



ADAPTATION FUND

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Adaptation Fund Board
Project and Programme Review Committee
Thirty-eighth Meeting
Bonn, Germany, 19-23 October 2026

PROPOSAL FOR MONGOLIA (1)



ADAPTATION FUND

ADAPTATION FUND BOARD SECRETARIAT
TECHNICAL REVIEW OF PROJECT PROPOSAL FOR
"CLIMATE-SMART RANGELANDS AND LIVESTOCK VALUE CHAINS FOR SUSTAINABLE
ADAPTATION (RAISE) PROJECT"

Project Title Climate-Smart Rangelands and Livestock Value Chains for Sustainable Adaptation (RAISE) project

Project ID AF00000512

Category Regular size project (over \$1 million)

Type Single country project

Stage Concept

Country Mongolia

Implementing Entity UNDP

Financing Requested USD 15,000,000.00

Reviewer Gisela Ferrari

Co-reviewer(s)

IE Contact Person

Missale Woldegiorgis, Nancy Bennet, Radhika Dave, Robin Merlier, Samar Taha, Wirunpat Meebungprav

Secretariat's Overall Comment

The project “Climate-Smart Rangelands and Livestock Value Chains for Sustainable Adaptation (RAISE) project” aims to enable herder communities to better adapt to climate change through regenerative rangeland management that integrates improved governance, climate-smart restoration, market-based incentives, and evidence-informed decision-making.

The proposal includes a request for a project formulation grant of USD 150,000.

The initial technical review raises several issues, related to the Theory of Change, inclusion of sectoral plans, the Checklist of ESP Principles, Alignment with the AF Results framework and the Gender Assessment to list a few, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review.

The second technical review identifies several outstanding issues across multiple sections of the concept note, including the accuracy and consistency of component numbers and financing amounts, the justification for UNDP’s dual role as Implementing Entity and Executing Entity, the clarity and structure of the Theory of Change, the alignment with sectoral plans, the screening of environmental and social risks including clearer articulation of risk pathways and corresponding mitigation measures, and the need for an initial analysis of alternatives. These issues are reflected in the set of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review.

Country Eligibility

Is the country party to the Kyoto Protocol, or the Paris Agreement?

Response: Yes

Secretariat: The country has ratified both the Kyoto Protocol (15 December 1999) and the Paris Agreement (21 September 2016).
(August 18, 2026)

Is the country a developing country particularly vulnerable to the adverse effects of climate change?

Response: Yes

Secretariat: Yes. The country is vulnerable to the adverse effects of climate change, manifested in rising temperatures, shifting precipitation patterns, and more frequent droughts, dzuds and other extreme weather events. Climate-related disasters such as floods, high-intensity rainfall events, and dust and snowstorms endanger human lives and health, cause livestock losses, and damage essential infrastructure, but the dzud remains the principal disaster directly threatening herder livelihoods at both regional and national scales. (March 5, 2026)

Project Eligibility

Has the designated government authority for the Adaptation Fund endorsed the project/programme?

Response: Yes

Secretariat: As per the Endorsement letter dated 18 July 2025. (March 5, 2026)

Does the length of the proposal amount to no more than Fifty pages for the project/programme concept, including its annexes?

Response: Cleared

Secretariat: Yes. The total number of pages is 48 including Annexes. The CN can benefit from a final proof reading and the inclusion of a Table of Contents, List of Tables and Figures and List of Abbreviations. (March 5, 2026)

Response: Cleared

Secretariat: The total number of pages is 51 including cover page, table of contents, list of tables and figures, list of abbreviations, and annexes. (August 18, 2026)

Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?

Response: Not Cleared

Secretariat: Yes. However additional information is required. The project seeks to enable herder communities to better adapt to climate change through regenerative rangeland management that integrates improved governance, climate-smart restoration, market-based incentives, and evidence-informed decision-making (paragraphs 50-142). The concept includes a justification for selection of the programme site (pp 12 – 13) and includes a description of how it will address maladaptation (page 24). For some of the Project Outputs, illustrative activities are provided which give a good indication of the actions to be undertaken to achieve substantial and tangible outcomes. The project activities align well with the goals and objectives and show cohesion of the Components.

