring Responsibilities:**

112. Project Manager: The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF RTA of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

113. The Project Manager will develop annual work plans based on the multi-year work plan included in Annex A, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy etc..) occur on a regular basis. The project monitoring plan is included as Annex B to this Prodoc.

114. Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

115. Project Implementing Partner: The Implementing Partner is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the project supports national systems.

116. UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the independent mid-term review and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

117. The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the [UNDP POPP](#). This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

118. The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).

119. UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

120. Audit: The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.<sup>3</sup>

#### **Additional GEF monitoring and reporting requirements:**

121. Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

- a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project implementation;
- b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
- d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
- e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;
- f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
- g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

122. The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.

123. GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

124. The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

125. Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which

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<sup>3</sup> See guidance here: <https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx>

may be of benefit to the project. The project will identify, analyze and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

126. GEF Focal Area Tracking Tools: The following GEF Tracking Tool(s) will be used to monitor global environmental benefit results:

127. The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted in Annex D to this project document – will be updated by the Project Manager/Team and shared with *the* mid-term review consultants and terminal evaluation consultants (not the evaluation consultants hired to undertake the MTR or the TE) before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

128. Independent Mid-term Review (MTR): The project Evaluation Plan is included as Annex C to this Prodoc. An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3<sup>rd</sup> PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center \(ERC\)](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

129. Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC.

130. The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

131. Final Report: The project's terminal PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

**Table 5 M&E Plan with Roles, Budget and Timeframe**

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget <sup>4</sup> (US\$)		Time frame
		GEF grant	Co-financing	
Inception Workshop	UNDP Country Office	\$10,000	\$5,000	Within three months of project document signature
Inception Report	Project Manager	None	None	Within 4 weeks of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework	Project Manager	None	None	Annually
GEF Project Implementation Report (PIR)	Project Manager and UNDP Country Office and UNDP-GEF team	None	None	Annually
Financial audit as per UNDP audit policies for NIM projects	UNDP Country Office	\$15,000 (\$3,000/year)	None	Annually or other frequency as per UNDP Audit policies
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Manager UNDP CO	None	None	On-going
Addressing environmental and social grievances	Project Manager UNDP Country Office BPPS as needed	None for time of project manager, and UNDP CO	None	On-going
Project Board meetings	Project Board UNDP Country Office Project Manager	\$10,000	\$5,000	At minimum annually
Supervision missions	UNDP Country Office	None <sup>5</sup>	None	Annually
Oversight missions	UNDP-GEF team	None <sup>5</sup>	None	Troubleshooting as needed
Lessons learned and knowledge generation	Project Manager	None	None	Annually
Knowledge management as outlined in Outcome 3	Project Manager	\$80,000	\$80,000	On-going
GEF Secretariat learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None	None	To be determined.
Mid-term GEF Tracking Tools to be completed by project team in collaboration with project stakeholders	Project Manager	\$10,000	\$10,000	Before mid-term review mission takes place.
Independent Mid-term Review (MTR) and management response	UNDP Country Office and Project team and UNDP-GEF team	\$40,000	\$10,000	Between 2 <sup>nd</sup> and 3 <sup>rd</sup> PIR.
Terminal GEF Tracking Tools to be completed by project team in collaboration with project stakeholders	Project Manager	\$10,000	\$10,000	Before terminal evaluation mission takes place

<sup>4</sup> Excluding project team staff time and UNDP staff time and travel expenses.

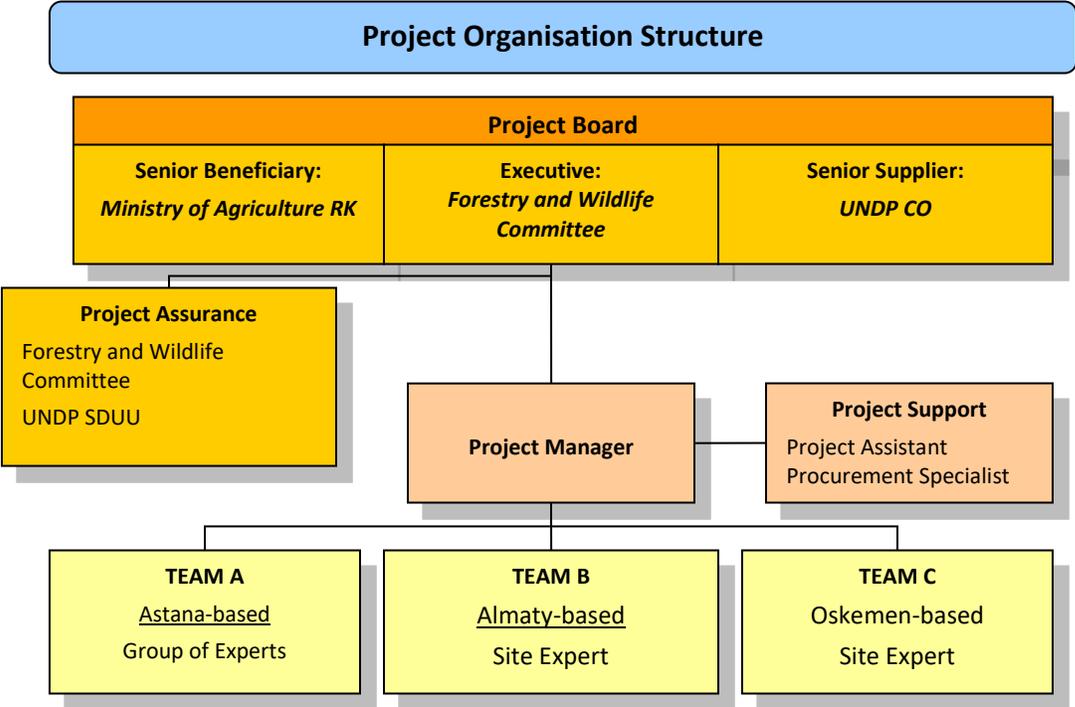
<sup>5</sup> The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget <sup>4</sup> (US\$)		Time frame
		GEF grant	Co-financing	
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP-GEF team	\$40,000	\$10,000	At least three months before operational closure
Translation of MTR and TE reports into English / Russian	UNDP Country Office	\$5,000	\$5,000	As soon as possible
<b>TOTAL indicative COST</b> Excluding project team staff time, and UNDP staff and travel expenses		\$220,000	\$135,000	

**VIII GOVERNANCE AND MANAGEMENT ARRANGEMENTS**

132. Roles and responsibilities of the project’s governance mechanism: The project will be implemented following UNDP’s national implementation modality, according to the Standard Basic Assistance Agreement between UNDP and the Government of Kazakhstan, and the Country Programme.

133. The Implementing Partner for this project is the Forestry and Wildlife Committee under the Ministry of Agriculture of the Republic of Kazakhstan. The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources. A senior representative of the Forestry and Wildlife Committee will be named as the National Project Director on behalf of the Implementing Partner and the government of the Republic of Kazakhstan. The project organization structure is as follows:



134. The **Project Board** (also called Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendation for

UNDP/Implementing Partner approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager. The Project Board will be chaired by a senior representative of the Forestry and Wildlife Committee. The terms of reference for the Project Board are contained in Annex E. The Project Board is proposed to be comprised of the representatives of the following institutions:

1. Chair of the Forestry and Wildlife Committee, Ministry of Agriculture RK
2. Deputy Resident Representative of UNDP in Kazakhstan
3. Land Management Committee, Ministry of Agriculture RK
4. Water Resource Management Committee, Ministry of Agriculture, RK
5. Science Committee, Ministry of Education and Science RK
6. Department of Budgeting for Agricultural Sector, Natural Resources, Construction and Utilities, Ministry of Finance RK
7. Committee on Environmental Regulation and Control, Ministry of Energy RK
8. Department of Natural Resource Management and Use of regional Akimats of Almaty, South Kazakhstan, Zhambyl, and East Kazakhstan regions.
9. Ecological Alliance "Baitak Bolashak", NGO
10. Association of forest management and wood processing organizations "Zhasyl Orman", NGO

135. The composition of the Project Board must include the following roles:

136. Executive: The Executive is an individual who represents ownership of the project who will chair the Project Board. This role can be held by a representative from the Government Cooperating Agency or UNDP. The Executive is: Chairman of the Forestry and Wildlife Committee. The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes. The executive has to ensure that the project gives value for money, ensuring cost-conscious approach to the project, balancing the demands of beneficiary and supplier.

137. Specific Responsibilities: (as part of the above responsibilities for the Project Board)

- Ensure that there is a coherent project organization structure and logical set of plans;
- Set tolerances in the AWP and other plans as required for the Project Manager;
- Monitor and control the progress of the project at a strategic level;
- Ensure that risks are being tracked and mitigated as effectively as possible;
- Brief relevant stakeholders about project progress;
- Organize and chair Project Board meetings.

138. Senior Supplier: The Senior Supplier is an individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. If necessary, more than one person may be required for this role. Typically, the implementing partner, UNDP and/or donor(s) would be represented under this role. The Senior Supplier is: The Deputy Resident Representative of the UNDP Kazakhstan Country Office.

139. Specific Responsibilities (as part of the above responsibilities for the Project Board)

- Make sure that progress towards the outputs remains consistent from the supplier perspective;
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management;
- Ensure that the supplier resources required for the project are made available;
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts.

140. Senior Beneficiary: The Senior Beneficiary is an individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The Senior Beneficiary role is held by a representative of the government or civil society. The Senior Beneficiary is: Forestry and Wildlife Committee of the Ministry of Agriculture of the Republic of Kazakhstan. The Senior Beneficiary is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. The Senior Beneficiary role monitors progress against targets and quality criteria. This role may require more than one person to cover all the beneficiary interests. For the sake of effectiveness, the role should not be split between too many people.

141. Specific Responsibilities (as part of the above responsibilities for the Project Board):

- Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Specification of the Beneficiary's needs is accurate, complete and unambiguous;
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target;
- Impact of potential changes is evaluated from the beneficiary point of view;
- Risks to the beneficiaries are frequently monitored.

142. The **Project Manager** will run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager function will end when the final project terminal evaluation report, and other documentation required by the GEF and UNDP, has been completed and submitted to UNDP (including operational closure of the project). A full-time Project Assistant and Procurement Specialist will provide support to the Project Manager in all tasks of the project, including administration, procurement, management of information and contacts, logistics etc.

143. The Project Manager will supervise three **implementation teams**. These teams will operate full-time: 1) Astana based team will be responsible for implementation, coordination and monitoring of the activities within three project components and will include appropriate Experts (PAs Expert, Expert on landscape Planning and Community Engagement, Wildlife management Expert, Forest management Expert, Communications and Capacity Building expert). Each Expert will be responsible for attainment of the specific Outputs. The exact contractual modalities for members of these teams will be determined on a case-by-case basis based on the match of tasks and qualifications (most likely, year-to-year service contracts). 2) Almaty base Site Coordinator will be responsible for coordination, monitoring, and support of the field based activities in the Almaty, South Kazakhstan, and Zhambyl regions. 3) Oskemen based Site Coordinator will be responsible for coordination, monitoring, and support of the field activities in the East-Kazakhstan region. The Site Coordinators should have a background in natural resource management.

144. UNDP will engage national and international consultants as indicated in Annex E as needed to ensure high quality and efficiency of the implementation of the project activities.

145. In addition, UNDP will provide technical support via practical guides, reference documents, tools and training packages for the use of the project. UNDP will coordinate with project partners to help ensure consistency and synergy among the project in Kazakhstan.

146. Beyond the project cycle management services provided by UNDP, UNDP will provide services to the project in financial management and procurement, with quality control consistent with the agency's overall safeguards and best practices. An agreement on Direct Project Costs (DPCs) between UNDP and the Implementing Partner has been determined based on the level of services to be delivered (refer to the Letter of Agreement in Annex Y).

147. The project will build **partnerships** with a variety of stakeholders whose participation is needed for successful implementation. In order to prevent commercial conflicts of interest, they will not be eligible to serve on the Project Board, nor will they play a direct role in project governance. But the Project Board may invite them as appropriate to board meetings and discussions of project plans and evaluation.

148. Project Assurance: UNDP provides a three – tier supervision, oversight and quality assurance role – funded by the GEF agency fee – involving UNDP staff in Country Offices and at regional and headquarters levels. Project Assurance must be totally independent of the Project Management function. The quality assurance role supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and

monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. This project oversight and quality assurance role is covered by the GEF Agency. The UNDP Country Office will provide project assurance, specifically the Programme Officer for the Sustainable Development and Urbanization Unit, as well as the UNDP-GEF Regional Technical Advisor, working out of the Istanbul Regional Hub.

149. UNDP Direct Project Services as requested by Government: The UNDP, as GEF Agency for this project, will provide project management cycle services for the project as defined by the GEF Council. In addition the Government of Kazakhstan may request UNDP direct services for specific projects, according to its policies and convenience. The UNDP and Government of Kazakhstan acknowledge and agree that those services are not mandatory, and will be provided only upon Government request. If requested the services would follow the UNDP policies on the recovery of direct costs. These services (and their costs) are specified in the Letter of Agreement (Annex Y). As is determined by the GEF Council requirements, these service costs will be assigned as Project Management Cost, duly identified in the project budget as Direct Project Costs. Eligible Direct Project Costs should not be charged as a flat percentage. They should be calculated on the basis of estimated actual or transaction based costs and should be charged to the direct project costs account codes: “64397- Direct Project Costs – Staff” and “74596-Direct Project Costs – General Operating Expenses (GOE)”.

150. Agreement on intellectual property rights and use of logo on the project’s deliverables and disclosure of information: In order to accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy<sup>6</sup> and the GEF policy on public involvement<sup>7</sup>.

151. Project Management: The project office will be in Astana. It is expected that the project office will be staffed full-time by the Project Manager, Project Assistant, and a team of Experts, as described above. Project operations will be supported, as also noted above, by financial, logistical, and procurement-related support staff employed by the UNDP Country Office.

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## IX FINANCIAL PLANNING AND MANAGEMENT

152. The total cost of the project is \$94,864,854. This is financed through a GEF grant of USD \$8,069,178 USD, and \$86,795,676 in parallel co-financing. The project co-financing commitment letters are included as Annex X to this Prodoc. UNDP, as the GEF Implementing Agency, is responsible for the execution of the GEF resources.

153. Parallel co-financing: The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. The planned co-financing will be used as follows:

**Table 6 Financial Planning: Committed Co-financing**

Co-financing source	Co-financing type	Co-financing amount	Planned Activities / Outputs	Risks	Risk Mitigation Measures
UNDP	Grant	\$200,000	Project management, Outcome 1, Outcome 2, Outcome 3	No significant risks.	N/A
FWC	Grant	\$70,510,507	Outcome 1, Outcome 2, Outcome 3, Outcome 4	In any government co-financing there can be a risk of economic downturns	The project will closely work with the government partners and

<sup>6</sup> See [http://www.undp.org/content/undp/en/home/operations/transparency/information\\_disclosurepolicy/](http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/)

<sup>7</sup> See [https://www.thegef.org/gef/policies\\_guidelines](https://www.thegef.org/gef/policies_guidelines)

Co-financing source	Co-financing type	Co-financing amount	Planned Activities / Outputs	Risks	Risk Mitigation Measures
Almaty Province	Grant	\$8,229,217	Output 1.1, Output 1.2, Output 2.1.3, Output 2.1.4, Output 2.1.5, Output 2.2.1., Output 2.3.1., Output 3.1.1., Output 3.1.2, Output 3.1.3, Output 3.1.4	during the life of the project that negatively impacts government budgeting.	monitor the status of co-financing to ensure that government budget allocated in support of the project objective remains firm during the project period, even in case of changes in national economic circumstances.
East Kazakhstan Province	Grant	\$7,177,711	Output 1.2, Output 2.1.3, Output 2.1.4, Output 2.1.5, Output 2.2.1, Output 2.3.1, Output 3.1.1, Output 3.1.2, Output 3.1.3, Output 3.1.4		
WWF	Grant	\$318,992	Output 1.1.1, Output 1.1.2, Output 1.2.1, Output 2.1.1, Output 2.1.2, Output 2.1.5, Output 3.1.1., Output 3.1.2, Output 3.1.3, Output 3.1.4	CSO co-financing is typically dependent on the organization's ability to continue raising funds in future years. In the case of WWF, the project's work is closely aligned with WWF's Caspian Tiger re-introduction initiative in the Ile-Balkhash delta, in partnership with the Government of Kazakhstan. If this initiative runs into any significant scientific or political challenges, WWF's ability to contribute co-financing may be reduced.	The project's partnership with WWF, and the project's work in the Ile-Balkhash region, is designed such that it is not directly dependent on WWF's contribution. The project results will be amplified as long as the WWF co-financing partnership remains secure, but achievement of the planned project results is not directly dependent on WWF.
ACBK	Grant	\$300,000	Output 1.1.1, Output 1.1.2, Output 1.2.1, Output 3.1.1, Output 3.1.2,	As for WWF, ACBK is a CSO, and their ability to commit co-financing throughout the life of the project	ACBK is a key technical partner for the project.

Co-financing source	Co-financing type	Co-financing amount	Planned Activities / Outputs	Risks	Risk Mitigation Measures
			Output 3.1.3, Output 3.1.4	depends on their ability to consistently securing funding in future years.	
Institute of Zoology	In-kind	\$59,249	Output 1.1.1, Output 1.1.2, Output 1.2.1, Output 3.1.1, Output 3.1.2, Output 3.1.3, Output 3.1.4	The project's partnership with the Institute of Zoology could change if the personnel involved with the Institute of Zoology changes.	The project will endeavor to work with a multi-person team within the Institute of Zoology to ensure that in case of turnover that there will still be at least some individuals that are committed to the project objective.

154. **Budget Revision and Tolerance:** As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF:

- a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more;
- b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

155. Non-GEF resources (e.g. UNDP TRAC or cash co-financing) will absorb any over expenditure incurred beyond the available GEF grant amount.

156. **Refund to Donor:** Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

157. **Project Closure:** Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

158. **Operational completion:** The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

159. **Transfer or disposal of assets:** In consultation with the NIM Implementing Partner and other parties of the project, UNDP programme manager (UNDP Resident Representative) is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file

160. **Financial completion:** The project will be financially closed when the following conditions have been met:

- a) The project is operationally completed or has been cancelled;
- b) The Implementing Partner has reported all financial transactions to UNDP;

- c) UNDP has closed the accounts for the project;
- d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

161. The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

## X TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Atlas Proposal or Award ID:	00097224	Atlas Primary Output Project ID:	00101043
Atlas Proposal or Award Title:	Conservation and sustainable management of key globally important ecosystems for multiple benefits		
Atlas Business Unit	KAZ10		
Atlas Primary Output Project Title	Conservation and sustainable management of key globally important ecosystems for multiple benefits		
UNDP-GEF PIMS No.	5696		
Implementing Partner	Forestry and Wildlife Committee, Ministry of Agriculture		

GEF Component / Atlas Activity	Responsible Party (Atlas Implementing Agent)	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)	Ref #
COMPONENT / OUTCOME 1: PA MANAGEMENT	FWC	62000	GEF	71200	International Consultants	\$25,000	\$10,000	\$10,000	\$30,000	\$25,000	\$100,000	1
				71300	Local Consultants	\$65,000	\$100,000	\$58,333	\$40,000	\$3,334	\$266,667	2
				71400	Contractual Services - Individ	\$92,000	\$107,000	\$107,000	\$30,000	\$40,000	\$376,000	3
				71600	Travel	\$8,000	\$13,000	\$10,000	\$8,000	\$9,000	\$48,000	4
				72100	Contractual services - Companies	\$30,000	\$75,000	\$50,000	\$240,000	\$160,000	\$555,000	5
				72200	Equipment & Furniture	\$-	\$353,000	\$200,000	\$425,000	\$150,000	\$1,128,000	6
				74200	Audio Visual&Print Prod Costs	\$4,000	\$4,000	\$3,000	\$2,000	\$3,000	\$16,000	7
				74500	Miscellaneous	\$1,000	\$1,000	\$1,000	\$2,000	\$3,000	\$8,000	8
				75700	Training Workshops and Conference	\$19,200	\$19,200	\$1,200	\$2,400	\$7,400	\$49,400	9
				<b>Total Outcome 1</b>		\$244,200	\$682,200	\$440,533	\$779,400	\$400,734	\$2,547,067	
COMPONENT / OUTCOME 2: FOREST AND PASTURE MANAGEMENT	FWC	62000	GEF	71200	International Consultants	\$55,000	\$115,000	\$155,000	\$70,000	\$35,000	\$430,000	10
				71300	Local Consultants	\$15,000	\$48,000	\$120,333	\$49,000	\$23,334	\$255,667	11
				71400	Contractual Services - Individ	\$114,000	\$236,500	\$217,000	\$115,000	\$135,000	\$817,500	12
				71600	Travel	\$15,000	\$44,000	\$145,000	\$32,000	\$12,000	\$248,000	13
				72100	Contractual services - Companies	\$85,000	\$170,000	\$320,000	\$295,000	\$25,000	\$895,000	14
				72200	Equipment & Furniture	\$-	\$89,000	\$394,000	\$304,833	\$145,000	\$932,833	15
				74200	Audio Visual&Print Prod Costs	\$2,000	\$14,000	\$22,000	\$25,000	\$33,000	\$96,000	16
				74500	Miscellaneous	\$2,000	\$10,000	\$12,000	\$8,000	\$3,000	\$35,000	17
				75700	Training Workshops and Conference	\$28,000	\$99,000	\$82,000	\$60,000	\$38,000	\$307,000	18
				<b>Total Outcome 2</b>		\$316,000	\$825,500	\$1,467,333	\$958,833	\$449,334	\$4,017,000	
COMPONENT / OUTCOME	FWC	62000	GEF	71200	International Consultants	\$20,000	\$15,000	\$25,000	\$-	\$10,000	\$70,000	19
				71300	Local Consultants	\$30,000	\$14,000	\$30,333	\$12,000	\$15,333	\$101,666	20

<b>3: KNOWLEDGE MANAGEMENT NT</b>				71400	Contractual Services - Individ	\$30,000	\$97,500	\$82,500	\$32,500	\$5,000	\$247,500	21
				71600	Travel	\$19,000	\$25,000	\$20,000	\$20,000	\$13,000	\$97,000	22
				72100	Contractual services - Companies	\$30,000	\$30,000	\$20,000	\$10,000	\$10,000	\$100,000	23
				72200	Equipment & Furniture	\$-	\$200,000	\$100,000	\$-	\$-	\$300,000	24
				74200	Audio Visual&Print Prod Costs	\$2,000	\$52,500	\$25,500	\$24,500	\$15,000	\$119,500	25
				74500	Miscellaneous	\$2,000	\$7,000	\$5,000	\$2,699	\$1,500	\$18,199	26
				75700	Training Workshops and Conference	\$4,000	\$20,000	\$21,000	\$15,000	\$7,000	\$67,000	27
				<b>Total Outcome 3</b>		\$137,000	\$461,000	\$329,333	\$116,699	\$76,833	\$1,120,865	
<b>Project management</b>	FWC / UNDP	62000	GEF	71400	Contractual Services - Individ	\$32,575	\$34,204	\$35,914	\$37,710	\$39,597	\$180,000	28
				71600	Travel	\$5,249	\$5,249	\$5,249	\$5,249	\$5,250	\$26,246	29
				72100	Contractual services - Companies	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$15,000	30
				73100	Rental & Maintenance-Premises	\$20,600	\$20,600	\$20,600	\$20,600	\$20,600	\$103,000	31
				74596	Direct Project Costs	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$60,000	32
				<b>Total Project Management Cost</b>		\$73,424	\$75,053	\$76,763	\$78,559	\$80,447	\$384,246	
<b>PROJECT TOTAL</b>						\$770,624	\$2,043,753	\$2,313,962	\$1,933,491	\$1,007,348	\$8,069,178	

**Table 7 Summary of Funds**

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total
<b>GEF</b>	\$770,624	\$2,043,753	\$2,313,962	\$1,933,491	\$1,007,348	\$8,069,178
<b>UNDP</b>	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$200,000
<b>FWC</b>	\$14,102,101	\$14,102,101	\$14,102,101	\$14,102,102	\$14,102,102	\$70,510,507
<b>Almaty Province</b>	\$1,645,843	\$1,645,843	\$1,645,843	\$1,645,844	\$1,645,844	\$8,229,217
<b>East Kazakhstan Province</b>	\$1,435,542	\$1,435,542	\$1,435,542	\$1,435,542	\$1,435,543	\$7,177,711
<b>Institute of Zoology</b>	\$11,850	\$11,850	\$11,850	\$11,850	\$11,849	\$59,249
<b>WWF</b>	\$63,798	\$63,798	\$63,798	\$63,799	\$63,799	\$318,992
<b>ACBK</b>	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$300,000
<b>TOTAL</b>	<b>\$18,129,758</b>	<b>\$19,402,887</b>	<b>\$19,673,096</b>	<b>\$19,292,628</b>	<b>\$18,366,485</b>	<b>\$94,864,854</b>

**Table 8 ATLAS Budget Notes**

Ref	Budget Notes
1	1/3rd component cost of contracting the services of an international mid-term review consultant (10 weeks @ US\$3000/wk) (M&E). 1/3rd component cost of contracting the services of an international final evaluation consultant (10 weeks @ US\$3000/wk) (M&E). Output 1.1.1. cost of contracting the services of an international consultant to provide technical assistance to support approval of multiple new PAs (8 weeks @\$3125/wk). Output 1.1.2. cost of contracting the services of an international consultant to support the drafting of PA management plans, including zoning, staffing plans, and business-plan based budget (15 weeks @\$3000/wk). Output 1.2.1 cost of contracting the services of an international consultant to support the introduction and piloting of the IUCN Green List Standard in at least 1 forest PA (3 1/3 weeks @\$3000/wk).
2	1/3rd component cost of contracting the services of a national mid-term review consultant (16 weeks @ US\$625/wk) (M&E). 1/3rd component cost of contracting the services of a national final evaluation consultant (16 weeks @ US\$625/wk) (M&E). Costs of contracting national technical inputs for the following outputs: 1.1.1., 1.2.1. Total of 416 weeks @\$625/wk.

Ref	Budget Notes
3	<p>Costs of national technical project staff and experts for outputs 1.1.1, 1.1.2, 1.2.1. Total of 601.6 weeks @\$625/wk. National technical project staff providing technical inputs include: Project manager (80% technical inputs), project assistant (33.3% technical inputs), landscape planning and community engagement expert, wildlife management expert, forest management expert, communications and capacity building expert, and two local project coordinators (all 100% technical inputs).</p> <p>Project assistant technical functions include:</p> <ul style="list-style-type: none"> <li>• Assist FWC and other relevant government agencies and project partners - including donor organizations and NGOs - with development of essential skills through training workshops and on the job training thereby upgrading their institutional capabilities;</li> <li>• Assist in carrying out regular, announced and unannounced inspections of all sites and project-funded activities.</li> <li>• Sub-supervise and coordinate the project to ensure its results are in accordance with the Project Document and the rules and procedures established in the UNDP Programming Manual</li> <li>• Liaise with UNDP, relevant government agencies, and all project partners, including donor organizations and NGOs for effective coordination of all project activities;</li> <li>• Assist in reporting progress of project to the SC, and ensure the fulfillment of SC directives;</li> <li>• Support the exchange and sharing of experiences and lessons learned with relevant community based integrated conservation and development projects nationally and internationally;</li> <li>• Assume secondary responsibility for daily project management, including substantive matters</li> <li>• Ensure adequate information flow, discussions and feedback among the various stakeholders of the project</li> <li>• Provide secondary support for adherence to the project's work plan, and assist in preparing revisions of the work plan, if required</li> <li>• Assist in preparing and agreement with UNDP on terms of reference for technical experts who are national and international consultants and subcontractors</li> <li>• Assist in guiding the technical work of consultants and subcontractors and oversee compliance with the agreed work plan</li> <li>• Assist in maintaining regular contact with UNDP Kazakhstan Country Office and the Government counterpart on project implementation issues</li> <li>• Assume secondary responsibility for meeting results targets set out in the agreed annual work plans and project results framework</li> <li>• Assist in liaising with project partners to ensure their technical contributions are provided within the agreed terms</li> <li>• Assume secondary responsibility for reporting on project progress vis-à-vis indicators in the logframe</li> <li>• Provide technical assistance and co-ordination for outcomes of the project</li> </ul>
4	<p>Component 1 travel (flights, visas, airport transportation, local ground transportation, daily subsistence allowances, accommodations, vehicle rental, fuel) allowances: International travel allowance: 4 international trips @\$3,000 ea (1 trip for output 1.1.1, 2 trips for output 1.1.2, and 1 trip for output 1.2.1. Domestic travel allowance: \$36,000 (Output 1.1.1.: \$24,000; Output 1.1.2: \$9,000; Output 1.2.1.: \$3000).</p>
5	<p>Technical services contracted by companies, organizations, or institutions for activities associated with the following outputs: Output 1.1.1: Completion of new PA technical justification documents (\$25,000); Output 1.1.2: Drafting of PA management plans, including zoning, staffing plans, and business-plan based budget (\$120,000), Specific planning for management of forest resources within PA management plans (\$40,000), Comprehensive field assessment of biodiversity values followed by monitoring (\$100,000), Field validation of boundary demarcation (\$60,000), forest ecosystem restoration in Ile-Balkhash tugai forest for ecosystem functioning and biodiversity conservation (\$150,000); Output 1.2.1: Conservation and SFM measures in PAs for high priority forest management issues (\$60,000).</p>
6	<p>Procurement of essential equipment associated with activities under the following outputs: Output 1.1.2: biodiversity field monitoring equipment (\$5,000); initial investment in critical infrastructure and technical capacity to operationalize 6 new PAs (Specific items to be determined by FWC and PA staff once PAs are officially established, but likely to include: office equipment and IT equipment, uniforms, field monitoring and enforcement equipment, etc.) (\$400,000). Output 1.2.1: Conservation and SFM measures in PAs for high priority forest management issues (forestry management field equipment (tools), fencing, saw fuel and oil, seedlings) (\$23,000); Investment in PA technical capacity strengthening for forest and biodiversity management: This addresses a critical barrier for strengthening forest PAs' management capacity (to increase METT scores, a key project indicator). The 9 targeted PAs have submitted a prioritized equipment request list, available on request, with a total estimated expense of \$1.7 million USD; therefore complete fulfillment of this request will be dependent on additional government co-financing. Technical equipment identified includes: Office equipment (desktop computer and monitor, multifunction printer, laptop computer, portable memory, projector); Field equipment (binocular, field scope, compass, angle gauge, altimeter, summer and winter uniform, tents, sleeping bags and mats, camera, portable housing, winter patrolling equipment, portable radios, mini wireless environmental monitoring meters, GPS units, flashlights, distance measurement equipment, small bird and mammal monitoring equipment); Fire equipment (pumps, fire extinguishers, hoses and pipes, etc.); Laboratory equipment (microscope, electronic scale, audiometer, entomological set, multifunctional anemometer, dryer,</p>

Ref	Budget Notes
	freezer, etc.); Software (GIS, antivirus, Photoshop, Corel DRAW, Pinnacle studio, etc.), and Other (solar panels, pumps, horses, off-road transportation, etc.). Total project investment allowance: \$700,000. There are actually 12 already-established PAs (covering approximately 4 million hectares) that will be project partners, therefore investment averages ~\$140,000 per PA.
7	Procurement of special services to develop and publish different information products in national, regional and local media and social network on new and existing PA objectives and functioning as well as about HCVF (Output 1.1.1 (\$11,000 allowance) and Output 1.1.2. (\$5,000 USD allowance).
8	Miscellaneous expenses allowance: Output 1.1.1: \$3,000; Output 1.1.2: \$5,000. Miscellaneous expenses cannot be fully predicted at the project planning stage, but may include items such as service fees, communications expenses, and provision of basic materials for experts in the field in short-term situations.
9	Workshops under Output 1.1.1: local and national stakeholder consultation workshops for establishment of new PAs, and for scientific workshops for completion of technical justification documents. Workshops under Output 1.1.2: Workshops for development of PA management plans in consultation with local communities and other stakeholders, planning for HCVF management within PAs, and establishment of community management boards. 84 technical expert working group meetings @\$100 ea = \$8,400; 24 local stakeholder meetings @\$1,000 ea = \$24,000; 17 national stakeholder meetings (including partial contribution to inception workshop and PB meetings) @\$1,000 ea = \$17,000.
10	1/3rd component cost of contracting the services of an international mid-term review consultant (10 weeks @ US\$3000/wk) (M&E). 1/3rd component cost of contracting the services of an international final evaluation consultant (10 weeks @ US\$3000/wk) (M&E). International technical assistance for the following outputs: 2.1.1., 2.1.2., 2.1.5, 2.2.2., 2.2.3., 2.2.4., 2.3.1. Total of 136 2/3rd weeks @\$3000/wk.
11	1/3rd component cost of contracting the services of a national mid-term review consultant (16 weeks @ US\$625/wk) (M&E). 1/3rd component cost of contracting the services of a national final evaluation consultant (16 weeks @ US\$625/wk) (M&E). Costs of contracting national technical inputs for the following outputs: 2.1.1., 2.1.2, 2.1.4, 2.1.5, 2.1.6, 2.3.1, 2.3.2. Total of 398.4 weeks @\$625/wk.
12	Costs of national technical project staff and experts for outputs: 2.1.1., 2.1.2., 2.1.3., 2.1.4., 2.1.5., 2.1.6., 2.2.1., 2.2.2., 2.2.3., 2.2.4., 2.2.5., 2.3.1., 2.3.2., 2.3.3. Total of 1,308 weeks @\$625/wk. National technical project staff providing technical inputs include: Project manager (80% technical inputs), project assistant (33.3% technical inputs) (see budget note 3 for project assistant technical functions), landscape planning and community engagement expert, wildlife management expert, forest management expert, communications and capacity building expert, and two local project coordinators (all 100% technical inputs).
13	Component 2 travel (flights, visas, airport transportation, local ground transportation, daily subsistence allowances, accommodations, vehicle rental, fuel) allowances: International travel allowance: \$48,000 (16 international trips @\$3,000 ea) (3 trips for output 2.1.1, 1 trip for output 2.1.2, 1 trip for output 2.1.5, 1 trip for output 2.2.2., 2 trips for output 2.2.3., 1 trip for output 2.2.4., and 7 trips for output 2.3.1. Domestic travel allowance: \$100,000 (all component 2 outputs). Output 2.3.1. study tour travel allowance: \$100,000 (~10-15 persons to travel internationally to study hydropower water management regimes for sustainable forest management).
14	Technical services contracted by companies, organizations, or institutions for activities associated with the following outputs: Output 2.1.1: Updated leskhoz forest inventories (for 6 targeted forestry units @\$75,000 ea) (\$450,000), Identification of and agreement on key biodiversity areas – corridors and buffer zones surrounding PAs (\$30,000), Updating leskhoz forest management plans based on inventory and biodiversity data (\$30,000), Saxaul protection and restoration (\$20,000), Development of leskhoz grazing plans for sustainable use of forest pastures in agreement with local communities (\$70,000), Feasibility assessment of major infrastructure wildlife crossing points (\$30,000). Output 2.1.2: Pasture inventory – condition and degradation assessment, definition of carrying capacity (\$100,000). Output 2.1.3: Documentation of results – identification of good practices and lessons (\$15,000). Output 2.1.4: Aggregation of relevant available data and digitization into geo referenced database (\$15,000), Production of final integrated land and forest management plans, with associated management guidelines (\$50,000). Output 2.1.6: Strengthened enforcement of hunting regulations (\$30,000). Output 2.2.3: Design plans for forest research and monitoring center (\$40,000). Output 2.3.3. Development of TSA training materials and courses (\$15,000).
15	Procurement of essential equipment associated with activities under the following outputs: Output 2.1.1: Saxaul protection and restoration (field tools, seedlings, etc.) (\$40,000); Establishment of genetic bank and nurseries for wildlife relatives of fruit and nut plants (nursery facilities and materials, tools, seedlings, etc.) (2 nursery expansions @\$35,000 ea); Fire protection strengthening measures for forestry service units (fire equipment, including pumps, fire extinguishers, hoses and pipes, etc.) (6 targeted leskhoz @\$37,500 ea). Output 2.1.2: Implementation of SLM via pasture management plan in local communities (pasture management equipment and pasture improvement investments) (\$50,000); Four community-driven SLM pilot projects (pasture management equipment, pasture improvement investments, seeds and field tools) (\$78,833); Pilot program of installing water points in areas near key tugai forest ecosystems used by livestock (\$7,500 per well serving 5,000 livestock) (\$125,000). Output 2.1.3: Equipment support for co-financing partners for afforestation pilot activities (land tenure assessment, land surveying and mapping, climate projection modeling) (\$50,000) (partner co-financing for afforestation of 50 hectares in each of 4 sites). Output 2.1.5: Construction

Ref	Budget Notes
	of tourism infrastructure according to management plan (picnic sites, walking paths, information boards, parking facilities, gates, camping sites) (9 PAs @~\$20,000 USD/ea = total of \$175,000). Output 2.1.6: Strengthened enforcement of hunting regulations – equipment for wildlife inspectors (\$50,000); Education and awareness of stakeholders about regulations (publications, signboards, etc.) (\$10,000). Output 2.2.2: Remote-sensing forest health monitoring system (IT equipment) (\$5,000). Output 2.2.3: Forest research and monitoring center is set up and equipped with relevant equipment and software (dependent on construction of facility before end of project) (\$30,000); Training of forest research and monitoring staff on remote sensing technologies (IT equipment and software) (\$15,000). Output 2.2.5: Setting up a database on afforestation regulations, technical information and silvicultural systems (IT equipment and software) (\$6,000). Output 2.3.1: TSA process completion in 3 selected demonstration projects (software) (\$3,000).
16	Procurement of special services to develop and publish different information products in national, regional and local media and social network on sustainable forest management, sustainable land management, forest investment partnership, hunting regulations, private investment in afforestation, TSA process and training: Output 2.1.1 (\$22,000 allowance), Output 2.1.2. (\$5,000 allowance), Output 2.1.3 (\$2,000 allowance), Output 2.1.4 (\$6,000 allowance), Output 2.1.6 (\$30,000 allowance), Output 2.2.3 (\$1,000 allowance), Output 2.2.5 (\$2,000 allowance), Output 2.3.1 (\$6,000 allowance), Output 2.3.3 (\$22,000 allowance).
17	Miscellaneous expenses allowance: Output 2.1.1: \$9,000; Output 2.1.2: \$5,000; Output 2.1.3: \$2,000; Output 2.1.4: \$3,000; Output 2.1.6: \$5,000; Output 2.2.3: \$1,000; Output 2.2.5: \$2,000; Output 2.3.1: \$6,000; Output 2.3.3: \$2,000. Miscellaneous expenses cannot be fully predicted at the project planning stage, but may include items such as service fees, communications expenses, and provision of basic materials for experts in the field in short-term situations.
18	Workshops, conferences, and trainings: Output 2.1.1.: Workshops related to updating forest inventories, strategy for removal of non-native invasive tree/bush species in HCVF zones, development of methodology for monitoring climate change effects on woody species, identification of key biodiversity areas for buffer zones and corridors, training on HCVF principles and practices for forestry staff including special training on stakeholder participation and community engagement, development of forestry unit grazing plans, feasibility assessment of major infrastructure wildlife crossings. Output 2.1.2: Stakeholder consultations with Pasture Management Committees, development of sustainable pasture management plans, implementation of pasture management plans, community-driven SLM pilot projects, planning for pilot program of installing water points in areas near key tugai forest ecosystems used by livestock. Output 2.1.3: Roundtable on private afforestation. Output 2.1.4: Stakeholder consultations on KBAs, corridors and buffer zones in 6 targeted districts for integrated land use planning, production of final integrated land and forest management plans and public dissemination, training of local government staff in use of geo-referenced database. Output 2.1.6: Workshops with local stakeholders on effectiveness of current hunting regulations, and coherence with biodiversity conservation needs and priorities, training for wildlife inspectors on advanced enforcement of hunting regulations, workshops and meetings with local stakeholders to raise awareness about hunting regulations and enforcement. Output 2.2.2: Workshops to design forest health monitoring system, and training of forestry staff to implement. Output 2.2.3: 15 training programs and improved forest research and data analysis capacities to support implementation and uptake of HCVF management approaches. Output 2.2.4 Workshops to develop regulations on subsidized maintenance of forests and SFM practices, tax reduction, land provision, wood and processing sector incentives, and development of carbon credit market and access to international markets. Output 2.2.5: Workshops on identifying suitable sites for incentivized private afforestation, workshop to set up database on afforestation regulations, and marketing events for afforestation-related private businesses to present business cases and identify potential investor groups. Output 2.3.1: Workshops to complete 3 TSA processes in selected demonstration sites. Output 2.3.3: Piloting “test class” first round of TSA national training. Cost factors: 2 national trainings and forums @\$5,000 each = \$10,000; 37 regional (sub-national) trainings @\$1,000 each = \$37,000; 12 national stakeholder consultations (including partial contribution to inception workshop and PB meetings) @\$1,000 each = \$12,000; 212 local stakeholder consultations @\$1,000 each = \$212,000; 360 technical expert working group meetings @\$100 each = \$36,000.
19	1/3rd component cost of contracting the services of an international mid-term review consultant (10 weeks @ US\$3000/wk) (M&E). Costs of contracting the services of an international final evaluation consultant (10 weeks @ US\$3000/wk) (M&E). International technical assistance for the following outputs: 3.1.3. Total of 16 2/3 weeks @\$3000/wk.
20	1/3rd component cost of contracting the services of a national mid-term review consultant (16 weeks @ US\$625/wk) (M&E). 1/3rd component cost of contracting the services of a national final evaluation consultant (16 weeks @ US\$625/wk) (M&E). Costs of contracting national technical inputs for the following outputs: 3.1.1., 3.1.3. Total of 152 weeks @\$625/wk.
21	Costs of national technical project staff and experts for outputs 3.1.1., 3.1.2., 3.1.3., 3.1.4. Total of 396 weeks @\$625/wk. National technical project staff providing technical inputs include: Project manager (80% technical inputs), project assistant (33.3% technical inputs) (see budget note 3 for project assistant technical functions), landscape planning and community engagement expert, wildlife management expert, forest management expert, communications and capacity building expert, and two local project coordinators (all 100% technical inputs).
22	Component 3 travel (flights, visas, airport transportation, local ground transportation, daily subsistence allowances, accommodations, vehicle rental, fuel) allowances: International travel allowance: \$39,000 (13 trips for output 3.1.3. @\$3,000 ea). Domestic travel allowance: \$58,000 (\$6,000 for Output 3.1.1., \$50,000 for Output 3.1.2 (\$10,000/yr for domestic travel for

