

Part I: Project Information		Response
GEF ID	10352	
Project Title	Conservation and Sustainable Management of Land Resources and High Nature Value Ecosystems in the Aral Sea Basin for Multiple Benefits	
Date of Screening		
STAP member Screener	Graciela Metternicht	
STAP secretariat screener	Guadalupe Duron	
STAP Overall Assessment		<p>Minor issues to be considered during project design. STAP welcomes UNDP's project "Conservation and Sustainable Management of Land Resources and High Nature Value Ecosystems in the Aral Sea Basin for Multiple Benefits" that pursues the major objective of promoting land degradation neutrality, restore and improve the use of land and water resources in Turkmenistan's Amu Darya watershed to enhance the sustainability and resilience of livelihoods and globally significant ecosystems. STAP is pleased that STAP's durability principles will be considered in the design and implement the project. In this regard, STAP wishes to emphasize the importance of developing a theory of change (narrative and figure), and using systems analysis - an important component of UNCCD's Scientific Framework for Land Degradation Neutrality. Because the project will deal with various intersecting variables, it will be valuable to describe and analyse the system, identify the diversity of values and perspectives of stakeholders, and recognize that stresses and shocks (e.g. climate variability, or changes in social values) will be critical to achieve the project's objective. STAP is pleased the LDN checklist will be used to develop the project. The UNCCD's scientific framework and STAP's guide to implementing the framework are two other valuable resources for designing the project. Lastly, STAP recommends for climate projection data to be used to design the project components. STAP offers various resources where to obtain Turkeministan's climate projection trends, and how to assess and manage climate risks.</p>
Part I: Project Information		
B. Indicative Project Description Summary		
Project Objective	Is the objective clearly defined, and consistently related to the problem diagnosis?	Yes.

Project components	A brief description of the planned activities. Do these support the project's objectives?	Yes. For component 1, STAP recommends applying UNCCD's "Scientific Framework for Land Degradation Neutrality", and STAP's guidelines on Land Degradation Neutrality. In particular, it would be valuable for the project developers to build-in the response hierarchy that encourages measures to avoid and reduce land degradation combined with actions to reverse degradation to achieve LDN. (Currently, the response hierarchy is only briefly mentioned on page 18.)The science behind the framework is explained in the scientific framework which can be accessed at: https://www.unccd.int/publications/scientific-conceptual-framework-land-degradation-neutrality-report-science-policy STAP's guidelines, a practical guide to applying the LDN conceptual framework, can be accessed at: http://www.stagef.org/publications . The description of the current situation evidences that some areas under irrigation may be so degraded that their restoration may be not economically feasible. STAP recommends that cost-effectiveness of interventions be undertaken considering external factors like climate change, and that attention be given to innovative solutions for degraded landscapes that could provide alternative livelihoods (e.g. carbon farming https://www.environment.gov.au/climate-change/government/emissions-reduction-fund/publications/cfi-salinity-guidelines ; or reclamation using novel technologies or phytoremediation).
Outcomes	A description of the expected short-term and medium-term effects of an intervention.	
	Do the planned outcomes encompass important global environmental benefits/adaptation benefits?	Yes.
	Are the global environmental benefits/adaptation benefits likely to be generated?	Yes, if the theory of change is revisited and adjusted as needed to address the adaptive management strategies the project may require, and the consideration of internal and external factors that could affect the effectiveness of outcomes.
Outputs	A description of the products and services which are expected to result from the project. Is the sum of the outputs likely to contribute to the outcomes?	Yes. However, STAP wishes to note that including of extension services to landholders as part of capacity building at institutional and communal level will strengthen the outputs related to outcome 1. A theory of change that includes needs analysis of stakeholders would also strengthen outputs of outcome 1.
Part II: Project justification	A simple narrative explaining the project's logic, i.e. a theory of change.	
1. Project description. Briefly describe:		
1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)	Is the problem statement well-defined?	Yes.
	Are the barriers and threats well described, and substantiated by data and references?	Yes, the barriers and underlying drivers are described thoroughly.
	For multiple focal area projects: does the problem statement and analysis identify the drivers of environmental degradation which need to be addressed through multiple focal areas; and is the objective well-defined, and can it only be supported by integrating two, or more focal areas objectives or programs?	Does not apply.