However, for some of the activities, it would be useful to include more quantitative information to get a better justification for the costs.

The linkage with the AF Strategic Objectives is provided in Part III A (para 206 – 208).

CAR 1: Outputs 3.3, 3.4, 4.1 and 4.5 do not include Illustrative activities, please include in the relevant section.

CR 1: Regarding Output 2.4 mentions micro-grants channeled through Herder Development Funds please clarify the following;

1. Who will manage those funds?
2. Is there a track record of success with such grants?
3. What measures will be put in place to ensure equitable and fair access as well as sustainability?

The Theory of Change is described in paragraphs 41 to 44 and illustrated in Figure 6. It shows the root causes and threats, posed by the climate scenarios and the logic of how the project's outcomes and outputs will contribute to the impact and overall project objectives. However, the ToC does not include the risks and assumptions.

CR 2: Please include the risks and assumptions in the ToC

(March 5, 2026)

Response: Not Cleared

Secretariat: CAR1: Not cleared. Outputs 3.3, 3.4, 4.1, and 4.4 include illustrative activities. However, the proposal should more clearly articulate how the described interventions will lead to the achievement of each output. A clearer organization of the interventions and a more explicit explanation of how each contributes to the intended results is recommended.

CR1: Cleared. According to paragraphs 81-83:

1. Funds will be managed first by the UNDP and later transferred to the Government through the Herder Development Funds.
2. The Small Grants Programme has operated for decades and has supported thousands of successful community projects worldwide, including in Mongolia.
3. Transparent selection rules, priority for women and youth, phased payments, and support for vulnerable groups will ensure fairness and long term viability.

CR2 (new): Not cleared. The ToC includes key assumptions and risks (Figure 6). However, several elements could be strengthened. While the components, outputs, outcomes, and impacts are logically connected, the diagram would benefit from more explicit causal linkages showing how each intervention leads to the stated outcomes. Additionally, the Gender Action Plan is presented as a cross-cutting pillar, but the diagram does not clearly show how gender-responsive activities are embedded within each output. Clarifying these linkages will improve readability and strengthen the results logic. It is recommended to remove UNDP and UNIDO from the diagram; their inclusion in the ToC diagram creates inconsistency with the Project Components and Financing table in Part B.

(August 18, 2026)

Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?

Response: Not Cleared

Secretariat: Yes. However additional information is required. Part II B (paragraphs 143 – 153) describes the economic, social and economic benefits of the project. It includes information on the expected beneficiaries and outlines how the vulnerable communities will be identified, including the selection criteria. Measures to address negative development or maladaptation are also described. However, there are no quantitative estimates of those benefits, neither does the section describe the measures which will be taken to ensure equitable distribution of benefits to vulnerable communities, households and individuals.

CAR 2: Please include where possible quantitative estimates of benefits

CR 3: Please describe the process through which the project will ensure equitable distribution of the project benefits.

CAR 3: Please specify in the PFG that resources will be used to develop the full gender assessment with associated Gender Action Plan.

(March 5, 2026)

Response: Not Cleared

Secretariat: CAR2: Cleared. The revised section (Paragraphs 126-130) includes quantitative estimates of both beneficiaries and benefits, specifying 4,000 direct herder households (16,000 individuals), at least 50% women and 30% youth, plus 20,000 indirect beneficiaries. It also quantifies expected benefits, including projected reductions in livestock mortality (15–25%), increases in productivity (10–20%), income gains (20–30%), expected price premiums (15–30%), job creation (around 500 jobs), and measurable rangeland restoration targets (one million hectares, 60 water points, and improvements in vegetation and biomass).

CR3: Cleared. The proposal describes a clear process to ensure equitable distribution of benefits. It includes participatory beneficiary selection, transparent criteria, priority scoring for women, youth, persons with disabilities, and small herder households, and reserving at least 50% of training and micro grant opportunities for women. Social Inclusion Assessments inform Benefit Distribution Plans, while beneficiary registries, community scorecards, and a multi-level grievance mechanism will ensure accountability and fair access (Paragraph 128).