Ref	Budget Notes
	communications experts for education and awareness activities, and for Kazakh experts to travel to international meetings, conferences, and symposiums for knowledge management activities), and \$2,000 for Output 3.1.3.).
23	Technical services contracted by companies, organizations, or institutions for activities associated with the following outputs: Output 3.1.1: Proactive and dynamic patrol strategies, collection and use of patrol data, effective management systems and infrastructure and clear and consistent standards and procedures to maximize effectiveness of management (\$40,000). Output 3.1.3: Establishment of a “virtual” snow leopard research and monitoring center (\$50,000), DNA analysis in Almaty laboratory with international expert to mentor the process (\$10,000).
24	Procurement of essential equipment associated with activities under the following outputs: Output 3.1.1: Suitable and sufficient equipment and supplies to optimize effectiveness of law enforcement patrols (field monitoring and enforcement equipment – binoculars, field scopes, uniforms, radios, etc.) (\$50,000 allowance). Output 3.1.3: Snow leopard and associated biodiversity monitoring equipment investments (camera traps, binoculars, field scopes, GPS units, hand held field data collection units, etc.) (\$200,000 allowance (\$40,000/year) as per needs estimated in Kazakhstan NSLEP); Demonstration of satellite collaring of snow leopards (7 collars @\$5,000 ea, plus \$15,000 in trapping tools).
25	Procurement of special services to develop and publish different information products in national, regional and local media and social network on wildlife law enforcement and training (Output 3.1.1: \$10,000 allowance), snow leopard and associated biodiversity monitoring (Output 3.1.3: \$2,000), and annual state of the snow leopard report, and education and awareness activities for all project activities and components (Output 3.1.4: \$107,500 allowance).
26	Miscellaneous expenses allowance: Output 3.1.1: \$7,000; Output 3.1.3: \$11,199. Miscellaneous expenses cannot be fully predicted at the project planning stage, but may include items such as service fees, communications expenses, and provision of basic materials for experts in the field in short-term situations.
27	Workshops, conferences, and trainings: Output 3.1.1: Advanced trainings for wildlife law enforcement patrol staff, workshops to establish inter-agency collaboration mechanisms for wildlife law enforcement, advanced training of senior rangers in operational planning and deployment and patrol management and other key topics. Output 3.1.3: Workshop to update national snow leopard and associated biodiversity monitoring methodology in relation to global standards, GIS training for PA staff and snow leopard monitoring center collaborators, training of PA staff and other stakeholders on snow leopard and associated biodiversity monitoring techniques and community engagement, series of regional workshops to establish MoU on sharing transboundary snow leopard population monitoring data with neighboring range countries. Cost factors: 3 regional (international) workshops @\$5,000 each = \$15,000; 18 national stakeholder consultations or trainings <b>including partial contribution to inception workshop and PB meetings</b> @\$1,000 each = \$18,000; 34 regional (sub-national) trainings or workshops @\$1,000 ea = \$34,000.
28	Costs of national administrative project staff for project management: Project manager (16.67% administrative inputs) (48 weeks @\$625/wk), Project Assistant (66.7% administrative inputs) (160 weeks @\$375/wk), Procurement Specialist (100% administrative inputs) (240 weeks @\$375/wk).
29	Project management and oversight travel (flights, visas, airport transportation, local ground transportation, daily subsistence allowances, accommodations, vehicle rental, fuel) allowances: \$26,246. Domestic travel allowance of \$25,000 (\$5,000/yr) for project board meetings, plus an additional \$1,246 for domestic travel for project team project monitoring and oversight.
30	Services of accounting firm for annual audit @\$3,000/year (\$15,000 total).
31	Internet / phone: \$13,000. Office rent: \$90,000.
32	Direct Project Costs: Estimated UNDP Direct Project Cost recovery charges as indicated in the Agreement in Annex Y of the Project Document. The project is to be managed on the 100% Country Office Cost Recovery basis, upon request of the government, the implementing partner. The estimated cost (total \$60,000) includes: (i) recruitment and payroll management of project staff; (ii) purchase of goods and equipment as requested; and (iii) hiring of consultants. In accordance with GEF Council requirements, the costs of these services will be part of the executing entity’s Project Management Cost allocation identified in the project budget. DPC costs would be charged at the end of each year based on the UNDP Universal Pricelist (UPL) or the actual corresponding service cost. The amounts here are estimations based on the services preliminarily indicated, however as part of annual project operational planning the DPC to be requested during the calendar year would be defined and the amount included in the yearly project management budgets and would be charged based on actual services provided at the end of that year (total \$60,000).

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## **XI LEGAL CONTEXT**

162. This document together with the CPAP signed by the Government and UNDP which is incorporated herein by reference, constitute together a Project Document as referred to in the Standard Basic Assistance Agreement (SBAA); as such all provisions of the CPAP apply to this document. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner”, as such term is defined and used in the CPAP and this document.

163. Consistent with the Article III of the Standard Basic Assistance Agreement (SBAA), the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

- a) Put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) Assume all risks and liabilities related to the implementing partner’s security, and the full implementation of the security plan.

164. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document.

165. The Implementing Partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via [http://www.un.org/sc/committees/1267/aq\\_sanctions\\_list.shtml](http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml). This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document”.

166. Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

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## **XII ANNEXES**

Annex A. Multi Year Work Plan

Annex B. Monitoring Plan

Annex C: Evaluation Plan

Annex D. GEF Tracking Tools for Baseline, GHG Calculations (EX-ACT)

Annex E. Terms of Reference for Project Board, Project Manager, and other positions

Annex F. UNDP Social and Environmental Screening Protocol

Annex G. Stakeholder Engagement and Communication Plan

Annex H. Gender Analysis and Gender Mainstreaming Action Plan

Annex I. UNDP Risk Log

Annex J. Results Framework Indicator Data Disaggregation

Annex K. Region Profiles

Annex L. Maps

Annex M. Legal and Policy Context

Annex N. Snow Leopard Monitoring Review

Annex O. PA Capacity Needs Assessment

Annex P. Baseline Market Study on Potential for Private Afforestation

Annex Q. HCVF in Kazakhstan

Annex R. Forest Policy and Administration in Kazakhstan

Annex S. Capacity of Kazakhstan Forests for Carbon Capture, Sequestration, and Emission

Annex T. Hunting Context

Annex U. TSA Feasibility Assessment

Annex V. UNDP Project Quality Assurance Report

Annex W. Results of the capacity assessment of the project implementing partner and HACT micro assessment

Annex X. Project Co-financing Letters

Annex Y. Project Direct Costs Agreement

XII.i Annex A. Multi Year Work Plan

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Output 1.1.1 Protection regimes approved for globally important forest ecosystems (saxaul, floodplain forest, and mountain forest), and their associated SLM and biodiversity ecosystem services, in cooperation with local communities																					
1. Completion of technical justification documents																					
2. Local stakeholder consultations																					
3. National stakeholder consultations																					
4. National approval of protected areas																					
Output 1.1.2 Newly established forest PAs are operationalized with improved management effectiveness, including community management mechanisms																					
1. Drafting management plan, including zoning, staffing plans, and business plan-based budget																					
2. Specific planning for management of forest resources within PA management plan																					
3. Comprehensive field assessment of biodiversity values followed by monitoring																					
4. Field validation of boundary demarcation																					
5. Establishment of community management board																					
6. Initial investment in critical infrastructure and technical capacity to operationalize new PAs																					
7. Forest ecosystem restoration in Ile-Balkhash tugai forest for ecosystem functioning and biodiversity conservation																					
Output 1.2.1. Development and implementation of forest-specific management measures in PA management plans for PAs, covering 839 567 ha of HCVF																					
1. Revision of PA management plans to appropriately reflect needs of managing HCVF																					
2. Conservation and SFM measures in PAs for high priority forest management issues																					
3. Revision of silvicultural standards, targets and practices																					
4. At national level - amendment to PA legislation to allow ecosystem restoration of native species within specially protected zones																					

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
5. Management plan for globally important genetic resources of forest ecosystems																					
6. Training PA staff on HCVF management principles and practices																					
Output 2.1.1. Revision and implementation of Forest Management Plans for 10 forestry units bordering forest PAs covering [5 365 100] hectares (with [2 783 000] forested area), including community input mechanisms																					
1. Updated leskhoz forest inventories																					
2. Identification of and agreement on key biodiversity areas - corridors and buffer zones surrounding PAs																					
3. Updating leskhoz Forest Management Plans based on inventory and biodiversity data																					
4. Training on HCFV principles and practices for leskhoz staff																					
5. Saxaul protection and restoration - Research and training on improved saxaul reforestation techniques; development of SLM measures through improved forest pasture management; extend the cutting ban; feasibility assessment of alternative fuel sources; community awareness raising relating to saxaul protection																					
6. Establishment of nurseries for wild relatives of fruit and nut plants (north tian shan, west tian shan)																					
7. Fire protection strengthening measures																					
8. Installation of wildlife crossing points along main new highway in Uyghur leskhoz																					
9. Revision and improvement of silvicultural standards, targets and practices																					
Output 2.1.2. Forest pasture management plans (including grazing plans) developed and implemented with local community engagement in X pilot sites bordering PAs covering XXX,XXX ha of forest pastures																					
1. Pasture inventory - condition and degradation assessment, definition of carrying capacity - in community forest-pasture lands surrounding leskhoz and PAs.																					
2. Stakeholder consultations with Pasture Management Committees																					

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
3. Development of sustainable pasture management plan, including grazing plans for forestry units																					
4. Implementation of SLM via pasture management plan - mechanism for monitoring and enforcement to be defined																					
5. community-driven SLM pilot projects: demonstrating seasonal rotational grazing practices for SLM, and improvement of pastures by complementary seeding of forage herbs																					
6. Pilot program of installing water points in areas near key tugai forest ecosystems used by livestock.																					
Output 2.1.3. Incentive-based Forest Ecosystem Management Partnership: Four models of afforestation investments are designed and tested within different ownership patterns, including local community engagement																					
1. Roundtable forum on models, approaches, sites, and identification of partners																					
2. Agreements with four partners in place																					
3. Afforestation studies and activities (partner co-financed)																					
4. Documentation of results - identification of good practices and lessons																					
5. Draft regulations to implementation experience																					
Output 2.1.4 Integrated land and forest management plans developed and implemented in six administrative districts through community consultation covering XXX,XXX ha surrounding newly established PAs, including designation of buffer zones and corridors																					
1. Stakeholder consultations																					
2. Aggregation of relevant available data																					
3. Digitization of relevant data into geo-referenced database																					
4. Stakeholder consultations to identify key biodiversity areas, corridors, and buffer zones, and corresponding management requirements																					
5. Production of final integrated land and forest management plans, with associated management guidelines, and public dissemination																					
6. Training of local government staff in use of geo-referenced database																					

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Output 2.1.5 Tourism management strategies developed for forest PAs in cooperation with local communities, strategies integrated in PA management plans and under implementation																					
1. Detailed analysis of tourism loads and threats in each PA, including future projections																					
2. Analysis of revenue options from tourism																					
3. Development of tourism management plan, and integration with existing PA management plan																					
4. Construction of tourism infrastructure according to management plan																					
Output 2.1.6 Hunting regulations developed to fully incorporate biodiversity considerations and economic benefits to local communities, and implemented with strengthened monitoring and enforcement capacity																					
1. Biodiversity inventory analysis on forest hunting areas in three regions																					
2. Research and analysis on effectiveness of current regulations, and coherence with biodiversity needs and priorities																					
3. Proposal developed and adopted for revised regulations and management approaches																					
4. Strengthened enforcement of hunting regulations - training, equipment for wildlife inspectors																					
5. Education and awareness of stakeholders about regulations - local communities near hunting areas, hunting service providers, etc.																					
Output 2.2.1. Review of and modifications to existing forest governance system to ensure that the HCVF managed by 123 forestry entities (12,452,000 ha) are covered by policy objectives to be managed as an integral component of the national ecological network (IUCN VI PA category Managed resource protected area).																					
1. HCVF conservation and sustainable management strategy and national plan supported with adequate budget is developed and endorsed at national level																					
2. Assess the existing HCVF governance system as to ensure coordinated and effective implementation of the HCVFs Strategy and Action Plan within the available capacities and policy mechanisms between Central and local governments. Transfer of forestry units to central authority to be managed as a part of ecological network.																					

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
3. Review the existing technical, ecological and policy regulations on principal, sanitation and other felling in HCVFs based on inventories and threats analysis																					
4. Improved data management flows and storage with implementation of standardized reporting and database system																					
5. Review and improve the existing regulations and tools of HCVF inventories and systemic monitoring																					
6. Policy and mechanisms for SFM certification are developed and endorsed																					
Output 2.2.2. HCVF standards, tools, and practices are integrated into national forest management guidelines and regulations to improve the management effectiveness of HCVF																					
1. Assess the operational policy and guidelines for HCVFs management as to compliance with internationally set standards, tools and practices.																					
2. Develop comprehensive guidelines for HCVFs management planning based on threats assessments, identification and measuring of ecological and socio-economic characteristics and functions of the forests with appropriate intersectoral coordination and community engagement mechanisms in place																					
3. General scheme of fire early detection, prevention and extinguishing is developed within the forest fund lands.																					
4. Infrastructure and machinery standards for fires management management are revised and integrated into management planning.																					
5. Forest health monitoring system is set up and supported with relevant capacity and policy																					
6. Research on climate change adaptation measures is enhanced																					
Output 2.2.3. Training program and improved forest research and data analysis capacities to support implementation and uptake of HCVF management approaches																					
1. 15 Training modules are developed: forest management planning, Forest inventory, Forest management monitoring, Forest restoration and rehabilitation, Silviculture in natural and planted forest, fire management, forest and water, non-timber products management, forest pests, forest genetic resources, CC adaptation and mitigation,																					

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
forest tourism and recreat, forest certification, wildlife management, land use planning.																					
2. 15 training programs are organized for the target organizations																					
3. Forest research and monitoring Center is set up and equipped with relevant equipment and software.																					
4. Training for the staff of the forest research and monitoring Center																					
Output 2.3.1. Integrated economic and environmental resource management optimization assessments (Targeted Scenario Analysis (TSA)) demonstrated in three resource-management scenarios for improved conditions of mountain forests and grasslands, Tugai and Saxaul forest ecosystems.																					
1. TSA process completion in 3 selected demonstration projects																					
2. Study tour to California for hydropower TSA																					
3. The results of the TSAs are integrated in resource management planning for conservation of 3 types of forest (mountain forests and grasslands, Tugai, and Saxaul).																					
Output 2.3.2. Methodology and guidance for TSAs related to mountain forests and grasslands, Tugai and Saxaul forest ecosystems, are integrated in Kazakh legal context																					
1. Identify and revise sectoral policies relevant for TSA approach and relevant stakeholders																					
2. Identify existing mechanisms and gaps for including ecosystem services as inputs into sectoral outputs																					
3. Improve the guidance for regional planning by proposing TSA tools																					
4. Revise the regulations for EIA for the infrastructure development projects within the regions containing HCVFs																					
5. Consider the TSA application for development of financial incentives for afforestation projects and agroforestry projects (subsidies, tax exemptions, certifications)																					
Output 2.3.3. TSA is integrated into capacity development and professional training courses.																					
1. Agreements with training partners on mechanism, curriculum, and process for training on TSA																					
2. Development of TSA training materials and courses																					
3. Adoption and integration by training partners of TSA training materials and courses																					

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
4. Piloting "test class" first round of TSA national training																					
Output 3.1.1. Enhanced enforcement capacities of wildlife protection agencies through: (i) improved effectiveness of monitoring, apprehending, and prosecution of illegal activities; (ii) training materials developed and rolled out for wildlife protection agencies.																					
1. Suitable and sufficient equipment and supplies, appropriate terms and conditions of service, and supported and incentivized patrol staff in order to optimize the effectiveness of law enforcement patrols to ensure skilled and knowledgeable rangers, experienced and competent patrol leaders,																					
2. Proactive and dynamic patrol strategies, collection and use of patrol data, effective management systems and infrastructure, and clear and consistent standards and procedures to maximize effectiveness of management																					
3. Improved investigation collaboration mechanisms with other law enforcement agencies and with prosecutors, ensuring the investigative process leading to prosecution in court																					
4. Training of the senior rangers and patrol rangers in operational planning and deployments, patrol management, care and maintenance of equipment, information and data handling, standard operating procedures, crime scene training, fitness training.																					
Output 3.1.2 Targeted additional implementation of Kazakhstan's National Snow Leopard Ecosystem Conservation Plan and international engagement in GSLEP																					
1. Research and mapping of snow leopard population bio-ecological characteristics, habitat, prey, and predators and competitors in 4 key locations																					
2. Threats reduction analysis and mapping in 4 locations																					
3. Information and awareness activities (conferences, international meetings, publications)																					
Output 3.1.3. System for long-term regular monitoring of snow leopard in Kazakhstan put in place applying internationally certified quality standards (GIS-based), including																					
1. Monitoring methodology update considering the methods and techniques recommended by global monitoring framework guidance																					
2. Monitoring equipment investments																					

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
3. Establishment of a "virtual" snow leopard research and monitoring center																					
4. GIS training for PA and monitoring center collaborators																					
5. Training for PA staff and other stakeholders on RTA, snow leopard, prey and habitat monitoring techniques, community engagement																					
6. Training of 1 laboratory in sampling, analysis, interpretation and storing of DNA materials for 1 laboratory in Almaty																					
7. DNA analysis in Almaty laboratory with international expert to mentor the process																					
8. MoU on monitoring data sharing with the bordering snow leopard range countries																					

XII.ii Annex B. Monitoring Plan

The Project Manager will collect results data according to the following monitoring plan.

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
<b>Project Objective:</b> <i>Improve conservation status and management of key forest and associated grassland, riparian and arid ecosystems important for conservation of biodiversity, land resources and provision of livelihoods for local communities</i>	1. Area of critical ecosystems with improved management, including tugai, saxaul, and mountain forests, and associated grasslands	>9,300,000 hectares	Project reports and documentation; Successful completion of project activities for relevant project components, as verified by the MTR and TE.  GEF-6 Corporate Results Indicator 1: <i>“Improved management of landscapes and seascapes covering 300 million hectares”</i>	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- Project does not encounter critical risks that derail implementation - New threats do not emerge
	2. Forest area in Kazakhstan under <u>indirectly</u> improved management	Forests managed by 123 forestry entities = 12,652,400 ha of forest landscapes (within 29,318,750 total ha of national forest fund land); as indicated by status of HCVF management regulations (adopted at national level); Status of national institutional framework for forest management (plan for restructuring leskhozoes under FWC instead of akimats adopted at national level)	Project reports and documentation; Successful completion of project activities for relevant project components, as verified by the MTR and TE	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- Stakeholders remain interested in large-scale forest sector reform - Large scale sector reform can be achieved in the timeframe available for the project - Changing the institutional framework of the forest sector is not too complex for the scale and scope of the project
	3. # direct project beneficiaries	<u>Total:</u> ~41,000:	Number of staff employed at PAs targeted by the project	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- All staff in targeted PAs and leskhozoes will benefit from project

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
	<p># of PA staff with enhanced individual capacity</p> <p># of forestry staff with enhanced individual capacity</p> <p># of local resource users with improved sustainability of livelihoods</p>	<p><u>PA staff:</u> &gt;2,000 PA staff with enhanced capacity</p> <p><u>Forestry staff:</u> 457 leskhoz staff</p> <p><u>Local resource users:</u> Total: 38,753 (19,382 men; 19,371 women) (figures official from 2009 census)</p>	<p>Number of staff employed at leskhoz directly targeted by the project</p> <p>Number of people living in rural districts directly targeted by the project</p>				<p>investments in capacity strengthening</p> <ul style="list-style-type: none"> <li>- No large-scale staff turnover in targeted PAs and leskhoz</li> <li>- All community members in targeted districts depend at least partially on pastoralism for livelihoods, and therefore will benefit from project activities on sustainable land management</li> </ul>
	<p>4. Population trends for globally significant species, such as snow leopard, argali, goitered gazelle, and other threatened species within the expanded target PA estate:</p> <p><u>Alpine forest and associated ecosystems, flora:</u></p> <ul style="list-style-type: none"> <li>- <i>Picea schrenkiana</i></li> <li>- <i>Malus sieversii</i></li> <li>- <i>Malus niedzwetzkyana</i></li> <li>- <i>Juniperus sp. (turkestanica, semiglobosa, seravschanica)</i></li> <li>- <i>Betula tianschanica</i></li> <li>- <i>Populus tremula L.</i></li> <li>- <i>Abies siberica</i></li> </ul>	Species indicators.	Annual PA flora and fauna monitoring, as summarized in METT scorecards cells C38 and C39	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	<ul style="list-style-type: none"> <li>- Project lifetime is sufficient to allow impacts to be generated and monitored</li> <li>- New threats do not emerge</li> </ul>

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
	<p>- <i>Crataegus turkestanica</i></p> <p>- <i>Picea obovata</i></p> <p><u>Alpine forest and associated ecosystems, fauna:</u></p> <p>- <i>Uncia uncia</i></p> <p>- <i>Ursus arctos (incl. ssp isabellinus)</i></p> <p>- <i>Ovis ammon ssp (karelini, nigrimontana)</i></p> <p>- <i>Capra sibirica</i></p> <p>- <i>Cervus elaphus</i></p> <p>- <i>Capreolus pygargus</i></p> <p>- <i>Canis lupus</i></p> <p>- <i>Marmota sp. (baibacina, caudate, menzbieri)</i></p> <p><u>Floodplain (tugai) forest and associated ecosystems, flora:</u></p> <p>- <i>Populus pruinosa</i></p> <p>- <i>Ulmus sp.</i></p> <p>- <i>Fraxinus sogdiana</i></p> <p>- <i>Elaeagnus oxycarpa</i></p> <p>- <i>Tamarix ramosissima</i></p> <p><u>Floodplain (tugai) forest and associated ecosystems, fauna:</u></p> <p>- <i>Capreolus pygargus</i></p> <p>- <i>Sus scrofa</i></p>						

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
	<ul style="list-style-type: none"> <li>- <i>Cervus elaphus bactrianus</i></li> <li>- <i>Hemiechinus auritus</i></li> <li>- <i>Columba eversmanni</i></li> <li>- <i>Falco cherrug</i></li> <li>- <i>Aegyptius monachus</i></li> </ul> <p><u>Saxaul forest and associated ecosystems, flora:</u></p> <ul style="list-style-type: none"> <li>- <i>Populus pruinosa</i> Schrenk</li> <li>- <i>Elaeagnus oxycarpa</i></li> <li>- <i>Haloxylon aphyllum</i>, <i>H. persicum</i></li> <li>- <i>Berberis iliensis</i> M. Pop</li> <li>- <i>Lonicera iliensis</i> Pojark</li> <li>- <i>Tamarix ramosissima</i></li> </ul> <p><u>Saxaul forest and associated ecosystems, fauna:</u></p> <ul style="list-style-type: none"> <li>- <i>Gazella subgutturosa</i></li> <li>- <i>Capreolus capreolus</i></li> <li>- <i>Aquila rapax</i></li> <li>- <i>Aquila chrysaetos</i></li> <li>- <i>Lepus tolai</i></li> </ul>						
<b>Project Outcome 1</b>	5. Incremental area under conservation management through establishment of new PAs	1,830,000 net new hectares under protection, which: <ul style="list-style-type: none"> <li>- Increases the national PA coverage 0.67% from 8.81% to 9.49%,</li> <li>- Secures protection of</li> </ul>	Area of newly established PAs, according to government approval decree documents, as reported in annual PIR,	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- National political commitment to expanding the PA system remains firm

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
		761,693 ha of alpine forest ecosystems and 522,593 ha of tugai forest ecosystems; - Provides PA coverage for more than 1,000,000 ha of snow leopard range, which increases PA coverage of the two priority national snow leopard landscapes (Zhongar Alatau, and North/Central Tian Shan) from ~40% to ~90% (Zhongar Alatau = ~1,000,000 ha of snow leopard habitat, with current PA coverage of ~30%, which will increase by approximately 645,000 ha or 61% of snow leopard range; North/Central Tian Shan = ~1,100,000 ha of snow leopard range, with current PA coverage of ~48%, which will increase by approximately 440,000 ha, or 40% of snow leopard range)	and verified by MTR and TE				- Project does not encounter critical risks related to stakeholders in establishment of new PAs  - Various forms of PAs provide for improved conservation of biodiversity
	6. Forest PA management effectiveness	Baseline METT Scores: <u>Alpine forest ecosystems:</u> Almaty Zapovednik: 67 Ile-Alatau NP: 66 Kolsay Kolderi NP: 80 Kolsay Kolderi NP Expansion: 24 Zhongar Alatau NP: 59 Zhongar Alatau NP Expansion: 27 SW Zhongar Alatau ("Koksu Reserve") (proposed): 23	GEF-6 BD Tracking Tool METT for each PA	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- Project activities are sufficiently targeted to increase PA METT score  - Project results, in terms of increase METT score, can be documented within the timeframe of the project  - Proposed PAs are established in time to begin implementation of PA including

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
		Sairam-Ugam NP: 71 Aksu-Jabagly Zapovednik: 81 Karatau NP: 81 Karatau NP Expansion: N/A Katon Karagay NP: 20 Markakol Reserve: 48 Zapadno-Altay Reserve: 77 Ketmen Reserve (proposed): 21 Terskey Reserve (proposed): 21 Merke Reserve (proposed): 18 Saur-Manrak Reserve (proposed): 17 Tarbagatai NP (proposed): 18  <u>Floodplain (tugai) and saxaul forest:</u> Charyn Canyon NP: 68 Syr Darya-Turkestan Reserve: 73 Ile-Balkhash Reserve (proposed): 15 Ile Floodplain Reserve (proposed): 16					strengthening of management
	7. Level of achievement of Kazakhstan's forest PAs in securing their biodiversity and other associated values	No forest PAs in Kazakhstan have achieved "Green List" certification	Presence of Green List assessment, as verified by MTR and TE	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- Criteria of Green List standard are suitable for Kazakhstan context
<b>Project Outcome 2</b>	8. Change in area of sustainably managed forest in forest	>1,000,000 ha, as indicated by adoption of improved HCVF management practices in 6 targeted leskhozoes	GEF-6 SFM Tracking Tool cell C18	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- Forest managers are open and willing to implement HCVF management measures

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
	ecosystems bordering protected areas						- Institutional framework re-alignment in the forest sector does not interfere with forest management planning at the site level
	9. Reduction in degraded and deforested area in targeted forestry territories bordering protected areas	11,305.60 ha Leskhoz: degraded ha, deforested ha Bakanas: (no data for degraded area, lack of monitoring capacity), 7104 ha Narynkol: 70.6 ha, 67 ha Uygur: 986.4 ha, 3.2 ha Zaysan: 786 ha, 1646 ha Zharkent: 453.4 ha, 189 ha Zhongar: No data, lack of monitoring capacity.	Reporting by targeted leskhozoes ( <i>Note: Baseline determined as per existing methodology and data (area of sanitary cutting and other technical activities), which is not comprehensively reflective of forest characteristics. An updated methodology for calculating forest degradation and deforestation will be determined at the inception phase and described in inception report.</i> )	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- Forest degradation is not significantly worse than currently known - Forest degradation can be changed and documented within project lifetime - New threats do not emerge (or rate of impact of threats does not significantly change)
	10. Change in area of degradation in pasture and forest pasture landscapes bordering protected areas	Total: 0 ha with reduced degradation out of 73,000 degraded ha of pastureland	GEF-6 PMAT (Land Degradation) Tracking Tool, sheet 2 ("Project Context") cell C17.	Reported in DO tab of the GEF PIR Mid-term and Completion	Project Team	Project Documentation	- Implementation of improved pasture management planning leads to reduced degradation
	11. Area outside PAs with enhanced conservation management (PA corridors and buffer zones identified in district integrated management plans)	N/A (no conservation measures planned in targeted districts)	GIS analysis of integrated management plan maps, validated by terminal evaluation	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- District authorities are able and willing to apply and implement integrated management plans in other district land use planning policies and procedures

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
	12. Number of good practice models for private afforestation established in Kazakhstan	Two functional and replicable models demonstrated as feasible to meet key gaps in private afforestation regulatory framework: One private-sector based, and one community-based	Project documentation, assessment by terminal evaluation	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- Potential private afforestation partners remain willing and interested based on terms to be defined for afforestation pilot models
	13. Degree to which policy and regulatory context for managing natural resources incorporates ecosystem services	No methodology for considering full cost-benefit of ecosystem services incorporated in natural resource management policy and regulatory framework	Project documentation, assessment by terminal evaluation	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	- Piloting of TSA in Kazakhstan context is successful, and deemed valuable by stakeholders
<b>Project Outcome 3</b>	14. Quality and coverage of snow leopard monitoring data in Kazakhstan as indicated by estimated accuracy and timeliness of national snow leopard population estimate	Latest population estimate 15 years prior (2001) with a 91% confidence level (lowest possible estimated population / highest possible estimated population, i.e. 100/110 = 91%)	Annual national snow leopard monitoring database	Reported in DO tab of the GEF PIR	Project Team	Project Documentation	<ul style="list-style-type: none"> <li>- Accurately estimating snow leopard population can be done within a 12-month period</li> <li>- It is in the national interest to report an accurate level of snow leopard population on an annual basis</li> <li>- The project, along with other partner initiatives, can provide full national coverage for snow leopard monitoring</li> </ul>

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
	15. Level of international cooperation and coordination with Kazakhstan border countries regarding illegal wildlife trade, biodiversity management in borderland protected areas, and snow leopard monitoring	No formal international agreement between Kazakhstan and neighboring countries related to snow leopard conservation	Existence/absence of agreement	Annually	Project Team	Project Documentation	<ul style="list-style-type: none"> <li>- Political will exists between Kazakhstan and at least one bordering country to cooperate on snow leopard conservation</li> <li>- An agreement can be negotiated and adopted within the life of the project</li> <li>- Cooperation on snow leopard conservation presents the opportunity for a non-politically threatening issue for international cooperation</li> </ul>
<b>Cross-cutting</b>	16. Consistency of project gender mainstreaming approach with project plans	<p>Gender mainstreaming carried out during project implementation, as indicated by:</p> <ul style="list-style-type: none"> <li>a. Project Board and local stakeholder working groups have gender balance and/or include a gender expert;</li> <li>b. Policies, laws, and regulations developed with project support include gender perspectives, as relevant</li> <li>c. Project events and activities (e.g. trainings) promote gender balance</li> </ul>	Monitoring via annual project reporting (PIR) by project team	Annually Reported in DO tab of the GEF PIR	Project Team	Verification at mid-term review and terminal evaluation by independent external experts	All relevant stakeholders support or are in accordance with gender mainstreaming efforts undertaken by the project

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
		d. among invited participants, as feasible Project education and awareness activities are developed and carried out incorporating gender perspectives, as relevant					
<b>Mid-term GEF Tracking Tool (if FSP project only)</b>	N/A	N/A	Standard GEF Tracking Tool available at <a href="http://www.thegef.org">www.thegef.org</a> Baseline GEF Tracking Tool included in Annex.	After 2 <sup>nd</sup> PIR submitted to GEF	Project Team	Completed GEF Tracking Tool	N/A
<b>Terminal GEF Tracking Tool</b>	N/A	N/A	Standard GEF Tracking Tool available at <a href="http://www.thegef.org">www.thegef.org</a> Baseline GEF Tracking Tool included in Annex.	After final PIR submitted to GEF	Project Team	Completed GEF Tracking Tool	N/A
<b>Environmental and Social risks and management plans, as relevant.</b>	N/A	N/A	Updated SESP and management plans	Annually	Project Team UNDP CO	Updated SESP	N/A

### XII.iii Annex C: Evaluation Plan

Evaluation Title	Planned start date Month/year	Planned end date Month/year	Included in the Country Office Evaluation Plan	Budget for consultants	Other budget (i.e. travel, site visits etc...)	Budget for translation
<b>Mid-term Review</b>	June 2020	August 2020 (Submitted to GEF same year as 3 <sup>rd</sup> PIR)	Yes	\$40,000	Included in project management and technical components	Included in project management and technical components
<b>Terminal Evaluation</b>	September 2022	November 2022	Yes	\$40,000	Included in project management and	Included in project management and technical components

					technical components	
<b>Total evaluation budget</b>				USD \$80,000		

## XII.iv Annex D. GEF Tracking Tools for Baseline

See attached documents:

Protected Areas Management Effectiveness Tracking Tool for GEF-6: For all PAs targeted by the project

Sustainable Forest Management Tracking Tool for GEF-6

Land Degradation Portfolio Monitoring and Assessment Tool for GEF-6

Greenhouse Gas Calculations (EX-ACT Tool) – See results below.

**Narrative summary:** Climate Change Benefits: The project relies on the formulas and automatic calculations related to CO<sub>2</sub> emissions benefits in the EX-ACT tool. Annex S of the Prodoc is intended to provide overall support and justification for the project as contributing climate change benefits through SFM, but calculation of direct benefits was done using FAO Ex-ACT tool in line with GEF guidance. The use of the EX-ACT tool for carbon calculations is the common approach for all UNDP-GEF projects that must report on CO<sub>2</sub> benefits. The EX-ACT Excel file used for the CO<sub>2</sub> benefit calculations has been included with the submission documents. The EX-ACT tool requests inputs on the hectares of forest and land area affected by the project, as well as the level of with-project and with-out project degradation or deforestation. Under Outcome 2 (mainly under Output 2.1.1) the project will help avoid 9,009 hectares of deforestation of sub-tropical steppe (Forest Zone 3) and sub-tropical mountain system (Forest Zone 4) forests. Per the EX-ACT tool algorithms, this will avoid 2,775,426 tons CO<sub>2</sub> equivalent emissions (tCO<sub>2</sub>eq). Under Output 2.1.3 the project will also produce 200 hectares of afforestation. Per the EX-ACT tool algorithms, this will sequester 60,611 tCO<sub>2</sub>eq. The project does not work on cropland. In terms of grassland, under Output 2.1.2 the project will help 73,000 of pastureland turn from non-degraded land instead of severely degraded land. Without the project there would be 2,224,979 tCO<sub>2</sub>eq, and with the project an additional 444,996 tCO<sub>2</sub>eq will be sequestered, for a net balance of 2,669,975 tCO<sub>2</sub>eq. In terms of forest degradation, also mainly under Output 2.1.1 the project will help 2,400 hectares of sub-tropical steppe (Forest Zone 3) and sub-tropical mountain system (Forest Zone 4) forests go from moderate degradation to low degradation, instead of becoming severely degraded. This avoids 166,158 tCO<sub>2</sub>eq, and sequesters an additional 166,158 tCO<sub>2</sub>eq, for a net balance of 332,316 tCO<sub>2</sub>eq. Therefore the total CO<sub>2</sub> benefit generated by the project is calculated as 5,838,328 tCO<sub>2</sub>eq.

# EX-ACT Tool Results Summary Sheet

**The EX-Ante Carbon-balance Tool (EX-ACT) - Tier ONE Edition**

Start

Description

Land Use Change

Crop production

Grassland Livestock

Land degradation

Inputs Investments

Detailed Results

Official (1st period 2008-2012)

CO <sub>2</sub>	1
CH <sub>4</sub>	21
N <sub>2</sub> O	310

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Name of the project: 5696 Kazakhstan SFM -  
Continent: Asia (Continental)

Climate: Warm Temperate (Dry)  
Soil: HAC Soils

Duration (yr): 20  
Total area (ha): 1250100

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Component of the project	Gross fluxes			Share per GHG of the Balance					Results per year			Production		Emission Intensity		
	Without	With	Balance	Result per GHG			N <sub>2</sub> O	CH <sub>4</sub>	without	with	Balance	t of product Without	With	tCO <sub>2</sub> e per t of product Without	With	
	All GHG in tCO <sub>2</sub> e Positive = source / negative = sink			CO <sub>2</sub>	Soil	Other										CO <sub>2</sub>
<b>Land Use Changes</b>																
Deforestation	2,775,426	0	-2,775,426	-2,116,403	-659,023	0	0	138,771	0	-138,771						
Afforestation	0	-60,611	-60,611	-44,274	-16,337	0	0	0	-3,031	-3,031						
Other	0	0	0	0	0	0	0	0	0	0						
<b>Agriculture</b>																
Annual	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	
Perennial	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	
Rice	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	
<b>Grassland &amp; Livestocks</b>																
Grassland	2,224,979	-444,996	-2,669,975	0	-2,669,975	0	0	111,249	-22,250	-133,499	0	0	0	0.00	0.00	
Livestock	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	
<b>Degradation</b>	166,158	-166,158	-332,316	-273,796	-58,520	0	0	8,308	-8,308	-16,616						
<b>Inputs &amp; Investments</b>	0	0	0	0	0	0	0	0	0	0						
<b>Total</b>	<b>5,166,563</b>	<b>-671,765</b>	<b>-5,838,328</b>	<b>-2,434,473</b>	<b>-3,403,855</b>	<b>0</b>	<b>0</b>	<b>258,328</b>	<b>-33,588</b>	<b>-291,916</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0.00</b>		
<b>Per hectare</b>	<b>4</b>	<b>-1</b>	<b>-5</b>	<b>-1.9</b>	<b>-2.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>-0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.00</b>	<b>0.00</b>		
<b>Per hectare per year</b>	<b>0.2</b>	<b>0.0</b>	<b>-0.2</b>	<b>-0.1</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>-0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.00</b>	<b>0.00</b>		

Surfaces evolutions by land use / category (hectares - ha)			
	State at the beginning	Without Project	With Project
Forest/Plantation	1176900	1167890.8	1177100
Cropland	Annual	0	0
	Perennial	0	0
	Rice	0	0
Grassland	73000	73000	73000
Other Land	Degraded	200	9209.20191
	Other	0	0
Organic soils	0	0	0
<b>Total area =</b>	<b>1250100</b>	<b>1250100</b>	<b>1250100</b>

Uncertainty level	
Net balance	-5,838,328
Total uncert.	2,505,304
% of uncertainty	43

## XII.v Annex E. Terms of Reference for Project Board, Project Manager, and other positions

### **Terms of Reference: Project Board**

The Project Board will:

- Ensure that there is coherent project organization at both the national and local levels
- Following agreement, set tolerances in the Annual Work Plans and other plans as required with the National Project Manager, with the involvement of the National Project Director (FWC) (as necessary)
- Monitor and control the progress of the project activities at a strategic level considering the changes influenced by the project on any baseline investments
- Ensure that risks are being tracked and mitigated as effectively as possible
- Organize Project Board meetings, to be Chaired by the National Project Director, on a regular basis to be defined by the Board in agreement with the Project Director and National Project Manager. Normally these meetings will take place semi-annually or annually.
- Review and assess progress towards achieving the outputs is consistent from a project supplier perspective
- Promote and maintain focus to deliver the outputs from the project
- Ensure that the resources from the project supplier are readily available
- Arbitrate on, and ensure resolution of any supplier priority or resource conflicts
- Ensure that the expected project outputs and related activities of the project remains consistent with the perspective of project beneficiaries
- Be informed of meetings relevant to overall national project implementation, including any regional activities conducted in partnership
- Facilitate national policy and institutional changes necessary to engender success in project activities.
- Annually review project progress and make managerial and financial recommendations as appropriate, including recruitment for the Project Management Unit, review and approval of annual reports, budgets and workplans.