2) the baseline scenario or any associated baseline projects	Is the baseline identified clearly?	Yes. Baseline narratives for land degradation, biodiversity conservation, and knowledge management are described in the PIF.
	Does it provide a feasible basis for quantifying the project's benefits?	Partly. STAP recommends describing more clearly the methods that will be used to quantify and monitor the global environmental benefits. STAP suggest the team revising some of the metrics around quantification of project benefits. Example II.1.5 mentions Sustainable pasture management in 500,000 ha; when the preceding table establishes a project contribution of 50,000 ha of pasture land.
	Is the baseline sufficiently robust to support the incremental (additional cost) reasoning for the project?	Yes. However, as stated above, STAP recommends for the methodologies to be described more thoroughly.
	For multiple focal area projects:	
	are the multiple baseline analyses presented (supported by data and references), and the multiple benefits specified, including the proposed indicators;	Does not apply.
	are the lessons learned from similar or related past GEF and non-GEF interventions described; and	Partly. STAP recommends a more robust description of past, or on-going, initiatives in the project document. The baseline scenario identifies relevant projects that could become nexus for learning and dissemination of knowledge within and beyond the project area.
	how did these lessons inform the design of this project?	See above. Additionally, it is difficult to assess whether previous lessons informed the design of the PIF.
3) the proposed alternative scenario with a brief description of expected outcomes and components of the project	What is the theory of change?	The project's theory of change is that multiple types of benefits can be unlocked when land and water resources are managed in an integrated way that takes the full range of ecosystem services into consideration. The project's three components are closely aligned and linked to ensure a landscape approach within Turkmenistan's Amu Darya watershed for sustainable land and water that ensures the continuity of ecosystem services that sustain livelihoods. This is why the project targets multiple types of geographic areas: irrigated agricultural land, pasture land, and critical ecosystems (protected and otherwise).
	What is the sequence of events (required or expected) that will lead to the desired outcomes?	The PIF did not detail these steps. STAP suggests sequencing the intervention options, the alternative pathways and decision triggers for switching paths. Tied with this activity is stakeholder mapping - who should be responsible. STAP's primer on the theory of change can be useful in developing a theory of change: http://www.stagef.org/publications as well as RAPTA2: https://research.csiro.au/eap/rapta/ Of note is that STAP guidance on behavioral change and sustainability of outcomes will be further reviewed during the PPG phase, with additional specific aspects of the project designed to ensure sustainability (pg 22)
	· What is the set of linked activities, outputs, and outcomes to address the project's objectives?	See above.
	· Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?	Assumptions have not been identified. STAP's primer on the theory of change can assist project developers identify assumptions.
	· Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?	No - STAP recommended several resources in section 5 and 8 the project developers can use to implement adaptive management. In addition, developing a theory of change and embedding adaptive governance throughout this process, would enable project developers to respond to the project's changing conditions.

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund, LDCF, SCCF, and co-financing	GEF trust fund: will the proposed incremental activities lead to the delivery of global environmental benefits?	Yes, if a theory of change is developed, and revisited to confirm what, if any, adjustments are needed to reach the project objective.
	LDCF/SCCF: will the proposed incremental activities lead to adaptation which reduces vulnerability, builds adaptive capacity, and increases resilience to climate change?	Does not apply.
6) global environmental benefits (GEF trust fund) and/or adaptation benefits (LDCF/SCCF)	Are the benefits truly global environmental benefits, and are they measurable?	Yes. Methods need to be defined more thoroughly for measuring and monitoring the global environmental benefits.
	Is the scale of projected benefits both plausible and compelling in relation to the proposed investment?	Partly. Identifying assumptions in the theory of change, and clearly identifying what to do, who is to do it and who is to be engaged, would provide a better indication to what extent the benefits are likely to be achieved. A good theory of change and the Boards proposed to coordinate the project would enable identifying and adapting project management to ensure the range of benefits argued in the project are achieved.
	Are the global environmental benefits explicitly defined?	Partly. Some of the global environmental benefits require re-wording. For example, LDN is not a global environmental benefit. Increased soil organic carbon is a benefit that can result from LDN. Similarly, management effectiveness of PA is not a global benefits, but maintaining and improving the status of PA safeguards biodiversity.
	Are indicators, or methodologies, provided to demonstrate how the global environmental benefits will be measured and monitored during project implementation?	Partly. As noted above, the methods need to be described further; and metrics for indicators need to be developed.
	What activities will be implemented to increase the project's resilience to climate change?	Currently, the PIF does not describe how the project's resilience to climate change will be strengthened. STAP provides recommendations in sections 5 and 8 below on how to embed climate risks in the project, and apply systems analysis (a critical backbone of LDN approach), to increase the project's resilience.