CAR3: Not cleared. The PFG form explicitly states that resources will be used to prepare the full Gender Assessment and the Gender Action Plan to ensure equitable participation and benefit sharing. However, paragraph 136 of the proposal currently indicates that a comprehensive Gender Assessment and Gender Action Plan have already been developed, and similar statements appear throughout the CN. This is inconsistent with the PFG form, which specifies that PFG resources will finance the preparation of the gender and social inclusion analysis and the development of the GAP. Please clarify that both instruments will be prepared and finalized during the full-proposal stage. The GAP should be developed and updated as needed during full-proposal preparation to ensure full alignment with AF policies and with the detailed design of project activities.

(August 18, 2026)

Is the project / programme cost effective?

Response: Cleared

Secretariat: Yes. Part II D (para 154 – 159) proposes a logical explanation of the selected scope and approach. It emphasizes prevention over reactive relief, leverages existing systems to cut overheads, and generates multiple long-term returns that exceed the \$15 million investment.

Cost effectiveness is also demonstrated from a sustainability point of view by inter alia embedding costs in soum fees, taxes, and by-laws; and transition to self-enforcing apps, scorecards, and industry governance.

(March 5, 2026)

Response: Not Cleared

Secretariat: CAR3 (new): Paragraph 143 states that at the full proposal stage, a comprehensive cost benefit and alternatives analysis will be undertaken. However, please include an initial analysis of alternatives at this stage.
(August 18, 2026)

Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?

Response: Not Cleared

Secretariat: Yes. However additional information is required. Part II C lists all the relevant plans and strategies including the NAP, NDC, Vision-2050 Long-term Development Policy of Mongolia; the medium-term strategy for implementation of the Sendai Framework for disaster risk reduction in Mongolia and the sectoral plan for the livestock sector and the and the Cross-Sectoral Strategic Plan for Promoting Gender Equality (2022–2031), showing how the project is aligned with each of the plans.

However, it does not include information on National Food Security Plans, nor other relevant sectoral plans such as the water sector which are important considerations for the project.

CAR4: Please confirm if the Mongolia Sustainable Development Vision 2030 is still in effect and please include a link to this policy.

CR4: Please include other relevant sectoral plans as well as the years of the Livestock Sector Plan and the Vision 2030 Long Term development plan.

CR5: Kindly include the details of the identified plans and strategies in table format, including:

- (i) The Specific name of the plan/strategy and years of implementation
- (ii) Main Objective(s)
- (iii) Explain the relevance to the proposed project, including its alignment with the existing plan or strategy. A suggested structure could be: 'The proposed project is aligned with [Plan XX], under)Specific Action XX], contributing to [Outcome XX]".

(March 5, 2026)

Response: Not Cleared

Secretariat: CAR4: Not cleared. A note has been included in paragraph 145 clarifying that Mongolia's Sustainable Development Vision 2030 is no longer in effect, as it was superseded by the Vision 2050 Long-term Development Policy (Parliament Resolution No. 52/2020). Please include the link to this policy in the CN

(<https://www.vision2050.gov.mn/eng/v2050.html>).

CR4: Not cleared. Table 3 in Section D includes the National Food Security–related plans (Food Revolution Programme and Parliament Resolution No. 36/2022) and key water–sector policies (National Water Policy and Water Sector Strategy 2020–2030), with their respective years, objectives, and alignment statements. It also specifies the years of the Livestock Sector Plan (White Gold National Programme, 2024–2028) and clarifies that Vision 2030 has been superseded by Vision 2050 (2020–2050). Please note that, as in several other sections, not all updates appear in track changes. Please ensure that all future edits are properly tracked to facilitate review. To further strengthen the section, it is recommended to add additional sectoral policies, including the Green Development Policy (2014), the State Policy on Agriculture (2016–2025), the National Programme on Combating Desertification (2021–2030), and the National Disaster Protection Law (2017).

CR5: Cleared. The plans and strategies have been included in table format (Section D, Table 3), specifying their full names, implementation periods, and main objectives. The table also explains the project’s alignment with each plan, indicating the specific objectives or priority actions to which the project contributes.