The specific responsibilities of the Project Board are outlined below:

- Defining a project
  - Review and approve the Initiation Plan (if such plan was required and submitted to the Local PAC)
- Initiating a project
  - Agree on National Project Manager's responsibilities, as well as the responsibilities of the other members of the Project Management Unit;
  - Delegate any Project Assurance function as appropriate;
  - Review the Progress Report for the Initiation Stage (if an Initiation Plan was required);
  - Review and appraise detailed Project Plan and Annual Work Plan, including Atlas reports covering activity definition, quality criteria, issue log, updated risk log and the monitoring and communication plan.
- Running a project
  - Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
  - Address project issues as raised by the National Project Manager;
  - Provide guidance and agree on possible countermeasures/management actions to address specific risks;
  - Agree on National Project Manager's tolerances in the Annual Work Plan and quarterly plans when required;
  - Conduct regular meetings to review the Project Quarterly Progress Report and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans.
  - Review Combined Delivery Reports (CDR) prior to certification by the Implementing Partner;
  - Appraise the Project Annual Review Report, make recommendations for the next Annual Work Plan, and inform the Outcome Board about the results of the review.
  - Review and approve end project report, make recommendations for follow-on actions;

- Provide ad-hoc direction and advice for exception situations when National Project Manager's tolerances are exceeded;
- Assess and decide on project changes through revisions;
- Closing a project
  - Assure that all Project deliverables have been produced satisfactorily;
  - Review and approve the Final Project Review Report, including lessons learned;
  - Make recommendations for follow-on actions to be submitted to the Outcome Board;
  - Commission project evaluation (only when required by partnership agreement)
  - Notify operational completion of the project to the Outcome Board
- Specific Responsibilities of Executive (as part of the above responsibilities for the Project Board)
  - Ensure that there is a coherent project organization structure and logical set of plans
  - Set tolerances in the Annual Work Plan and other plans as required for the National Project Manager
  - Monitor and control the progress of the project at a strategic level
  - Ensure that risks are being tracked and mitigated as effectively as possible
  - Brief Outcome Board and relevant stakeholders about project progress
  - Organize and chair Project Board meetings
  - The Executive is responsible for overall assurance of the project as described below. If the project warrants it, the Executive may delegate some responsibility for the project assurance functions.
- Specific Responsibilities of Senior Supplier (as part of the above responsibilities for the PB)
  - Make sure that progress towards the outputs remains consistent from the supplier perspective
  - Promote and maintain focus on the expected project output(s) from the point of view of supplier management
  - Ensure that the supplier resources required for the project are made available
  - Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes
  - Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts
- The supplier assurance role responsibilities are to:
  - Advise on the selection of strategy, design and methods to carry out project activities
  - Ensure that any standards defined for the project are met and used to good effect
  - Monitor potential changes and their impact on the quality of deliverables from a supplier perspective
  - Monitor any risks in the implementation aspects of the project.
- Specific Responsibilities of Senior Beneficiary (as part of the above responsibilities for the Project Board)
  - Ensure the expected output(s) and related activities of the project are well defined
  - Make sure that progress towards the outputs required by the beneficiaries remains consistent from the beneficiary perspective
  - Promote and maintain focus on the expected project output(s)
  - Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes
  - Resolve priority conflicts.
- The assurance responsibilities of the Senior Beneficiary are to check that:
  - Specification of the Beneficiary's needs is accurate, complete and unambiguous
  - Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target
  - Impact of potential changes is evaluated from the beneficiary point of view
  - Risks to the beneficiaries are frequently monitored.

*Recruitment processes for project positions will adhere to gender sensitive guidelines for recruitment and selection of candidates and assessment of gender related competencies.*

## **Terms of Reference: National Project Manager**

### Background

The National Project Manager (NPM), will be a locally recruited national selected based on an open competitive process. He/she will be responsible for the overall management of the project, including technical coordination and the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The NPM will be tasked with the day-to-day management of project activities, as well as with substantive, financial and administrative reporting. The NPM's prime responsibility is to ensure that the project produces the planned outputs and achieves the planned indicators and indicator targets by undertaking necessary activities specified in the project document to the required standard of quality and within the specified constraints of time and cost. This will require linking the indicators to the work plan to ensure Results-Based Management.

The NPM will report to the UNDP Kazakhstan CO for all of the project's substantive and administrative issues. The NPM will be responsible for meeting government obligations under the project and will perform a liaison role with the Government, UNDP and other UN Agencies, NGOs and other project partners.

### Duties and Responsibilities

- Supervise and coordinate the project to ensure its results are in accordance with the Project Document and the rules and procedures established in the UNDP Programming Manual
- Assume primary responsibility for daily project management - both organizational and substantive matters – budgeting, planning and general monitoring of the project
- Ensure adequate information flow, discussions and feedback among the various stakeholders of the project
- Ensure adherence to the project's work plan, prepare revisions of the work plan, if required
- Assume overall responsibility for the proper handling of logistics related to project workshops and events
- Prepare, and agree with UNDP on, terms of reference for national and international consultants and subcontractors
- Guide the work of consultants and subcontractors and oversee compliance with the agreed work plan
- Maintain regular contact with UNDP Kazakhstan Country Office and the Government counterpart on project implementation issues of their respective competence
- Monitor the expenditures, commitments and balance of funds under the project budget lines, and draft project budget revisions
- Assume overall responsibility for meeting financial delivery targets set out in the agreed annual work plans, reporting on project funds and related record keeping
- Liaise with project partners to ensure their co-financing contributions are provided within the agreed terms
- Assume overall responsibility for reporting on project progress vis-à-vis indicators in the logframe
- Undertake any other actions related to the project as requested by UNDP or the Government
- Provide technical assistance and co-ordination for outcomes of the project
- Assuring technical co-ordination among consultants to be hired

### Qualifications

- Proven management expertise – must be able to fluidly handle the political, technical, and people management challenges that the NPM will face on a daily basis.
- A university and/or a higher degree in related fields;

- At least 8 years of experience in natural resource management or project/programme management;
- At least 5 years of project/programme management experience;
- Working experience with ministries, national institutions and marine sector in Kazakhstan;
- Ability to effectively coordinate a large, multi-stakeholder project;
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
- Strong drafting, presentation and reporting skills;
- Strong computer skills, in particular mastery of all applications of the MS Office package and internet search;
- Strong knowledge of protected areas, biodiversity conservation, sustainable forest management and sustainable land management issues in Kazakhstan, including the political, institutional and socio-economic contexts;
- Good writing and communication skills in English.

### **Terms of Reference: Project Assistant**

#### Background

The Project Assistant (PA), will be a locally recruited national selected based on an open competitive process. He/she will report to the National Project Manager (NPM) and assist the NPM in the coordination of the UNDP-GEF project. S/he will oversee support activities in substantive and administrative project implementation including drafting ToRs, assisting information flow, drafting annual work plan, procurement, recruitment and operations logistics. S/he will assess support requirements against project objectives and operating environment. In addition to the administrative tasks, the PA will support the NPM on technical tasks by undertaking necessary activities specified in the project document to the required standard of quality and within the specified constraints of time and cost. Thus, qualification of the PA position for this project includes knowledge and experience in natural resource management focusing on forests ecosystems and conservation.

#### Duties and Responsibilities

- Provide technical assistance and co-ordination for related activities under outputs
- Assisting the NPM for technical co-ordination among consultants to be hired
- Assist the NPM in managing the project staff
- Assist the NPM in formulation of technical ToR for key project expert positions
- Assist the NPM and the project experts to ensure that project experts' results are delivered on time
- Assist the NPM in development of specifications for procurement of specialized equipment
- Assist in screening of options in mapping of project sites
- Prepare GEF quarterly project progress reports, as well as any other substantive and administrative reports requested by the Executing Agency and UNDP
- Act as NPM in case of his/her absence
- Overall, provide all necessary support to the NPM in implementation of the project, both at substantive and administrative sides
- Provide general administrative support to ensure the smooth running of the PMU
- During visits of international experts, manage their visa support, transportation, hotel accommodation etc.
- Monitor the use of non-expendable equipment (record keeping, drawing up regular inventories)
- Arrange duty travel
- Perform any other substantive and administrative duties as requested by the NPM

### Qualifications

- University degree in Engineering, Management or Environmental Sciences or related fields;
- At least 2 years of experience in natural resource management
- 6 years of experience in the area of project management at medium and small scale;
- Solid experience of planning and reporting on foreign funded projects;
- Basic knowledge of forest conservation issues in Kazakhstan, including the political, institutional and socio-economic contexts
- Good secretarial skills and good organizational capacity;
- Knowledge in administrative procedures of the Government;
- Good computer skills in common word processing (MS Word), spreadsheet (MS Excel), and accounting software;
- Appropriate English, Kazakh and Russian language skills, both spoken and written.

### **Terms of Reference: Procurement Specialist**

#### Background

The Procurement Specialist (PS), will be a locally recruited national selected based on an open competitive process. He/she will report to the National Project Manager (NPM) and assist the NPM in the coordination of the UNDP-GEF project. S/he will oversee support activities in substantive and administrative project implementation including drafting ToRs, assisting information flow, drafting annual work plan, procurement, recruitment and operations logistics. S/he will assess support requirements against project objectives and operating environment. In addition to the administrative tasks, the PA will support the NPM on technical tasks by undertaking necessary activities specified in the project document to the required standard of quality and within the specified constraints of time and cost. Thus, qualification of the PA position for this project includes knowledge and experience in natural resource management focusing on forests ecosystems and conservation.

#### Duties and Responsibilities

- Deliver procurement services and financial support services for the project including bidding, competitive selection, and contracting services and goods as required by the project.
- Accounting of project funds and financial planning and reporting in line with UNDP requirements and procedures.
- Support project team in daily administration of personnel, travel, premises and other contracted services.
- Overall, provide all necessary support to the NPM in implementation of the project, both at substantive and administrative sides
- Provide general administrative support to ensure the smooth running of the PMU
- During visits of international experts, manage their visa support, transportation, hotel accommodation etc.
- Monitor the use of non-expendable equipment (record keeping, drawing up regular inventories)
- Arrange duty travel
- Perform any other substantive and administrative duties as requested by the NPM

### Qualifications

- University degree in Finance, Accounting, Management or related fields;
- At least 2 years of experience in financial administration and procurement
- 6 years of experience in the area of project management at medium and small scale;
- Solid experience of planning and reporting on foreign funded projects;
- Basic knowledge of forest conservation issues in Kazakhstan, including the political, institutional and socio-economic contexts
- Good secretarial skills and good organizational capacity;
- Knowledge in administrative procedures of the Government;

- Good computer skills in common word processing (MS Word), spreadsheet (MS Excel), and accounting software;
- Appropriate English, Kazakh and Russian language skills, both spoken and written.

### Indicative Summary of Project Positions

#	Position Title	Role in the project by outputs	\$ per week	Estimated weeks
	<b>Project Team</b>			
1	National Project Manager	National Project Manager (NPM) is responsible for general daily coordination of the project at the national level under the supervision of National Project Director (NPD). NPM leads the work of the Project Implementation Groups and is fully responsible for effective implementation of all the project activities. NPM ensures timely and efficient planning, controls and monitors the project activities in accordance with GEF/UNDP procedures for planning, monitoring and reporting. NPM ensures effective teamwork on the basis of international standards of business administration and HR management. NPM maintains contacts with the Forestry and Wildlife Committee of MoA RoK (Implementing Partner for the project), and with Project Director. NPM is responsible for timely financial and progress reporting.	692	260
2	Protected Areas Expert	The PAs Expert will be responsible for the effective implementation of measures aimed at achieving Outcome 1 with a focus on improved management of the forest PAs to ensure that valuable forest ecosystems remain healthy and productive. The scope of activities of PA includes the development of the management plans of target PAs to ensure that HCVMs are managed based on international standards; assessment of the management and financial effectiveness; planning for adequate biodiversity monitoring systems; and upgrade the capacity of the staff based on capacity study. The Expert will oversee the preparation of studies on creation/expansion of the PA system in project sites; will ensure timely and efficient planning, execution of activities and result delivery in accordance with the project document and reporting on the progress of approved activities under Outcome 1 of the project.	346	260
3	Landscape Planning and Community Engagement Expert	The Expert will be responsible for Outcome 2 and will secure timely rational planning, implementation, and monitoring of the activities and achievement of outputs according to the project document as well as development of progress reports on the implementation of agreed project activities under Outcome 2 related to the improvement of territorial landscape planning to maintain ecosystem services, implementation of demonstration projects in pastures, saxaul, tugai and mountain forests.	346	260
4	Wildlife Management Expert	The Expert will be leading the activities under the Outcome 3. Along with that the Expert will be responsible for coordination and implementation of relevant activities within other two project Outcomes where the wildlife management and monitoring issues are addressed. This includes biodiversity inventory for newly planned PAs, design of monitoring programs for new and existing PAs, species and habitats management planning, nature resource use patterns for a landscape planning activities (hunting), biodiversity data management and information systems.	346	260
5	Forest Management Expert	Sustainable forest management is a crosscutting issue throughout the project and is represented in all Outcomes. The Forest Expert will be responsible for coordination, monitoring, and implementation of SFM activities and achieving the relevant outputs of the project as stated in the project document. The Expert will initiate and coordinate the work of national and international consultants, maintain partnerships, and ensure timely SFM thematic area.	346	260

#	Position Title	Role in the project by outputs	\$ per week	Estimated weeks
6	Communications and capacity building Expert	The Expert will be responsible for communicating the project among stakeholders, beneficiaries and to the broader public. The Expert will work in close collaboration with the project team and partner organizations. The Expert will lead the design, management and implementation of the communication strategy of the project based on strong partnerships with national governments, private and public sectors, community based organizations and mass media. The expert will maintain media relationships, PR activities, producing external and internal communication materials and writing for project purposes. The Expert will initiate and coordinate the capacity building activities as stated in the project document.	346	260
7	Project Assistant	The Project Assistant will provide support to the project implementation team to carry out broad array of tasks on a daily basis. The Project Assistant will be responsible for all administrative (contractual, organizational and logistics) issues and the issues related to financial operations (payment for services and goods, payments, accounting, cash management and others).	277	260
8	Procurement Specialist	Procurement specialist will deliver procurement services and financial support services for the project including bidding, competitive selection, and contracting services and goods as required by the project. The Procurement Specialist will be accounting of the project funds and financial planning and reporting in line with UNDP requirements and procedures. It is expected that the Procurement Specialist will support project team in daily administration of personnel, travel, premises and other contracted services.	346	260
9	Almaty based Site Coordinator	Site Coordinator will plan, initiate, coordinate, manage and monitor project activities in 5 project sites – Tien-Shan mountain forests, Charyn floodplain forests, Ili floodplain forests, Syrdarya floodplain forests, and saxaul forest in Balkhash area. The Coordinator will coordinate and manage project activities and maintain contacts with stakeholders and beneficiaries at the local level, provide assistance to project team in maintaining contacts with local authorities, land users, and other stakeholders, provide administrative, logistical assistance and technical support to project consultants and contractors to implement project activities, support, control and monitor implementation of demonstration and pilot projects. The Site Coordinator will also prepare and post information on implementation of project activities in local mass media and disseminate project published materials (books, booklets, surveys) among local to stakeholders.	346	260
10	Oskemen-based Site Coordinator	Site Coordinator will plan, initiate, coordinate, manage and monitor project activities in Altai mountain forests project sites. The Site Coordinator will arrange and manage project activities and maintain contacts with stakeholders and beneficiaries at the local level, provide assistance to project team in maintaining contacts with local authorities, land users, and other stakeholders, provide administrative, logistical assistance and technical support to project consultants and contractors to implement project activities, support, control and monitor implementation of demonstration and pilot projects. The Site Coordinator will also prepare and post information on implementation of project activities in local mass media and disseminate project published materials (books, booklets, surveys) among local to stakeholders.	346	260
	<b>IC Assignments</b>			
11	PA planning & management	Output 1.1.1. Revision of management plans for existing target forest PAs to ensure that HCVFs are properly managed. Drafting of management plans for newly proposed PAs, including zoning, staffing	40,000 USD / 200 per week	200

#	Position Title	Role in the project by outputs	\$ per week	Estimated weeks
		plans, and business plan-based budget; Establishment of community management board		
12	Systemic / Institutional Effectiveness & Capacity Development for HCVFs Management	<p>Output 1.2.1. Revision of PA management plans to appropriately reflect needs of managing HCVF; SFM measures in PAs;</p> <p>Output 1.2.1. Revision of silvicultural standards, targets and practices; At national level - amendment to PA legislation to allow ecosystem restoration of native species within strictly protected zones; Training PA staff on HCVF management principles and practices;</p> <p>Output 2.1.1. Updating forestry units' Forest Management Plans based on inventory and biodiversity data; Training on HCFV principles and practices for leskhoz staff;</p> <p>Output 2.1.4 Integrated land and forest management plans developed and implemented in six administrative districts;</p> <p>Output 2.2.1. Assess the existing HCVF governance system as to ensure coordinated and effective implementation of the HCVFs Strategy and Action Plan within the available capacities and policy mechanisms between Central and local governments. Review the existing technical, ecological and policy regulations on principal, sanitation and other felling in HCVFs based on inventories and threats analysis; Review and improve the existing regulations and tools of HCVF inventories and systemic monitoring; Improve financial and technical regulations for incentive-based private- state partnerships in forest sector; Develop comprehensive guidelines for HCVFs management planning based on threats assessments, identification and measuring of ecological and socio-economic characteristics and functions of the forests with appropriate inter-sectoral coordination and community engagement mechanisms in place.</p>	75,000 USD / 200 per week	375
13	HCVFs and Water	<p>Output 1.1.1. Drafting management plans for target PAs, including zoning;</p> <p>Output 1.1.2. Specific planning for management of forest resources within PA management plan; Comprehensive field assessment of biodiversity values followed by development of monitoring programs for targeted PAs;</p> <p>Output 1.2.1. SFM measures in PAs and forestry units; Forest water management, including collecting and recording data on water parameters linked to forest properties and functions, maintaining the ideal height of groundwater; ensuring that water quantity and quality are maintained or improved; protecting natural resources and human-made infrastructure against water damage; and maintaining or improving conditions for rest and recreation in forests</p>	30,000 USD / 300 per week	100
14	Forest Diseases and Pests	<p>Output 1.1.1. Drafting management plan, including zoning;</p> <p>Output 1.1.2. Specific planning for management of forest resources within PA management plan; Comprehensive field assessment of biodiversity values followed by development of monitoring programs for targeted PAs;</p> <p>Output 1.2.1. SFM measures in PAs and forestry units; Designing and implementation of integrated pest management plan (IMP) that describes prevention, observation and suppression measures that are ecologically and economically efficient and socially acceptable, in order to maintain pest populations at suitable levels; Suppression of pests by using mechanical control, biological control involving the use of natural enemies and biopesticides, and other sustainable methods.</p> <p>Output 2.2.2. Forest health monitoring system is set up and supported with relevant capacity and policy;</p>	20,100 USD / 300 per week	67
15	Silvicultural Systems	<p>Output 1.1.1. Drafting management plan, including;</p> <p>Output 1.1.2. Specific planning for management of forest resources within PA management plan;</p>	20,000 USD / 200 per week	100

#	Position Title	Role in the project by outputs	\$ per week	Estimated weeks
		Output 1.2.1. SFM measures in PAs and forestry units including a restoration management plan, including preparing a topographic land-use map, assessment of road accessibility, existence of natural regeneration and needs for planting; agreeing on restoration/rehabilitation objectives, selecting the restoration/rehabilitation method, choosing the species to be used, and establishing a nursery and assessing possible positive and negative social and environmental impacts. Output 2.1.1. Revision and improvement of silvicultural standards, targets and practices		
16	Forests Monitoring and Data Management	Output 1.1.1. Drafting management plan, including zoning; Output 1.1.2. Specific planning for management of forest resources within PA management plan; Output 1.2.1. SFM measures in PAs and forestry units; Output 2.2.2. General scheme of fire early alarm, prevention and extinguishing is developed within the forest fund lands; Infrastructure and machinery standards for fires management are revised and integrated into management planning. Forest health monitoring system is set up and supported with relevant capacity and policy; Research on climate change adaptation measures is enhanced; Output 2.2.3. Training models are developed and training is conducted: forest management planning, Forest inventory, Forest management monitoring, Forest restoration and rehabilitation, Silviculture in natural and planted forest, fire management, forest and water, non-timber products management, forest pests, forest genetic resources, CC adaptation and mitigation, forest tourism and recreate, forest certification, wildlife management, land use planning	20000 USD/ 200 per week	100
17	Forest Biodiversity and Ecosystems	Output 1.1.1. Drafting management plan, including zoning; Output 1.1.2. Specific planning for management of forest resources within PA management plan; Comprehensive field assessment of biodiversity values followed by development of monitoring programs for targeted PAs; Output 1.2.1. SFM measures in PAs and forestry units; Output 2.1.1. Revision and improvement of silvicultural standards, targets and practices	20000 USD / 200 per week	100
18	Pasture Management	Output 2.1.1. Development of plans for sustainable use of forest pastures in agreement with local communities; including detailed analysis and assessment of pasture carrying capacity depending on annual conditions. Development of the pasture passports that would include the characteristics of pastures, including remote ones to be included into rotation schemes; Output 2.1.2. Pasture inventory - condition and degradation assessment, definition of carrying capacity - in community forest-pasture lands surrounding leskhozoes and PAs. Development of sustainable pasture management plan, including grazing plan	36 000 USD / 200 per week	180
19	Landscape Planning	Output 2.1.4 Integrated land and forest management plans developed and implemented in six administrative districts; Aggregation of relevant available data; Digitization of relevant data into geo-referenced database; Stakeholder consultations to identify key biodiversity areas, corridors, and buffer zones, and corresponding management requirements; Production of final integrated land and forest management plans, with associated management guidelines, and public dissemination; Training of local government staff in use of geo-referenced database;	45 000 USD / 200 per week	225
20	Community Engagement and	Output 1.1.2. Establishment of community management board for target PAs;	20 000 USD / 200 per week	100

#	Position Title	Role in the project by outputs	\$ per week	Estimated weeks
	Participatory Management	Output 2.1.1. Development of plans for sustainable use of forest pastures and forests in agreement with local communities; including detailed analysis and assessment of pasture carrying capacity depending on annual conditions; Output 2.1.2. Stakeholder consultations with Pasture Management Committees; Development of sustainable pasture management plan, including grazing plan		
21	Tourism in Forest Ecosystems	Output 2.1.5. Detailed analysis of tourism loads and threats in each PA, including future projections; Analysis of revenue options from tourism; Development of tourism management plan, and integration with existing PA management plan;	30,000 USD / 200 per week	150
22	Hunting Management in Forest Ecosystems	Output 2.1.6. Biodiversity inventory analysis on forest hunting areas; Research and analysis on effectiveness of current regulations, and coherence with biodiversity needs and priorities; Proposal developed and adopted for revised regulations and management approaches; Strengthened enforcement of hunting regulations - training, equipment for wildlife inspectors; Education and awareness of stakeholders	30,000 USD / 200 per week	150
23	Productive Forest Management and Policy	Output 2.1.3. Roundtable forum on models, approaches, sites, and identification of partners; Agreements with four partners in place; Afforestation studies and activities; Documentation of results - identification of good practices and lessons; Draft regulations to implementation experience; Stakeholder consultations; Output 2.2.1. Productive forests policy and mechanisms for SFM certification are developed and endorsed; Improve financial and technical regulations for incentive-based private- state partnerships in forest sector Output 2.2.4. Regulations on state co-financing in infrastructure investments for afforestation projects; Regulations on subsidized maintenance of forests and SFM practices; Regulations on tax reduction;	24,900 USD / 300 per week	83
24	Afforestation Technical Expertise	Output 2.1.3. Roundtable forum on models, approaches, sites, and identification of partners; Agreements with four partners; Afforestation studies and activities; Draft regulations to implementation experience; Stakeholder consultations; Output 2.2.5. Definition of the suitable lands for afforestation; Cost-benefit analysis for different business cases; Marketing of the afforestation business cases and opportunities among potential investor groups;	25,000 USD / 200 per week	125
25	Spatial Planning of Patrols and Forest Protection	Output 3.1.1. Optimizing the effectiveness of law enforcement patrols to ensure skilled and knowledgeable rangers, experienced and competent patrol leaders, suitable and sufficient equipment and supplies, appropriate terms and conditions of service, and supported and incentivized patrol staff; Maximizing effectiveness of management through proactive and dynamic patrol strategies, collection and use of patrol data, effective management systems and infrastructure, and clear and consistent standards and procedures; Improving investigation collaboration mechanisms with other law enforcement agencies and with prosecutors, ensuring the investigative process leading to prosecution in court; Training of the senior rangers and patrol rangers in operational planning and deployments, patrol management, care and maintenance of equipment, information and data handling, standard operating procedures, crime scene training, fitness training	15000 USD/ 200 per week	75
26	Snow Leopard Monitoring and RTA	Output 3.1.2. Research and mapping of Snow Leopard population biological characteristics, habitat, prey, and predators and competitors in 4 key locations; Threats reduction analysis and mapping in 4 locations; Output 3.1.3. Monitoring methodology update considering the methods and technics recommended by global monitoring framework	78 000 USD / 300 per week	260

#	Position Title	Role in the project by outputs	\$ per week	Estimated weeks
		guidance; DNA analysis in Almaty laboratory with international expert to mentor the process; Training for PA staff and other stakeholders on RTA, SL, prey and habitat monitoring technics, community engagement		
27	Database & GIS	Output 2.1.4 Integrated land and forest management plans developed and implemented in six administrative districts; Aggregation of relevant available data; Digitization of relevant data into geo-referenced database; Stakeholder consultations to identify key biodiversity areas, corridors, and buffer zones, and corresponding management requirements; Production of final integrated land and forest management plans, with associated management guidelines, and public dissemination; Training of local government staff in use of geo-referenced database; Output 3.1.2. Research and mapping of Snow Leopard population bio-ecological characteristics, habitat, prey, and predators and competitors in 4 key locations; Other mapping tasks as needed.	30000 USD / 200 per week	150
28	Economics in Conservation & PES	Output 2.3.1. TSA process completion in 3 selected demonstration projects; Output 2.3.2. Identify and revise sectoral policies relevant for TSA approach and relevant stakeholders; Identify existing mechanisms and gaps for including ecosystem services as inputs into sectoral outputs; Improve the guidance for regional planning by proposing TSA tools; Revise the regulations for EIA for the infrastructure development projects within the regions containing HCVFs; Consider the TSA application for development of financial incentives for afforestation projects and agroforestry projects (subsidies, tax exemptions, certifications) Output 2.2.4. Regulations on development of carbon credit market and access to international markets	45,000 USD / 400 per week	112.5
29	National Consultant for Mid-term Evaluation	See description under International consultants, but with stronger focus on local issues including the preparation of the mission (arrangements of meetings, logistics, etc.).	\$10,000 / \$625 per week	16
30	National Consultant for Final Evaluation	See description under International consultants, but with stronger focus on local issues including the preparation of the mission (arrangements of meetings, logistics, etc.).	\$10,000 / \$625 per week	16
	<b>International Expertise</b>			
31	HCVFs: Inventory, Sustainable Management, and Research	Output 1.1.1. Drafting management plan, including zoning, staffing plans, and business plan-based budget; Output 1.2.1. Revision of PA management plans to appropriately reflect needs of managing HCVF; SFM measures in PAs; Output 1.2.1. Revision of silvicultural standards, targets and practices; At national level - amendment to PA legislation to allow ecosystem restoration of native species within strictly protected zones; Training PA staff on HCVF management principles and practices; Output 2.1.1. Updating forestry unit Forest Management Plans based on inventory and biodiversity data; Training on HCFV principles and practices for forestry unit staff; Output 2.1.4 Integrated land and forest management plans developed and implemented in six administrative districts; Output 2.2.1. HCVF conservation and sustainable management strategy and national plan supported with adequate budget is developed and endorsed; Assess the existing HCVF governance system as to ensure coordinated and effective implementation of the HCVFs Strategy and Action Plan within the available capacities and policy mechanisms between Central and local governments. Transfer the forestry units back to the central authority to be managed as a part of ecological network; Review the	\$190,000 / 3,000 per week	63

#	Position Title	Role in the project by outputs	\$ per week	Estimated weeks
		existing technical, ecological and policy regulations on principal, sanitation and other felling in HCVFs based on inventories and threats analysis; Review and improve the existing regulations and tools of HCF inventories and systemic monitoring; Improve financial and technical regulations for incentive-based private- state partnerships in forest sector; Develop comprehensive guidelines for HCVFs management planning based on threats assessments, identification and measuring of ecological and socio-economic characteristics and functions of the forests with appropriate inter-sectoral coordination and community engagement mechanisms in place.		
32	Species and Habitats Management	Output 1.1.2. Specific planning for management of forest resources within PA management plan; Comprehensive field assessment of biodiversity values followed by development of monitoring programs for targeted PAs; Output 1.2.1. Management plans for globally endangered species and habitats;	\$55,000 / \$3,000 per week	18
33	HCVFs Management within a Landscape	Output 1.1.1. Drafting management plan, including zoning; Output 1.1.2. Specific planning for management of forest resources within PA management plan; Output 1.2.1. SFM measures in PAs and forestry units; Output 2.2.2. General scheme of fire early alarm, prevention and extinguishing is developed within the forest fund lands; Infrastructure and machinery standards for fires management are revised and integrated into management planning; Forest health monitoring system is set up and supported with relevant capacity and policy; Research on climate change adaptation measures is enhanced; Output 2.2.3. Training models are developed and training is conducted: forest management planning, Forest inventory, Forest management monitoring, Forest restoration and rehabilitation, Silviculture in natural and planted forest, fire management, forest and water, non-timber products management, forest pests, forest genetic resources, CC adaptation and mitigation, forest tourism and recreation, forest certification, wildlife management, land use planning	\$100,000 / \$3,000 per week	33
34	Targeted Scenario Analysis	Output 2.3.1. Integrated economic and environmental resource management optimization assessments (Targeted Scenario Analysis (TSA)) demonstrated in three resource-management scenarios for improved conditions of mountain forests and grasslands, Tugai and Saxaul forest ecosystems. Output 2.3.2. The results of the TSAs are integrated in resource management planning for conservation of 3 types of forest (mountain forests and grasslands, Tugai, and Saxaul). Output 2.3.3. Methodology and guidance for TSAs related to mountain forests and grasslands, Tugai and Saxaul forest ecosystems, are integrated in Kazakh legal context (i.e. compensation schemes, tax exemptions, subsidies, certifications, national accounts, EIA procedures, investment regulations, national budget planning), including SFM and SLM principles, criteria, and indicators for each key ecosystem type in Kazakhstan designed	\$145,000 / \$4,000 per week	36
35	Snow Leopard Monitoring Methodology and Training	Output 3.1.2. Research and mapping of Snow Leopard population bio-ecological characteristics, habitat, prey, and predators and competitors in 4 key locations; Threats reduction analysis and mapping in 4 locations; Training of 1 laboratory in sampling, analysis, interpretation and storing of DNA materials for 1 laboratory in Almaty Output 3.1.3. Monitoring methodology update considering the methods and technics recommended by global monitoring framework guidance; DNA analysis in Almaty laboratory with international expert to mentor the process; Training for PA staff and other stakeholders on RTA, SL, prey and habitat monitoring technics, community engagement.	\$50,000 / 2,500 per week	20

#	Position Title	Role in the project by outputs	\$ per week	Estimated weeks
36	International Consultant for Mid-term Evaluation	The main objective of the mid-term international evaluation team will be to determine progress being made towards the achievement of outcomes and will identify course correction to strengthen the chances for the delivery of the expected results. The team will test and confirm the key hypotheses underlying the project, reassess risks and assumptions, focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learnt about project design, implementation and management. The mid-term evaluation will also examine to which degree cross-sectoral issues such as gender mainstreaming have been taken into account in project planning and implementation. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document.	\$30,000 / \$3,000 per week	10
37	International Consultant for Final Evaluation	The main task of the final evaluation team will be – in accordance with UNDP and GEF guidance – to focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The final evaluation should also provide recommendations for follow-up activities, and the report will feature management response to the issues raised.	\$30,000 / \$3,000 per week	10

XII.vi Annex F. UNDP Social and Environmental Screening Protocol

*Please see attached document.*

XII.vii Annex G. Stakeholder Communication and Engagement Plan

Stakeholder Group	Why Included (interests)	Relevant Project Outcomes and Outputs	Participation Methods		Timeline	Cost est.
			Method	Responsibility		
Forestry and Wildlife Committee (FWC) of the Ministry of Agriculture	Implementing Partner for the project. It is the key government institution responsible for SFM, regulating biodiversity, including the establishment and management of protected areas, hunting areas and forests. It oversees and seeks state funding for the establishment/ expansion of PAs, including negotiations with local authorities and stakeholders, through its regional offices, preparation and justification of the relevant budgets. FWC ensures conservation and recovery of the threatened and endangered species and that efficient information management system is in place.	All project outcomes and outputs.	FWC will initiate and lobby all policy amendments within the ministries and the Parliament.	PMU	Ongoing	No cost beyond normal project operations.
Committee of Water Resources	This Committee and its regional branches are responsible for management of water resources to meet the needs of water users of different sectors of the economy in a sustainable way.	All project outcomes, but particularly Outcome 2.3, Outputs 2.3.1 – 2.3.3.	The Committee and its branches will contribute to development of landscape-level planning frameworks and development and implementation of the sustainable water use models at the regional and district level.	PMU	Ongoing	No cost beyond normal project operations.
Ministry of Agriculture	Develops and implements state policy and programs in agriculture sector.	All project outcomes and outputs.	The Ministry will contribute to development of landscape-level management plans and implementation of sustainable use alternatives in rangeland and agricultural productive landscapes.	PMU	Ongoing	No cost beyond normal project operations.
Ministry of Energy	Inherited the mandate of the Ministry of Environment after it was abolished. Current role of the Ministry of Energy is to develop state policies and programs on environmental conservation	All project outcomes.	One of the key players in development of planning frameworks that focus on the economic potentials	PMU	Ongoing	No cost beyond normal project operations.

Stakeholder Group	Why Included (interests)	Relevant Project Outcomes and Outputs	Participation Methods		Timeline	Cost est.
			Method	Responsibility		
	and sustainable development, and coordinate with the Secretariat of the CBD.		(rather than the constraints) of safeguarding and maintaining ecosystem services in the districts. Ensure that its monitoring and data collection systems under its Environmental Information Center are harmonized with the decision support systems developed by the project. MEP and its Oblast branches are responsible for Environmental impact assessments, which are needed for any of the planned activities related to conservation or use of nature resources.			
Ministry of National Economy, Ministry on Investments and Development, Ministry of Finance	Mandates related to key ecological economics issues in the project target zones.	Outcomes 1.1, 1.2, 2.1, 2.2, and 2.3.	These three ministries will be engaged in economic valuation of the ecosystem services, development of the PES schemes, demonstration of TSA project, and drafting and lobbying the relevant policies and regulations.	PMU	Ongoing	No cost beyond normal project operations.
JSC “Samrul Energo”	Is a 100% shareholder of the Hydro Power Stations that impact the floodplain forests of Ili and Syr Darya Rivers by regulating their hydrological regime.	Outcome 2.3, Outputs 2.3.1 – 2.3.3.	The project will engage the company for implementation of the threats analysis for floodplain forests and development of recommendations on integrated water use planning with the relevant PAs and forestries through the TSA tools.	PMU	Ongoing	No cost beyond normal project operations.
Land Management Committee	At a national level is responsible for development and implementation of state policy and programs on land	All project outcomes, but particularly	One of the key players in development of planning	PMU	Ongoing	No cost beyond normal

Stakeholder Group	Why Included (interests)	Relevant Project Outcomes and Outputs	Participation Methods		Timeline	Cost est.
			Method	Responsibility		
(oblast and rayon-level branches)	use planning and land management, geodesies and cartography. Oblast branches are responsible for key decisions related to zoning and allocation of land use permits for agriculture, mining, etc at oblast level.	Outcome 1.1 and Outcomes 2.1 – 2.3.	frameworks that focus on the economic potentials (rather than the constraints) of safeguarding and maintaining ecosystem services in the districts.			project operations.
Administrative Units of 12 existing PAs and new PAs	These are the key beneficiaries of activities on protected area expansion and strengthening management effectiveness.	All project outcomes, but particularly Outcome 1.1, Outputs 1.1.1, 1.1.2 and Outcome 1.2, Output 1.2.1.	Coordinate negotiations with oblast / rayon administrations and other relevant government agencies regarding zoning arrangements and the creation of buffer zones and corridors, as well as adaptive landscape management to ensure that the PA is managed in tandem with the management of production activities occurring in the larger landscape.	PMU	Ongoing	No cost beyond normal project operations.
Forestry Administrations of the target areas	Forest units are state funded legal entities operating under the regional administrations aimed at management of the forest fund lands outside the protected areas system comprising about 80 % of forested area in Kazakhstan.	All project outcomes, but particularly Outcome 1.1, Outcome 2.1 and 2.2.	The project will focus on improving capacity of the forestries within the boundaries of the project sites.	PMU	Ongoing	No cost beyond normal project operations.
Oblast Akimats	Grant official endorsement of land use projects for PAs of local importance. Allocate land for planned PAs.	All project outcomes.	Disseminate the project's lessons learned related to landscape-level planning and management and advocate for replication of this ecosystem approach throughout Oblast. Assist in community mobilization and awareness activities.	PMU	Ongoing	No cost beyond normal project operations.
Rayon akimats	Responsible for district level governance and oversight, and coordination with higher levels of government on all	All project outcomes.	Lead the development and implementation of the landscape-level	PMU	Ongoing	No cost beyond normal

Stakeholder Group	Why Included (interests)	Relevant Project Outcomes and Outputs	Participation Methods		Timeline	Cost est.
			Method	Responsibility		
	issues, including forest and land management.		management plans by providing coordinating inputs of all stakeholders			project operations.
Association for the Conservation of Biodiversity of Kazakhstan (ACBK)	Involved in a variety of biodiversity conservation related activities and initiatives in Kazakhstan, including activities related to snow leopard conservation, protected area management, and forest management.	All project outcomes, but particularly Outcome 1.1, Outputs 1.1.1, 1.1.2, and 1.2.1; Outcome 2.1, Outputs 2.1.5 and 2.1.6; Outcome 3.1	Possible project steering committee member; will provide technical inputs and guidance on various mapping, biodiversity monitoring, and wildlife law enforcement activities.	PMU	Ongoing	No cost beyond normal project operations.
WWF	Working on a large-scale landscape and species restoration program in the Ile-Balkhash region related to restoration of the Caspian tiger species.	All project outcomes and outputs related to the Ile-Balkhash tugai forest, including Outcome 1.1, Outputs 1.1.1 and 1.1.2; Outcome 1.2, Output 1.2.1.	Possible project steering committee member; will provide input and coordination of tugai forest management and restoration activities in Ile-Balkhash region.	PMU	Ongoing	No cost beyond normal project operations.
Other NGOs	There are multiple other NGOs working on environmental issues in Kazakhstan, including biodiversity conservation, and specifically related to conservation of snow leopards.	All project outcomes, but particularly Outcome 3.1.	The project will coordinate and communicate with all relevant partners working on related issues in the project target zones, and particularly in relation to planning and organizing monitoring of snow leopard populations and associated species and habitats.	PMU	Ongoing	No cost beyond normal project operations.
Institute of Zoology	Is already implementing a camera trapping project, but still no data and publications are available.	All project outcomes, but particularly Outcome 3.1.	The institute will not only provide expertise related to biodiversity in Kazakhstan, but will also be a beneficiary of the project through improved capacity in using new tools of data processing like biostatistics and population/habitat modeling.	PMU	Ongoing	No cost beyond normal project operations.
Institute of Geography	Has vast experience in producing data maps for landscape planning and management.	All project outcomes.	Considering the vast and complicated areas of four landscapes of the	PMU	Ongoing	No cost beyond normal

Stakeholder Group	Why Included (interests)	Relevant Project Outcomes and Outputs	Participation Methods		Timeline	Cost est.
			Method	Responsibility		
			project, this institute will contribute to this work.			project operations.
Institute of Botany	Experience in monitoring, cataloguing, and mapping flora in targeted project zones.	All project outcomes.	Will be engaged in surveys and research on habitat status to be integrated into the snow leopard habitat management plans and establishment of new PAs. Will also be involved in the landscape planning activities.	PMU	Ongoing	No cost beyond normal project operations.
Forestry Institute and Kazlesproekt (State project design institute under CFH)	Responsible for providing technical inputs to government forest managers, including national-level forest monitoring.	All project outcomes, but particularly Outcome 2.1, Outputs 2.1.1 – 2.1.4; and Outcome 2.2, Outputs 2.2.1 – 2.2.5.	Will contribute their research, experience and expertise for training and site visits related to monitoring of the habitat and introduction of new information management systems.	PMU	Ongoing	No cost beyond normal project operations.
State enterprise “Science & Production Center on Land Resources Management”	Institutional mandate related to technical inputs for management and planning related to land management, including pasture management.	All project outcomes, but particularly Outcome 2.1, Outputs 2.1.2 and 2.1.4.	Will support project activities related to implementation of demonstration projects on sustainable land and pasture management, and monitoring land degradation	PMU	Ongoing	No cost beyond normal project operations.
Kazakh Research Institute of Livestock Breeding and Fodder Production	Interests related to the health and sustainability of national livestock populations.	All project outcomes, but particularly Outcome 2.1, Outputs 2.1.2 and 2.1.4.	Will support project activities related to implementation of demonstration projects on sustainable land and pasture management, and monitoring land degradation	PMU	Ongoing	No cost beyond normal project operations.
Local industries and entrepreneurs	Various interests related to the planned project activities in targeted project areas. For example, related to eco-tourism.	All project outcomes, but particularly Outcome 2.1, Outputs 2.1.3 and 2.1.6.	Will participate in consultations and provide inputs to the development of the landscape-level management plans for further implementation.	PMU	Ongoing	No cost beyond normal project operations.