7) innovative, sustainability and potential for scaling-up	Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?	Partly; there is innovation in the application of LDN and remote sensing for land use planning and for a baseline assessment that will be used in prioritisation of interventions. It would be valuable to provide further details on both of these methods, how they will address ecosystem and land degradation, contribute to scaling, and deliver global environmental benefits. Furthermore it is highly desirable the project appraises the feasibility of innovative business and financial models (e.g. public-private partnerships, the use of market-based instruments), and approaches for rehabilitation of degraded agricultural areas (e.g. phyto-remediation, etc). Papers that can be used to that end are: Baumber, A., Berry, E. and Metternicht, G., 2019. Synergies between Land Degradation Neutrality goals and existing market-based instruments. <i>Environmental science & policy</i> , 94, pp.174-181. Chasek, P., Akhtar-Schuster, M., Orr, B.J., Luise, A., Ratsimba, H.R. and Safriel, U., 2019. Land degradation neutrality: The science-policy interface from the UNCCD to national implementation. <i>Environmental science & policy</i> , 92, pp.182-190. Kust, G., Andreeva, O., Lobkovskiy, V. and Telnova, N., 2018. Uncertainties and policy challenges in implementing Land Degradation Neutrality in Russia. <i>Environmental science & policy</i> , 89, pp.348-356. Liniger, H., Harari, N., van Lynden, G., Fleiner, R., de Leeuw, J., Bai, Z. and Critchley, W., 2019. Achieving land degradation neutrality: The role of SLM knowledge in evidence-based decision-making. <i>Environmental science & policy</i> , 94, pp.123-134.
	Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors?	Partly. The types of innovation are described (LDN and remote sensing), but not how they will encourage scaling.
	Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?	Given the projected effects of climate change in Turkmenistan, change is certain to influence the project outcomes. STAP recommends for the project to be designed using a systems analysis and options for designing interventions through an iterative, flexible and responsive lens for adaptive governance. See section 8.
1b. Project Map and Coordinates. Please provide geo-referenced information and map where the project interventions will take place.		Different types of maps land use change, land degradation, and key biodiversity areas, are provided in the annex. STAP recommends providing the geo-referencing information where the project interventions will take place. Currently, the coordinates only for the key biodiversity areas are listed on page 52-55.
2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil society organizations; Private sector entities.If none of the above, please explain why. In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.	Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?	In the project document, STAP recommends defining the roles and responsibilities of each stakeholder in relation to the global environmental outcomes. The project developers can keep in mind the following questions as the project is designed: What are the stakeholders' roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge? Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?
	What are the stakeholders' roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?	See above.

<p>3. Gender Equality and Women's Empowerment. Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes/no/ tbd. If possible, indicate in which results area(s) the project is expected to contribute to gender equality: access to and control over resources; participation and decision-making; and/or economic benefits or services. Will the project's results framework or logical framework include gender-sensitive indicators? yes/no /tbd</p>	<p>Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?</p>	<p>Partly. Gender differentiated risks and opportunities will be considered in the project design. STAP is encouraged by the project's plan to apply gender sensitive data, identify appropriate indicators, and build on gender mainstreaming lessons from other projects. STAP would like for the gender methodology, and plan to be described further in the project document. In addition, STAP suggests to consider whether gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed in the project.</p>
	<p>Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed?</p>	<p>See above.</p>
<p>5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design</p>	<p>Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project's control?</p>	<p>Partly. The social risks and mitigation strategies are described in the PIF. It is clear that stakeholder engagement and deliberation processes will be implemented to address social differences, or risks, that may hamper the project. However, less clear is how the project intends to address climate risk.</p>
	<p>Are there social and environmental risks which could affect the project?</p>	<p>Yes. The PIF describes the social risks. The environmental risks, due to climate change, are less explained.</p>