(August 18, 2026)

Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?

Response: Not Cleared

Secretariat: Yes. However additional information is required. Part II E (para 167 – 168) lists the relevant technical standards and regulations and describes how the project is aligned with them on the basis of specific themes.

CR6: To support the information already provided, please briefly provide information on the procedures for compliance.

(March 5, 2026)

Response: Cleared

Secretariat: CR6: Cleared. A description of the compliance procedures has been added, covering environmental and social screening, required technical clearances, regular monitoring and reporting, and a corrective action process for any non-compliance (Section E, Paragraphs 149-151).

(August 18, 2026)

Is there duplication of project / programme with other funding sources?

Response: Cleared

Secretariat: No. Part II F presents a table which summarizes related projects and programmes, identifies synergies to leverage, and explains the unique value added by this project. Paragraph 170 also describes the coordination mechanism which will be used by the project and Para 171 explains further the unique value of the proposed project.

(March 5, 2026)

Does the project / programme have a learning and knowledge management component to capture and feedback lessons?

Response: Not Cleared

Secretariat: Yes. Part II G (para 172 – 173) explains that the project embeds learning and knowledge management in Component 4, drawing on lessons from past initiatives like World Bank's Sustainable Livelihoods Programme and GCF's ADAPT programme to overcome issues like localized impacts and weak scale-up. Key capture mechanisms used include: a National Rangeland MRV Platform, a Climate-Smart Pastoralism Working Group, Annual Reports and Resources, horizontal and vertical knowledge flow and dissemination and the use of channels such as blended digital (dashboards, e-learning) and traditional (workshops, media, conferences); institutionalized via university partnerships, South-South exchanges,

The project enables adaptive management through evaluations such as midterm/terminal reviews and participatory assessments.

CR 7: Please clarify which entity/unit or individual in the PMU will be responsible for systematically tracking and management of the collection of experiences gained. The roles of data oversight and accountability for tracking are not explicit.

CAR5: Please reframe component 4 of the proposal to remove monitoring and evaluation from it as this to be covered under IE fees and EE costs.

(March 5, 2026)

Response: Cleared

Secretariat: CR7: Cleared. Section G (paragraphs 155-158) clarifies that the Project Management Unit (PMU), housed at UNDP, holds primary responsibility for systematically tracking and managing the collection of experiences and lessons learned throughout the project cycle. Within the PMU, the Knowledge Management and Communications Officer will be designated as the individual responsible for this function. The section also specifies that data oversight and quality assurance will be jointly led by MECC and ALAMGaC through a formal data governance protocol, ensuring clear accountability for both knowledge management and data integrity.

CAR5: Cleared. Component 4 focuses on knowledge, learning, and data integration functions such as establishing the National Rangeland MRV Platform, convening Business and Policy Roundtables, and enabling domestic and global knowledge sharing, as described in paragraphs 106-125.

(August 18, 2026)

Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?

Response: Not Cleared

Secretariat: Yes. However additional information is required. Part II H (para 174 – 178) describes the inclusive, and multi-stakeholder consultative process which took place in preparation of the proposal, ensuring that the concerns of marginalized and vulnerable groups in target communities were taken into consideration. A comprehensive list of various categories of stakeholders is also provided in that section of the proposal.

CAR 6: Please prepare a table that provides a comprehensive list of the stakeholder consultations convened in the country. This may be placed in the Annex and referenced in Section II:

- (i) The total number of attendees, disaggregated by sex, with background information to verify whether marginalized and vulnerable groups have been consulted. Please ensure the names of the stakeholders are also highlighted.
- (ii) A summary of the subjects/issues discussed and agreements reached
- (iii) Indicate how their interests have been incorporated into the project, including how gender and other vulnerable group considerations were addressed.

CAR 7: Clearly indicate participation of stakeholders with a gender remit.

(March 5, 2026)

Response: Cleared

Secretariat: CAR6: Cleared. Table 6 in Section H summarizes all stakeholder consultations during CN development, listing the names of participating stakeholder groups and the total number of attendees disaggregated by sex. It also provides a summary of the issues discussed and indicates how these inputs were incorporated into the proposal. In addition, paragraphs 160-168 further describe how consultations with herders, women, youth, poor households, displaced households, and persons with disabilities help to shape the project design.