Stakeholder Group	Why Included (interests)	Relevant Project Outcomes and Outputs	Participation Methods		Timeline	Cost est.
			Method	Responsibility		
Hunting and Fishery Managers	Responsible for game species and Red List species monitoring in hunting concession territories; interests related to the sustainability of game populations in hunting concessions and neighboring territories.	All project outcomes, but particularly Outcome 1.1., Output 1.1.1 and 1.1.2; and Outcome 2.1, Outputs 2.1.4 and 2.1.6.	Will contribute to the development and implementation of the landscape-level management plans as being key repositories of ecological information on biodiversity, land resources, wildlife, and habitats. Will ensure that monitoring and data collection and processing systems are harmonized with the decision support system. Will engage patrolling rangers of existing hunting areas for introduction of the new spatial monitoring and reporting tool.	PMU	Ongoing	No cost beyond normal project operations.
Rural consumer cooperatives and communities	Natural resource users whose livelihoods are intertwined with sustainability of forest and land management; in some instances responsible for managing forest and land resources at the local level in targeted project areas.	All project outcomes.	Will be actively engaged in the development of income-generation activities (through Public Councils) at the PAs and corridors that are a focus of the project, as well as in sustainable use demonstrations at project territories.	PMU	Ongoing	No cost beyond normal project operations.

## XII.viii Annex H. Gender Analysis and Gender Mainstreaming Action Plan

### Introduction: Gender Context in Kazakhstan

According to the 2015 Global Gender Gap Report of the World Economic Forum, Kazakhstan is ranked 47th (scored 0.719) in the Gender Gap Index (out of 145 countries). While education attainment is assessed well (28th position), political empowerment of women is rather low (ranked 78th). It is worth noting that the ranking has been gradually improving over the years, for example, the score in 2006 when the ranking was first calculated was 0.693 only. The rating has mainly been improving due to data on education. By another measure, UNDP's Gender Development Index, according to the latest available statistics (2015), Kazakhstan ranked 11th out of 160 countries with data, with a GDI score of 1.006.

Over the last years Kazakhstan has made tangible progress in reducing the gender inequality from 0.459 in 2008 to 0.369 in 2015. The situation has mainly improved through reduction of maternal mortality from 31.2 in 2008 to 12.8 in 2015 and increased representation of women at law-making level, in the Majilis of the Parliament, from 0.170 in 2008 to 0.267 in 2015<sup>8</sup>. The latter suggests that the efficient promotion of gender equity is possible at the level of legislation and can be achieved at the level of implementation of the national gender policy.

### The Gender Gap Index in the Republic of Kazakhstan\*

Year	Gender Gap Index	Determining Indicators							
		Maternal mortality	Fertility rate (per 1000 women aged 15-19 years)	Seats in the Mazhilis of the Parliament, ratio of men and women		Proportion of the population aged 15 and older, with at least higher education		Proportion of the economically active and working-age population	
				males	females	males	females	males	females
2008	0,459	31,2	31,12	0,830	0,170	0,806	0,806	0,832	0,788
2009	0,463	36,8	28,84	0,822	0,178	0,814	0,815	0,831	0,785
2010	0,428	22,7	28,30	0,823	0,177	0,822	0,824	0,840	0,788
2011	0,395	17,6	29,46	0,757	0,243	0,829	0,832	0,839	0,788
2012	0,379	13,5	31,35	0,757	0,243	0,837	0,841	0,842	0,792
2013	0,375	12,6	33,64	0,738	0,262	0,845	0,849	0,842	0,794
2014	0,372	11,7	34,72	0,738	0,262	0,853	0,858	0,845	0,788
2015	0,369	12,8	30,83	0,733	0,267	0,860	0,866	0,849	0,792

\*Calculations are based on the official statistical data according to the UNDP methodologies, published in the Human Development Report 2011.

Among other important achievements is integration of women in the labor market and entrepreneurship (i.e. the unemployment rate of the women has reduced from 9.2% in 2006 to 5.7% in 2015). Kazakhstan is nearing gender parity in accessing to elementary and secondary education – net enrollment ratio in elementary education equaled to 98.7% in 2015 and is among the leading countries for this indicator.

### National Gender Equality: Demographic and Economic Dimensions

Men's life expectancy at birth in Kazakhstan is 64.6 years and women's is 74.1 years; gross national income per capita for men is \$26,867 and for women is \$15,408. Expected and mean years of schooling for men are 14.7 and 11.5 respectively. For women, they are 15.4 and 11.3. Kazakhstan's population trends are also displayed in the report. It is expected that by 2030, the country's population will reach 18.6 million people. The HDI currently estimates it at 16.6 million (although the official statistics within Kazakhstan already put the number at above 17 million). The annual growth rate has been 1% since 2010. The urban population is 53.3%. The fertility rate is 2.4 births per women. Before 2010, it was 2.0.

In Kazakhstan the labor market shows vertical segregation, meaning that women lack representation in leadership positions across the different sectors of the economy. Recent legal efforts and measures in Kazakhstan are aiming to increase women's representation on boards in private sector. However, women are still underrepresented in top corporate jobs. According to the World Bank, 33.3% of small private enterprises have women managers and only 9.8% of large corporate firms have top women managers. This implies there still remains room for improvement and efforts should be taken to increase women's access to leadership in private sector.

<sup>8</sup> According to the data of the Ministry of National Economy's Committee on Statistics <http://stat.gov.kz>

The gender gap is relatively low in Kazakhstan but labor market outcomes portray differences between women and men. The labor market in Kazakhstan is characterized as having high female participation, skilled workers and low unemployment rates. However, women are mainly self-employed meaning that women are less likely to have formal working arrangements lacking decent working conditions and proper social security benefits. Women also represent more than 70% of the total employees in sectors that are traditionally for women such as health care and education. Sectors such as the latter as well as food services, financial services and insurance demonstrate a high proportion of women workers. However, these are all sectors with low paying wages<sup>9</sup> and account for only 2% of Kazakhstan's GDP<sup>10</sup>. In 2009, women made up 59.2% of the informal sector of the rural population and this number continues to be relatively the same representing missed opportunities for inclusive growth. Since 2000, the labor participation rate of the population in Kazakhstan for people 15 years of age and above has been around 72%. This figure remained the same for 2011. In regards to wages, the gender pay gap is below 10%. This figure can be higher in a number of OECD countries. However, despite this the gender pay gap is clearly present.

In April 2016, Secretary of State Abdykalikova announced that the proportion of women in business has increased from 38% to 50% since 2006. In addition, Kazakhstan took the 25th place in the ranking of countries according to the proportion of working women of the WEF's 2015 Global Competitiveness Index. Since 2010 female unemployment rate declined from 6.6% to 5.7% in the country. The general level of economic activity of the population of Kazakhstan was 71.7% in 2015. The level of economic activity of women was lower (66.7%) than men (77.3%), due primarily to more early retirement, and because of the earlier termination of employment. Despite the fact that the unemployment rate of the population over the period from 2008 to 2015 had a downward trend (2008: 6.6%; in 2015 - 5.1%), the level of female unemployment remains high in comparison with the male unemployment. Ratio of wages between men and women is 67.8% in 2015, while in 2010 it was 63.8%.

According to JSC "Entrepreneurship Development Fund" Damu 1,280 small and medium-sized enterprises (SMEs) headed by women granted loans in 2015, and the amount of credit amounted to just over 19 billion KZT. The total number of active SMEs headed by women amounted to more than 325.4 thousand units, or 41% of the total. Most of them are individual entrepreneurs - 84.6%. The largest number of women entrepreneurs is concentrated in sectors such as wholesale and retail trade; repair of motor vehicles and motorcycles (50.3%), agriculture, forestry and fishing (16.6%), other services (9.4%) and real estate activities (6.6%).

### **National Gender Policy and Strategies**

Kazakhstan's new reform agenda "The 100 steps" can be leveraged to strengthen effective monitoring of gender equality initiatives. "The 100 steps" program strives to establish a results-oriented state governance system with standardized procedures for monitoring, assessment and control. In addition, it stresses that the efficiency of implementing key initiatives by Ministers and Akims will be thoroughly monitored by the national commission. Moving forward, it will be important to mainstream the gender agenda within the broader governance reform initiatives to ensure that the national gender policy goes beyond declarative statements and translate into concrete action with measurable outcomes. Gender policy in Kazakhstan will need to increase awareness and understanding from line ministries and local executive bodies on the need of adopting a gender approach to policies.

In addition to the two laws governing gender policy ("On State Guarantees of Equal Rights and Equal Opportunities for Men and Women" and "On Prevention of Domestic Violence"), Kazakhstan ratified 12 international instruments in the field of gender equality. The country has acceded to the four fundamental documents of the UN Women's Rights: Declaration on the Elimination of Violence against Women (1993), the Beijing Declaration and Platform for Action (1995), the 2000 Millennium Declaration, the 2030 Agenda for Sustainable Development (2015). The recommendations of the UN Committee on the Elimination of Discrimination against Women were also implemented.

### **National Gender Equality Strategy: 2006-2016 and 2017-2030**

The leading document in the gender area is the Strategy for Gender Equality in the Republic of Kazakhstan for 2006-2016 approved by the Decree of the President of the Republic of Kazakhstan dated November 29, 2005 number 1977 is a document of national importance, consolidating a set of interrelated measures and actions aimed at achieving the common goal of plans - the creation of conditions for the realization of equal rights and opportunities for men and women enshrined in the Constitution of the Republic of Kazakhstan and international documents, adopted by Kazakhstan.

It should be noted that this Gender Equality Strategy is the first ever adopted in the history of independent Kazakhstan. At that time point the document was an innovative instrument opening a new stage in the social policy of the state to ensure a stable balance on the level of gender relations of the social sphere in general and provides, inter alia, the introduction of gender knowledge society education and awareness of the system of the necessity of legal and gender equality. Development of the project was the result of

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<sup>9</sup>[http://www.oecd.org/edu/school/OECD%20School%20Resources%20Review\\_Kazakhstan\\_FINAL\\_CRC\\_with%20cover.pdf](http://www.oecd.org/edu/school/OECD%20School%20Resources%20Review_Kazakhstan_FINAL_CRC_with%20cover.pdf)

<sup>10</sup><http://www.adb.org/sites/default/files/institutional-document/34051/files/kazakhstan-country-gender-assessment.pdf>

the constructive cooperation between the women empowerment CSOs, state bodies and international stakeholders (UN agencies and OSCE).

2016 marks a decade of implementation of the strategy and UNDP in the framework of the gender project provides technical support to conduct its evaluation, a comprehensive assessment of the implementation of the strategy, results, problems and limitations, as well as the determination of the effectiveness of implemented activities compared to envisaged goals and objectives, develop proposals for the improvement of gender policy in Kazakhstan.

UNDP is assisting the Government of Kazakhstan, represented by the National Commission for Women Affairs, Family and Demographic Policy under the President of the Republic of Kazakhstan, to develop a new program of country-level document, based on a comprehensive gender-based campaign with a clear detailing the implementation of its instruments at all levels of government and all actors interact, defining the conditions for the formation of gender policy: the state; civil society; international organizations and the donor community.

Current development of the gender and family policy in the Republic of Kazakhstan is embodied in the Family and Gender Equality Policy 2016-2030, which is the follow-up of the Gender Equality Strategy for 2006-2016. The policy has been developed based on the Constitution of the Republic of Kazakhstan, Development Strategy of Kazakhstan until 2050, National Action Plan on Advancement of Women in the Republic of Kazakhstan, United Nations Convention on the Elimination of All Forms of Discrimination Against Women, UN's recommendations on how to implement it in Kazakhstan, other ratified international treaties and agreements, Plan of the Nation "100 Concrete Steps". The implementation of the policy is planned for the current period of socioeconomic development and sustained growth of country's economy (until 2020), as well as for the long-term until 2030. The policy includes a few key priorities that are relevant to the project, including increased participation of women in economy and labor market, increased ownership of women (land, assets etc.), involvement of women in local planning mechanisms including budgetary allocation mechanisms etc.

As per the Family and Gender Equality Policy 2016-2030 in the Republic of Kazakhstan: *"Economic empowerment for rural women who do not have access to public resources and services continues to be an urgent matter. According to national statistics, one in three rural women in Kazakhstan is self-employed and lives on incomes from subsistence farming, which includes personal consumption. Incomes, which include personal consumption initially deprive women of the opportunity to invest money in human capital for return to real sector of economy"*<sup>11</sup>.

The new document integrates the gender mainstreaming in the policies of central government bodies and regions on gender equality policy format project development level and will consist (but not limited) following focus areas:

- The effect of gender inequality on economic and demographic loss
- Gender-oriented economic policy
- The empowerment of women in social and political life
- A gender approach to planning in the field of social policy
- Gender criteria for the development of culture, science and education
- Gender issues in the health and prospects of their solutions
- Achieving gender equality in the family
- Strengthening the family and the role of the father in the upbringing
- Prevention of gender-based violence
- Gender requirements for information policy
- Women's participation in peace and security

However, it should be mentioned that currently there is limited access of women to financial resources, especially in rural areas for engaging in entrepreneurship, which forces them to start small businesses, mainly in the informal sector of economy that generate low income. Women's limited access to capital, financial resources and information significantly contributed to restriction of rights of rural women – only 10% of households are led by women, owning only 2.9% of agricultural lands whose qualitative characteristics (fertility, volumes and location) are low, due to scarcity of loans and credits taken by women. The lack of property (collateral) among women makes it difficult to obtain credits for farming and therefore makes their entrepreneurial activities less efficient than men's.

The policy of employment expansion in Kazakhstan, being still gender-neutral, does not fully address the factor of inclusiveness of gender component and in particular improvement of the level of engagement of women from vulnerable groups in activities related to implementation of current state programmes in the field of employment. The situation on the labor market of Kazakhstan today is such that women continue to hold weaker positions than men on the labor market: the level of their professional qualifications and salaries are lower; professional and sectoral segregation is high.

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<sup>11</sup> <https://www.zakon.kz/4836884-koncepcija-semejnoj-i-gendernoj.html>

A no less important factor in shaping an effective gender policy in Kazakhstan is the use of the integrated gender mainstreaming approach (IGMA) as underlying, including gender-responsive budgeting, which is the main mechanism to implement the gender policy at all levels of socioeconomic development of advanced nations of the world. In Kazakhstan, the use of the IGMA is not consolidated at the country gender policy level and is based on separate components whose quality dimensions are very different from each other. However, innovative approaches to introducing such a tool in the forest sector can be consolidated during the project implementation so that an enabling environment can be created for increasing the standard of living and quality of life of people. Certainly, specific character of each territory determines the feasibility of using its own set of economic instruments and incentives in each specific case. A special attention should be paid to relationship between the mechanisms dealing with the programme formulation and adoption and the processes of formulating and implementing regional budget policy. Gender mainstreaming at the level of local budgeting means incorporation of the gender-responsive budgeting elements into the range of management processes.

In order to enhance the effectiveness of Kazakhstan's gender policy the Concept sets out: "to integrate gender mainstreaming into the main budgeting process through building respective capacities, raising awareness of the impact of the budget planning on satisfaction of needs of men and women and narrowing gender gaps"<sup>12</sup>.

In Kazakhstan, while the state budget does earmark funds for gender related activities, gender responsive budgeting is a fairly untapped tool. Although, in principle, integrating a gender approach in the formulation of budgets is articulated in the Gender Strategy, its application remains lagged. In the implementation of the Gender Strategy, the public budgets are allocated to achieve output indicators rather than focusing on the outcome results. Efforts are needed to refocus the resource allocation process towards greater linkages with expected results. In order to effectively allocate public budgets, Kazakhstan may benefit from setting fewer and more measurable objectives and better targeting output and outcome indicators for gender equality through an evidence-based analysis of policies and programmes, which allow for effective evaluation and monitoring.

### **Gender Aspects in the Main Project Target Area: Almaty Region**

#### *Representation of women at the decision-making level*

The political framework for ensuring gender equality within the processes of promoting gender equality in Kazakhstan has been developed in partnership with civil society and a broad range of stakeholders provided that strategic areas of ensuring gender equality and development of the country will be integrated into the state policy. However, the latter is unlikely at the level of the pilot region, Almaty oblast, which is confirmed by the data of official statistics. Women's representation in district Maslikhats of the oblast in 2015 constituted 18.4%; town Maslikhats respectively – 27.5%; oblast – 11.4%, which is below than in other parts of the country.

#### **Characteristics of composition of deputies in district Maslikhats in 2015**

	Deputies Total Number	Including		Gender distribution	
		Females	Males	Females	Males
Republic of Kazakhstan	2,160	423	1,737	19.6	80.4
Almaty	250	46	204	18.4	81.6

#### **Characteristics of composition of deputies in town Maslikhats in 2015**

	Deputies Total Number	Including		Gender distribution	
		Females	Males	Females	Males
Republic of Kazakhstan	625	136	489	21.8	78.2
Almaty	40	11	29	27.5	72.5

#### **Characteristics of composition of deputies in oblast Maslikhats in 2015**

	Deputies Total Number	Including		Gender distribution	
		Females	Males	Females	Males
Republic of Kazakhstan	549	68	481	12.4	87.6
Almaty	44	5	39	11.4	88.6

<sup>12</sup> <https://www.zakon.kz/4836884-koncepcija-semejnoj-i-gendernoj.html>

In the Almaty region women are not represented among political civil servants of local executive bodies.

**Characteristics of composition of political civil servants in local executive bodies by gender in 2015**

	Total	The number of political civil servants, total		Akims of oblasts, capital and city of republican significance, their first deputies and deputies		Akims of cities that are administrative centers of oblasts	
		Females	Males	Females	Males	Females	Males
Republic of Kazakhstan	208	6	98	6	84	-	14
Almaty	14	-	7	-	6	-	1

**The number of public administration employees across regions in 2015**

	The number of employees			
	Females		Males	
	people	in per cent	people	in per cent
Republic of Kazakhstan	144,820	36.6	250,589	63.4
Almaty	11,083	33.4	22,052	66.6

The percentage of women representation among public administration employees in 2015 comprised 33.4%, which was almost the same as the national indicator but lower than the men's indicator across the oblast (region).

Employment

The current employment market in Almaty region and in the country in general is characterized by rather vulnerable position of women in terms of qualification level, compensation and salary, sectoral and age segregation, and unregistered and illegal self-employment. Table 1 demonstrates the share of contribution to GGP of the region with gender breakdown.

**Table 1. Share of GDP contribution of Almaty region by gender (%)**

Indicator	2008	2009	2010	2011	2012	2013	2014	2015
<b>Kazakhstan</b>								
Women	37,8	38,6	38,8	39,3	39,7	39,3	38,6	38,2
Men	62,2	61,4	61,2	60,7	60,3	60,7	61,4	61,8
<b>Almaty region</b>								
Women	38,1	41,9	40,2	41,9	41,7	42,9	41,9	42,5
Men	61,9	58,1	59,8	58,1	58,3	57,1	58,1	57,5

**Table 2. Self-employed population in Almaty region (thousand people)**

		2008	2009	2010	2011	2012	2013	2014	2015
<b>Women</b>	RK	1 351	1 350,6	1 368,5	1 355,4	1 303,4	1 247,5	1 144,7	1 071,9
	Almaty region	166	167,8	178,3	193,4	198,6	194,5	168,1	135,4
<b>Men</b>	RK	1 306,8	1 314	1 336,3	1 364,9	1 390	1 373,4	1 255,6	1 257
	Almaty region	171,3	172,3	187,1	203,4	215,7	209,7	181,1	153,5

The number of self-employed women in rural locations in 2015 was twice higher than that in urban locations in Kazakhstan. The household nominal income in Almaty region in 2016 comprised 54,427 KZT whereas minimum subsistence level of 22,859 KZT.

The salary level is an important indicator in rural areas since it is the main source of cash that can be invested into consumables, education and self-development. Salary level also impacts the status of women in the family and economic freedom, equal access to household budget.

**Table 3. Salary level in Almaty region (KZT)**

	2008	2009	2010	2011	2012	2013	2014	2015
<b>Average monthly men</b>	53 570	57 151	67 246	76 771	86 635	92 157	100 823	101 839

<b>Average monthly women</b>	35 740	42 872	50 899	59 978	69 640	72 603	79 126	80 968
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The rural population dominates in the oblast, concentrated in livestock breeding and plant cultivation that fall into the category of self-employed people and could be identified, in our opinion, as the category of vulnerable groups. In Kazakhstan, since its independence various approaches have been developed to the identification of persons falling into self-employed within the limits of employment legislation, tax legislation and methodological requirements for maintaining state statistics on labor and employment. However, the definition “self-employed” is very ambiguous in the Law of the RK “On employment”<sup>13</sup>, which allows with political considerations in mind to refer a wide range of persons as self-employed that are not in fact self-employed. Such a common occurrence of self-employment in the country stems from territorial disaggregation of living standards, thus suggesting that a directly-proportional dependence of these two factors exists. If the number of women among self-employed prevailed in 2006, 2009, there were more self-employed men in 2015. This results from the direct effect of government employment programmes, since women from among the self-employed could be employed and realize their potential in a particular sector of activity, through various opportunities provided as part of promotion of women’s employment. However, this requires more careful study so that approaches can be identified to ensure equal opportunities on the labor market, especially in rural areas and project areas in particular. In order to contribute to already achieved results in this field focus groups should be identified as part of further targeted gender impact within the frames of the project in line with country-level strategic plans and United Nations Sustainable Development Goals.

The number of self-employed women in rural areas in 2015 in Kazakhstan was 683,5 000 people, that is, almost twice higher than that in urban locations– 388,3000 (men - 823,6 and 433,2 000 people respectively). This indicator is not urban/rural and gender-disaggregated at the level of regions, however, the author, resting on research papers, can state the fact that, if in such gender-specific sectors as trade and education women are mainly represented in the employee category, in the agricultural sector, they are usually self-employed and produce agricultural products themselves, including in the private backyards (households).

According to the one-time survey “People’s time budgets” women spend much of their time on domestic duties compared to men who spend more time on paid jobs and education. Based on the amount of time spent on unpaid domestic labor a conclusion about living conditions (availability of home appliances, comfort of living spaces, other basic amenities and utilities) can be made: the worse are living conditions, the more time is spent on housekeeping. As far as women are more likely to be involved in housekeeping than men, significant time spent on this activity stipulates women’s limited access to education, realization of their professional skills (career development), satisfaction of their cultural needs and availability of non-food items. Women spend nearly twice as much time than men on fulfillment of family obligations.

#### Access to Resources and Capital

One of the key targets of the gender policy in Kazakhstan is to achieve equal access to economic resources, including land and financial resources that will make women more competitive at the employment market and SMB.

Despite the efforts made by Kazakhstan to support women in small businesses and improving official statistics reporting 52% of small businesses are headed by women, there are some limitations in access to financial resources, thus women are mainly engaged in low income businesses.

Rural communities and women in particular have insufficient access to capital assets, financial resources, and information. Only 10% of agricultural farms are run by women occupying 2.9% of agricultural lands, most of which have poor productivity characteristics. Rural women have rarely access and control over land due to traditional patterns in land inheritance practices – land and ownership are transmitted mainly to men.

“Damu” Fund is a key financial institution that channels the state support to businesses through a number of active programs. The Chamber of Commerce of Almaty region reports 9 business projects headed by women were funded (108 million KZT) through the “Damu” Fund “Business women support project” in 2016. In addition 657 women received funding for micro business projects with the total funding pool of 296 million KZT. 521 million KZT of subsidized loans were granted to 71 women for SMB development. Substantial share of this support goes to rural women. The Information Centers provided over 1500 consultations to women, 652 women were trained in business and management, and over 300 women were supported in writing business plans.

Despite significant improvement in promotion of women’s engagement in SMBs the regional Chamber of Commerce reports on the following challenges: 1) the theme of women entrepreneurship in Kazakhstan receives little attention in terms of studies that would help to engage more targeted approaches in supporting and funding in rural areas, 2) lack of professional training in businesses that are more attractive for women, 3) Economic incentives and supporting mechanisms are not sufficient to encourage women’s engagement in SMB and start-ups.

<sup>13</sup> [http://online.zakon.kz/Document/?doc\\_id=38847468](http://online.zakon.kz/Document/?doc_id=38847468)

During consultations with the representatives of the local communities and administrations the following problems related to access to water resources, land resources, capital assets, and machinery have been identified: 1) drinking water and sanitation services are not delivered in many rural areas of Almaty region despite the implementation of national program Ak-Bulak mainly because of the high tariffs for the poorest households with many children; 2) Women are deprived a legally confirmed ownership right on any valuable property, including agricultural machinery, livestock, irrigation water facilities, housing, thus are not eligible for loans or participation in managing and making decisions effecting the households' economies and income; 3) Often women do not legally register their ownership right (share) on agricultural lands and livestock, thus cannot continue to sustain the family economy in case of divorce, death of the spouse, or changed living conditions or take part in decisions on land use.

The knowledge and data on the ownership and control over the assets and land resources helps to better understand the actual gender balance.

Social Role

Marriage and family institution remains important and defines traditional role of a woman in Kazakhstan that strongly impacts the economic security and social role of women. This should be taken into account when setting gender targets within the project. Based on the example of Almaty region the social and economic role of women in rural areas is diversifying and goes beyond the housekeeping role (Table 5).

**Table 4. Marriage/Divorce trends as indicators of change in women's social and economic role in rural areas of Almaty region**

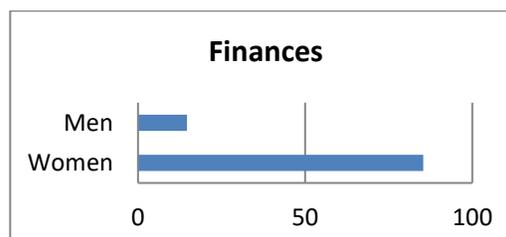
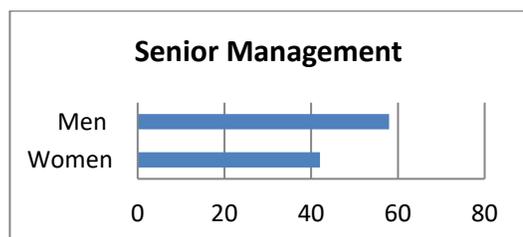
	2008	2009	2010	2011	2012	2013	2014	2015
<b>Number of registered Marriages</b>	11202	11704	12286	13018	13504	13575	12104	11455
<b>Number of Divorces</b>	1912	2113	2354	2421	2798	3037	2981	3303

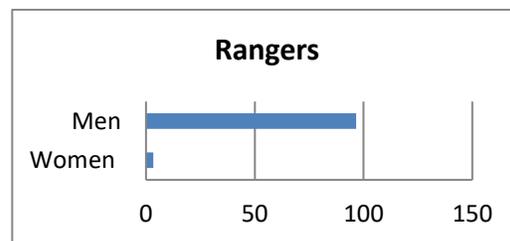
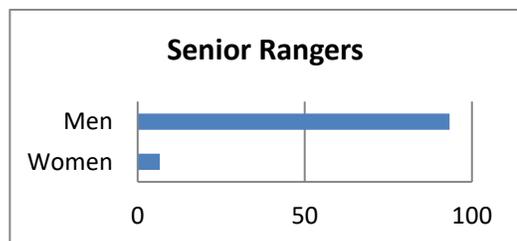
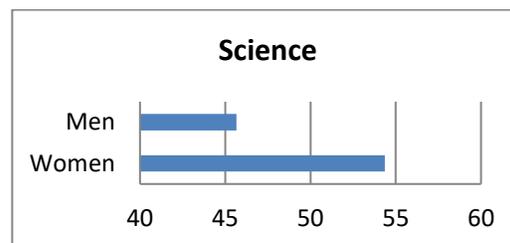
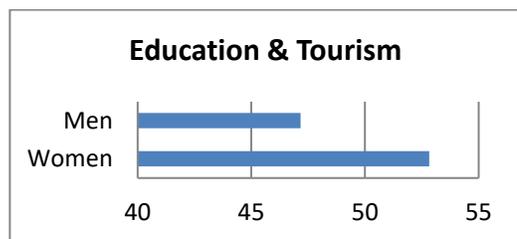


One of the tasks of the Gender and Family Concept 2030 claims application of new approach in family policy that will enable equal social security of all family members not only within public dimensions, but in internal domestic environment as well. Such approach will foster the change in existing domination of men within the family in terms of sound distribution of responsibilities, opportunities, and rights in the conditions of existing Kazakh cultural and family traditions. This is most relevant to families in rural areas. This indicator closely correlates with the above described employment and resource access profiles.

Gender Breakdown of Employment in the Protected Areas Sector

The study of gender aspects of the employment in PAs system that was carried out in target PAs has demonstrated clear gender patterns in occupational segregation. Women are usually underrepresented in upper managerial positions, such as Directors, Deputy Directors, Heads of Divisions. The project will have this segregation in mind when designing project activities related to capacity building and improvement of specific professional skills for the PA staff by adjusting gender balance in certain occupation and promoting women participation in non traditional jobs within the PA and forest management system.





### Gender in Pastoralism and Agricultural Livelihoods

Almaty region, like other project sites, is an agricultural region and counts for 19% of employment in this sector in Kazakhstan.

**Table 5. Employment in agricultural sector of Almaty region (thousand people)**

	2008	2009	2010	2011	2012	2013	2014	2015
<b>Men</b>	201,6	195,1	213,7	216,5	234,8	216,0	166,8	141,3
<b>Women</b>	184,6	196,0	180,1	186,2	193,4	207,0	156,7	152,4

The project will work in the areas where local population is mainly self-employed in cattle breeding and farming. This group of population can be categorized as vulnerable due to low income level and seasonal employment in the sector that very much depends on weather, natural ecosystems conditions, climate change factors and access to financial resources.

The main thematic areas addressed by the project include:

- Forest management, including fire management and disaster risk reduction
- Forest-dependent livelihoods
- Pastoralism and forest pasture-dependent livelihoods
- Water and natural resources management
- Biodiversity conservation, including relevant aspects of biological, socio-economic, meteorological, forest and soil, ecological, geographical, and other relates sciences
- Protected areas
- Ecotourism
- Environmental education
- Environmental law enforcement

During the PPG basic gender analysis was carried out to identify the trends in gender policy and practices within the project areas and thematic focus to develop recommendations for the project on mainstreaming the gender issues into the project activities and monitoring, and to define the project specific gender indicators, that will demonstrate how the project contributed to the implementation of the gender equity policy in Kazakhstan.

The methodology of the study included a desk review of the official statistics in relation to employment opportunities, access to resources, and role in the society in Almaty region. The selection of the region is based on representation of the forest ecosystems, land use challenges, natural resources use and access, and prospective project's interventions in the region that will help to integrate the findings of the study into the project activities in the most effective way.

## Summary of Gender Context Issues for Consideration in Project Development and Implementation

- The current demographic situation in the project areas is balanced with almost 1:1 ratio of female population to male population. The traditional economic activities undertaken are livestock breeding and farming, mainly run by men, while women are engaged in keeping family and household.
- Female population constitutes half of the population of the region where the key production sector is agriculture: crop farming and livestock breeding. Since women are mainly represented in the employee category, in the agricultural sector they are usually self-employed and produce agricultural products themselves, including in the private backyards (households), thus making significant contributions to the agricultural sector of the region through provision of labor for planting, weeding, harvesting and processing of products in addition to reproductive activities and public work. It is worth noting that women also produce and sell vegetables from home gardens or forest products whereas incomes generated by this are used for family consumption, sustaining the level of food supplies, health services and access to education. However, the latter is not yet reflected at the national statistics level and is rarely recognized at the level of domestic relations.
- Women continue to hold weaker positions than men on the labor market: the level of their professional qualifications and salaries are lower while occupational and sectoral segregation is high.
- Women are often socially vulnerable and have been increasingly involved in informal employment and as a consequence no decent involvement in the social protection system and no pension provision in particular.
- Women have fewer chances to find work through their own efforts in case of unemployment, thus forcing them more often than men to contact the employment services so that they can be registered as unemployed, receive the allowance and find a job. It should also be noted that women with higher and specialized secondary education, at 45 and older have less chances for employment.
- Women's limited access to financial resources, especially in rural areas in order to be engaged in entrepreneurship, forces them to start small businesses, mainly in the informal sector of economy, which generates low income.
- Being deprived of individual ownership right on capital assets (livestock, house, land), women are more often engaged in informal economic activities with low income and social security.  
Having limited access to information about financial resources and business opportunities, women are less often initiate small business or have fewer opportunities in decision making about the households economy.
- Forest dependent rural communities (men and women) have limited knowledge and understanding of connections between the current agricultural activities and condition of forest ecosystems, their potential impact on limited forest and land resources, economic implications of such resource use practices in a longer term, and access to information and knowledge on how it can be improved. As well as they do not have sufficient technical and financial capacity to transfer to a better management agricultural practices. There is no system in place that would provide such support, information, and funding. Most people are not aware of the threats to forest ecosystems and the impact of forest degradation on the fundamental ecological functions important to sustain livelihoods of local rural communities.
- There is no intersectoral management mechanism in the villages neighboring PAs or forest stands, that would enable all stakeholders' (including community members – men and women) to be engaged in planning and decision-making in relation to the status of the natural resources. Such a non-integrated management approach does not allow planning and management of the different sectors on a landscape level in a sustainable way to maintain fair and equal access to forest and land resources.
- Women's inadequate access to capital, financial resources and information was the major factor in disempowerment of rural women – only 2.9% of agricultural lands whose qualitative characteristics (fertility, volumes and location) are low due to scarcity of loans and credits taken by women. The lack of property (collateral) among women makes it difficult to obtain credits for farming and therefore makes their entrepreneurial activities less efficient than men's.
- The local governments, PAs and forest entities do not have sufficient capacity and integrated system of data collection and analysis in relation to land and forest use, changes in ecosystems, and threats analysis, which hampers their role of resource managers and information and services providers to local households that would enable sustainable management of important forest resources in a long-term perspective.

- Gender-specific and gender-sensitive indicators are not integrated into the local and district planning and reporting systems, which impairs the statistics-based component of the gender analysis and demands more efforts to be implied to the survey-based analysis to develop and measure relevant indicators over the project span.

Considering the above the project will strive to:

- Minimize the negative impact of certain economic and social activities on the important forest ecosystems and limited agricultural lands by raising awareness among men and women regarding the links between their established patterns of production and consumption and the effects of those patterns on the forest ecosystems and biodiversity. To achieve this the project will consider specific roles of women and men in performing social and economic activities and design advocacy approaches that will take into account specific women's and men's roles
- Ensure sustainable use of natural resources by promoting innovative gender-responsive solutions based on improved capacity, knowledge, new self-employment opportunities, and access to planning and decision-making. These solutions will produce changes in status and role of women and men and to some extent transform gender relations to make them more equal. For example, improved access of women to knowledge on PA management -since they are mainly responsible for those activities, improved access of women to local decision-making which will have empowering impact on their status and consideration of their role in community affairs, improved access of women to job opportunities which will improve their economic situation and consequently their role and status in family decision-making etc.
- Increase women's participation in development of environmentally sound, cost-effective practices and methods of sustainable forest and pasture management, agroforestry, fuel forests development, and water resource management and their wide spread use by men and women. In this context the project will consider the roles played by women and men in finding alternatives when water, other resources are deficient.
- Improve local and regional policy in nature resource related sectors to ensure that integrated gender mainstreaming approach (IGMA) is applied, including gender-responsive budgeting, which is the main mechanism for implementing the gender policy at all levels of socioeconomic development. Gender mainstreaming at the level of local budgeting means incorporation of the gender-responsive budgeting elements in the range of management processes. Theoretical and practical experiences of advanced countries of the world has shown that putting gender-responsive processes in place contributes, first of all, to faster economic growth; improvement in the quality of services for people; more sustainable resource management aiming to promote the policy of equal opportunities and ensure sustainable development of the region.

### **Recommendations for Mainstreaming Gender in Project Design, Implementation and Monitoring**

1. Research on gender-specific contributions to the forest degradation caused by economic and social activities of local communities in 1 target district in Almaty region, as well as the impact of various solutions (social, economic, institutional, and technological) in order to increase the effectiveness of policies and measures aiming to conserve and/or rehabilitate the biological diversity of forest related ecosystems. The results are to be scaled up to other 5 districts that are part of the landscape planning interventions of the project. This will improve the existing gender specific data accumulation and monitoring at the level of regional management plans.
2. Situation/Stakeholder Analysis will be initiated to deliberate drivers (factors/threats to biodiversity, including reasons, incentives, etc., that force men and/or women to act destructively in respect to biodiversity), stakeholders (interest groups/communities, governments and international agencies, private sector representatives, experts), barriers/constraints to change (cultural, financial, administrative, etc.), and local ideas/initiatives upon which a project could be built.
3. Household surveys at the household level to identify the different roles that men and women play in the management of forests and pastures at the household and community level as well as sustainable practices developed by men and women. Such surveys will be organized in 1 target district, covering at least 3 villages. The surveys will be conducted in the beginning of the project to feed the research and defining the baseline for the project gender indicators and in the end of the project to measure the impact of the project activities in relation to the targeted gender specific objectives stated above.
4. Awareness campaign will be carried out by the project aiming at improving public understanding of the contribution of biodiversity and forests to community well-being, including income, by designing communications strategies and information campaigns in a way that addresses the needs of both women and men.
5. Capacity-building and knowledge transfers in sustainable forest and pasture management and planning, engagement in decision making procedures through the community based consultations mechanism, practical solutions adapted to specific conditions of ecosystem status, existing and potential threats and targeted scenarios in pilot villages. This will include organizing training workshops designed to improve the efficiency of their use of biological resources and improve professional skills and capacities to manage important forest resources in sustainable and effective way. This will also improve the equal access to information on available funding

opportunities and consultations on business planning and compliance with Damu Fund requirements for men and women. Target audience for capacity building will be based on the analysis of the specific roles of women and men in use of biological resources and forest resources.

6. Pilot projects will be designed for conservation and/or restoration of forest ecosystems and combining biodiversity and ecological functions with income-generating activities and carry out consultations and technical support to encourage women’s equal participation in developing and completing pilot projects that will generate additional socio-economic benefits in a long term perspective.

Recommendations for Integrating Gender Considerations in Project Strategy and Design

The UNDP Gender Marker for all UNDP projects is assessed at the Output level. It is a UNDP goal that all projects be assessed as “GEN2” for their gender marker. The GEN2 marker coder is defined as such: “Gender equality is not the *main* objective of the expected output, but **the output promotes gender equality in a significant and consistent way.**”<sup>14</sup>

To reach a GEN2 gender marker rating, at least 50% of project outputs should be rated GEN2. Therefore recommendations are made below for each project outputs in order to reach the GEN2 level marker for the proposed project.

The below recommendations for project outputs and activities will be further developed into the project’s Gender Mainstreaming Action Plan at the beginning of project implementation. Outputs not included in the table below have been assessed as having low gender relevance.