	For climate risk, and climate resilience measures:	STAP suggests adding climate projection data for Turkmenistan in section 1 - to strengthen the context of the problem situation. If climate data is available for the project site, STAP recommends adding this data. The World Bank's climate knowledge portal is one source for climate data that the project developers may wish to use: https://climateknowledgeportal.worldbank.org/ Furthermore, STAP recommends developing the interventions bearing in mind the effects of climate change on temperature and precipitation. Key questions the project developers should ask during the project design are listed to the right. Both temperature and precipitation will be affected by climate change. STAP also recommends for the project developers to consider: 1) the period of time the intervention is expected to contribute to global environmental benefits, and how the activities may be affected by climate change; 2) how each intervention will be impacted by climate variability, or weather-related disasters (e.g. droughts); and, 3) how might climate, and non-climate stressors (e.g. social changes mentioned in the PIF), interact to exacerbate climate risks? The project developers may wish to refer to U.S. AID's Climate Risk and Management tool: https://www.climatelinks.org/resources/climate-risk-screening-management-tool ; and STAP's guidance on climate risk assessment: http://www.stapgef.org/stap-guidance-climate-risk-screening . STAP also recommends the team to access recent research on the interconnections between climate change, water resources and food in Turkmenistan. Water availability is central to this project. Duan, Weili, Yaning Chen, Shan Zou, and Daniel Nover. "Managing the water-climate-food nexus for sustainable development in Turkmenistan." Journal of Cleaner Production 220 (2019): 212-224.
	· How will the project's objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately?	See above.
	· Has the sensitivity to climate change, and its impacts, been assessed?	See above.
	· Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with?	See above.
	· What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures?	See above.
6. Coordination. Outline the coordination with other relevant GEF-financed and other related initiatives	Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?	Yes, the PIF identifies several initiatives which will contribute to this project.
	Is there adequate recognition of previous projects and the learning derived from them?	Yes. However, STAP suggests describing further the lessons from previous, or on-going, initiatives should be detailed in the project document. Also, the project's theory of change and component 3 should describe how lessons from previous projects are being used to inform the design of the project, and scale-up learning on sustainable land and water management in the Aral Sea Basin.

	Have specific lessons learned from previous projects been cited?	See above.
	How have these lessons informed the project's formulation?	See above.
	Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects?	See above.
8. Knowledge management. Outline the "Knowledge Management Approach" for the project, and how it will contribute to the project's overall impact, including plans to learn from relevant projects, initiatives and evaluations.	What overall approach will be taken, and what knowledge management indicators and metrics will be used?	STAP suggests building adaptive management, learning and knowledge into the project design, which should rely on LDN's systems thinking principles. Implementing adaptive governance has an important role to play in this regard. Adaptive governance is defined as "Adaptive Governance helps you to deal with complexity, uncertainty and rapid change in legitimate, equitable and effective ways. It involves creating governance structures and processes that enable adaptability, trusted collaboration and Active Learning. This is achieved through establishing key roles, responsibilities, decision-making processes and accountabilities in the governance of intervention design, implementation and assessment." The project developers may wish to consider the Resilience, Adaptation Pathways and Transformation Approach, version 2 as a guide on how to embed adaptive governance in the project: https://research.csiro.au/eap/rapta/
	What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?	Plans for scaling up results need to be described.
STAP advisory response	Brief explanation of advisory response and action proposed	
1. Concur	STAP acknowledges that on scientific or technical grounds the concept has merit. The proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement.	
	<i>* In cases where the STAP acknowledges the project has merit on scientific and technical grounds, the STAP will recognize this in the screen by stating that "STAP is satisfied with the scientific and technical quality of the proposal and encourages the proponent to develop it with same rigor. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design."</i>	
2. Minor issues to be considered during project design	STAP has identified specific scientific /technical suggestions or opportunities that should be discussed with the project proponent as early as possible during development of the project brief. The proponent may wish to:	
	(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised;	
	(ii) Set a review point at an early stage during project development, and possibly agreeing to terms of reference for an independent expert to be appointed to conduct this review.	

	The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.	
3. Major issues to be considered during project design	STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical methodological issues, barriers, or omissions in the project concept. If STAP provides this advisory response, a full explanation would also be provided. The proponent is strongly encouraged to:	
	(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised; (ii) Set a review point at an early stage during project development including an independent expert as required. The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.	