CAR7: Cleared. Stakeholder participation with a gender remit is documented in Table 6 Section H, which includes dedicated consultations with the National Committee on Gender Equality and the gender focal points of Dundgovi and Sukhbaatar aimags.

(August 18, 2026)

Is the requested financing justified on the basis of full cost of adaptation reasoning?

Response: Not Cleared

Secretariat: Yes. Part II I (para 179 – 188) provides a comprehensive justification for the funding requested, using a clear structure: contrasting business-as-usual (BAU) vulnerabilities with AF additionality, embedding into national policies, detailing impact pathways, and justifying incremental costs.

CAR8:

1. Please clarify how the implementation will ensure that “a market-based architecture that mobilizes private co-finance and converts time-bound grants into recurring, self-financing systems” (see paragraph 157) will not adversely impact the successful implementation of the AF grant.
2. Please remove the word “incremental” from paragraph 184.

(March 5, 2026)

Response: Not Cleared

Secretariat: CAR8:

1. Cleared. Paragraph 141 in Section C explains that AF funded core adaptation activities do not depend on private co-finance, that market-based mechanisms are additive and intended only to scale and sustain results, and that implementation will be phased and risk managed so AF delivery is never compromised. It also notes that governance arrangements will monitor private sector engagement and ensure AF resources remain fully aligned with adaptation outcomes even if co-finance underperforms. The text added is not in track changes,

please ensure full visibility of the modification.

2. Not cleared. Please ensure that the word “incremental” was removed as indicated. This could not be verified, as former paragraph 184 does not appear to contain the term.

(August 18, 2026)

Is the project / program aligned with AF's results framework?

Response: Not Cleared

Secretariat: No.

CAR 9: The alignment table Part III A has to be revised according to the instructions and example provided in the following link: <https://www.adaptation-fund.org/wp-content/uploads/2025/11/Alignment-with-Adaptation-Fund-Results-Framework-Template-and-guidance-Nov-2025.docx>

(March 5, 2026)

Response: Not Cleared

Secretariat: CAR9: Not cleared. Please adjust Table 8 following the AF guidance (<https://www.adaptation-fund.org/wp-content/uploads/2025/11/Alignment-with-Adaptation-Fund-Results-Framework-Template-and-guidance-Nov-2025.docx>). Ensure that each AF output corresponds to the AF outcome listed in the first part of the table and disaggregate the budget using the grant amount associated with each Fund outcome/output indicator. Please do not lump together amounts for various indicators.

(August 18, 2026)

Has the sustainability of the project/programme outcomes been taken into account when designing the project?

Response: Cleared

Secretariat: Yes. Part II J (para 189 – 197) provides a comprehensive and robust description of sustainability across all key dimensions (institutional, financial, market, social, environmental, technical, and replication and scaling), explicitly addressing design choices that ensure post-project continuity without ongoing external funding.

(March 5, 2026)

Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?

Response: Not Cleared

Secretariat: Yes. However additional information is required. Part II K (para 198 – 205) describes the potential environmental and social impacts and risks. The project is classified as Category B. The gender-specific cultural and legal context which the project will operate has not be elaborated neither has the initial Gender Assessment been completed. However, the proposal states that a Gender Action plan will be completed in the Full proposal stage.

The checklist of environmental and social impacts and risks against the 15 ESP principles is partially completed. The process screening process does not indicate that it covers all direct, indirect, transboundary and cumulative impacts and risks that could result from the proposed project.

CAR 10: Please provide an initial gender assessment, qualitative and quantitative data on gender roles, activities, needs and available opportunities and challenges or risks for men and women. Paragraphs 6 to 9 provides useful information for the analysis but please consider the differentiated impacts of climate change on men and women.

CAR 11: Please revise the Checklist table as follows:

1. There should be three columns, Column 1 – Checklist Principle, Column 2 – No further Assessment Required and Column 3 – Potential impacts and risks – further assessment and management required for compliance
2. Complete the table using those new headings
3. For each principle also include the level of risk – none, low, medium or high and for each principle under Potential Impacts please provide justification to substantiate the conclusions.
4. Please note that Principles 1, 4 and 6 always apply and should be unchecked.