Project Output	Recommendations for integrating gender considerations
<p>Output 1.1.2 Newly established forest PAs are operationalized with improved management effectiveness, including community management mechanisms</p>	<p>During the feasibility assessment stage for the planned new/expanded PAs the project will organize consultations with local stakeholders to identify potential conflicts caused by imposed limitations, discuss win-win solutions with the land users, and secure support from all concerned. The project will plan and conduct consultations in a way that women’s views are equally represented and accounted for.</p> <p>Consultations should also provide full information about potential impact of changes in resource management on rural communities, including differentiated impact on women and men. After the approval of new PAs the project will support the establishment of the Community Council that will be elected from the community members as a formal mechanism for participation in PAs management to communicate the major challenges on a regular basis. While designing and conducting the participatory elections, the project will ensure that women and men are equally represented on the Board.</p>
<p>Output 1.2.1. Development and implementation of forest-specific management measures in PA management plans for PAs, covering 839 567 ha of HCVF</p>	<p>The project will support the revision of the management plans so that the key biodiversity values are clearly articulated both for the management and monitoring purposes of PA staff and for the communities that are using the PAs forest resources (e.g. pastures, sub-products, fuel wood and construction wood). Considering the gender-specific housekeeping and income generation segregation between men and women, the project will design the awareness and PA participatory management activities accordingly. For example, women are more often engaged in harvesting and selling of forest sub-products, such as herbs mushrooms, berries, fruits. So they will be identified as a target group for the relevant awareness activities. Similarly, in saxaul forests women and man are both potential fuel wood collectors, so they should have equal access to the information on consequences of this illegal activity. The management plan should also stipulate the development of capacities and improvement of professional skills of men and women staff of target PAs. This particularly refers to HCVF management principles and practices. The training will be also based on self-desired improvement (capacity survey) of skills of the staff even if it is not immediately required for the current position, but will benefit for the future career development of men and women.</p> <p>The forest biodiversity in Kazakhstan has a number of globally important genetic resources – wild fruit trees and herbs- that are strongly threatened because of the poor management and uncontrolled harvesting. The project will impose regulations that would enable sustainable use of these resources and deliberate business schemes for improving the efficiency of this type of income generation through introducing product processing technics, marketing, and green labeling. This activity will be particularly focused on women as a main target group impacting the genetic resources. This will be accomplished in cooperation with PAs.</p>

<sup>14</sup> Source: UNDP Gender Marker Guidance Note for Staff, Revised 2016.

Project Output	Recommendations for integrating gender considerations
<p>Output 2.1.1. Revision and implementation of Forest Management Plans for 6 forestry units bordering forest PAs, including community input mechanisms</p>	<p>Most productive pasture resources used by local households are located within the borders of the Forestry entities, and are managed based on forest ticket with inaccurate and outdated bearing capacity assessments. In order to become an effective member of pasture management and forest protection measures, the local communities are to be well informed about all aspects of pasture management planning and SFM principles. They should also support an underlying long-term goal of maintaining biodiversity, land resources and ecosystems' services for benefits of future generations. To implement this task the project will carry out the research and consultations to ensure fair access to information and scientific knowledge that will back up the Identification of an agreement on key biodiversity areas - corridors and buffer zones surrounding PAs. The men and women will be equally engaged in Forest Management planning processes in cooperation with Forest entities administrations through workshops and consultations.</p> <p>Saxaul protection and restoration activities of the project are specifically targeted on rural communities. Considering the complete ban of saxaul use in Kazakhstan that was recently introduced, it is important to monitor the impact on the households' economies, health, sanitation, and social and economic well-being of women, and to increase their role in economic activities in the conditions of dry lands ecosystems in order to balance their role of households maintenance and family care.</p> <p>One such opportunity is improved afforestation and reforestation practices where the project intends to provide training and research on improved saxaul reforestation techniques, development of SLM measures through improved forest pasture management, feasibility assessment of alternative fuel sources, community awareness raising relating to saxaul protection.</p> <p>Forest fires, despite the recent positive statistics, remain the key threat both to forest ecosystems and neighboring villages, becoming more prominent in the conditions of climate change. The project will consider gender specific awareness about fire prevention measures, participation of community members in fire management measures, rules of conduct in case of fires etc.</p>
<p>Output 2.1.2. Forest pasture management plans (including grazing plans) developed and implemented with local community engagement in pilot sites bordering PAs of forest pastures</p>	<p>The effectiveness of this output will strongly depend on the level of engagement and awareness of local communities and highest possible and fair consideration of variety of interests, including gender-specific interests. During the consultations, the project will accurately document and analyses the responses of surveyed groups, making clear distinction between potential roles of man and women in proposed pastures and water management improvements.</p> <p>The piloted projects should design gender-responsive impact monitoring system for a different timeframes to measure the efficiency and sustainability of the newly introduced agricultural practices.</p>
<p>Output 2.1.4 Integrated land and forest management plans developed and implemented in six administrative districts through community consultation covering ha surrounding newly established PAs, including designation of buffer zones and corridors</p>	<p>Apart from the ground-based deliverables of this output, the project here will target the policy level – testing bottom up regional planning approach. This output provides good ground for introducing gender specific statistics at the regional level on the example of 6 districts of Almaty region. This will address the problem of gender specific data in a longer term.</p>
<p>Output 2.1.5 Tourism management strategies developed for forest PAs in cooperation with local communities, strategies integrated in PA management plans</p>	<p>Nature-based tourism development is one of the business opportunities that have big potential among women both as a fully operational agent and as a sub-services provider. The project will ensure that women have equal access to information on technical, financial, and land resources for skillful consideration of revenue options from tourism in the framework of the PAs management plans. The project will consider additional activities (consultations, trainings, info tours) to create conditions for women to benefit from tourism management strategies and participate in related activities.</p>

Project Output	Recommendations for integrating gender considerations
and under implementation	
Output 2.2.3. Training program and improved forest research and data analysis capacities to support implementation and uptake of HCVF management approaches	The project will ensure equal representation of women and men in groups of trained professionals in the following topics: forest management planning, forest inventory, forest management monitoring, forest restoration and rehabilitation, silviculture in natural and planted forest, fire management, forest and water, non-timber products management, forest pests, forest genetic resources, CC adaptation and mitigation, forest tourism and recreation, forest certification, wildlife management, land use planning. This will provide opportunities for professional career and better employment opportunities of women in forest management sector. In addition, targeted training to women that are already active in sector to increase their competencies, skills and career opportunities will be organized, and models for creation of mentoring network for women in this sector – these interventions have better potential in increasing women’s opportunities.

Recommendations for Mainstreaming Gender in Project Implementation

- At the project inception phase the project team should develop a detailed action plan for mainstreaming gender in all project outputs.
- The project team and technical staff should include appropriate gender balance, to the extent feasible, taking into consideration necessary technical qualifications.
- All remaining gender-related baseline data should be finalized as soon as possible.
- A gender mainstreaming expert should be included in the Project Steering Committee, and on all lower-level project decision-making bodies.
- At the inception phase the project results framework indicators and targets should be reviewed to ensure adequate gender-disaggregation of any relevant indicators.
- Project capacity development activities should endeavor to have gender balance among participants to the extent feasible and relevant.

Recommendations for Monitoring Gender Mainstreaming in the Proposed Project

Below are proposed possible gender indicators to be tested for six specific project pilot districts for many of the project activities.

**Table 6. Gender-related indicators to be tested for six target regions (Balhash, Panfilov, Kerbulak, Eskeldy, Uigur, Raimbek)**

Indicator	Baseline	Midterm Target	Final Target	Assumptions
Awareness of local community’ members and policy makers on linkages between economic activities of local communities and status of forest ecosystems in target districts through the awareness and community engagement campaigns to be designed during preparation of the project communication strategy.	Quantitative baseline to be established in first year of project	Ratio of men/women 70/40	Ratio of men/women 50/50	The data will be collected based on surveys to be conducted in the project target areas and focus groups at beginning, midterm, and final year of project.
Awareness on the ways to decrease the impact on forest ecosystems through the awareness and community engagement campaigns to be designed during preparation of the project communication strategy.	Quantitative baseline to be established in first year of project	Ratio of men/women 70/40	Ratio of men/women 50/50	Surveys will contain data both on the gender of the respondent and the number and genders of affected members of the household.
Awareness on access to financial resources of the local communities to decrease the current land use practices impact on forest ecosystems by partnering with DAMU program and organizing consultations during the community mobilization activities.	Quantitative baseline to be established in first year of project	Ratio of men/women 70/40	Ratio of men/women 50/50	Surveys will contain data both on the gender of the respondent and the number and genders of affected members of the household.

<b>Indicator</b>	<b>Baseline</b>	<b>Midterm Target</b>	<b>Final Target</b>	<b>Assumptions</b>
Awareness on opportunities to participate in decision making on land use and forest management through organized consultations and participatory activities with local stakeholders about community based Councils and resource co-management mechanisms.	Quantitative baseline to be established in first year of project	Ratio of men/women 70/40	Ratio of men/women 50/50	Surveys will contain data both on the gender of the respondent and the number and genders of affected members of the household.
Change in land use or natural resource use practices by gender to see whether the advocacy, awareness raising and skills building activities had impact	Quantitative baseline to be established in first year of project	Ratio of men/women 70/40	Ratio of men/women 60/40	Surveys will contain data both on the gender of the respondent and the number and genders of affected members of the household.
Change in qualification level for PAs and Forest entities' staff as a result of training and workshops on technical SFM related issues and management issues.	Quantitative baseline to be established in first year of project	Ratio of men/women 60/40	Ratio of men/women 50/50	Surveys will contain data both on the gender of the respondent and the number and genders of affected members of the household.

## XII.ix Annex I. UNDP Risk Log

Types of risks include environmental, financial, organizational, political, operational, regulatory, security, strategic.

**Note:** The SESP risk related to indigenous people (UNDP Social and Environmental Standard 6) was carefully analyzed during the project development phase, particularly in relation to the ethnic minority Uyghur population in Uyghur district, where some of the project activities will be carried out. The criterion of indigenous people was determined not to apply in this instance. The primary criterion for a group of people to be defined as "indigenous" is the fact that these people are first, native or aboriginal to a territory, which is not the case in this instance, at least not in relation to the ethnic Kazakh majority population, which was present in this territory concurrently (or possibly prior to) the Uyghur ethnic minority population. In addition, officially there are no defined indigenous populations in Kazakhstan, according to government definitions and policies. At the same time, when working on sites with the presence of ethnic minorities the project will actively engage with all groups, and if necessary, prepare action plans to ensure concerns of all groups are accommodated properly.

**Table 9 Risk Assessment and Mitigation**

Project risks					
Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
<b>Non-SESP Risks</b>					
Changes in government policy priorities related to sustainable forestry development	<i>Political</i>	I = 2 (minor) P = 2 (not likely)	Despite its modest forest resources compared to other countries in Europe and Asia, forestry has a long tradition in Kazakhstan. Forestry continues to be high on the government agenda, particularly due to several government policies including State Forest Planting Program «Jasyl El» and the 2003 Forest Code.	UNDP	N/A
Biodiversity science and conservation community continue to ignore/underestimate the participatory approaches in planning the landscapes and continue to use formal social surveys as a key tool for community engagement.	<i>Political</i>	I = 2 (minor) P = 2 (not likely)	The project will develop and distribute high quality case studies demonstrating the benefits and differences between conventional and participatory approaches for community engagement activities. And will propose relevant amendments to policies and land use plans, feasibility studies and other planning tools currently used for infrastructural and development projects.	UNDP	N/A
Data deficiencies to complete the ecosystem services quantification and economic valuation research may undermine the quality of the final products related to species and habitats modeling.	<i>Operational</i>	I = 2 (minor) P = 2 (not likely)	The project will engage high quality international expertise in species and habitats management and will follow the advice especially in relation to methodological tools. The project will avoid completing fundamental scientific research, but will rather focus on specific threats, risks, and solutions within the landscapes.	UNDP	N/A
Mountain ecosystems are particularly vulnerable to climate change impacts, and data and analysis on climate change impacts for the mountain forest ecosystems of Kazakhstan is still not well developed. Therefore climate change could lead to ecosystem impacts that negatively influence the status of biodiversity and the sustainability of forest ecosystems, despite project efforts. The question will be in what timeframe such effects may happen, whether it would be within the lifetime (or shortly thereafter) of the project, or	<i>Environmental</i>	I = 2 (minor) P = (not likely)	The project will be sure to utilize the best available climate science and data for Kazakhstan's mountain ecosystems. The project will apply this data to ensure appropriate planning and management of PA boundaries, and related buffer zones and corridors in order to support biodiversity requirements. The project will also support the development of a monitoring program for assessing climate impacts on woody species, which will further be used to improve biodiversity outcomes. <b>The project will ensure that climate resilience measures are incorporated in all relevant project activities.</b>	UNDP	N/A

Project risks					
Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
whether such effects, if they occur, would be on much longer timescales.					
<b>Risks Identified Through SESP</b>					
<p><b>Risk 1:</b></p> <p>Principle 1.1 <i>“Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups? – YES”</i></p> <p>Principle 1.2 <i>“Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? – YES”</i></p> <p>Principle 1.3 <i>“Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups? – YES”</i></p> <p>Principle 2.4 <i>“Would the Project potentially limit women’s ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? – YES”</i></p> <p><b>Explanation of risk in relation to project:</b> The project will be supporting the establishment of multiple new protected areas. When establishing protected areas, there is always a possibility that this process will result in some modification to the enjoyment of human rights of individuals living near or otherwise using territory to be included in the protected area. In addition, the protected areas are primarily in remote rural areas, and the inhabitants in such regions typically have a higher percentage of people living in poverty, and/or marginalized groups. Therefore there is a risk that the project activities could have an adverse effect on the enjoyment of human rights, and/or possibly restrict availability, quality or access to resources. There is also the risk that the populations affected would include the</p>	Political	1 = 2 (minor) P = 2 (not likely)	The risk is assessed based on the planned project activities, regardless of mitigation measures, or in consideration of the fact that mitigation measures are an inherent element of the project activities itself. For example, in the establishment of protected areas, an integral part of the process is the engagement of and communication with local communities to ensure the protected area is established in a way that is in as much alignment as possible with local needs and priorities. This process is not a mitigation measure per se, it is a de facto part of the action itself. The project will be working closely with all stakeholders to ensure that stakeholders are adequately consulted and their considerations integrated in the establishment of any protected areas. In any cases where there may be adverse impacts, mitigation and compensation measures will be developed and implemented. The fact that there are many different types of protected areas which convey different levels of protection provides significant flexibility for the project and all stakeholders to ensure that environmental as well as social, economic, and human rights needs and priorities are met. This approach is further combined with the fact that within a single protected area there can be many different zones that allow different levels and types of land-use. The protected areas established will also have permanent community-based management mechanisms in place to facilitate ongoing stakeholder consultation and input to the protected area management process. Based on the remoteness of the areas targeted for new protected areas, and the relatively low levels of population in the vicinity of those areas, any potential impact is considered minor, and the probability is considered not likely. With respect to gender, a gender analysis was undertaken, and an action plan developed, which will be further elaborated and updated at the project inception phase.	UNDP	N/A

Project risks					
Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
poor or other marginalized groups, and that these groups would be disproportionately affected by the project activities (due to their inherent proximity to the targeted area).					
<p><b>Risk 2:</b></p> <p>Principle 1.5. <i>“Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project? – YES”</i></p> <p>Principle 1.6 <i>“Is there a risk that rights-holders do not have the capacity to claim their rights? – YES”</i></p> <p>When working developing countries there is always a risk that government authorities and responsible parties may not have the full capacity necessary to fulfill their duties in terms of governance, administration, and management of natural resources. In fact, the fact that many projects work to strengthen the individual, institutional, and systemic capacity of natural resource management government agencies is an indicator of the insufficient capacity of these organizations. Therefore, there is a risk that institutional government duty-bearers related to the management of forest ecosystems and land resources do not have the capacity to meet their obligations.</p> <p><b>Explanation of risk in relation to project:</b> In addition, by the same principle and rationale of the fact that the project will be working on natural resource management issues in rural and remote areas, there is a risk that resource users and other rights holders do not have the capacity to claim their rights. Such resource users living in rural and remote areas may not been fully educated and informed about what their rights are (in this case, in relation to usufruct or other natural resource-related rights), or the procedures to claim those rights. There is a risk that rights holders may not have the legal, self-organizing, or financial means to claim their rights.</p>	Organizational	I = 2 (minor) P = 2 (not likely)	The risk is assessed based on situation and context that the project will be working in. Although the risks are present, the combination of the impact and probability of the risk is considered low. The fact that there is limited capacity on both the part of the government and rights holders is an inherent element to working on sustainable livelihoods in developing countries; clearly this does not automatically place all such projects in a moderate or high risk category. At the same time, in this project standard procedures will be applied to mitigate the low risk that exists. As with the previous risks, the project will be working closely with all stakeholders to support government natural resource management authorities and institutions to meet their obligations, and with resource user rights holders to claim their rights. This will be accomplished through multiple stakeholder consultation sessions during all relevant aspects of the project to ensure that all parties are aware of and understand the relevant obligations and rights. During the PPG phase a capacity needs assessment was conducted in relation to the PAs involved in the project, through an aggregate assessment of the METT tracking tools. The weakest item identified through the METT in relation to PA management was for item number 24 of the METT: “24. Local communities: Do local communities resident or near the protected area have input to management decisions?”, which had an aggregate score of 1.33 out of total possible of 3. Based on this capacity needs assessment the project will be including special trainings for PA staff on stakeholder engagement and community participation in PA management, in relation to strengthened HCVF management.	UNDP	N/A
<b>Risk 3:</b>	Environmental	I = 1 (negligible)	The risk is assessed based on the actual impact and probability of the activities themselves, without	UNDP	N/A

Project risks					
Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
<p>Standard 1.2 “Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities? – YES”</p> <p>Standard 1.3 “Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? – YES”</p> <p><b>Explanation of risk in relation to project:</b> The project specifically targets the conservation and sustainable management of critical habitats, environmentally sensitive areas, and legally protected areas in the forested regions of Kazakhstan. Part of the project objective is the formal gazettement of national level protected areas, which is likely to involve changes to the use of lands and resources, which has the potential for adverse short-term impacts on livelihoods; long-term impacts are anticipated to be positive as the project will support transitions to sustainable livelihoods. The project’s actions are anticipated to have positive short-term and long-term impacts on habitats and ecosystems.</p>		<p>P = 5 (expected)</p>	<p>consideration of any potential mitigation measures. The conservation, protection, and sustainable use of these areas is the objective of the project. Therefore the probability of these risks is “expected”. However, given that the objective of the project is to enhance the environmental and social qualities of these areas, the risk of negative social and environmental impacts is “negligible” (theoretically the project has a high likelihood of <u>positive</u> impacts). Nonetheless, this risk will be consistently monitored throughout project implementation via the standard project management oversight and risk monitoring systems.</p>		
<p><b>Risk 4:</b></p> <p>Standard 1.6 “Does the Project involve harvesting of natural forests, plantation development, or reforestation? – YES”</p> <p><b>Explanation of risk in relation to project:</b> The planned project activities include small amounts of reforestation / afforestation. There are two activities whereby reforestation / afforestation will be conducted. First, the project will be working with national government authorities and stakeholders, including the FWC and the National Plant Breeding Center, to improve tree nurseries in a small number of selected locations. The purpose of these improved nurseries will be to increase the availability of seedlings for rare species, such as wild fruit and nut</p>	<p>Environmental</p>	<p>I = 1 (negligible) P = 5 (expected)</p>	<p>The risk is assessed based on the impact and probability of the project activities, regardless of any potential or actual planned mitigation measures. However, mitigation measures are also foreseen as an inherent part of the project activity. For example, the project team will work with the partner leskhozes (local forestry services) to ensure ecologically appropriate locations for planting trees, and will use native species (this is the purpose of the activity). The relatively small area of tree planting means that any ecological impact will be minimal, and the overall environmental impact – considering the benefits of the planted trees – is expected to be positive. Kazakhstan’s national forest cover currently stands below its historical average, and it is part of the national forest policy to increase forest cover.</p>	<p>UNDP</p>	<p>N/A</p>

Project risks					
Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
relatives, the rare native ash tree <i>Fraxinus sogdiana</i> , and valuable mountain forest species such as Schrenk's spruce ( <i>Picea schrenkiana</i> ).					
<p><b>Risk 5:</b></p> <p><i>“Standard 2.2 Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change? - YES”</i></p> <p><b>Explanation of risk in relation to project:</b> The project impacts include the conservation of endangered and threatened species, and the improved management of protected areas. These results could be sensitive to changing climatic conditions in the future.</p>	<i>Environmental</i>	I = 1 (negligible) P = 3 (moderately likely)	The risk is assessed based on the actual impact and probability related to the project activities, regardless of any potential or actual mitigation measures. The project team will work with all partners and stakeholders to apply the best available climate change impact prediction data for the Kazakhstan's forested regions, and will ensure that all project activities and plans take potential future climate impacts into consideration. For example, the project will ensure that planted trees are in locations that will continue to have suitable climate conditions in the future, and will work with protected area management authorities to develop PA management plans for the new PAs that consider potential future climate impacts. In addition the project will assist in developing a methodology for climate change monitoring of woody species in Kazakhstan.	UNDP	N/A
<p><b>Risk 6:</b></p> <p>Standard 5.2 <i>“Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)? – YES”</i></p> <p>Standard 5.4 <i>“Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources? – YES”</i></p> <p><b>Explanation of risk in relation to project:</b> The project will work to support the establishment of protected areas intended to conserve biodiversity as well as a variety of ecosystem services provided by forest ecosystems in these territories. By the very nature of this activity, as indicated in relation to Risks 1 and 3 above, establishing PAs may result in a change in land and resource use in areas where PAs are established. As a result, this could result in economic displacement. It is not foreseen that the project activities would result in any physical displacement of communities or resource users. The same project activities could also affect land tenure arrangements and/or community-based</p>	<i>Political</i>	I = 2 (minor) P = 1 (moderately likely)	<p>Due to the remote areas where the project will be working and the low population densities in these areas, any possible impact due to project activities is expected to be minor, and the probability is moderately likely. The risk is assessed based on the actual impact and probability of the project activities, without consideration of potential mitigation measures. Nonetheless, mitigation measures are inherently included in the scope of the project as part of the execution of project activities.</p> <p>As previously discussed under Risks 1, 2 and 3, the project will constantly work with all relevant stakeholders to ensure that these risks are minimized. The project will support the establishment of protected areas in accordance with all norms, policies, procedures and laws of Kazakhstan, as well as international norms in relation to land tenure and all associated rights, as well in relation to possible economic displacement related to the establishment of protected areas. In any instances where economic displacement may occur the project will be working with stakeholders to provide compensation, offsetting support, and mitigation in relation to affected resource users.</p>	UNDP	N/A

Project risks					
Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
property rights or customary rights to land, territories or resources.					

XII.x Annex J. Results Framework Indicator Data Disaggregation

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
<p>1. Area of critical ecosystems with improved management, including tugai, saxaul, and mountain forests, and associated grasslands</p>	<p>N/A (zero hectares improved)</p>	<p>9,127,071 hectares =</p> <p>a. Total area PAs directly targeted (Component 1) = 4,719,242.15 ha (see GEF-6 Biodiversity Tracking Tool, Objective 1, Section 1, cell C28) (of which 2,188,159 ha existing, and 2,531,082 ha new)</p> <p>b. Pasture area of leskhozoes directly targeted (Output 2.1.1.) = 1,175,700 ha:</p> <p>Narynkol - 141,400  Uigur - 156,200  Zharkent - 151,900  Bakanas - 647,800  Zhongar - 21,700  Zaisan - 56,700</p> <p>c. Area of village/A-Os directly targeted (Output 2.1.2) = 720,000 ha (average of 120,000 ha each, including estimated degraded area of 73,000):</p> <ul style="list-style-type: none"> <li>- Katon-Karagay Local Community (Altai alpine forest ecosystem): estimated degraded area 8,500 ha (no data)</li> <li>- Miyaly Local Community (Ile river tugai ecosystem): estimated degraded area 24,000 ha</li> <li>- Shaulder-Bayaldyr-Koksaray Local communities (Syr Darya tugai forest ecosystem): estimated degraded area 15,000 ha</li> <li>- Sumbi Local community (Charyn river tugai forest ecosystem): estimated degraded area 8,500 ha</li> <li>- Koku-Kakpak Local Communities: estimated degraded area 8,500 ha</li> <li>- Turgen-Saty Local Communities: estimated degraded area 8,500 ha</li> </ul>	<p>Project reports and documentation; Successful completion of project activities for relevant project components, as verified by the MTR and TE.</p> <p>GEF-6 Corporate Results Indicator 1: <i>“Improved management of landscapes and seascapes covering 300 million hectares”</i></p> <p>GEF-6 Corporate Results Indicator 2: <i>120 million hectares under sustainable land management</i></p>

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
		<p>d. Area of integrated natural resources management plans in six districts directly targeted (Output 2.1.4) = 2,512,129 ha, including 350,000 ha of anticipated buffer zones and corridors (figures are approximate estimates):</p> <p>Anticipated buffer zones and corridors:</p> <ul style="list-style-type: none"> <li>- Zhongar Alatau-Altyn Emel: 73,198 (Protection of winter migrations of the mountain goat and snow leopard)</li> <li>- Kolsai Koldery-Terskeiskaya: 35,253 (Protection of the snow leopard habitat)</li> <li>- Charyn River Delta: 15,548 (Tugai migratory zone)</li> <li>- Kolsai Kolderi-Ketmen: 32,080 (Protection of the snow leopard habitat)</li> <li>- Ile river floodplain: 197,684 ha (Tugai migratory zone)</li> </ul> <p>(Exact total is 353,763 ha, but all figures are rough estimates based on GIS analysis of proposed corridors, so the figure is rounded to 350,000)</p> <p>e. Any area affected by changed water management regimes or other management measures as a result of TSAs (Outcome 2.3): To be determined.</p>	
2. # Forest area in Kazakhstan under <i>indirectly</i> improved management	N/A (zero hectares indirectly improved)	<p>Forests managed by 123 forestry entities = 12,652,400 ha of forest landscapes (within 29,318,750 total ha of national forest fund land); as indicated by status of HCVF management regulations (adopted at national level);</p> <p>Status of national institutional framework for forest management (plan for restructuring leskhozoes under FWC instead of akimats adopted at national level)</p>	Project reports and documentation; Successful completion of project activities for relevant project components, as verified by the MTR and TE
3. # direct project beneficiaries # of PA staff with enhanced individual capacity	N/A (zero beneficiaries)	<u>Total:</u> ~41,000	Number of staff employed at PAs targeted by the project

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
<p># of forestry staff with enhanced individual capacity</p> <p># of local resource users with improved sustainability of livelihoods</p>		<p><u>PA staff:</u> &gt;2,000 PA staff with enhanced capacity: 2,215 staff currently employed in existing PAs that will be included in project activities; details on number of staff per each PA available in supporting documentation for GEF-6 SFM Tracking Tool – see sheet “Calcs_HCVF_PAs”, cell D57.</p> <p><u>Forestry staff:</u> 457 leskhoz staff</p> <p>Narynkol 128</p> <p>Uigur 161</p> <p>Zharkent 39</p> <p>Bakanas 50</p> <p>Zhongar 25</p> <p>Zaisan 54</p> <p><u>Local resource users:</u></p> <p>Katon Karagai – 3,869 (1,866 men and 2,003 women)</p> <p>Miyali - 1,128 (581 men and 547 women)</p> <p>Shaulder-Bayaldyr-Koksaray – Shaulder – 8,428 (4,205 men and 4,223 women);</p> <p>Koksaray - 3,896 (1,986 men and 1,910 women);</p> <p>Bayaldyr - 1,528 (759 men and 769 women)</p> <p>Sumbi Rural district:</p> <p>Sumbe village - 3,545 (1,825 men and 1,720 women); Shoshanai village - 732 (381 men and 351 women)</p> <p>Koksu - 923 people (449 men and 474 women)</p> <p>Kakpak – 2,300 people (1,177 men and 1,123 women)</p> <p>Turgen-Saty:</p> <p>Turgen - 12,116 people (6,004 men and 6,112 women);</p> <p>Satay – 288 people (149 men and 139 women)</p>	<p>Number of staff employed at leskhoz directly targeted by the project</p> <p>Number of people living in rural districts directly targeted by the project</p>

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
		Total: 38,753 (19,382 men; 19,371 women) (all figures official from 2009 census)	
<p>4. Species Indicators:</p> <p><u>Alpine forest and associated ecosystems, flora:</u></p> <ul style="list-style-type: none"> <li>- <i>Picea schrenkiana</i></li> <li>- <i>Malus sieversii</i></li> <li>- <i>Malus niedzwetzkyana</i></li> <li>- <i>Juniperus sp. (turkestanica, semiglobosa, seravschanica)</i></li> <li>- <i>Betula tianschanika</i></li> <li>- <i>Populus tremula L.</i></li> <li>- <i>Abies siberica</i></li> <li>- <i>Crataegus turkestanica</i></li> <li>- <i>Picea obovata</i></li> </ul> <p><u>Alpine forest and associated ecosystems, fauna:</u></p> <ul style="list-style-type: none"> <li>- <i>Uncia uncia</i></li> <li>- <i>Ursus arctos (incl. ssp isabellinus)</i></li> <li>- <i>Ovis ammon ssp (karelini, nigrimontana)</i></li> <li>- <i>Capra sibirica</i></li> <li>- <i>Cervus elaphus</i></li> <li>- <i>Capreolus pygargus</i></li> <li>- <i>Canis lupus</i></li> <li>- <i>Marmota sp. (baibacina, caudate, menzbieri)</i></li> </ul> <p><u>Floodplain (tugai) forest and associated ecosystems, flora:</u></p> <ul style="list-style-type: none"> <li>- <i>Populus pruinosa</i></li> <li>- <i>Ulmus sp.</i></li> <li>- <i>Fraxinus sogdiana</i></li> <li>- <i>Elaeagnus oxycarpa</i></li> <li>- <i>Tamarix ramosissima</i></li> </ul>	<p>Please see GEF-6 BD Tracking Tool METT scorecards for all PAs, cells C38 and C39</p> <p><u>Alpine forest and associated ecosystems, flora:</u></p> <ul style="list-style-type: none"> <li>- <i>Picea schrenkiana</i> - 65,321</li> <li>- <i>Malus sieversii</i> - 5,100</li> <li>- <i>Malus niedzwetzkyana</i> - no data</li> <li>- <i>Juniperus sp. (turkestanica, semiglobosa, seravschanica)</i> - 7,572</li> <li>- <i>Betula tianschanika</i> - 1,522</li> <li>- <i>Populus tremula L.</i> - 4,788</li> <li>- <i>Abies siberica</i> - 76,859</li> <li>- <i>Crataegus turkestanica</i> - 1,100</li> <li>- <i>Picea obovata</i> - 18,580</li> </ul> <p><u>Alpine forest and associated ecosystems, fauna:</u></p> <ul style="list-style-type: none"> <li>- <i>Uncia uncia</i> - 110-130</li> <li>- <i>Ursus arctos (incl. ssp isabellinus)</i> - 507</li> <li>- <i>Ovis ammon ssp (karelini, nigrimontana)</i> - 685</li> <li>- <i>Capra sibirica</i> - 6,039</li> <li>- <i>Cervus elaphus</i> - 3,306</li> <li>- <i>Capreolus pygargus</i> - 7,072</li> <li>- <i>Canis lupus</i> - 561</li> <li>- <i>Marmota sp. (baibacina, caudate, menzbieri)</i> - 21,045</li> </ul> <p><u>Floodplain (tugai) forest and associated ecosystems, flora:</u></p> <ul style="list-style-type: none"> <li>- <i>Populus pruinosa</i> - 172</li> <li>- <i>Ulmus sp.</i> - 280</li> <li>- <i>Fraxinus sogdiana</i> - 1474</li> </ul>	<p><u>Flora:</u> Non-deterioration of baseline status</p> <p><u>Fauna:</u> Increase relative to baseline</p>	<p>Annual PA flora and fauna monitoring, as summarized in METT scorecards cells C38 and C39</p>

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
<p><u>Floodplain (tugai) forest and associated ecosystems, fauna:</u></p> <ul style="list-style-type: none"> <li>- <i>Capreolus pygargus</i></li> <li>- <i>Sus scrofa</i></li> <li>- <i>Cervus elaphus bactrianus</i></li> <li>- <i>Hemiechinus auritus</i></li> <li>- <i>Columba eversmanni</i></li> <li>- <i>Falco cherrug</i></li> <li>- <i>Aegyptius monachus</i></li> </ul> <p><u>Saxaul forest and associated ecosystems, flora:</u></p> <ul style="list-style-type: none"> <li>- <i>Populus pruinosa</i> Schrenk</li> <li>- <i>Elaeagnus oxycarpa</i></li> <li>- <i>Haloxylon aphyllum</i>, <i>H. persicum</i></li> <li>- <i>Berberis iliensis</i> M. Pop</li> <li>- <i>Lonicera iliensis</i> Pojark</li> <li>- <i>Tamarix ramosissima</i></li> </ul> <p><u>Saxaul forest and associated ecosystems, fauna:</u></p> <ul style="list-style-type: none"> <li>- <i>Gazella subgutturosa</i></li> <li>- <i>Capreolus capreolus</i></li> <li>- <i>Aquila rapax</i></li> <li>- <i>Aquila chrysaetos</i></li> <li>- <i>Lepus tolai</i></li> </ul>	<p>- <i>Elaeagnus oxycarpa</i> - unknown</p> <p>- <i>Tamarix ramosissima</i> - unknown</p> <p><u>Floodplain (tugai) forest and associated ecosystems, fauna:</u></p> <ul style="list-style-type: none"> <li>- <i>Capreolus pygargus</i> - &gt;68</li> <li>- <i>Sus scrofa</i> - &gt;241</li> <li>- <i>Cervus elaphus bactrianus</i> - 126</li> <li>- <i>Hemiechinus auritus</i> - unknown</li> <li>- <i>Columba eversmanni</i> - &gt;518</li> <li>- <i>Falco cherrug</i> - 24</li> <li>- <i>Aegyptius monachus</i> - 4</li> </ul> <p><u>Saxaul forest and associated ecosystems, flora:</u></p> <ul style="list-style-type: none"> <li>- <i>Populus pruinosa</i> Schrenk - unknown</li> <li>- <i>Elaeagnus oxycarpa</i> - unknown</li> <li>- <i>Haloxylon aphyllum</i>, <i>H. persicum</i> - &gt;447</li> <li>- <i>Berberis iliensis</i> M. Pop - unknown</li> <li>- <i>Lonicera iliensis</i> Pojark - unknown</li> <li>- <i>Tamarix ramosissima</i> - unknown</li> </ul> <p><u>Saxaul forest and associated ecosystems, fauna:</u></p> <ul style="list-style-type: none"> <li>- <i>Gazella subgutturosa</i> - 161</li> <li>- <i>Capreolus capreolus</i> - unknown</li> <li>- <i>Aquila rapax</i> - 7</li> <li>- <i>Aquila chrysaetos</i> - 16</li> <li>- <i>Lepus tolai</i> - 472</li> </ul>		
<p>5. Incremental area under conservation management through establishment of new PAs</p>	<p>N/A (only existing PAs)</p>	<p>1,830,000 net new hectares under protection:</p> <p><u>New PA Breakdown:</u></p> <p>Expansion of Kolsay Kolderi National Park: 121,315 (including 73,075 ha of alpine</p>	<p>Area of newly established PAs, according to government approval decree documents, as reported in annual PIR, and verified by MTR and TE</p>

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
		<p>forested land, and 99,630 ha of snow leopard range)</p> <p>Northern and southern slopes of Ketmen Ridge: 218,474 (including 131,515 ha of alpine forested land, and 126,847 ha of snow leopard range)</p> <p>Terskey Region: 189,407 (including 123,562 ha of alpine forested land, and 145,521 ha of snow leopard range)</p> <p>Expansion of Zhongar Alatau National Park: 218,278 (including 102,248 ha of alpine forested land, and 131,477 ha of snow leopard range)</p> <p>Protected areas in the southwest of the Zhetysusky Alatau slope / Koksus river: 586,796 (including 206,689 of alpine forested land, and 514,406 ha of snow leopard range)</p> <p>Merke ГРПП: 88,554 (including 48,692 ha of alpine forested land, and 40,093 ha of snow leopard range)</p> <p>Expansion of Karatau Reserve: 19,700 (including 0 ha of forest, and 0 ha of snow leopard range)</p> <p>Saur-Manrak Reserve: 332,160 (including 66,678 ha of alpine forested land and 104,161 ha of snow leopard range)</p> <p>Tarbagatai SNNP: 143,550.5 (including 9,234 ha of alpine forested land, and 41,626 ha of snow leopard range)</p> <p>Ile-Balkash Reserve: 415,164.2 (including 399,738 ha of tugai forested land)</p> <p>Floodplain forests along the Ili River in Panfilov district: 197,684 (including 122,855 ha of tugai forested land)</p> <p>Forest and snow leopard range figures estimated using GIS based on available forest data, and based on projected snow leopard range in two priority national landscapes.</p>	

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
		Total expected area of proposed new PAs: 2,531,082.7 Area of existing zakazniks to be incorporated in new PAs: 700,693 ha  Net new PA area: 1,830,389.7	
6. Forest PA management effectiveness	Baseline METT Scores: <u>Alpine forest ecosystems:</u> Almaty Zapovednik: 67 Ile-Alatau NP: 66 Kolsay Kolderi NP: 80 Kolsay Kolderi NP Expansion: 24 Zhongar Alatau NP: 59 Zhongar Alatau NP Expansion: 27 SW Zhongar Alatau (“Koksu Reserve”) (proposed): 23 Sairam-Ugam NP: 71 Aksu-Jabagly Zapovednik: 81 Karatau NP: 81 Karatau NP Expansion: 17 Katon Karagay NP: 20 Markakol Reserve: 48 Zapadno-Altay Reserve: 77 Ketmen Reserve (proposed): 21 Terskey Reserve (proposed): 21 Merke Reserve (proposed): 18 Saur-Manrak Reserve (proposed): 17 Tarbagatai NP (proposed): 18  <u>Floodplain (tugai) and saxaul forest:</u> Charyn Canyon NP: 68 Syr Darya-Turkestan Reserve: 73 Ile-Balkhash Reserve (proposed): 15 Ile Floodplain Reserve (proposed): 16	30% improvement in score gap ((1 – METT value)*0.3) over baseline Target METT Scores: <u>Alpine forest ecosystems:</u> Almaty Zapovednik: 77 Ile-Alatau NP: 76 Kolsay Kolderi NP: 86 Kolsay Kolderi NP Expansion: 47 Zhongar Alatau NP: 71 Zhongar Alatau NP Expansion: 49 SW Zhongar Alatau (“Koksu Reserve”) (proposed): 46 Sairam-Ugam NP: 80 Aksu-Jabagly Zapovednik: 87 Karatau NP: 87 Karatau NP Expansion: 42 Katon Karagay NP: 44 Markakol Reserve: 64 Zapadno-Altay Reserve: 84 Ketmen Reserve (proposed): 45 Terskey Reserve (proposed): 45 Merke Reserve (proposed): 43 Saur-Manrak Reserve (proposed): 42 Tarbagatai NP (proposed): 43  <u>Floodplain (tugai) and saxaul forest:</u> Charyn Canyon NP: 78 Syr Darya-Turkestan Reserve: 81 Ile-Balkhash Reserve (proposed): 41 Ile Floodplain Reserve (proposed): 41	GEF-6 BD Tracking Tool METT for each PA

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
7. Level of achievement of Kazakhstan's forest PAs in securing their biodiversity and other associated values	No forest PAs in Kazakhstan have achieved "Green List" certification	At least 1 forest PA has had a preliminary Green List assessment	Presence of Green List assessment, as verified by MTR and TE
8. Change in area of sustainably managed forest in forest ecosystems bordering protected areas	N/A	>1,000,000 ha, as indicated by adoption of improved HCVF management practices in 6 targeted leskhoz: Forested area by targeted leskhoz: Bakanas: 911,200 ha Zharkent: 63,800 ha Uygur: 103,500 ha Narynkol: 52,500 ha Zhongar: 11,400 ha Zaysan: 32,100 ha	GEF-6 SFM Tracking Tool cell C18
9. Reduction in degraded and deforested area in targeted forestry territories bordering protected areas	11,305.60 ha Leskhoz: degraded ha, deforested ha Bakanas: (no data for degraded area, lack of monitoring capacity), 7104 ha Narynkol: 70.6 ha, 67 ha Uygur: 986.4 ha, 3.2 ha Zaysan: 786 ha, 1646 ha Zharkent: 453.4 ha, 189 ha Zhongar: No data, lack of monitoring capacity.	>5% improvement over baseline	Reporting by targeted leskhoz ( <i>Note: Baseline determined as per existing methodology and data (area of sanitary cutting and other technical activities), which is not comprehensively reflective of forest characteristics. An updated methodology for calculating forest degradation and deforestation will be determined at the inception phase and described in inception report.</i> )
10. Change in area of degradation in pasture and forest pasture landscapes bordering protected areas	Total: 0 ha with reduced degradation out of 73,000 degraded ha of pastureland - Katon-Karagay Local Community (Altai alpine forest ecosystem): est. 8,500 ha (no data) - Miyaly Local Community (Ile river tugai ecosystem): est. 24,000 ha - Shoulder-Bayaldyr-Koksaray Local communities (Syr Darya tugai forest ecosystem): est. 15,000 ha - Sumbinski Local community (Charyn river tugai forest ecosystem): est. 8,500 ha - Kaskasu-Kakpak Local Communities: est. 8,500 ha - Turgen-Saty Local Communities: est. 8,500 ha <i>(Note: only 7 communities have official data, which average a total pasture area of</i>	Total: 73,000 ha with reduced degradation - Katon-Karagay Local Community (Altai alpine forest ecosystem): est. 8,500 ha (no data) - Miyaly Local Community (Ile river tugai ecosystem): est. 24,000 ha - Shoulder-Bayaldyr-Koksaray Local communities (Syr Darya tugai forest ecosystem): est. 15,000 ha - Sumbi Local community (Charyn river tugai forest ecosystem): est. 8,500 ha - Koku-Kakpak Local Communities: est. 8,500 ha - Turgen-Saty Local Communities: est. 8,500 ha	GEF-6 PMAT (Land Degradation) Tracking Tool, sheet 2 ("Project Context") cell C17.