CR 8: Please confirm that the screening process covers all potential direct, indirect, transboundary and cumulative impacts and risks that could result from the proposed project/programme.

(March 5, 2026)

Response: Not Cleared

Secretariat: CAR10: Cleared. Section K, paragraphs 188–192 provide both qualitative and quantitative data on gender roles, activities, needs, opportunities, and vulnerabilities for women and men, and they also address the differentiated impacts of climate change, including workload changes, mobility constraints, health impacts, recovery challenges, and GBV risks.

CAR11: Not cleared. Table 7 includes the three required columns and principles 1, 4, and 6 remain unchecked. However, please better articulate the risks associated with each principle and the mitigation measures that will be implemented to address those risks in Table 7. Additionally, please remove the following text from paragraph 194: “Note that Principles 1 (Compliance with the Law), 4 (Human Rights), and 6 (Core Labour Rights) always apply and therefore cannot be marked as requiring no further assessment”. On page 42, please adjust the formatting, as Part III currently begins in the middle of a paragraph.

CR8: Not cleared. The screening process covering all direct, indirect, cumulative and transboundary impacts is described in the narrative immediately following Table 7, in particular paragraph 198 (“Scope of impact assessment”), which states that all four categories of impacts have been assessed and that no significant adverse effects are anticipated. However, please state that further evaluation of potential risks and impacts for each Adaptation Fund ESP principle will be undertaken during the full proposal development stage, and that corresponding mitigation measures will be refined during preparation of the Environmental and Social Management Plan (ESMP) at the Full Proposal stage.

(August 18, 2026)

Resource Availability

Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?

Response: Not Cleared

Secretariat: Yes. The figures are rounded to a whole number, are consistent across the Components Table and AF Alignment table. The Implementation Entity Management Fee is at 8.5 % of the total budget before fee. The PFG is USD 150,000 which is appropriate for a proposal of this size budget.

CAR12: Please confirm if Ministry of Environment and Climate Change (MECC), UNDP and UNIDO will all execute the PFG or if the PFG will be executed by UNDP. If the latter, please amend the PFG request form.
(March 5, 2026)

Response: Not Cleared

Secretariat: CAR12 (new): Not cleared.

1. Cleared. The IE management fee is capped at 8.5% of the total programme budget before the fee.
2. Not cleared. The PFG form was amended to show that UNDP will execute the PFG, and the IE fee is capped at 8.5% of the total PFG requested. However, please adjust paragraph 46 to clearly state that UNDP will execute the PFG, with UNIDO and national counterparts providing technical inputs and coordination support as relevant.
(August 18, 2026)

Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?

Response: Not Cleared

Secretariat: Yes. However, some modification is required. In the components financing table, the figures are rounded to a whole number and add up and match across all tables. The Project Execution Cost is 9.5 % of the total budget.

It is noted that the Implementing Entity, UNDP, is also servicing as one of the Execution Entities. Please note, In case of Implementing Entity serving as the Executing Entity, the limit for execution is 1.5%. When the IE provides part of execution services for the project, to limit the execution costs of the IE to 1.5 per cent of the cost of the part of the project or programme executed by the implementing entity of the project/programme cost. In both cases, the justifications must be provided, as this arrangement can be approved only on an exceptional basis.

CAR 13: In the components financing table please enter the budget at output level so that it is clear what the cost is for each output.
(March 5, 2026)

Response: Not Cleared

Secretariat: CAR 13: Not cleared. In the components financing table please enter the budget at output level so that it is clear what the cost is for each output.

CAR13 (new):

1. For better readability, please indicate the cost of each output directly in the "Amount" column and add a row at the end of each component summarizing the total cost per component. This will allow easy visualization of the cost distribution across outputs, outcomes and components.
2. In Section B, please revise the Project Components and Financing table to include a separate line for "Project Subtotal (Components 1–4): USD 12,680,375" before listing the EE and IE costs.
3. Please ensure that the Project Components and Financing table includes its corresponding table number.

4. Please use full numbers in paragraphs 48 and 49 and correct the component amounts in paragraph 48 as well as the EE amount in paragraph 49.
5. Paragraphs 206–211 describe the project governance structure; however, please clearly justify why UNDP will serve simultaneously as Implementing Entity and Executing Entity in some cases.
6. Update the component numbers, names, and amounts throughout the proposal and ensure they are accurately reflected in the portal.

(August 18, 2026)

Eligibility of IE

Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?

Response: **Cleared**

Secretariat: Yes. UNDP's accreditation is valid until 11 October 2029.

(March 5, 2026)



ADAPTATION FUND

CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme: Climate-Smart Rangelands and Livestock Value Chains for Sustainable Adaptation (RAISE) project

Country: Mongolia

Thematic Focal Area: Food Security

Type of Implementing Entity: Multilateral Implementing Entity

Implementing Entity: UNDP

Executing Entities: Ministry of Environment and Climate Change (MECC), UNDP and UNIDO

Amount of Financing Requested: 15,000,000 (U.S Dollar Equivalent)

Project Formulation Grant Request (available to NIEs only): Yes ☒ No ☐

Amount of Requested financing for PFG: 150,000 (in U.S Dollars Equivalent)

Letter of Endorsement (LOE) signed: Yes ☒ No ☐

NOTE: LOEs should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: <https://www.adaptation-fund.org/apply-funding/designated-authorities>

Stage of Submission:

☒ This concept has been submitted before

☐ This is the first submission ever of the concept proposal.

In case of a resubmission, please indicate the last submission date: January 23, 2026.

Please note that concept note documents should not exceed 50 pages, including annexes.

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List of Abbreviations

Abbreviation	Full Form	Abbreviation	Full Form
ADB	Asian Development Bank	GIS	Geographic Information System
AF	Adaptation Fund	GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ALAMGaC	Agency for Land Administration and Management, Geodesy and Cartography	GPS	Global Positioning System
ALMP	Annual Land Management Plan	GSNI	Gender Social Norms Index
ADAPT	Improving Adaptive Capacity and Risk Management of Rural Communities in Mongolia (GCF-funded project)	HACCP	Hazard Analysis and Critical Control Points
ASDIP	Aimags and Soums Green Regional Development Investment Programme	HFS	Herder Field Schools
CBD	Convention on Biological Diversity	HHA	Herder Household Association
CPR	Center for Policy Research	IBLI	Index-Based Livestock Insurance
DSL IP	Dryland Sustainable Landscapes Impact Programme	IFAD	International Fund for Agricultural Development
EBRD	European Bank for Reconstruction and Development	ILMP	Integrated Land Management Plan
EE	Executing Entity	IMWG	Inter-Ministerial Working Group
EIA	Environmental Impact Assessment	IRIMHE	Information and Research Institute of Meteorology, Hydrology and Environment
EIB	European Investment Bank	ISO	International Organization for Standardization
ESMP	Environmental and Social Management Plan	LCP	Livestock Commercialization Project
ESP	Environmental and Social Policy	LDN	Land Degradation Neutrality
EU	European Union	LOE	Letter of Endorsement
FAO	Food and Agriculture Organization of the United Nations	LWG	Leather Working Group
GBF	Global Biodiversity Framework	MALI	Mongolian Association of Leather Industry
GCF	Green Climate Fund	MASM	Mongolian Agency for Standardization and Metrology
GCIP	Global Cleaner Industrial Production Programme (UNIDO)	MECC	Ministry of Environment and Climate Change
GDP	Gross Domestic Product	MED	Ministry of Economy and Development
GEF	Global Environment Facility	MET	Ministry of Environment and Tourism
GHG	Greenhouse Gas	MFLSP	Ministry of Family, Labour and Social Protection