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
	<i>approximately 120,000 ha, while the average degraded area for these communities is approximately 8,500 ha. However, the average date of the survey is 1991, more than 26 years ago. Baseline data must be re-confirmed at project inception phase).</i>		
11. Area outside PAs with enhanced conservation management (PA corridors and buffer zones identified in district integrated management plans)	N/A (no conservation measures planned in targeted districts)	350,000 ha :  - Zhongar Alatau-Altyn Emel: 73,198 (Protection of winter migrations of the mountain goat and snow leopard) - Kolsai Koldery-Terskey: 35,253 (Protection of the snow leopard habitat) - Charyn River Delta: 15,548 (Tugai migratory zone) - Kolsai Kolderi-Ketmen: 32,080 (Protection of the snow leopard habitat) - Ile river floodplain: 197,684 ha (Tugai migratory zone)  (Exact total is 353,763 ha, but all figures are rough estimates based on GIS analysis of proposed corridors, so the figure is rounded to 350,000)	
12. Number of good practice models for private afforestation established in Kazakhstan	N/A (no models yet established by project)	Two functional and replicable models demonstrated as feasible to meet key gaps in private afforestation regulatory framework: One private-sector based, and one community-based	Project documentation, assessment by terminal evaluation
13. Degree to which policy and regulatory context for managing natural resources incorporates ecosystem services	No methodology for considering full cost-benefit of ecosystem services incorporated in natural resource management policy and regulatory framework	At least one regulation adopted at provincial or national level that recognizes and incorporates TSA methodology	Project documentation, assessment by terminal evaluation
14. Quality and coverage of snow leopard monitoring data in Kazakhstan as indicated by estimated accuracy and timeliness of national snow leopard population estimate	Latest population estimate 15 years prior (2001) with a 91% confidence level (lowest possible estimated population / highest possible estimated population, i.e. 100/110 = 91%)	Publishing of annual population estimates with a 95% or greater confidence level	Annual national snow leopard monitoring database
15. Level of international cooperation and coordination with Kazakhstan border countries regarding illegal wildlife trade, biodiversity management in borderland	No formal international agreement between Kazakhstan and neighboring countries related to snow leopard conservation	International agreement between Kazakhstan and at least one bordering country under implementation regarding at least one of the below issues:	Existence/absence of agreement

Indicators	Calculations for Baseline Values	Calculations for Target Values	Means of Verification
protected areas, and snow leopard monitoring		<ul style="list-style-type: none"> <li>- Cooperation on law enforcement at border points regarding illegal wildlife trade</li> <li>- Illegal hunting by border guards</li> <li>- Data sharing on snow leopard monitoring</li> </ul>	
16. Consistency of project gender mainstreaming approach with project plans	N/A – Project not under implementation; project design includes multiple elements designed to mainstream gender	<p>Gender mainstreaming carried out during project implementation, as indicated by:</p> <ul style="list-style-type: none"> <li>e. Project Board and local stakeholder working groups have gender balance and/or include a gender expert;</li> <li>f. Policies, laws, and regulations developed with project support include gender perspectives, as relevant</li> <li>g. Project events and activities (e.g. trainings) promote gender balance among invited participants, as feasible</li> <li>h. Project education and awareness activities are developed and carried out incorporating gender perspectives, as relevant</li> </ul>	Monitoring via annual project reporting (PIR) by project team; Verification at mid-term review and terminal evaluation by independent external experts

## XII.i Annex K. Project Target Region Profiles

### See accompanying reports:

1. Altai and Saur Mountain Ecosystems (8 pages, 2.8 MB)
2. West and Central Tien Shan Mountain Ecosystems (14 pages, 2.6 MB)
3. Charyn River Floodplain Forests (Tugai) Ecosystem (7 pages, 1.4 MB)
4. Ile River Floodplain Forests (Tugai) Ecosystem (7 pages, 1.7 MB)
5. Syr Darya Floodplain Forests (Tugai) Ecosystem (5 pages, 2.0 MB)
6. Balkhash Saxaul Forest Ecosystem (6 pages, 1.2 MB)

XII.ii Annex L. Data and Maps of Targeted Project Regions

The key characteristics of the pilot sites are summarized in Table 10 below.

**Table 10 Summary of Project Demonstration Sites by Component**

Component	Output	Site	Region / Location	Ha / Forested Ha	
1	1.1.1.	Saur Manrak Reserved zone (v)	East Kazakhstan region	332,160/66,678	
	1.1.2.	Tarbagatai National Park (II)	East Kazakhstan region	143,550/55,9,234	
	3		Ecological corridor Ili river floodplain forests (V)	Almaty region	197,684/ 122,855
			Koksuisky Zakaznik (iV)	Almaty region	586,796/240/951
			Expansion of Zhongar-Alatau National Park (II)	Almaty region	218,278/ 102 248
			Ketmen Complex Zakaznik (IV)	Almaty region	68,910/48,692
			Terskei Reserved zone (V)	Almaty region	189,407/123,562
			Merke Regional Nature Park (VI)	Zhambyl region	19,644
			Expansion of Karatau Reserve (Ia)	South Kazakhstan region	20,932
			Expansion of Kolsai Koldery National Park (II)	Almaty region	121 315/73 075
			Planned reserve Ile-Balkhash	Almaty region	415,416.20/ 399,738
		1.2.1.	West Altai Reserve	East Kazakhstan region	86,122/49,022
	2.1.2	Katon-Karagai National Park	East Kazakhstan region	643,477/260,415	
	2.1.3.	Almaty Reserve	Almaty region	71,700/14,369	
	2.1.4.	Ile-Alatau National Park	Almaty region	186,450/69,906	
	2.1.5.	Kolsai Koldery Natioal Park	Almaty region	161,045/74,521	
	2.2.3.	Zhongar-Alatau National Park	Almaty region	356,022/63,687	
	3.1.1.	Aksu-Zhabagly Reserve	South Kazakhstan region	131,934/22,851	
	3.1.2.	Sairam Ugam National park	South Kazakhstan region	149,037/27,471	
	3.1.3.	Syrdarya Turkestan Regional Park	South Kazakhstan region	119,978/58,095	
		Ile Balkhash Reservat	Kyzylorda region	415,164/399,738	
		Charyn National Park	Almaty region	127,050/2,250	
	2	2.1.1.	Narynkol Forestry Unit	Almaty region	193,912/52,533
2.1.2.		Uigr Forestry Unit	Almaty region	259,715/103,515	
2.1.3.		Zharkent Forestry Unit	Almaty region	215,864/63,821	
2.1.6.		Bakanas Forestry Unit	Almaty region	155,8997/911,172	
2.2.3.		Zhongar Forestry Unit	Almaty region	33,100/11,400	
		Zaisan Forestry Unit	East Kazakhstan region	88,760/32,070	
		Pihtovskoe Forestry Unit	East Kazakhstan region	80,601/40,459	
		Ridder Forestry Unit	East Kazakhstan region	304,922/215,525	
		Targeted sites for pasture management planning		Pasture area (ha)	
2	2.1.2.	Katon-Karagai rural district	East Kazakhstan region	Data not available	
	2.1.3.	Bakanas rural district	Almaty region	5,176	
		Bakbaty rural district	Almaty region	12,706	
		Bereki rural district	Almaty region	5,266	
		Zhyleki rural district	Almaty region	111,978	
		Karaoi rural district	Almaty region	91,073	
		Miyaly rural district	Almaty region	344,090	
		Sumbi rural district	Almaty region	Data not available	
		Bairkum rural district	South Kazakhstan region	Data not available	
Baitogai rural district	South Kazakhstan region	Data not available			

Component	Output	Site	Region / Location	Ha / Forested Ha
		Shaulder rural district	South Kazakhstan region	268,082
		Kelintobe rural district	Kyzylorda region	Data not available
		Kaskasu village	South Kazakhstan region	Data not available
		Kokibel village	Almaty region	Data not available
		Turgen village	Almaty region	Data not available
		Saty village	Almaty region	Data not available
		Sites for landscape planning		Total area (ha)
2	2.1.4.	Balkhash district	Almaty region	3,740,000
		Panfilov district	Almaty region	1,060,000
		Kerbulak district	Almaty region	1,150,000
		Eskeldy district	Almaty region	430,000
		Uigur district	Almaty region	870,000
		Raiymbek district	Almaty region	1,420,000

The three regions targeted by the project are shown in Figure 5, Figure 6, and Figure 7 below. The maps highlight and identify the key protected areas targeted by the project, the forest zones, and snow leopard habitat within these areas.

Under Output 2.1.4 the project will work with six districts in Almaty province to develop and implement landscape-level integrated land-use planning. The six districts targeted have been selected based on their strategic position relative to the ecosystems targeted by the project. In addition, through implementing district-level landscape planning in these districts, the project will facilitate and enable the development and implementation of wildlife corridors and PA buffer zones from the southeast to the northwest of Almaty province, stretching from the Central Tien Shan Mountains to the shores of Lake Balkhash.

Two maps highlighting the landscape level integrated management planning approach are included below, following the three province maps. Figure 8 below shows the six districts targeted by the project within Almaty Province. Figure 9 shows the complex picture of the integration of PAs, forest zones, snow leopard habitat and administrative regions.

Figure 5 East Kazakhstan Province Targeted Project Region

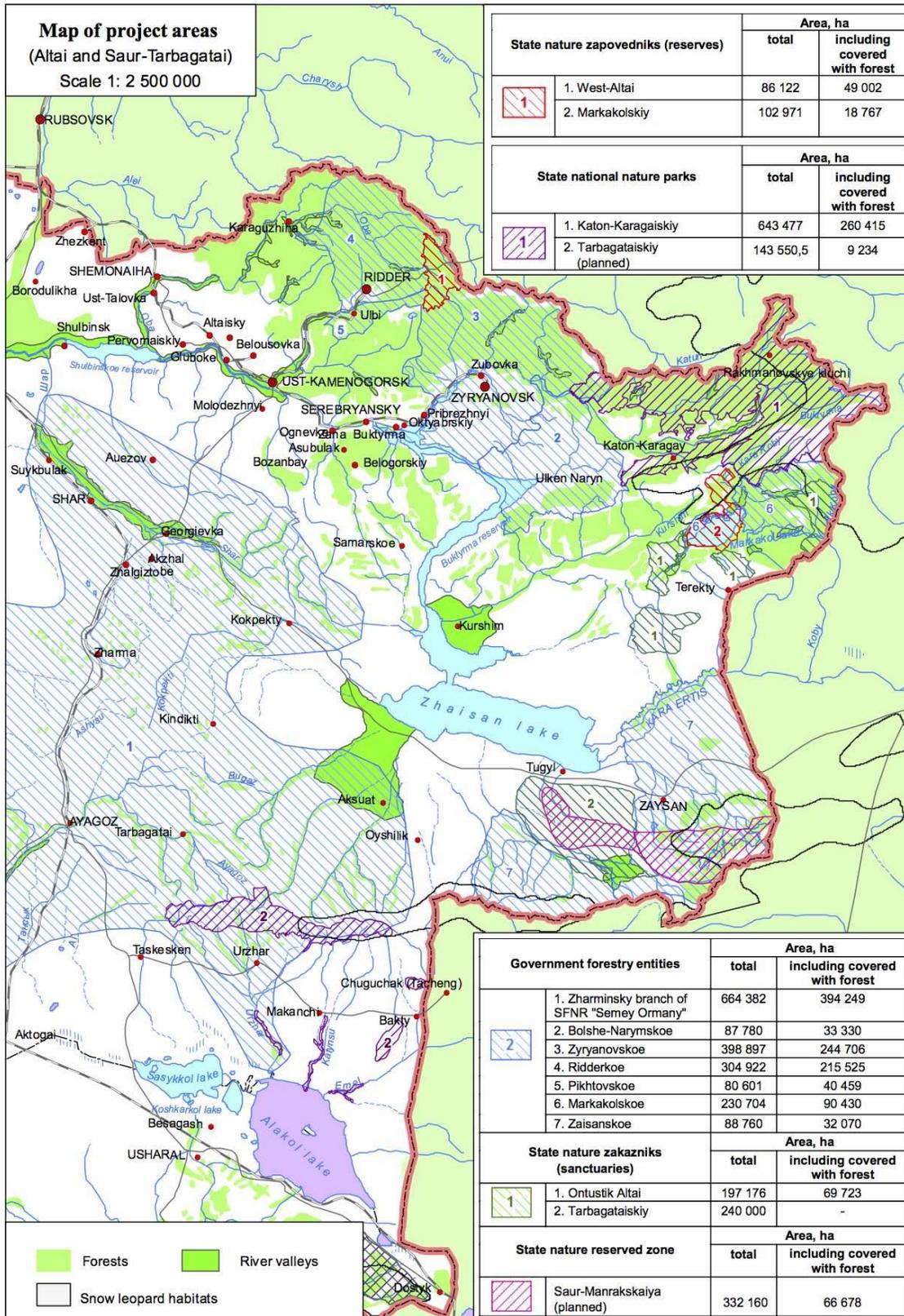
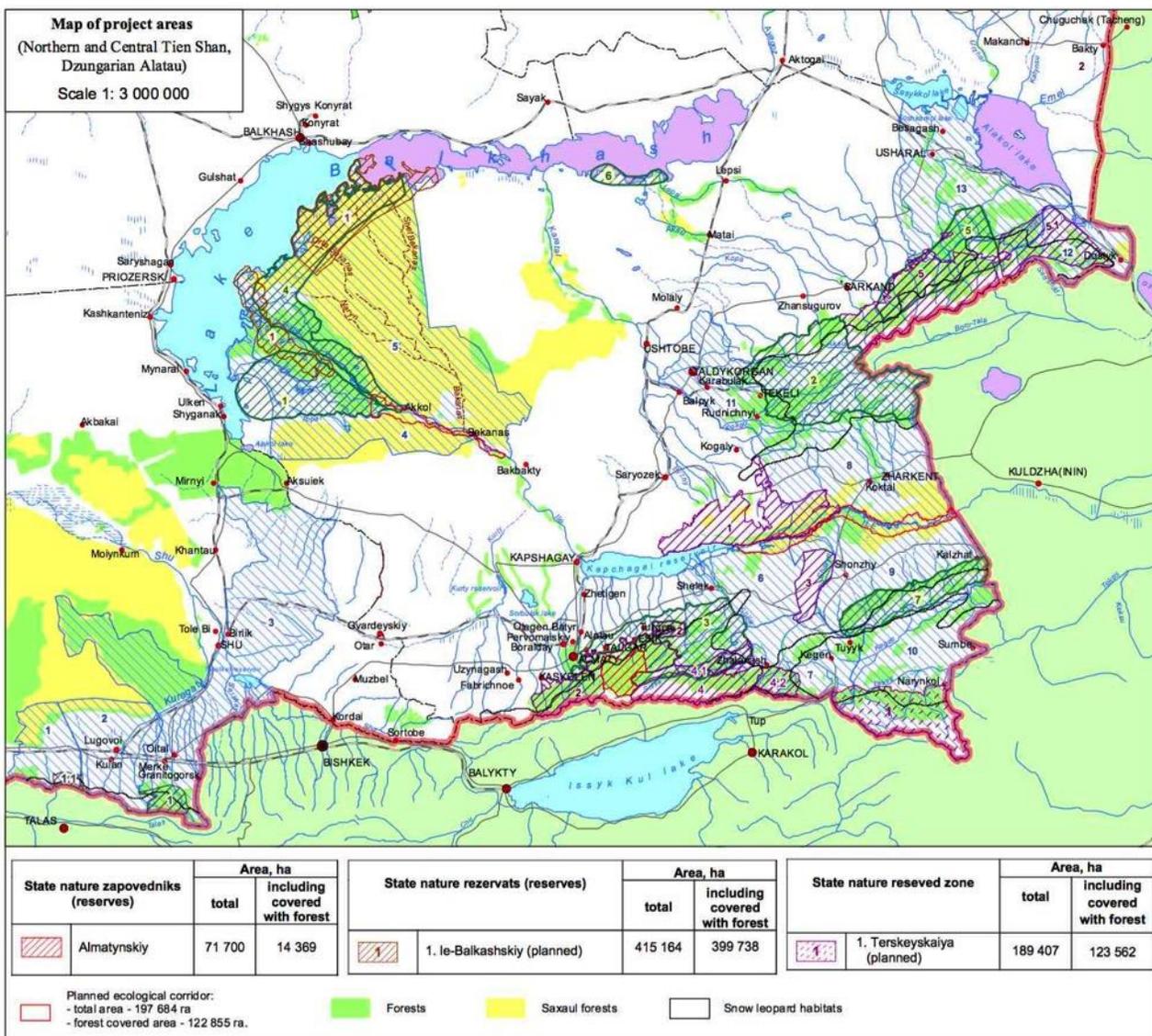


Figure 6 Almaty Province Targeted Project Region



State national nature parks	Area, ha	
	total	Including covered with forest
1. Altyr-Emel	161 153	11 113
2. Ie-Alatau	186 450	69 906
3. Charynski	127 050	22 50
4. "Kolsai kolderi"	161 045	74 521
4.1 Expansion of the territory	65 208	34 819
4.2	56 107	38 256
5. Zhongar-Alatau	356 022	63 687
5.1 Expansion of the territory	218 278	102 248

Government forestry entities	Area, ha	
	total	Including covered with forest
1. Aktobinskoe	16 627	51 03
2. Lugovskoe	45 388	1 043
3. Merkensko	440 699	194 758
4. Kurtinskoe	367 567	189 703
5. Bakanasskoe	1 558 997	911 172
6. Shelekskoe	104 516	23 426
7. Kegenskoe	84 790	24 434
8. Zharkentskoe	215 864	63 821
9. Uighurskoe	259 715	103 515
10. Narynkolskoe	193 912	52 533
11. Taldykorganskoe	185 792	51 166
12. Uigentasskoe	76 402	17 679
13. Alakolskoe	168 116	52 852

State nature zakazniks (sanctuaries)	Area, ha	
	total	Including covered with forest
1. Pribalkhashskiy	503 000	116 512
2. Koksuiyskiy	586 796	240 951
3. (planned)		
4. Almatynskiy	542 400	138 336
5. Karoyskiy	509 000	419 016
6. Lepinskiy	258 000	144 400
7. Kukanskiy	49 100	2 178
8. Ketmenskiy (planned)	68 910	48 692

State regional nature parks	Area, ha	
	total	Including covered with forest
1. Merkenskiy zakaznik (planned SRNP)	68 910	48 713
1. 1 Expansion of Merkenskiy zakaznik (Shalsu cluster)	19 644	-

Figure 7 South Kazakhstan Targeted Project Region

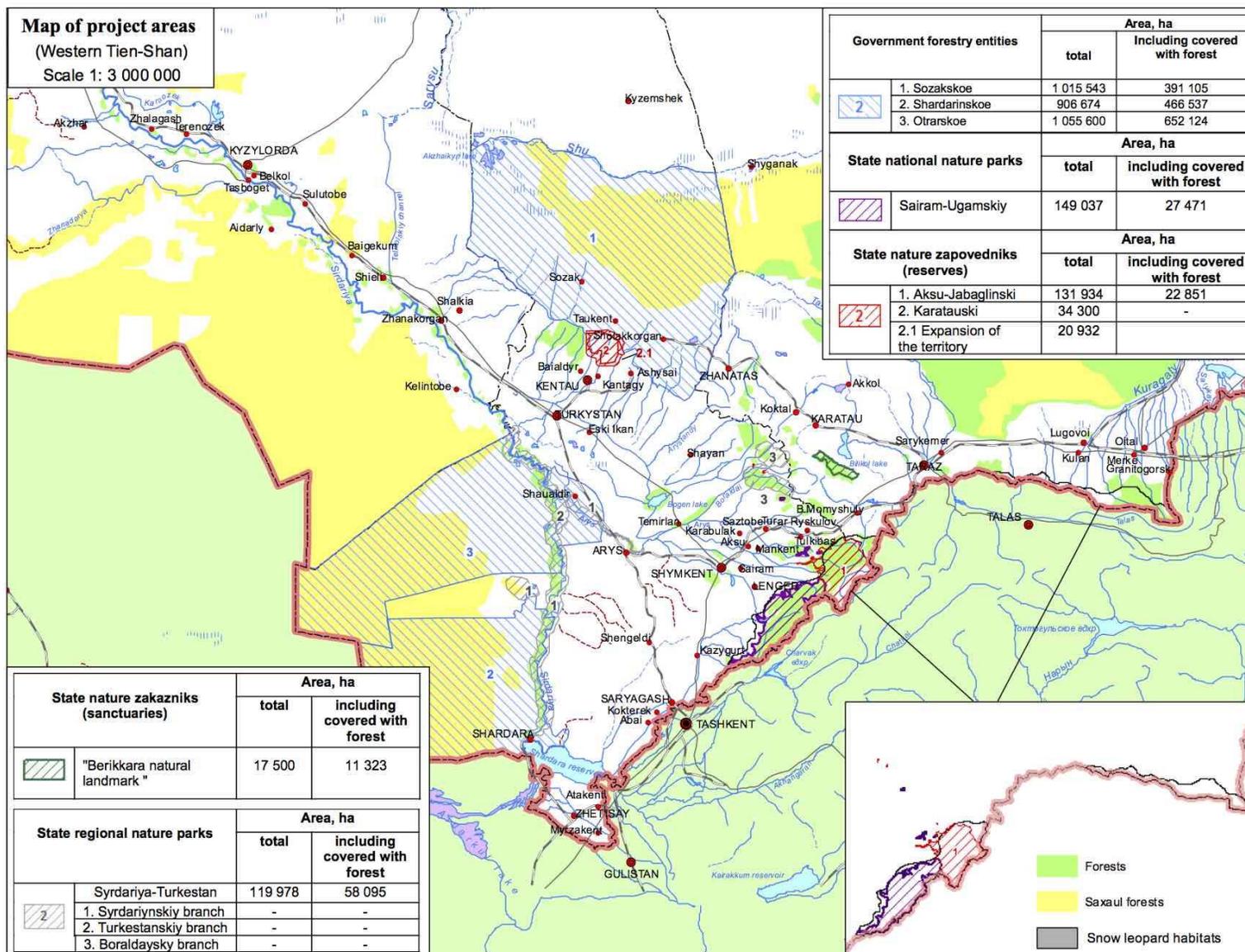
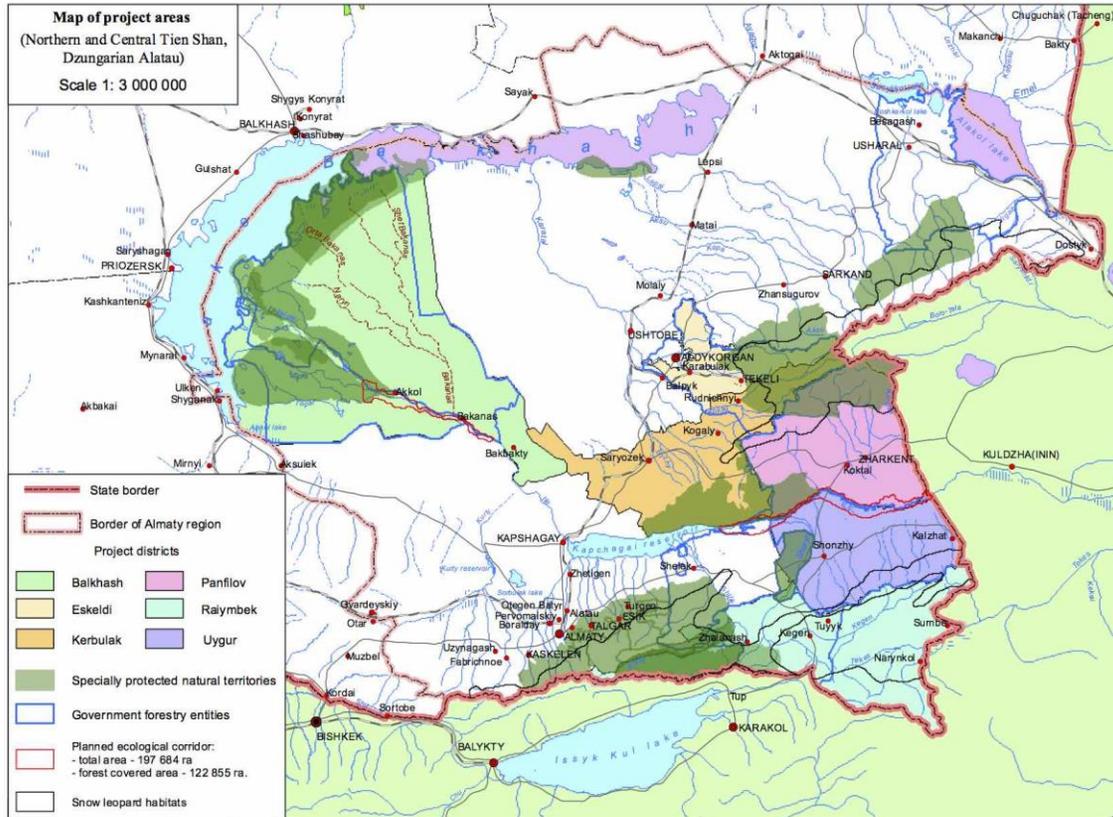


Figure 8 Six Targeted Districts for Integrated Land-use Planning in Almaty Province



Districts	Area thousand km <sup>2</sup>
Balkhash	37,4
Panfilov	10,58
Kerbulak	11,5
Eskeldi	4,3
Uygur	8,8
Raiymbek	14,2

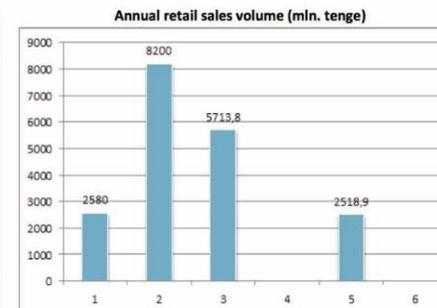
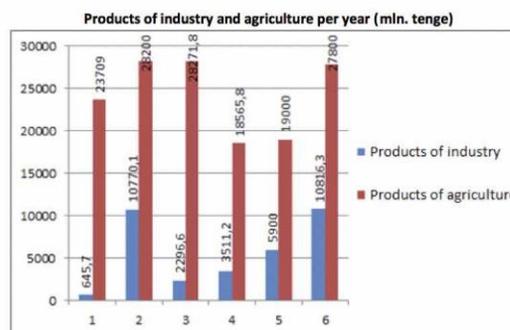
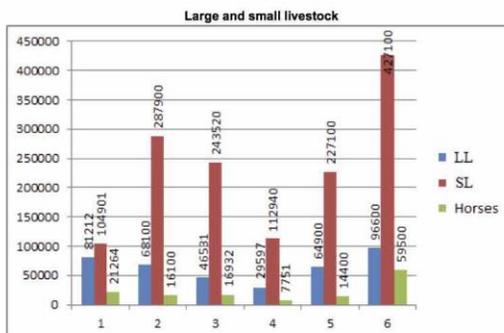
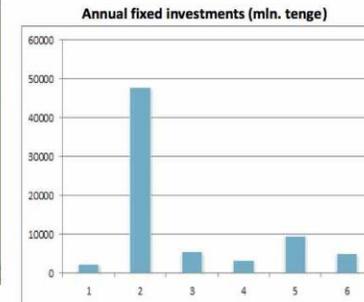
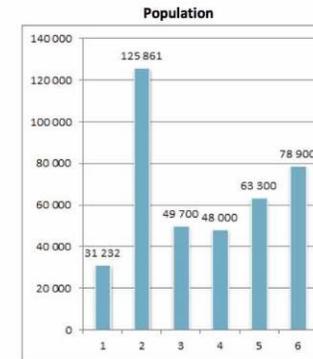
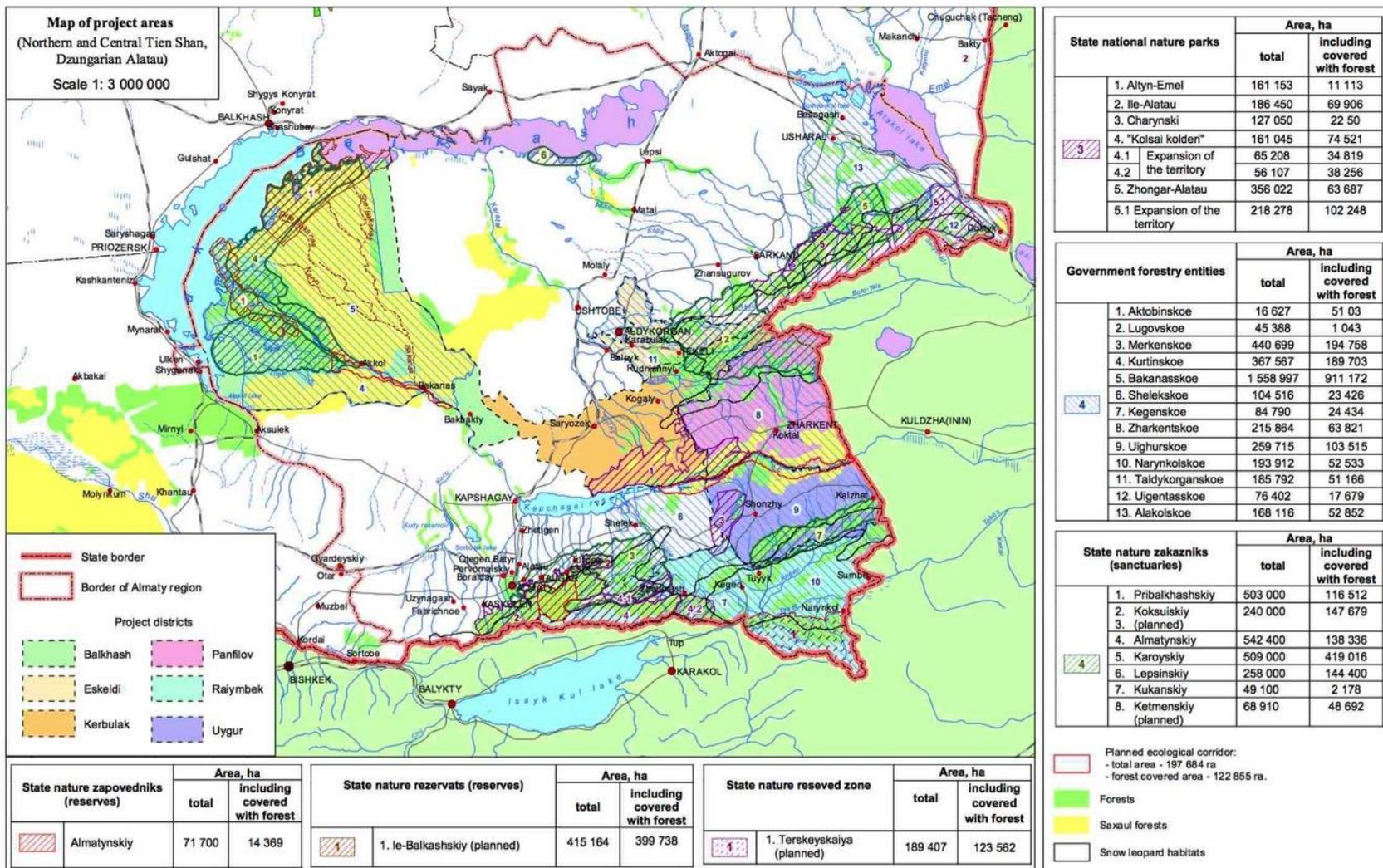


Figure 9 Integrated Landscape Planning Approach in Six Districts of Almaty Province, for Establishment of Wildlife Corridors and PA Buffer Zones



**Legislation and Policy Context**

1. Kazakhstan has well-developed environmental legislation, which enable operations of the biodiversity conservation as well as sustainable land and forest management. The key laws relevant to this project are briefly summarized in Table 11 below.

**Table 11 Relevant Legislation of Kazakhstan**

Law	Date of Adoption	Description
Land Code	20.06.2003 No 442-II	Makes provision the ownership, tenure, administration, sustainable use and rehabilitation of land and the natural resources associated with that land.
Environmental Code	25.01.2012 No 548 - IV	Regulates legal relations within the environmental sector, related to protection, recovery, and conservation of the environment; use of use, restoration of natural resources and monitoring of the environmental impact of economic activities in the Republic of Kazakhstan.
Forest Code	08.07.2003 No 477-II	Regulates the protection, rehabilitation and sustainable use of forests, forest species and forest products.
Water Code	09.07.2003 N 481	Provides the legal framework to support the development and use of water, and the protection of the national water resources.
Law on Protected Areas	25.01.2012 N 548-IV	Regulates legal relations on establishment, expansion, protection, recovery, sustainable use, and management of the Protected Areas, bearing significant ecological, scientific, cultural, historical, and recreational value and representing global, regional and national ecological network.
Law on Wildlife Protection and Reproduction	25.01.2012 № 548-IV	Regulates the legal relations on protection, reproduction, and use of the wildlife and aims at conservation of biological diversity in wildlife, sustainable use of wildlife to ensure the ecological, economic, and esthetic needs of current and future generations.
Law on Pastures	20.02.2017 N 47-VI	Provides the legal framework for the conservation, sustainable use, tenure rights and administration of pasturelands, and aims at improvement of pasture conditions, infrastructure, and prevention of land degradation.

2. Biodiversity conservation and sustainable use, as well as sustainable land and forest management policy objectives are set up in the main national development documents, including the following in Table 12 below.

**Table 12 Relevant State Programs in Kazakhstan**

State Program	Implementation Period	Description of environmental aspects
National Concept and Action Plan for Transition of Kazakhstan to Green Economy	2013-2020	Green Economy (GE) is defined as that with high living standards for the population and environmentally-friendly and efficient use of natural resources. The Program aims to diversify the economy through careful use of natural resources and is focused on seven key areas for transition to green economy: 1. <b>Sustainable use of water resources</b> 2. <b>Sustainable and productive agriculture</b> 3. Energy saving and enhanced energy efficiency 4. Development of electric power sector, increasing the share of renewable energy 5. Sustainable waste

		management 6. Air pollution abatement 7. <b>Conservation and efficient management of natural ecosystems.</b> The Program seeks to introduce new, effective ways of natural resource management, economic instruments of water supply, and sustainable agriculture practices.
National Program and Action Plan for Agricultural Development of RK	2013-2020	Provides for increasing the volume of the state support of the agriculture sector 4.5 times by 2020 through introduction of new market instruments such as investment subsidies, insurance and guaranteeing of loans, modernization of the system of required insurance, and subsidization of the interest rates in farming, fisheries, livestock breeding etc.
National Strategy and Action Plan for Conservation of and Sustainable Use of Biodiversity	2015-2030	Although the Strategy was not officially endorsed, it is informally represents the strategic vision of the natural resources management in Kazakhstan and is used as a road map for the annual planning of the Committee on Forestry and Wildlife. It sets specific goals and actions for the biodiversity and ecosystems management. Now the Strategy is being updated and is in the process of gaining official endorsement.

## **Snow Leopard conservation planning and monitoring framework in Kazakhstan: Identification of capacity gaps**

The assessment is based on revision of two main documents, regulating and guiding snow leopard conservation in Kazakhstan: 1). Strategy and Action Plan for Snow Leopard Conservation; and 2). Methodological Recommendations on Snow Leopard Monitoring in Kazakhstan. The summary also reflects the views of research organizations engaged in snow leopard monitoring activities: the Institute of Zoology, ACBK, Forestry and Wildlife Committee, and staff of the PAs visited during the PPG field missions. The document aims at defining the capacity gaps and developing recommendations on actions that will foster the capacity development on systemic and institutional levels.

### **Contents:**

- 1. Description of current national system of snow leopard monitoring**
- 2. Summary review of operational guidance for snow leopard conservation planning and monitoring in Kazakhstan as compared to the GSLEP Draft *“Planning and Monitoring Framework for Snow Leopard Conservation Programs”***

### **1. National System of Snow Leopard Monitoring in Kazakhstan**

#### **Snow Leopard Monitoring**

Within PAs snow leopard monitoring is implemented by inspectors as a part of PA patrolling. All PAs are obliged to report on rare and endangered species annually, including snow leopard. The accuracy and reliability of reported data varies depending on capacity of the research staff and support from outside research organizations and internationally funded projects. Generally the quality and reliability of the data collected by PA inspectors is not sufficient for regular and aligned analysis. The main reasons for low quality monitoring include underequipped field staff, insufficient technical and research capacity, inaccessibility of the snow leopard habitat, poor capacity to plan and implement monitoring activities. The key monitoring report for the PA is so called “Nature Record” that is produced annually and is submitted to the Forestry and Wildlife Committee.

Hunting concessions are responsible for monitoring the wildlife within their borders. The monitoring species include game species and endangered species, although reporting is mainly focused on game species since this data is used to quantify the hunting quota for the next year. The reports are produced annually. The accuracy of the data also varies depending on the capacity of individual concessions. In the area of the snow leopard, hunting areas are supposed to report all prey species, like roe deer, Siberian ibex, red deer, argali, wild boar, hare, marmot. The data is reported to the regional inspections of the Forestry and Wildlife Committee. Due to limited resources and poor capacity of the rangers, hunting concessions are not engaged in snow leopard monitoring.

So far starting from 2013, snow leopard monitoring was mainly done through a short-term project funded by Ministry of Science, and a number of internationally funded projects. The monitoring was organized in six PAs in the Tien Shan area, with a leading role by two organizations, the Institute of Zoology and ACBK.

Data on snow leopard population numbers and distribution is based on available publications, and recent observations that became possible due to camera trapping mapping and recording of the presence traces in four habitats of the snow leopard. To support the monitoring, the Institute of zoology has prepared and published a methodology on snow leopard monitoring that describes the techniques of planning and recording the camera trapping data. Based on the results of the monitoring activities during 2013-2016, the abundance of the snow leopard was identified and reported.

#### **Snow Leopard Prey Monitoring**

The main prey species of the snow leopard in Kazakhstan include roe deer, Siberian ibex, red deer, argali, wild boar, hare, and marmot. Protected areas report all observations of listed species, but this data is not linked to snow leopard monitoring neither in numbers, nor in space. Similarly hunting concessions register and report some of these species numbers. The data is collected by different agencies and is not fully used for analysis and correlation with the snow leopard related data. The capacity of hunting areas for designing monitoring is much lower than that of the PAs’ staff. Both PAs and hunting concessions collect data from visual observations during patrolling and winter traces monitoring. Both institutions are limited in transport, field equipment, and monitoring skills.

Snow Leopard Information Management System

Currently there is no consolidated storage of existing data on the snow leopard and any other wildlife. There are several databases being used by different organizations. The biggest is the one developed by UNDP/GEF and is based within the company “KazLesProekt’ - agency that used to be responsible only for the forest management. But now the Forestry and Wildlife Committee assigned this agency as one responsible for maintaining the integrated on-line biodiversity database. It is expected that all PAs will transfer the data on-the database. Hunting concessions are still not included into this system. The database is not yet fully used by PAs due to poor capacity and undeveloped management and monitoring systems. ACBK maintains their own database. Both are GIS compatible. The data from hunting concessions are presented and stored on paper only.

Since the database is still not fully operational the “Nature Records Book” remains the only official mechanism of data collection. The annual reports and summary reports for 5 years are stored in PAs and Forestry and Wildlife Committee on paper. So “officially” there is no operational electronic storage of data.

Geo-referenced data on snow leopards resulting from camera trapping and targeted research, as well as coordinates of cameras and traces, are not published and are not available in any open sources.

**2. Summary review of operational guidance for snow leopard conservation planning and monitoring framework in Kazakhstan as compared to GSLEP Draft “Planning and Monitoring Framework for Snow Leopard Conservation Programs”**

Content	Global Framework	Monitoring Framework in Kazakhstan	Recommended actions/capacity development activities within the proposed project
Conceptual framework	Threats Reduction Analysis Approach	<p><u>Not applied</u></p> <p>The methodology is focused on description of specific field methods of snow leopard monitoring.</p> <p>Although the Conservation Strategy briefly indicates the presumed threats based on the past experience and outdated publications. But there is no logical link between the proposed conservation actions and claimed threats, as well as specific targets related to the threats.</p> <p>In general, complex threat analysis is not used as a systemic approach in conservation theory and practice in Kazakhstan. This in many cases drives to the situation, that both conservation impact and effectiveness of conservation actions are difficult to measure. This also becomes a reason for ignoring some important causes of threats. For example, community engagement in conservation is still an underestimated approach in conservation, and even if used, it is done in formal and unstructured ways. Or another example, diseases in wildlife are almost completely ignored as a threat to populations in Kazakhstan, while may become a priority due to climate change and natural modifications of the habitats. Habitat monitoring practice itself</p>	<ul style="list-style-type: none"> <li>- Revise relevant policy and regulations to ensure that RTA is fully or partially included as a conceptual approach in planning of the conservation activities in PAs and outside.</li> <li>- Training on applying RTA approach in planning and designing conservation activities.</li> <li>- Update the existing methodology on snow leopard monitoring to include relevant methods and tools as described below.</li> </ul> <p>Focus groups: PAs, research institutions, consultancies, individual experts.</p>

Content	Global Framework	Monitoring Framework in Kazakhstan	Recommended actions/capacity development activities within the proposed project
		<p>may be a good example of ignoring the threats analysis tools in conservation in Kazakhstan.</p>	
<p>Conservation planning and monitoring</p>	<p>Identifying areas</p>	<p><u>Partially applied</u></p> <ul style="list-style-type: none"> <li>- The latest GIS based estimations (McCarthy, T.M., Mallon, D., et. al., 2016) proposes that the total area of the snow leopard range in Kazakhstan is about 4,983,600 ha.</li> <li>- Institute of Zoology argues this figure and claims that it does not account for some specific factors of ecological and climate character, and that 2,000,000 ha, that include key habitats, is sufficient for inclusion into the monitoring program. Those areas are: Western Tien Shan (220,000 ha), Northern Tien Shan (500,000 ha), Jungar Alatau (700,000 ha), Altai (500,000 ha), and Saur-Tarbagatai (90,000 ha).</li> <li>- The applied GIS based analysis completed by the Institute of zoology was limited to mapping the data on snow leopard camera trapping, available data on prey (mostly random observations of PAs inspectors), and basic geographic and socio-economic data. No complex studies for a broader description of each area, (including habitat and vegetation, prey, land use and tenure, hunting concessions, data on local communities and their economies, infrastructure, tourism and other such information) was collected and integrated into the planning processes. So naturally there is no basis for targeted threats analysis, scaling, prioritizing and planning. Rather the conservation organizations are focused only on estimating snow leopard populations as a priority action.</li> </ul>	<p>Complete a complex GIS based study for each of the identified areas followed by some additional analysis on a landscape level, that would integrate biodiversity data, ecological analysis, and socio-economic context to finally agree on the area of the key habitats of all snow leopard groups; to complete the spatial planning for the priority measures and filling in the capacity gaps.</p>
	<p>Identifying threats</p>	<p><u>Not applied</u></p> <ul style="list-style-type: none"> <li>- General description of the threats is stated in the National Strategy for Snow Leopard Conservation and is practically a list of typical threats known in any other range country. The listed threats are not scaled, structured (direct-indirect, internal-external), measured or prioritized and are not linked to specific areas and specific populations. Currently the identified threats are rather risk assumptions that need to be estimated and elaborated through the RTA approach.</li> <li>- There is no sufficient data available for a comprehensive threats analysis that could be</li> </ul>	<ul style="list-style-type: none"> <li>- Complete the integrated snow leopard threats analysis with participation of multiple stakeholders, including international experts and representatives of the snow leopard range countries where this concept was successfully used.</li> <li>- Identify relevant targets and indicators for estimation of reduction of the identified threats and causes, and evaluation of effectiveness of completed conservation measures.</li> <li>- Revise the existing strategy of the snow leopard conservation in Kazakhstan and</li> </ul>

Content	Global Framework	Monitoring Framework in Kazakhstan	Recommended actions/capacity development activities within the proposed project
		<p>followed by well-structured planning and monitoring activities with specific indicators and clear distribution of roles and budgets.</p> <ul style="list-style-type: none"> <li>- There is no capacity within research institutions as well as responsible governmental agencies to use planning tools, including RTA that are recommended and used internationally.</li> </ul>	<p>monitoring methodology based on RTA results.</p>
	Developing a situation analysis	<p><u>Not applied</u></p> <ul style="list-style-type: none"> <li>- There are no any recommendations or instructions for development of a situation analysis study within the recently proposed methodology on snow leopard monitoring in Kazakhstan.</li> <li>- Research institutions tend to work mainly on populations research with little attention to broader ecological and socio-economic contexts. There is no capacity within research institutions to conduct integrated ecological studies with relevant indexes, rates and correlations, as well structured socio-economic studies, stakeholder analysis, and other aspects of situation analysis recommended by international research community.</li> </ul>	<ul style="list-style-type: none"> <li>- Training on situation analysis methods and tools to be provided based on the international experience and by international experts.</li> <li>- Develop training modules and materials on situation analysis in conservation to be used in educational institutions and by conservation groups;</li> <li>- Complete situation analysis to identify the data and information gaps;</li> <li>- Complete desk review and field studies to collected the missing data.</li> <li>- Complete threats analysis linked to specific population group and relevant ecological and socio-economic contexts. Complete the spatial analysis.</li> </ul>
	Threats ranking – Quantifying threats	<p><u>Not applied</u> See above</p>	<ul style="list-style-type: none"> <li>- Rank and quantify the identified threats for each population groups.</li> </ul>
	Setting up conservation targets	<p><u>Partially applied</u></p> <ul style="list-style-type: none"> <li>- The existing Methodology on snow leopard monitoring does not include any guidance on setting up the conservation targets, since it is mainly focused on monitoring techniques. Partially this is a matter for difference in interpretation of the term “methodological guidance”, which in mainly equals to tools or techniques.</li> <li>- The Strategy and Action Plan on snow leopard Conservation (SAP) is a more appropriate document for describing goals, targets and indicators for measuring the progress. Though the SAP is naturally based on poor data, targets are stated in a general wording, that are not quantified and do not refer to specific areas, populations or threats with one exception – improving PAs system targets are specific in locations.</li> <li>- It is interesting, that in SAP summarized barriers for achieving the targets include capacity gaps, poor awareness and</li> </ul>	<ul style="list-style-type: none"> <li>- Based on situation analysis data identify the conservation targets and indicators for each population group.</li> <li>- Quantify the targets and indicators where possible.</li> <li>- Develop a monitoring scale and timeframes for assessing the targets and for measuring the indicators.</li> <li>- Revise the Strategy and Action Plan based on the set targets supported with detailed capacity building and funding sources activities.</li> <li>- Ensure that setting the targets is an inclusive and science based process.</li> </ul>

Content	Global Framework	Monitoring Framework in Kazakhstan	Recommended actions/capacity development activities within the proposed project
		unmotivated engagement of local administrations, communities and land users, and insufficient financing. But the actions part still stays within biological context and completely ignores the key barriers lying within the socio-economic context.	
	Designing conservation	<u>Partially applied</u> The methodology does not include any guidance on designing a conservation program. But the result of the action planning process is stated in the SAP. Each target has a list of actions expressed in a general wording without any links to specific areas, populations or quantified targets.	- Review the existing methodology to ensure that the results of capacity building activities are fully integrated
Monitoring techniques	Snow leopard population abundance / density: Camera trapping “capture-recapture”	<ul style="list-style-type: none"> <li>- Ad-hoc on a country level. Although Institute of zoology and ACBK have tested a more or less systemic approach within three PAs over the last three years, the reports do not really show that the variables interpretation and analysis of data is completely corresponding to the international standards.</li> <li>- Coverage in 6 sites out of 4 snow leopard population groups</li> <li>- Coverage of 500,000 ha of snow leopard habitat</li> <li>- Data not consolidated among relevant organizations</li> <li>- No annual consolidated analysis estimate of national population</li> <li>- Limited national capacity to apply protocol for identifying individuals documented</li> </ul>	<ul style="list-style-type: none"> <li>- “Basic” level of monitoring would require 400 additional regular, ongoing camera trapping studies in 9 sites for 130 snow leopard populations in Kazakhstan, covering 4,983,600 hectares of habitat. Initial monitoring can be focused on 2,010,000 ha.</li> <li>- Additional training of 30 individuals in methods for camera trapping research and snow leopard identification protocols</li> <li>- Annual aggregation and analysis of data</li> </ul>
	Snow leopard population abundance / density: DNA analysis “capture-recapture”	<ul style="list-style-type: none"> <li>- No national capacity for DNA analysis.</li> <li>- Irregular and infrequent analysis using external laboratories: total of 1 sample analyzed from Kazakhstan</li> </ul>	<ul style="list-style-type: none"> <li>- Training of relevant individuals on sample collection.</li> <li>- Study existing laboratories for the capacity needs to analyze and interpret DNA samples collected from the wildlife and to maintain a DNA markers bank.</li> </ul>
	Snow leopard sign-based presence / occupancy surveys (detection of scat, prints, pug marks, etc.)	- Is carried out by the Institute of zoology in all sites of the snow leopard in Kazakhstan but is not so evident in a strategy and action plan.	<ul style="list-style-type: none"> <li>- Elaboration of the scat collection program for a long-term perspective.</li> <li>- Establish a system of collection, mapping and verification of signs-based presence data.</li> <li>- Training of PAs staff, inspectors of the hunting concessions, NGOs. Setting up a community based monitoring system.</li> </ul>

Content	Global Framework	Monitoring Framework in Kazakhstan	Recommended actions/capacity development activities within the proposed project
	Snow leopard secondary surveys of local resource users (herders, hunters, etc.) => Rates of extinction/colonization	<ul style="list-style-type: none"> <li>- No systemic experience in designing and completing surveys of local resource users in all snow leopard habitat sites in Kazakhstan.</li> <li>- Some occasional information is collected during the field works from the local resource users.</li> </ul>	<ul style="list-style-type: none"> <li>- Carry out a complex survey as a part of a baseline situation analysis, including threats verification.</li> <li>- Set up a community based monitoring system based on relevant incentives schemes.</li> </ul>
	Prey: Double observer method	<ul style="list-style-type: none"> <li>- Institute of zoology reports on using this method in southwestern areas during short expeditions.</li> <li>- Some species are counted by hunting concessions, but data is not integrated into snow leopard monitoring program.</li> </ul>	To be confirmed with stakeholders.
	Prey: Distance sampling	<ul style="list-style-type: none"> <li>- Not used. May be not appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>- Estimate the applicability of the method for populations in Kazakhstan.</li> </ul>
	Prey: Camera trapping	<ul style="list-style-type: none"> <li>- Some camera traps captured the prey in all sites where the monitoring program is ongoing.</li> </ul>	<ul style="list-style-type: none"> <li>- Estimate the applicability of the method for populations in Kazakhstan.</li> </ul>
	Prey: Repeat count surveys in occupancy framework	<ul style="list-style-type: none"> <li>- Some species are regularly counted by PAs and hunting concessions. The data is not available centrally and the methods and data accuracy need additional verification.</li> </ul>	<ul style="list-style-type: none"> <li>- Develop a system of data collection and verification for SL prey species within the existing monitoring systems of ungulates and huntable species.</li> </ul>
	Habitat: Vegetation sampling: Fixed-size plots; point intercept counts; 11 <sup>th</sup> plant counts; biomass estimation; detection / non-detection surveys; direct/photographic observations	<ul style="list-style-type: none"> <li>- No capacity to plan and implement integrated habitat assessment and monitoring.</li> </ul>	<ul style="list-style-type: none"> <li>- Develop a habitat monitoring program with a leading role of international experts.</li> <li>- Identify and train the relevant individuals to support the habitat monitoring targets of the whole SL monitoring system in planning and using habitat analysis methods and tools.</li> </ul>
	Habitat: GIS-based modeling: <ul style="list-style-type: none"> <li>- Remote sensing;</li> <li>- Satellite images;</li> <li>- Digital elevation models;</li> <li>- Normalized differential vegetation index;</li> <li>- Habitat classification</li> </ul>	<p>As reported by the Institute of zoology GIS-based modeling was done through the following methods:</p> <ul style="list-style-type: none"> <li>o Remote sensing</li> <li>o Satellite images</li> <li>o Digital elevation models</li> <li>o Slope</li> </ul> <p>As a result a map of potential range of the snow leopard in Almaty suburbs was developed.</p> <p>The habitat modeling is simplified to data mapping, which is limited and methodologically inaccurate.</p>	<ul style="list-style-type: none"> <li>- GIS based habitat modeling training for the individual experts within the organizations engaged in habitat monitoring section of the program.</li> <li>- Design a habitat modeling program within the situation analysis phase.</li> <li>- Define the specific capacity and data gaps.</li> <li>- Develop a capacity building program.</li> </ul>

Content	Global Framework	Monitoring Framework in Kazakhstan	Recommended actions/capacity development activities within the proposed project
	and land-use patterns; - Unsupervised classification; - Supervised classification; - Slope; - Viewshed; - Ruggedness (undulation)		

## XII.v Annex O. Protected Areas Capacity Needs Assessment

See attached document.

### Full list of competence standards used for assessing protected areas staff (shortened version)

<b>FRM</b>	<b>FINANCIAL AND RESOURCES MANAGEMENT</b>
<b>FRM</b>	<b>LEVEL 2</b>
FRM 2.1	Collect and present evidence of expenditure and other financial transactions (collecting receipts, keeping simple records of transactions, providing basic reports etc)
FRM 2.2	Manage stores of equipment and supplies.
<b>FRM</b>	<b>LEVEL 3</b>
FRM 3.1	Prepare budgets and keep books and accounts
FRM 3.2	Manage procurement and record keeping of equipment, supplies and property.
FRM 3.3	Manage official documentation and reporting on finances, assets, equipment, infrastructure etc.
<b>FRM</b>	<b>LEVEL 4</b>
FRM 4.1	Develop and monitor financial plans and prepare financial reports
FRM 4.2	Develop detailed business plans, fund raising and revenue generating schemes.
<b>HUM</b>	<b>HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT</b>
<b>HUM</b>	<b>LEVEL 2</b>
HUM 2.1	Lead and motivate work teams.
HUM 2.2	Provide training and instruction in the workplace for supervised staff
<b>HUM</b>	<b>LEVEL 3</b>
HUM 3.1	Brief, supervise, motivate and evaluate performance of individuals and teams.
HUM 3.2	Prepare detailed work plans for staff and supervise, monitor and report on work plan implementation
HUM 3.3	Determine causes of poor performance and workplace conflicts and take appropriate action (advice, guidance, formal disciplinary procedures)
HUM 3.4	Plan, prepare and deliver formal vocational and skills training for staff
HUM 3.5	Plan, prepare and deliver formal academic lectures
<b>HUM</b>	<b>LEVEL 4</b>
HUM4.1	Identify staffing needs and structures, assign roles and responsibilities and set performance standards
HUM4.2	Manage staff recruitment and contracting.
HUM 4.3	Plan for and ensure the welfare, health and safety of staff.
HUM4.4	Lead training and development needs analysis.
HUM4.5	Plan, design, supervise and evaluate staff training and capacity development programmes
<b>CTI</b>	<b>COMMUNICATION, TECHNOLOGY AND INFORMATION</b>
<b>CTI</b>	<b>LEVEL 2</b>
CTI 2.1	Make basic oral presentations to colleagues, local people and visitors
CTI 2.2	Prepare written reports of work activities using standard formats
CTI 2.3	Communicate in other languages and/or dialects.
CTI 2.4	Operate and maintain computer for basic functions (word processing, internet, email)
CTI 2.5	Operate office and audio visual equipment (photocopiers, projectors, printers etc)
<b>CTI</b>	<b>LEVEL 3</b>
CTI 3.1	Organize and chair formal meetings.
CTI 3.2	Give technical presentations and write technical reports/papers.
CTI 3.3	Operate and maintain computers for advanced functions (databases, web pages etc)
CTI 3.4	Operate GIS systems
CTI 3.5	Manage library, archives and other information resources.
<b>CTI</b>	<b>LEVEL 4</b>
CTI 4.1	Negotiate agreements and resolve disputes and conflicts.
CTI 4.2	Institute mechanisms for public consultations, communication and participation over decisions, policies & plans.
<b>FCR</b>	<b>FIELD CRAFT AND PRACTICAL SKILLS</b>
<b>FCR</b>	<b>LEVEL 2</b>
FCR 2.1	Care for, check and maintain basic field equipment.
FCR 2.2	Follow good safety and environmental practice in the field.
FCR 2.3	Fight fires.

FCR 2.4	Identify, prevent and/or provide primary treatment in the field for illness, diseases and bites
FCR 2.5	Use compass and chart or map for navigation and orientation.
FCR 2.6	Use GPS for georeferencing locations and for navigation and orientation.
FCR 2.8	Construct and repair structures, paths and trails.
FCR 2.9	Drive and provide basic maintenance for motor vehicles and small engines
FCR 2.10	Safely operate and maintain small boats and their engines
FCR 2.11	Use and maintain radio handset for field communication.
<b>FCR</b>	<b>LEVEL 3</b>
FCR3.1	Plan and organise logistics for field trips, surveys and patrols.
FCR3.2	Organise and lead search and rescue operations in the field.
FCR3.3	Operate and use base station radio and communication equipment.
FCR3.4	Draw up plans and specifications for small works and basic site infrastructure and supervise construction work
FCR3.5	Inspect and specify maintenance and repair requirements and schedules.
FCR3.6	Locate, mark and inspect boundaries in the field.
FCR3.7	Identify and assess fire risks and hazards and plan fire prevention and control
<b>FCR</b>	<b>LEVEL 4</b>
FCR 4.1	Contribute to specification and design of major infrastructure projects.
<b>CMP</b>	<b>CONSERVATION ASSESSMENT, PLANNING AND MANAGEMENT</b>
<b>CMP</b>	<b>LEVEL 2</b>
CMP2.1	Recognise common and typical vegetation and habitat types, plant and animal species and their signs
CMP2.2	Accurately record and report wildlife observations using standard forms (where available)
CMP2.3	Conduct supervised surveys of wildlife, habitats, natural resources and physical landscape features
CMP2.4	Use identification aids to identify plants and animals.
CMP2.5	Use and care for basic scientific instruments used in surveying (binoculars, telescope, camera)
CMP2.6	Conduct practical forest ecosystems creation, restoration, management and manipulation work
CMP2.7	Assist in the capture / immobilisation, handling and transportation of animals.
CMP2.8	Check and replenish feeding stations for wild animals.
CMP2.9	Care for captive animals
<b>CMP</b>	<b>LEVEL 3</b>
CMP 3.1	Specify management requirements for conservation of habitats and forest ecosystems
CMP 3.2	Specify, and evaluate sustainable quotas for sustainable use of forest resources using scientific methods
CMP 3.3	Specify special measures for assisting protection, survival or recovery of key biodiversity values.
CMP 3.4	Plan evaluate and supervise management of invasive and problem animals and human wildlife conflict.
CMP 3.5	Plan and supervise animal capture, transport, care and management.
CMP 3.6	Lead specialised, scientifically based, taxonomic, habitat and ecosystem surveys and monitoring
CMP 3.7	Analyse, and present interpret survey and monitoring data in forest ecosystems.
CMP 3.8	Curate collections and manage museums
<b>CMP</b>	<b>LEVEL 4</b>
CMP 4.1	Plan, manage and evaluate, scientifically based programmes for forest ecosystem and habitat research, conservation and monitoring
CMP 4.2	Plan, manage and evaluate, scientifically based programmes for species research, conservation and monitoring (survey, monitoring, control, reintroduction, special protection measures etc)
CMP 4.3	Plan, manage and evaluate ex-situ animal conservation and breeding projects
CMP 4.4	Plan, manage and evaluate reforestation and afforestation measures. Develop silvicultural projects (nurseries, seed plots, plantations, etc.)
CMP 4.5	Determine the value of ecological/environmental services of the forests.
<b>SDC</b>	<b>SUSTAINABLE DEVELOPMENT AND COMMUNITIES</b>
<b>SDC</b>	<b>LEVEL 2</b>
SDC 2.1	Gather and record information about communities and livelihoods and provide basic reports
SDC 2.2	Provide basic info, guidance & assistance for community-based conservation and sustainable use.
SDC 2.3	Monitor compliance by local communities with agreements and laws affecting them and the PA
<b>SDC</b>	<b>LEVEL 3</b>
SDC 3.1	Plan and conduct scientifically based social and economic surveys (populations, communities, social conditions, livelihoods, resource use, culture etc)
SDC 3.2	Plan and conduct scientifically based historical and archaeological assessments (site history, historical and archaeological sites, historic and cultural landscapes etc)
SDC 3.3	Develop participatory forest conservation and management agreements
SDC 3.4	Plan, coordinate and facilitate community capacity development activities.
SDC 3.5	Promote development of local networks and organizations.

SDC 3.6	Provide advice on sustainable community based forest resource use and management
<b>SDC</b>	LEVEL 4
SDC4.1	Develop agreements with communities for resource access and use.
SDC4.2	Resolve conflicts concerning protected areas, communities and other stakeholders (Disputes, complaints over settlements, resource use, land claims, decisions)
SDC4.3	Identify and mobilize external sources of assistance, support and finance for local communities.
SDC4.4	Design and implement long socio economic and cultural research and monitoring programmes.
<b>PAM</b>	<b>PROTECTED AREA POLICY, PLANNING AND PROJECTS</b>
<b>PAM</b>	LEVEL 4
PAM 4.1	Understand and interpret relevant legislation for the planning and management of protected areas
PAM 4.2	Lead the development of protected area conservation zoning systems and management plans using an appropriate national or international format and process
PAM 4.3	Lead development of contingency plans for potential disasters within the forested areas.
PAM 4.4	Plan and negotiate trans boundary protected area and conservation initiatives.
PAM 4.5	Develop HCVFs Management Plans, Protected Area management plans, budgets and business plans using internationally recognized formats and processes.
PAM 4.6	Develop and negotiate collaborative partnerships, plans and programmes (e.g. with local communities, other agencies, NGOs etc)
PAM 4.7	Direct, review and evaluate implementation of special projects (with national or international funding)
PAM 4.8	Monitor management effectiveness of the protected area using standard tools and methods (e.g. IUCN Management Effectiveness Tracking Tool)
<b>LAW</b>	<b>LAW ENFORCEMENT</b>
<b>LAW</b>	LEVEL 2
LAW 2.1	Recognize and identify signs and evidence of illegal or restricted activities in the field.
LAW 2.2	Conduct enforcement activities legally and safely (Patrol, searches, checkpoints, raids, detentions)
LAW 2.3	Treat suspects and members of the public correctly and legally during patrol and enforcement activities.
LAW 2.4	Report correctly on law enforcement activities (written reports, verbal reports, evidence in court)
LAW 2.5	Deal effectively with hostile situations and defend oneself against physical attack.
LAW 2.6	Care for and use firearms correctly and safely (if relevant)
<b>LAW</b>	LEVEL 3
LAW 3.1	Plan law enforcement activities and programmes.
LAW 3.2	Lead patrol and law enforcement activities in the field.
LAW 3.3	Liaise with local communities to resist and prevent illegal activities.
LAW 3.4	Follow correct procedure for dealing with violations, suspects, crime scenes and seized or confiscated evidence.
<b>LAW</b>	LEVEL 4
LAW4.1	Identify legal requirements and instruments for improving or extending protection and contribute to the development of protected area regulations.
LAW4.2	Coordinate protected area law enforcement activities with law enforcement and regulating agencies (police, judiciary, military, border guards etc)
<b>RTO</b>	<b>RECREATION AND TOURISM</b>
<b>RTO</b>	LEVEL 2
RTO 2.1	Guide, assist and regulate visitors on site.
RTO 2.2	Respond to emergencies and accidents to visitors.
<b>RTO</b>	LEVEL 3
RTO 3.1	Identify recreation opportunities and design appropriate recreation activities for a protected area.
RTO 3.2	Plan and implement recreation surveys to gather information about visitors and the use of the site
RTO 3.3	Identify potential recreation impacts and design impact monitoring and mitigation systems.
RTO 3.4	Supervise safety and security of visitors and other users.
<b>RTO</b>	LEVEL 4
RTO4.1	Lead development of detailed recreation and tourism strategies and plans for the protected area and local communities (identification of opportunities, demand, suitable activities, infrastructure and equipment needs, limits, zones, impacts, benefits, costs etc)
RTO4.2	Develop business and financial plans and forecasts for tourism and recreation in the protected area (Costs, incomes, fees, ticketing, permits, concessions, franchises etc)
RTO4.3	Establish safety standards and codes of conduct for protected area users.
<b>AWA</b>	<b>AWARENESS, EDUCATION AND PUBLIC RELATIONS</b>
<b>AWA</b>	LEVEL 2
AWA 2.1	Provide basic information about the protected area to visitors, community members and the public.
<b>AWA</b>	LEVEL 3

AWA 3.1	Plan and design awareness and education activities and events for visitors, educational groups and local people (talks, presentations, guided walks etc)
AWA 3.2	Research, plan, and design awareness and educational publications, exhibits and signs
AWA 3.3	Research, plan and design special education programmes for schools.
AWA 3.4	Deliver formal and informal interpretive/ awareness/ educational presentations for visitors, local people and educational groups (talks, guided walks, lectures, audio visual presentations etc)
AWA 3.5	Provide information for the media (publicity, press releases, TV and radio interviews etc)
<b>AWA</b>	<b>LEVEL 4</b>
AWA 4.1	Lead the development of interpretation, awareness and education strategies and action plans and evaluate their impacts
AWA 4.2	Research and plan interpretive/tourist/visitor centres and other major infrastructure
AWA 4.3	Plan and manage marketing, media and public relations activities.

### **Baseline Market Study on Potential for Private Afforestation in Kazakhstan**

*This document presents a brief summary of the baseline situation analysis on private afforestation in Kazakhstan, carried out within the EU Project FLERMONECA, by Hessen-Forst and UNIQUE.*

#### **1. Country-specific context**

The Ministry of Economics of Kazakhstan approved a degree that seeks to support private afforestation in the country, by financing up to 50% of its total costs. However, due to lack of capacity, a program in this matter by the Forestry and Wildlife Committee of the Ministry of Agriculture remains to be developed.

Compared to its overall region, Kazakhstan is a country with low forest coverage. According to the national standards, the forest coverage is approximately 4.6 % of the area of the country (Baizakov 2015). However, this percentage amounts in circa 11.5 million ha forest cover, which makes Kazakhstan one of the forest richest countries in Eurasia (World Bank 2003).

Kazakhstan is a country with low-density forests, which are in big part characterized by protection functions. Some forest areas that could be suitable for production purposes are damaged (by fire or overused through illegal logging) or not managed. Current afforestation activities are done for protection or recreation purposes (green belts, city greening, waste water forestations) and tend to focus on wood production. While production-related afforestation need further adaptation of the forest code paired with successful private scientific-driven pilot projects.

Currently, the majority of the forest fund in the country is state owned, with only approx. 387 ha of forests being privately owned (data 2013, Baizakov 2015). About 80 % of the state forest fund is managed by the *Akimats*, and 20 % by the Forestry and Wildlife Committee.

The existing legal framework of Kazakhstan acknowledges the governmental willingness to support private forest afforestation activities, corresponding to the high interest in increasing the forest cover in the country. The concrete regulations on the state support include guidelines for the period of support and for the financing amounts (up to 50 %). In order to enable the implementation of these incentives, it is crucial to define tangible guidelines on subsidy amount, its limits, the subsidized cost positions (e.g. administrative costs), the subsidized type of expenditures (e.g. in-kind contributions), and the specific moment of the payment (time between expenditures and refunding). Another strong incentive is the possibility to transfer reserve land fund<sup>12</sup> area into forest land by establishing private forests.

#### **2. Kazakhstan's wood supply and demand**

The demand side of the wood based market of Kazakhstan is mainly formed by consumption of wood based panels, and sawn wood, which has reached a total 2.5 million m<sup>3</sup> in 2014 as compared to 1 million m<sup>3</sup> in 2010. Growth on wood demand in Kazakhstan is mainly driven by the construction and furniture industries, and the country depends to a high degree on imports of wood-based products to supply this demand.

The national wood processing industry currently supplies approx. 40% of the wood based panel consumption, and approx. 80% of the national sawn wood consumption. These figures indicate that around 60% of panels and 20% of sawn wood are imported.

The value of wood products exports by the domestic industries (USD 14 million in 2014) is lower than the import values (USD 557 million in 2014). This illustrates the significant value adding potential that could be capitalized if imports would be substituted with domestic production. The supply requirements of the domestic wood processing industries amount to approx. 4.6 million m<sup>3</sup> equivalents. Experts estimate that industrial roundwood extraction for national forests in Kazakhstan is between 1.5 and 2 million m<sup>3</sup>. Still these volumes are too low to substitute the recorded production figures. In this context, afforestation targeting wood production could strongly contribute to cover the demand of wood products for national consumption, while also using the value adding potential of the forest sector.

#### **3. Afforestation and private investment in Kazakhstan**

Currently, afforestation in Kazakhstan is connected with protection purposes. Most experiences in the country include the afforestation of green belts, and green stripes for protection purposes along motorways and railroads. Afforestation with economic purposes however, is not frequent in Kazakhstan, and very few experiences exist including the calculation of financial resources invested over time.

The incentive of having state support of up to 50 % of the establishment costs for the first ten to fifteen years is indeed a high incentive, but it faces the great challenge of being implemented in a sector lacking successful examples and documented data on the

matter. Forest Code "...was not supported by timely approval of the relevant bylaw containing the economic mechanisms of realization of the support..." (Baizakov, 2015). Also, cost norms per hectare have not yet been determined (Baizakov, 2015), and discussions concerning the recognition of indirect afforestation costs is still ongoing. There are other restrictions to afforestation in Kazakhstan. For example, private forest property can only be obtained through afforestation since transfer of existing forest fund to privates is forbidden. Contracts for long-term forest users are limited to 49 years, meaning that investments (e.g. applying silvicultural concepts, improving of roads etc.) do not guarantee future revenues. Moreover, cheap wood products currently entering the country have caused the closing of wood production facilities further reducing forest management activities.

#### 4. Afforestation models

The following were regarded as models to be further evaluated for forest projects with private sector involvement:

**Afforestation with fast growing poplar** aiming to production in short rotation periods with selected planting material. The main focus is wood production for industrial and energy purposes.

Fast growing poplar plantations are of high interest within the forest sector of Kazakhstan. Hybrids of *Populus alba* / *Populus nigra* were regarded as the most appropriate, with also *Populus tremula* being used. Depending on the different sites, the rotation cycle varies from 12 to 20 years, and the annual growth rate is estimated at 15-25 m<sup>3</sup>/ha. The final products are plywood, rotary cut veneer, pulp, and firewood.

The plantation costs for five years could not be presented since data on irrigation, local characteristics of soil preparation and other plantation costs are difficult to gather. However, current cost for final cuttings and skidding up to the forest road could be calculated at 12-15 Euro/m<sup>3</sup>.

The current wood price for firewood is about 15 Euro/m<sup>3</sup> for firewood (price at forest road). The estimated plantation of 200 ha will supply a village of 400 households. Poplar can also be used for plywood and veneer (e.g. fruit boxes). Currently the wood market in Kazakhstan is weak due to high volumes of imports from Russia.

The implementation of national rules for the trade with carbon credits is not fully developed. Once the national market for trade of carbon credit is established these are likely to figure as additional incomes.

**Reforestation to transform suitable forest stands into productive birch forests**, targeting specifically forest sites formerly destroyed by fire, illegal logging or other biotic/abiotic factors.

For plantations with high productive birch a 40-50 year rotation cycle is recommended. An annual growth rate of 5-7 m<sup>3</sup>/ha can be expected (source: interviews; Hynynen et. al. 2010). The distribution of the assortments may be designed as follows: 30 % for industrial use (plywood, particle board) and 70 % for firewood/energy purposes. Taking into account the potential sites, mixture with pine (*Pinus sylvatica*) or other site-suitable species is appropriate.

The plantation costs for the first five years amount to approx. 1,500 Euro. Costs for final cuttings are estimated at 15 Euro/m<sup>3</sup> (forest road; distance to forest road: 500 m). Additionally, the transport to the wood processing plant is to be calculated with 10 Euro/m<sup>3</sup>. The current wood market situation allows the following overview of the expected prices: a) 15 Euro/m<sup>3</sup> firewood (forest road), 30 Euro/m<sup>3</sup> delivered and cut in units of 0,5 m; b) 30 Euro/m<sup>3</sup> roundwood (forest road); c) 40 Euro/m<sup>3</sup> wood plant's gate; d) Taxes: 5-10 Euro/m<sup>3</sup> depending assortment/species.

**Improvement of existing forest** stands aiming on higher productivity by the use of selected planting material, the application of suitable silvicultural concepts and harvesting technologies.

The improvement of degraded or poor forests on fertile stands through appropriate forest management would lead to their development and to higher productivity. The sites targeted for this approach mainly consist of forest with current low standing volume and suboptimal tree-species composition. These are mainly former productive forest stands, which have been degraded by human intervention (by clearcut without further maintenance of natural regeneration; by pests or fire destroyed forests). The precipitation for productive forest should be above 600 mm.

The production aims to the development of highly productive forests. Wood production is mainly for industrial use (construction timber, plywood, veneer, paper/pulp) but also for firewood production (branches, low quality, thinning material). Costs for interventions depend on the current situation of the stands (tree species composition, standing volume, necessity of enrichment planting. These forests are mainly located in Eastern Kazakhstan.

**Afforestation for environmental or protection purposes**. This approach is considered to be of little attraction for private investors under the current situation. The main objective of this approach is afforestation of grassland or steppe with adapted species for

environmental or protection purposes. National experiences on afforestation in stripes or belts to protect railways, motorways, riverine areas as or urban areas exist. This approach can be applied to sites with the need of improvement in environmental and/or protection objectives. Precipitation needed varies according to the species-composition. Additionally, use of firewood and also selective/sanitary cuttings are possible.

## 5. Type of investors in Kazakhstan context – overview

Type of Investors	Description	Evaluation
Forest users	<ul style="list-style-type: none"> <li>• Have long-term lease contracts (up to 49 years).</li> <li>• Lease contracts = logging licenses.</li> <li>• Are obliged to afforest 2 ha for every ha of final felling.</li> </ul>	<ul style="list-style-type: none"> <li>• Due to the current economic situation, lack of control, etc. forest users are often not able to fulfill the obligations of their lease contracts.</li> <li>• This fact often leads to conflicts between lezhkoses and private forest users.</li> <li>• Low potential for this stakeholder group to be targeted as potential private investor.</li> </ul>
Local population / local communities	<ul style="list-style-type: none"> <li>• Participation of the local population is highly important for private afforestation projects (locals as workforce).</li> <li>• For the involvement of communities / local population as carrier of projects, very complex incentive mechanisms are needed.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of knowledge, skills and motivation among the locals leads to the conclusion that this group isn't suitable to be targeted as potential private investor</li> <li>• It is important to include local population / communities by means other than their participation as investors in the projects</li> </ul>
Private persons / family offices	<ul style="list-style-type: none"> <li>• Perceive afforestation as opportunity to diversify their investments.</li> </ul>	<ul style="list-style-type: none"> <li>• The current legal framework does not fully enable this group to conduct professionally private afforestation.</li> </ul>
Households (enterprises engaged in agriculture)	<ul style="list-style-type: none"> <li>• Landowners, who often express interest in afforestation.</li> <li>• In many cases they already have knowledge and some experience with nurseries and afforestation.</li> </ul>	<ul style="list-style-type: none"> <li>• This group may be realistically considered as potential private investors in afforestation projects.</li> <li>• Its representatives acknowledge the positive impact of afforestation activities.</li> <li>• Financial and institutional state support is pre-conditional for the piloting period.</li> </ul>
Wood industry	<ul style="list-style-type: none"> <li>• Local and foreign wood industry operating in the country is confronted with economic problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Current economic situation of the sector has critical impact on the activities of the wood industry sector in Kazakhstan. Therefore, at this stage, the wood industry, operating in the country is not expected to express notable interest in carrying out private afforestation projects.</li> </ul>
Large industry (gas, oil, metal)	<ul style="list-style-type: none"> <li>• Such enterprises are obliged to compensate part of their emissions.</li> <li>• Afforestation can serve as a compensation measure.</li> </ul>	<ul style="list-style-type: none"> <li>• This group of potential investors expressed notable interest in conducting afforestation projects.</li> <li>• As a precondition, however, there should be official and legally binding guidelines at the state level that define the working mechanisms for emissions trade. These guidelines would enable the companies to benefit from the afforestation projects.</li> </ul>

All of the described types of investors recognize the high and positive ecological and social impact of afforestation measures. The positive image that it could provide for the investors (on a local level for small-scale investors; on a national and international level for large-scale investors) serves as a significant incentive. Smaller enterprises, on the one hand, recognize the need of financial support by the state in order to enable them to undertake afforestation investments. On the other hand, large enterprises emphasize the need to establish clear and transparent mechanisms on a legal level that would allow them to benefit from their potential large-scaled afforestation investments.

## 6. Recommendations

The recommendations focus on the definition of a framework, specifically on the topics of a policy enabling private investments, and for the creation of technical information in order to provide the basis for investment calculations. A pilot phase

would be a crucial element for setting a detailed regulatory framework, which is currently missing. Additionally, through the implementation of concrete sample plots, the necessary technical data could be gathered. These elements aim to facilitate the decision making-process for private investors in order to successfully implement afforestation activities under the concept of public-private partnership.

### **Supporting the enabling environment for the private sector**

#### **Subsidies and tax incentives**

The current legal framework in Kazakhstan includes the support for the establishment of private afforestation and nurseries (of up to 50 %). These subsidies are regarded to be the main drivers of small and medium scaled afforestation activities in the future. Considerations for the designing of regulations addressing the financing of such activities, and other subsidies that could be taken into account could include investment in forest roads / forest infrastructure, subsidies for the maintenance of forests, tax reductions.

#### **Provision of land**

Long term investments with private capital require high property rights security. Certainty about land titles and land use rights is crucial for private capital. Due diligence studies are important components for private investments and focus on the availability and security of land titles.

Additionally, a regulatory framework for international investors regarding land rights or long-term lease contracts for afforestation projects does not exist. For afforestation on large scale these regulations should be developed and implemented.

#### **Strengthen the wood and forest cluster**

A sector policy towards a strong and modern wood processing industry does not exist yet. A sector policy should be developed and the following elements should be considered: a) Development of a forest and wood cluster; b) Readiness study for investments in the wood industry. As in the case of forest investments, investments in the wood processing industry also need a regulatory framework and a sound information base. Conducting a readiness study would allow to identify the crucial and missing elements in order to improve the situation and initiate appropriate measures accordingly; c) National forest inventory. Current and future provision of raw material is one of the most important data required by investors in wood processing.

#### **Functioning of a carbon credit market**

A properly functioning carbon credit market could accelerate afforestation activities. Carbon credits could figure as additional revenues or, in the case of industries, could compensate payments for carbon emissions. Even though a general framework in this matter exists in Kazakhstan, implementation rules remain to be defined.

### **Creating a technical information base**

#### **Definition of suitable areas for afforestation**

Data on suitable sites for afforestation or reforestation are available through the state organizations of Kazlesproject, Kazgiproject and Kazkhselectioncenter. Specific mapping concerning afforestation targets can be carried by these organizations, and according to the specific needs (e.g. precipitation during growing season, soil type, altitude, and temperature) an adjusted soil mapping can be developed. Currently, only rough estimations about the total area of a region can be formulated. A map should show the areas suitable for reforestation as a result of combining different aspects of current land use (forest land, degraded forest land, agricultural land), natural conditions (e.g. annual precipitation/during growing season, soil conditions, altitude, average temperature) as well as the conditions of the infrastructure (access to roads) should be prepared. This topic is related mainly to cartographical tasks (GIS). This task poses the challenge of matching different information and data combining and interpreting areal images, satellite data, and site information in a professional manner.

#### **Cost-benefit analysis for different business cases**

Though very small in number and area, there are some experiences in Kazakhstan on afforestation targeting wood production. These experiences are poorly or not documented, and are available only by interviewing land users, experts, or scientists involved in these activities. In cases where analyses have been carried out, the main source of data was the Kazlesproject. Access to this data is given through an official request by the Committee, and includes information for afforestation aiming at protection and recreational topics.

It seems worthy to collect and analyze all available data concerning afforestation in Kazakhstan, in order to incorporate lessons from past projects and support current afforestation efforts.

In concrete, economic and qualitative data are necessary, some of the key aspects that should be included are: natural data (e.g. yield based on species/hybrid/clone and site condition, re-position/mortal rates), applied soil preparation and planting methods, experiences with different hybrids/clones of fast growing poplar, supply possibilities of planting material, cost and prices (site and soil preparation and, plantation, costs of irrigation systems, maintenance including tending, pruning, weed control), input (e.g. plants, fertilizer), harvesting, skidding, storage and transport costs, administrative costs, prices for the most important wood assortments, among others.

### ***Initiating a pilot period***

Although there is some information available, the lack of concrete data about afforestation experiences in Kazakhstan is evident. Information regarding suitability of species and their hybrids/clones (for a period of at least three years) is of particular importance for those afforestation models targeting wood production. It is imperative to not only gather this information in order to reduce uncertainty on afforestation under the different natural conditions of the country; but also to publish and facilitate access to this information, while keeping the all process public and transparent.

A concrete planning and administration of the pilot projects would include: 1) Development of a concept for the pilot project containing the objectives, organizations involved, duration, costs, contribution of the state (areas, workforce), and others organizations input (knowledge, financing). 2) Selection of at least ten suitable sites, mainly according to the two favored models: fast growing poplar and productive birch forests. The distribution between these two production models should be realized according to the prioritizing of the key models.

### **Outlook**

The government of Kazakhstan has undertaken important steps towards the development of prerequisites for private afforestation. Along with the official expression of interest to involve private investors in the expansion of the forest cover area of the country, regulatory incentives have been established and legally implemented through the Forest Code of the Republic. However, concrete measures should be promoted to further enable their practical application.

There are already afforestation experiences. In practice, these should be further developed, and require monitoring activities and a profound evaluation. Also, there is a notable lack of data needed for the proper establishment of private afforestation projects. In order to over-come the obstacles explained in this report, it is crucial to promote afforestation through the implementation of short-term (three-years period), small-scaled pilot projects. These pilot projects would be helpful for the collection of data in real and practical conditions, and such data should be monitored and evaluated. Additionally, further shortcomings in the legal framework for the implementation of afforestation activities may be identified during the pilot period and should be addressed. Another benefit of the pilot projects is the opportunity for the private investors to receive an introduction to afforestation activities, in order to develop their know-how and set the ground for future, larger private investments. Moreover, the pilot projects would serve as exemplary models whose success may attract potential private actors to invest in afforestation activities, and thus contribute to the increase of the forest cover area and strengthen the basis of wood supply for a growing economy.

### High Conservation Value Forests in Kazakhstan

Although the concept of identification and management of HCVF is not clearly outlined and structures in the current regulatory framework for forest management, some key features are integrated into the forest management policy.

Given the shortage of forest resources and climate zonation of Kazakhstan, all forests are regulated as protection forests, that are important for maintaining and protection of ecological and socio-economic functions of the landscapes, including water regimes, soil quality, conservation of genetic resources, important biodiversity pools, sanitation, recreation and other. This type of forests is mainly protected within PAs boundaries. In addition to protection forests there is a category of specially protected sites with restricted forest use regime that include valuable one or several significant natural components or ecosystem functions. These sites are allocated following specific research and feasibility assessment with the assigned management regime and restrictions for resource users. The table below demonstrates how these two types of forest categories can fall under different HCVF types.

HCVF Type	Protection Forests	Special protected sites	Regulatory Framework
HCVF 1.1. PAs	Protected areas: <ul style="list-style-type: none"> <li>• Forests of state nature reserves;</li> <li>• Forests of state national natural parks;</li> <li>• Forests of state natural sanctuaries;</li> <li>• Forests of state regional natural parks;</li> <li>• Forests of state reserve areas;</li> <li>• State natural forest monuments.</li> </ul>		Forest Code RK, Land Code RK, Law on Protected Areas, Scientific justification and feasibility study
HCV 1.2. Rare and endangered species	<ul style="list-style-type: none"> <li>• Forest areas of scientific importance, including forest genetic sanctuaries;</li> <li>• Special valuable large stands of forests;</li> <li>• Sub-alpine forests.</li> </ul>	<ul style="list-style-type: none"> <li>• Forest areas with relict and endemic plants;</li> <li>• Habitats of rare and endangered species.</li> </ul>	Forest Code RK, Law on Protected Areas, Scientific Justification, Biological justification, Forest survey and planning project.
HCV 1.3. Endemic species	<ul style="list-style-type: none"> <li>• State natural forest monuments;</li> <li>• Forest areas of scientific importance, including genetic forest sanctuaries;</li> </ul>	<ul style="list-style-type: none"> <li>• Forest areas with relict and endemic plants;</li> <li>• Habitats of rare and endangered wild animals.</li> </ul>	Forest Code RK, Law on Protected Areas, Scientific Justification, Forest survey and planning project.
HCV 1.4. Key seasonal habitats		<ul style="list-style-type: none"> <li>• Forest areas with relict and endemic plants;</li> <li>• Habitats of rare and endangered wild animals,</li> <li>• The strips of forest along the banks of rivers or other water bodies inhabited rare or endangered species;</li> <li>• Forest outliers.</li> </ul>	Forest Code RK, Biological justification; Forest survey and planning project.
HCV 2. Large forest landscapes			

<b>HCVF Type</b>	<b>Protection Forests</b>	<b>Special protected sites</b>	<b>Regulatory Framework</b>
HCV 3. Forests including rare or endangered ecosystems	<ul style="list-style-type: none"> <li>• Pine forest belts along the Irtysh river;</li> <li>• Floodplain forest of the Charyn River</li> </ul>		Forest Code RK, Law on Protected Areas, Scientific Justification, Biological justification
HCV 4.1. Importance for water conservation	<ul style="list-style-type: none"> <li>• State protective forest stripes;</li> <li>• Prohibited forests stripes along the banks of rivers, lakes, reservoirs, canals and other water bodies</li> </ul>		Forest Code RK, Scientific Justification, Biological justification
HCV 4.2. Particular importance for erosion prevention	<ul style="list-style-type: none"> <li>• Anti-erosion forests;</li> <li>• Field and soil protective forest.</li> </ul>		Forest Code RK, Scientific Justification, Biological justification
HCV 4.3. Particular importance for fire break			
HCV 5. Livelihoods of resident population	<ul style="list-style-type: none"> <li>• Nut-producing zones;</li> <li>• Fruit-tree plantings</li> </ul>	<ul style="list-style-type: none"> <li>• Forests located in the desert, semi-desert, forest-steppe, forest-tundra zones, steppes, mountains;</li> </ul>	Forest Code RK, Scientific Justification, Biological justification
HCV 6. Local traditions and culture preservation			

## XII.viii Annex R. Forest Context, and Forest Policy and Administration in Kazakhstan

**Forests in Kazakhstan.** Kazakhstan is a forest poor country and by percentage of forested land (4.61%) ranks one of the lowest in the world. Of 12,6 million hectares of total forested land 7.8 million hectares, i.e. almost 70% are saxaul and shrub associations (sparse growth of trees) of the desert zone, while forests of coniferous and deciduous species have the area of only 3.7 million hectares. All forests provide habitats to globally important biodiversity and play an important role in land, wildlife and watershed management, and tourism, and besides they are the source of timber. They are a key factor in protecting the watershed of the Aral Sea and Lake Balkhash, and play a role in reducing desertification and siltation of waterways and reservoirs. About 300,000 people are directly dependent on the forestry sector, while an estimated 2.5 million live in or rely on the forests for fuel wood, fodder and other forest products. Almost 10% of all forests in Kazakhstan are plantations established in the Soviet period for wind erosion and sand control in agricultural lands. However, this precious resource has been subject to increased degradation in the recent years of political and economic transformation. The main factors have been increased incidence and areas of fires, unauthorized cutting, overgrazing, decreased water tables, development of agricultural land, desiccation of riparian forests, as well as pests and diseases.

**Forest Biodiversity.** Current Kazakh flora counts 68 species of trees, 266 species of bushes, 433 species of small bushes, semi-bushes and semi-grass, 2,598 species of perennial grass, and 849 species of annual grass. This biodiversity provides many unique species and is the origin of a number of common nuts and fruit trees (including apples). The region hosts 835 species of vertebrates, including fish, amphibians, reptiles, birds and mammals. The Kazakh forests include coniferous tree species such as pine (*Pinus silvestris*), Shrenk spruce (*Picea Shrenkiana*), Siberian spruce (*Picea obovata*), Siberian silver fir (*Abies sibirica*), Siberian larch (*Larix sibirica*), cedar (*Pinus sibirica*), treelike archa – semispherical archa (*Juniperus semiglobosa*) and Zeravshan archa (*Juniperus seravscanica*); soft-deciduous species such as birch (*Betula verrucosa*), aspen (*Populus tremula*), black poplar (*Populus nigra*), turanga (*Populus diversifolia*), black willow (*Alnus glutinosa*), river ashtree (*Fraxinus sogdiana*); hard-deciduous trees such as oak (*Quercus robur*), elm (*Ulmus pinnatoramosa*), narrowleaf oleaster (*Elaeagnus angustifolia*), black saxaul (*Haloxylon aphyllum*), white saxaul (*Haloxylon persicum*); bushes such as Siberian juniper (*Juniperus sibirica*), meadow-sweet (*Spiraea acutifolia*), dog-rose (*Rosa canina*), yellow acacia (*Caragana arborescens*), tamarisk (*Tamarix*) and sand acacia (*Ammodendron argenteum*). Hardwoods cover 61.8% of forest areas (about 7 million ha), coniferous forest 15.5% (but the bulk of timber volume), and bushes 22.7%. There are more pines and silver firs in coniferous forests, while soft-deciduous forests mostly include birch and aspen, and hard-deciduous forests comprise saxaul scrub covering almost half of forested areas.

**Timber Stocks.** Standing stock of timber amounts to 383.67 million m<sup>3</sup>, including coniferous wood – 236.6 million m<sup>3</sup> (61.7%); soft-deciduous wood – 123.9 million m<sup>3</sup> (32.3%); saxaul – 10.4 million m<sup>3</sup> (2.6%); bushes – 8.5 million m<sup>3</sup> (2.2%). Mature and over-mature forests make 29% of general growing stock. The percentage of forest cover is highest in Zhambyl Oblast (16% cover) and lowest with 0.1% in Aktyubinsky and Atyrausky Oblasts each. The landscape and forest cover are highly variable even within the natural zone.

### Forestation rate – 4.61%

Total area of the country (thousand ha)	Forest fund lands (thousand ha)	Forested area (thousand ha)
272,490.2	29,301.9	12,627

Since the 1970's, almost 97% of all forests have been classified as primarily protection forests that included forests with primary water-protection, conservation, sanitary-hygienic, recreational and other functions, plus the forests of protected areas, national parks, protected forest sites, as well as forests of research and historic value. Only 3.1% of Kazakh forests (0.81 million ha in Eastern Kazakhstan) were categorized as the 2nd Group, i.e. forests of limited commercial importance. **The new Forest Code of 2003** has abandoned the division of forests into the 1st and 2nd Groups and designating all Kazakh forests as primarily protection forests. Protection forests are further subdivided into 19 categories and grouped into 3 categories based on their main function (water protection, sanitation and hygiene protection, natural reserves, etc.), with varying environmental restrictions on utilization. Altogether, these restrictions limit the area of stocked forest lands where commercial utilization may be allowed to only 4.17 million ha (or 36.5%).

### Protection forests by categories (State inventory of Forestry Fund 2015)

Function	Category	Area, thousand ha	
		Total	Forest covered
Protection forests	Soil protection	19,867.80	9,654.80
	Protection lines	53.9	21.7
	Anti-erosion forests	884.5	302.8

<b>Total</b>		<b>20,806.20</b>	<b>9,979.30</b>
Riparian forests	Catchment-protection forests along rivers and lakes	1617.2	944.2
Other	Protection belts along railway and highways	114.3	58.2
Sanitation and health functions	Green belts of residential areas	184.3	63.6

The overall strategy in forest management is protection of the existing forest resources. This is managed by the following objectives: (i) Erosion protection;(ii) Fire and pest management; (iii) Reforestation; (iv) Recreation and tourism. These objectives, however, assumed mainly a centrally management forest management systems with little or no input from the common users and/or inhabitants. The concept of community forest and rangeland management is not yet well-understood or accepted.

All gazetted forest land (29.3 million hectares of land that are designated for forest use and called the State Forest Fund) is owned and managed by the State. In principle, the central government, through the Forest and Wildlife Committee and regional governments (Akimats).

#### Forest governance (Total Forest Fund lands – 29,301.9 thousand ha)

<b>Forestry and Wildlife Committee</b>	6,267.36	21.4 %
<b>Regional Akimats</b>	22,818.04	77.9 %
<b>Other</b>	216.5	0.7 %

#### Selection of the geographic focus of the project

Region	Forest Fund land	Share
RK	29.3	100%
Kyzylorda region	6.7	23%
Almaty region	5.2	18%
Zhambyl region	4.5	16%
East Kazakhstan region	3.7	13%
South Kazakhstan region	3.4	12%
Akmola region	1.0	3%
Aktobe region	0.9	3%
Kostanai region	0.7	2%
North Kazakhstan region	0.7	2%
Karaganda region	0.6	2%
Pavlodar region	0.5	2%
Mangystau region	0.5	2%
Atyrau region	0.2	1%
West Kazakhstan region	0.2	1%

**Forest administration and management.** During the Soviet period forest management and utilization were both the responsibility of the State Forest Authorities. The new Forest Code of Kazakhstan (enacted in the summer of 2003) is meant to provide an improved framework for community and private sector involvement in forest management. Important changes are being proposed in the division of responsibilities for forest management and use between the centre and the regions, and between the public and private sectors:

- delegation of most forest management functions from the central Forest and Hunting Committee to state forest enterprises of the oblast governments;
- provision for «private forest estate». This is meant to promote creation and maintenance of manmade forests and shelterbelts on privatized farmland, as it would legally allow such newly forested lands to be gazetted as forest estate, effectively waiving assessment of property tax on these otherwise nonproductive no-man’s lands;
- elimination of noncompetitive short-term forest use contracts (only contracts for 10 or more years would be allowed, with allocation on a strictly competitive tender basis);
- mandatory requirement for all commercial forest harvesting operators to be subject to licensing

FUNCTIONS	Forests within PAs (30 PAs)		Forests within Forestry Units (123 Forest Units)	
	FWC	Regional Akimat	FWC	Regional Akimat
<b>Administration</b>				
Formulation of Forest Policy				
Implementing law, control/oversight/enforcement)				
Collection and processing of information				
Financial support				
Planning regional/oblast, national level				
Planning community/district level				
<b>Management</b>				
Goal setting				
Management of assets (infrastructure)				
Management of forest land (protection)				
Management of forest land (production)				
Management of wood processing (sawmills)				
Management of non-wood products/services (mining, water, hunting, tourism etc.)				

The red-framed functions are poorly implemented due to unclear and uncoordinated regulations, between the central and regional levels, unbalanced capacities and funding, and misinterpretation and misunderstanding of primary forest management goals by central and regional levels. To improve the critical management gaps the forestry and Wildlife Committee is now considering the option of returning to centralized type of forestland administration when the central government retained all functions. But a better option could be to assign different functions depending on geographical and socioeconomic context, while the basic forest law should stipulate and enforce a few fundamental principles, whereby the distribution of forest management functions should be:

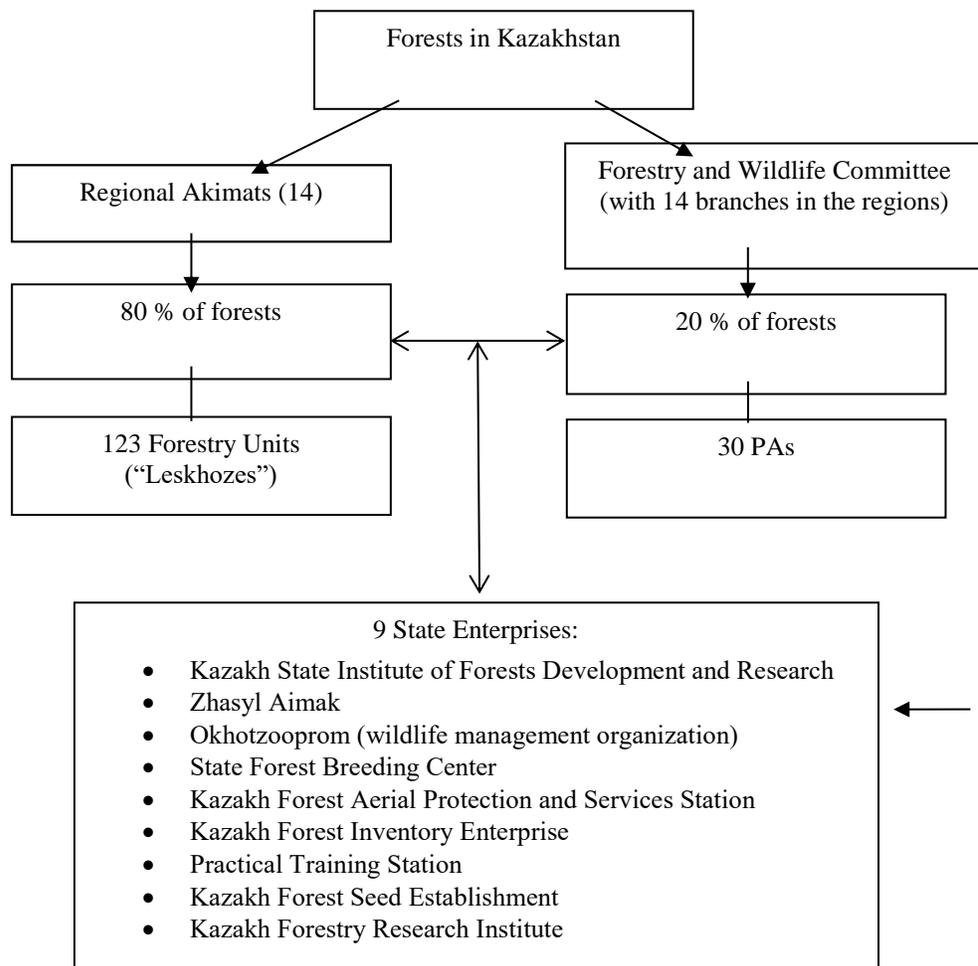
- 1) Cover the full resource cycle from overall planning / regulatory / oversight to physical operations / restoration / infrastructure / processing / marketing. If any key function is overlooked, this creates loopholes and inefficiencies in management regimes. For example, the key function of approval of forest management plans and subsequent enforcement of their implementation is not explicitly listed in the current draft Forest Code.
- 2) Avoid overlapping mandates and clearly separate between implementation and oversight to ensure accountability and transparency (e.g. implementation of the forest cadaster and monitoring in the Forest Code is assigned both to the territorial forestry oversight departments of the central government and to the local forestry units of the oblast Akimats, which are now meant to be revenue-generating entities.)
- 3) Depending on the geographic and socioeconomic context (such as overall abundance/concentration or scarcity/patchiness of forest, population/farming density, environmental externalities, etc.) certain functions might be most effectively realized by public or private, central or local organization. For example thinning and infrastructure maintenance works in the remote Altay forests would be a more natural role for long-term private leaseholders, while the same role in the densely populated Tien Shan foothills or along the Syr-Darya valley in the South would be best played by, or contracted to, communal organizations.
- 4) Economies of scale should also be a key factor in the process of management function allocation, such as preparation of a forest management plan in accordance with centrally approved rules could in the Altay zone be easily handled by individual long-term leaseholders, but in saxaul forests with mixed uses it should be implemented at a more aggregate landscape level by specialized rayon organizations.
- 5) Functional responsibilities should be accompanied by the economic means to carry these out – either by providing direct financing or fiscal incentives for implementation of public goods functions, or by granting the resource manager certain resource user rights for income generation. The direct financing scheme has been the primary arrangement under the centrally planned economy, and it would continue to be valid for those forests that must remain under direct public management (central or oblast) due to their prevailing public goods function, such as certain types of protected areas, roadside shelterbelts, etc. With some other forests, whose public-goods function is less critical, forest and land management responsibilities may be conceded to non-governmental entities (private companies, communal or public organizations), in which case they should also be given the right (on a payment basis or free of charge) to use and sell certain forest products in exchange for an obligation to manage / protect / replant these forests.

Considering the above principles, organizational options for forest institutions in Kazakhstan should evolve towards diversification, and allowing enough flexibility to select a combination of options that would best suit the regional conditions. For example, in the east/north-eastern forests, management planning should move to a landscape approach, with detailed inventory only on production forest land. Local communities should participate in forest management planning, and district and regional governments should also be involved. In the southeastern mountain forests the focus should be on watershed management, again with community involvement. In the saxaul forests the first priority is to carry out an updated resource inventory, and the second to institute a sustainable management regime (the age-class distribution is presently skewed as mature and semi-mature trees are over-harvested). On agricultural and pasture lands, land use management regimes would need to be re-instituted for improved management of forest vegetation.

The revision and clarification of forest administration and management functions is required to enable the above principles into the policy and practice with the special focus on the following key responsibilities should:

- Guidance, review and endorsement of forest management plans
- Access and contribution to forest management information systems
- Oversight of implementation of management plans, including harvesting and reforestation where this is contracted out
- Oversight of forest protection
- Oversight of afforestation
- Initial support to technological innovations
- Preparation of standards for forest products certification, with piloting on a local level
- Review and revision of regulations regarding establishment of private plantation forests

**Institutional structure of forests administration**



## XII.ix Annex S. Capacity of Kazakhstan Forests for Carbon Capture, Sequestration, and Emission

*The given document presents a brief summary of the assessment of the forest potential for carbon capture and sequestration (Safonov G.V., 2016).*

In December 2015, Paris held the World Environment Summit - 21th Conference of Parties to the UN Framework Convention on Climate Change. Kazakhstan, for its part defined the contribution in limitation and reduction of greenhouse gases anthropogenic emissions for the period up to 2030 by 15% (absolute target) and 25% (conditional target in the case of international support) with respect to the base year of 1990.

In order to achieve the declared objectives, the huge role is played by forest and pasture ecosystems - key reservoirs of deposited carbon, comparable with emission of CO<sub>2</sub> of the largest countries around the world on greenhouse emission.

The main part of forests and the population of Kazakhstan is concentrated in the fertile forest steppe zone extending from Russia's northern border, in the foothills and on the slopes of the Altai Mountains, Alatau and Tien Shan mountains along the eastern and south-eastern borders and along the banks of the Syr Darya and other major rivers in the southern deserts. Despite the trend of low priority of the forestry sector, the majority of Kazakhstan's population lives in forest areas or nearby, and uses them as a source of food and fodder, fertile soils, for protective purposes and for the procurement of construction materials, fuelwood, providing gainful employment, recreation, etc. About 300 thousand people are directly dependent on the forest sector and the number of people living in forest areas and using forests for fuel wood as a source of building materials, fodder, and other forest products is estimated at 2.5 million people. Another large part of the population uses the forest for protective purposes, for recreation, fight against wind and soil erosion, water retention, increasing productivity of agricultural lands (shelterbelts).

The study was used IPCC methodology that is feasible for the managed forests, subject to planning and implementation of regulation measures and the use of forests to ensure the environmental, economic and social functions performed by forests. All forests in Kazakhstan fall under this category of managed forests.

In accordance with the IPCC Guidelines (2006), the assessment of carbon stocks and changes can be made using several levels of difficulty (Tiers). In the presence of country data to assess the stocks of forest biomass, the carbon budget (stocks) is calculated for long-term living biomass (aboveground and underground), dead wood biomass (dead wood), and carbon stocks in litter and soils in forestland. The last was not assessed within this study due to insufficient data.

For the calculation of carbon stock in the biomass of trees using the results of one-time recording of forests of the Forest Fund, index of the timber specific gravity, expansion factor, including aboveground and underground parts (Table 1), which were obtained as weighted averages for each group of tree species of trees growing in local condition. Data on dead wood volumes provided by the State Enterprise "Kazakh Forest Inventory Enterprise" is also used (Table 2).

**Table 1. The specific wood density and expansion factor on forest tree species**<sup>15</sup>

Species	Expansion factor, dimensionless quantity		Specific density of the wood, tons /m <sup>3</sup> of dry matter
	underbrush	approaching maturity	
Coniferous	1,22	1,41	0,504
Soft-wooded	1,28	1,39	0,597
Hard-wooded	1,29	1,55	0,711
Saxaul	1,54	1,54	0,711
Other trees	1,28	1,39	0,554

<sup>15</sup> National inventory report of anthropogenic emissions from sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the 1990-2013. Astana, 2015, p. 235.

Shrubs	1,18	1,42	0,384
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**Table 2. Data on the stock of standing wood and dead wood on the forest lands of the Republic of Kazakhstan**

Species/year	Woodstock, million m <sup>3</sup>	
	Standing wood	Dead wood
Coniferous		
1993	230,04	101,8
1998	230,84	102,0
2003	228,59	103,2
2008	235,35	103,4
2013	255,23	112,12
Soft-wooded		
1993	117,88	37,7
1998	122,12	40,4
2003	128,96	42,2
2008	127,23	42,4
2013	138,76	46,26
Hard-wooded		
1993	2,84	1,55
1998	2,98	1,69
2003	3,11	1,83
2008	3,23	1,85
2013	3,37	1,95
Saxaul		
1993	10,63	3,47
1998	10,14	3,83
2003	15,14	3,88
2008	14,93	3,95
2013	14,89	3,96
Other trees		
1993	1,02	0,24
1998	1,52	0,27
2003	2,60	0,43
2008	2,70	0,45
2013	3,06	0,51
Shrubs		
1993	7,0	2,23
1998	8,53	2,64
2003	11,0	2,59
2008	10,9	2,62
2013	10,85	2,60

Summary results of the calculations of carbon stock accumulated in forest ecosystems of the Republic of Kazakhstan are presented in Table 3. Total carbon stock in forests of Kazakhstan is 718.3 million tons of CO<sub>2</sub>-eq for 2013. In the living biomass of tree and shrub vegetation is accumulated 554.0 million tons of CO<sub>2</sub>-eq. The main carbon stock contained in coniferous species - 303 100 000 CO<sub>2</sub>-eq., in softwood trees - 204.5 million tons of CO<sub>2</sub>-eq in hardwood - 5.9

million tons of CO<sub>2</sub>-eq in saxaul forests - 29.8 million tons of CO<sub>2</sub>-eq, other tree species - 3.0 million tons of CO<sub>2</sub>-eq, and shrubs - 7.6 million tons of CO<sub>2</sub>-eq. The stock of carbon in the dead wood of in total of 164.3 million tons of CO<sub>2</sub>-eq.

The age structure of the stock of carbon stored in the biomass of the living forest stands are as follows:

- Underbrush – 25.2 million tons of CO<sub>2</sub> eq. (4.6%)
- Middle-aged – 254.0 million tons of CO<sub>2</sub> eq. (46.8%)
- Approaching maturity – 108.3 million tons of CO<sub>2</sub> eq. (19.9%)
- Mature and over-mature – 155.8 million tons of CO<sub>2</sub> eq. (28.7%)

It should be emphasized that the proportion of underbrush and middle-aged stands accounted 51.4% of the total carbon stored in living woody biomass pool. Kazakhstan Forests quite young, and thus the potential for further absorption of carbon by forest ecosystems is very high.

**Table 3. Estimation of carbon stocks in wood biomass of forest plantations in Kazakhstan**<sup>16</sup>

	Area, million ha	The stock of standing biomass, million m <sup>3</sup>	Phytomass (aboveground and underground part), million t	The stock of carbon in phytomass, million t of CO <sub>2</sub> eq	The stock of dead wood, million m <sup>3</sup>	The stock of carbon in dead wood, million t of CO <sub>2</sub> eq	Total, carbon stock, million t CO <sub>2</sub> eq
<b>Coniferous</b>	<b>1,692</b>	<b>255,2</b>	<b>165,3</b>	<b>303,1</b>	<b>112,1</b>	<b>103,6</b>	<b>406,7</b>
Underbrush	0,244	14,4	8,9	16,3			
Middle-aged	0,973	153,3	94,2	172,8			
Approaching maturity	0,198	33,7	23,9	43,9			
Mature and over-mature	0,277	53,8	38,3	70,1			
<b>Soft-wooded</b>	<b>1,517</b>	<b>138,8</b>	<b>111,6</b>	<b>204,5</b>	<b>46,3</b>	<b>50,6</b>	<b>255,2</b>
Underbrush	0,243	4,7	3,6	6,5			
Middle-aged	0,575	49,8	38,1	69,8			
Approaching maturity	0,315	36,7	30,4	55,8			
Mature and over-mature	0,383	47,6	39,5	72,5			
<b>Hard-wooded</b>	<b>0,100</b>	<b>3,4</b>	<b>3,2</b>	<b>5,9</b>	<b>2,0</b>	<b>2,5</b>	<b>8,4</b>
Underbrush	0,028	0,6	0,6	1,1			
Middle-aged	0,064	2,2	2,0	3,7			
Approaching maturity	0,005	0,2	0,3	0,5			
Mature and over-mature	0,004	0,3	0,3	0,6			
<b>Saxaul</b>	<b>6,100</b>	<b>14,9</b>	<b>16,3</b>	<b>29,8</b>	<b>4,0</b>	<b>5,2</b>	<b>35,0</b>
Underbrush, capacity 1	0,132	0,1	0,1	0,1			
Underbrush, capacity 2	0,570	0,6	0,7	1,2			
Middle-aged	1,980	3,8	4,2	7,7			
Approaching maturity	1,485	4,1	4,5	8,2			
Mature and over-mature	1,933	6,3	6,9	12,6			
<b>Other wood species</b>	<b>0,159</b>	<b>3,0</b>	<b>1,7</b>	<b>3,0</b>	<b>0,5</b>	<b>0,5</b>	<b>3,6</b>

<sup>16</sup> Recording data of FF RK - Explanatory note to the materials of the state recording of the forest fund of the Republic of Kazakhstan as of January 1, 2013, author's calculations.

Shrubs	2,651	10,9	4,2	7,6	2,6	1,8	9,5
TOTAL	12,218	426,1	302,2	554,0	167,4	164,3	718,3

The largest carbon reserves accumulated in the pine forests - 129.8 million tons of CO<sub>2</sub>-eq, birch - 123.1 million tons of CO<sub>2</sub>-eq, fir forests - 77.2 million tons of CO<sub>2</sub>-eq. 42.2 million tons of CO<sub>2</sub>-eq accounted for spruce and 41.5 million tons of CO<sub>2</sub>-eq to larch forests. Among the softwood trees, an important carbon reservoir is also aspen stands - 50.2 million tons of CO<sub>2</sub>-eq. Among hardwood trees elm can be identified - 4.2 million tons of CO<sub>2</sub>-eq of carbon stock, but generally, hardwood forests are making a negligible contribution to the overall carbon balance.

The share of saxaul forests totally is about 29.9 million tons of CO<sub>2</sub> eq of carbon stored. Black saxaul provides 2/3 of the storage volume, white saxaul - 1/3.

### Greenhouse gas emissions in forest ecosystems

Important role in the evaluation of forests` climate role are factors that affect the state (quality and quantity) of forest ecosystems. The main factors include: logging, forest diseases, forest fires, destruction of ecosystems under the influence of other negative factors.

Felling in the forests of Kazakhstan for a long time are banned, this factor had no significant impact on the carbon-depository potential of forests. In addition, the felling of mature and over-mature forest stands, carbon-depository potential of which has been exhausted, does not result in CO<sub>2</sub> emissions, and also allows to increase the absorption due to the emergence of underbrush as a result of artificial or natural regeneration on forest lands released.

The most important factor in greenhouse gas emissions is forest fires. According to the Ministry of the Republic of Kazakhstan for Emergency Situations from 0.70 to 182.50 thousand ha of forestland burns out every year in the country. The most extensive forest fires were in the period of 1995-2007. In recent years, fire area significantly decreased.

### Outlook

According to our estimates, while maintaining the existing forest area of forest fund, forest ecosystems in the country can provide volumes of additional carbon absorption in each five-year period 2016-2020, 2021-2025, 2026-2030 in the amount of 50.5 million tons of CO<sub>2</sub> equivalent.

Unfortunately, now, the program of forestry development in Kazakhstan is not accepted in the long term, although there are certain prerequisites. Thus, the decree of the President of the Republic of Kazakhstan approved the Concept of transition of the Republic of Kazakhstan to the "green economy", the Resolution of the Government of the Republic of Kazakhstan from July 31, 2013 №750 approved the Plan of measures on realization of this Concept, the Forest Code of the Republic of Kazakhstan and the Republic of Kazakhstan Law "On Specially protected natural areas" are acting. A number of sectoral programs relating to the protection and reproduction of forests - "Forests of Kazakhstan" (2004-2006), "Zhasyl el" (2005-2007, 2008-1010), "Zhasyl damu" (2010-2014), UNECE / FAO "Sustainable forest management for the purpose of the green economy", a joint project of Kazakhstan and the World Bank "Conservation of forests and increase of forest cover in the Republic of Kazakhstan" and others were implemented.

Recommendations to increase the forest cover of Kazakhstan reflected in the draft of the Concept for the Conservation and Sustainable Use of Biodiversity of Kazakhstan till 2030, the draft of Forestry Development Plan of the Republic of Kazakhstan up to 2020, but they have not been approved until now.

In case, if additional measures are allowed to increase the forest cover of Kazakhstan from 4.6% to 5.0% up to 2020, carbon absorption by forests would increase by an additional 2.9 million tons of CO<sub>2</sub> eq a year after reaching the forest age of 5-10 years (assuming the establishment of forest plantations in accordance with the current structure of saplings). A more accurate assessment of the additional absorption, in the case of adoption of the forestry development programs of Kazakhstan, will require detailed information on the planned plantations (species composition, age, climatic conditions, etc.).

Carrying out felling of mature and over-mature forests with the implementation of reforestation measures (natural and artificial) in existing areas of forest fund will also help to increase the absorptive capacity of forests. Activation of even a small part of the of forest fund areas of Kazakhstan for growing new forests, for example, 10%, would give additional amounts of absorption of around 0.5 million tons of CO<sub>2</sub> a year after reaching the age of tree stand 5-10 years.

XII.x Annex T. Analysis of Hunting Context in Kazakhstan and Feasibility Assessment of Community-based Trophy Hunting Enterprises

*Please see attached document.*

XII.xi Annex U. Feasibility Assessment of Targeted Scenario Analysis Opportunities

*Please see attached document.*

XII.xii Annex V. UNDP Project Quality Assurance Report

*UNDP-required Prodoc Annex. To be added by UNDP after GEF approval.*

XII.xiii Annex W. Results of the capacity assessment of the project implementing partner and HACT micro assessment

*UNDP-required Prodoc Annex. To be added by UNDP after GEF approval.*

## XII.xiv Annex X. Project Co-financing Letters

UNDP – *See attached document.*

Forestry and Wildlife Committee – *See attached document.*

Almaty Province Akimat – *See attached document.*

East Kazakhstan Akimat – *See attached document.*

Institute of Zoology – *See attached document.*

ACBK – *See attached document.*

WWF – *See attached document.*

## **LETTER OF AGREEMENT BETWEEN UNDP AND THE MINISTRY OF AGRICULTURE RK FOR THE PROVISION OF SUPPORT SERVICES**

1. Reference is made to consultations between officials of the Ministry of Agriculture of the Republic of Kazakhstan (hereinafter referred to as “the MA”) and officials of UNDP with respect to the provision of support services by the UNDP country office for nationally managed programmes and projects. UNDP and the MA hereby agree that the UNDP country office may provide such support services at the request of the MA through its institution designated in the relevant project document of the joint project of the UNDP and the Ministry of Agriculture of the Republic of Kazakhstan) “Conservation and sustainable management of key globally important ecosystems for multiple benefits”, as described below.

2. The UNDP country office may provide support services for assistance with reporting requirements and direct payment. In providing such support services, the UNDP country office shall ensure that the capacity of the MA-designated institution is strengthened to enable it to carry out such activities directly. The costs incurred by the UNDP country office in providing such support services shall be recovered from the administrative budget of the office.

3. The UNDP country office may provide, at the request of the designated institution, the following support services for the activities of the project:

- (a) Identification and recruitment of project personnel; handling administrative issues related to the project personnel;
- (b) Identification and facilitation of training activities, seminars and workshops;
- (c) Procurement of goods and services;
- (d) Processing of direct payments.

4. The procurement of goods and services and the recruitment of project personnel by the UNDP country office shall be in accordance with the UNDP regulations, rules, policies and procedures. Support services described in paragraph 3 above shall be detailed in an annex to the project document, in the form provided in the Attachment hereto. If the requirements for support services by the country office change during the life of a project, the annex to the project document is revised with the agreement of the UNDP resident representative and the designated institution.

5. The relevant provisions of the Standard Basic Assistance Agreement (SBAA) between with the MA of Kazakhstan and the UNDP, signed by the Parties on 5 October 1992, including the provisions on liability and privileges and immunities, shall apply to the provision of such support services. The MA shall retain overall responsibility for the nationally managed project through its designated institution. The responsibility of the UNDP country office for the provision of the support services described herein shall be limited to the provision of such support services detailed in the annex to the project document.

6. Any claim or dispute arising under or about the provision of support services by the UNDP country office in accordance with this letter shall be handled pursuant to the relevant provisions of the SBAA.

7. The manner and method of cost-recovery by the UNDP country office in providing the support services described in paragraph 3 above shall be specified in the annex to the project document.

8. The UNDP country office shall submit progress reports on the support services provided and shall report on the costs reimbursed in providing such services, as may be required.
9. Any modification of the present arrangements shall be effected by mutual written agreement of the parties hereto.
10. If you are in agreement with the provisions set forth above, please sign and return to this office two signed copies of this letter. Upon your signature, this letter shall constitute an agreement between the MA and UNDP on the terms and conditions for the provision of support services by the UNDP country office for nationally managed project the United Nations Development Programme (UNDP) and the MA of Kazakhstan (Ministry of Agriculture of the Republic of Kazakhstan) "Conservation and sustainable management of key globally important ecosystems for multiple benefits".

Attachment to the Annex Y:

DESCRIPTION OF UNDP COUNTRY OFFICE SUPPORT SERVICES

1. Reference is made to consultations between the Ministry of Agriculture of the Republic of Kazakhstan, the institution designated by the Government of Kazakhstan, and officials of UNDP with respect to the provision of support services by the UNDP country office for the nationally managed project of UNDP and the MA of Kazakhstan "Conservation and sustainable management of key globally important ecosystems for multiple benefits", ATLAS Project ID 00101043, or "the Project".
2. In accordance with the provisions of the letter of agreement signed and the project document, the UNDP country office shall provide support services for the Project as described below.
3. Support services to be provided, including:

Support services	Schedule for the provision of the support services	Cost to UNDP of providing such support services (where appropriate)	Amount and method of reimbursement of UNDP (where appropriate)
Payment Process	Ongoing throughout implementation when applicable	As per the UPL- US\$ 38.79 for each	UNDP will directly charge the project upon provision of services, on a quarterly basis.
Vendor profile entry in ATLAS	Ongoing throughout implementation when applicable	As per the UPL- US\$ 20.92 for each	As above
Project personnel selection and/or recruitment process * Project Manager  * Project Assistant	Start of project	As per the UPL- US\$ 633.03	As above

<b>Support services</b>	<b>Schedule for the provision of the support services</b>	<b>Cost to UNDP of providing such support services (where appropriate)</b>	<b>Amount and method of reimbursement of UNDP (where appropriate)</b>
Staff HR & Benefits Administration & Management (one time per staff including medical insurance enrolment, payroll setup and separation process)	Ongoing throughout implementation when applicable	As per the UPL- US\$ 213.24 for each	As above
Recurrent personnel management services: Staff Payroll & Banking Administration & Management (per staff per calendar year)	Ongoing throughout implementation when applicable	As per the UPL- US\$ 478.19 for each	As above
Consultant recruitment	Ongoing throughout implementation when applicable	As per the UPL- US\$ 246.38 for each	As above
Procurement of goods and services involving local CAP	Ongoing throughout implementation when applicable	As per the UPL- US\$ 566.56 for each purchasing process	As above
Procurement of goods and services not involving local CAP	Ongoing throughout implementation when applicable	As per the UPL- US\$ 223.46 for each purchasing process	As above
Issue/Renew IDs (UN LP, UN ID, etc.)	Ongoing throughout implementation when applicable	As per the UPL- US\$ 39.28 for each	As above
F10 settlement	Ongoing throughout implementation when applicable	As per the UPL- US\$ 32.71 for each	As above
Visa request	Ongoing throughout implementation when applicable	US\$ 46.98 for each	As above
Hotel reservation	Ongoing throughout implementation when applicable	US\$ 13.16 for each	As above
Travel Ticket processing	Ongoing throughout implementation when applicable	US\$ 36.97 for each	As above

Maximum DPC amount to be charged to GEF funds is \$60,000 USD.