Abbreviation	Full Form	Abbreviation	Full Form
MMA	Mongolian Meat Association	RAP	Response Action Plan
MNCCI	Mongolian National Chamber of Commerce and Industry	RBA	River Basin Administration
MNFPUG	Mongolian National Federation of Pasture User Groups	RDC	Research and Development Center for Food, Agriculture and Light Industry
MNS	Mongolian National Standard	RIAH	Research Institute for Animal Husbandry
MNT	Mongolian Tugrug (national currency)	RUA	Rangeland Use Agreement
MOFALI	Ministry of Food, Agriculture and Light Industry	SDC	Swiss Agency for Development and Cooperation
MRV	Monitoring, Reporting and Verification	SDG	Sustainable Development Goal
MSCP	Mongolian Sustainable Cashmere Platform	SECIM	Support to Employment Creation in Mongolia (UNIDO project)
MULS	Mongolian University of Life Sciences	SFA	Sustainable Fibre Alliance
NAMAC	National Association of Mongolian Agricultural Cooperatives	SLP	Sustainable Livelihoods Programme (World Bank)
NAMEM	National Agency for Meteorology and Environmental Monitoring	SME	Small and Medium Enterprise
NAP	National Adaptation Plan	SOP	Standard Operating Procedure
NDC	Nationally Determined Contribution	SRF	Strategic Results Framework
NDVI	Normalized Difference Vegetation Index	TDB	Trade and Development Bank of Mongolia
NEMA	National Emergency Management Agency	TNC	The Nature Conservancy
NSO	National Statistics Office of Mongolia	UN	United Nations
NUM	National University of Mongolia	UNCCD	United Nations Convention to Combat Desertification
PFG	Project Formulation Grant	UNDP	United Nations Development Programme
PMU	Project Management Unit	UNFCCC	United Nations Framework Convention on Climate Change
PMPMD	Project for Market and Pasture Management Development (IFAD-funded project)	UNIDO	United Nations Industrial Development Organization
PSC	Project Steering Committee	USD	United States Dollar
PUG	Pasture User Group	WGI	White Gold Initiative
RAISE	Climate-Smart Rangelands and Livestock Value Chains for Sustainable Adaptation (project name)	WWF	World Wildlife Fund

A. Project Background and Context

General information

1. Mongolia is a land-locked country situated between China and Russia. With a land area of 1.56 million km² and a population of 3.5 million, Mongolia is one of the least densely populated countries on earth with about two people per km². The national landscape consists largely of dry grasslands, semi-deserts, and mountain ranges, transitioning from the taiga forests of the north to the Gobi Desert in the south. Rangelands cover 80 percent of the territory - around 120 million hectares - forming the ecological backbone of both livestock production and the country's biodiversity. Forests account for about 12 percent, and arable land constitutes less than 1 percent. The total water resources are approximately 596.8 km³, with lakes holding the largest share (532 km³), followed by rivers (34.6 km³), glaciers (19.4 km³) and groundwater (10.8 km³). For domestic water supply and ecosystem services, Mongolia depends heavily on rivers, lakes, and groundwater.¹

2. Mongolia remains one of the world's few predominantly pastoral nations. Pastoral livestock production contributes 75% of gross agricultural output, underpinning rural livelihoods, food security, light industry, and national identity. However, this foundation is increasingly vulnerable to climate change and socioeconomic pressures. Nearly two-thirds of the rural population depend on herding, yet climate-related shocks and limited access to quality education, healthcare, and social services are driving migration to urban areas. Between 1990 and 2019, about 663,000 people moved from rural areas to Ulaanbaatar, which is equivalent to 45% of the capital's 2019 population. At the same time, the share of herders aged 15–34 fell sharply from 57.7% in 1995 to 24.5% in 2024, raising concerns about rural workforce shortages and accelerating demographic ageing.²

3. Mongolia's economy is dominated by the mining sector—particularly coal, copper, and gold, which contributes 27.9% of gross domestic product (GDP) and over 87.9% of export earnings. Per-capita GDP in current prices has risen from USD 1220.2 in 1990 to USD 6750.6 in 2024.³ Poverty rates have fallen proportionally, yet absolute numbers remain high, particularly in rural areas where livelihoods depend on livestock and other climate-sensitive natural resources. Agriculture, including pastoral livestock production, employs 22.5% of the labor force and provides a critical social safety net.⁴ The economy remains highly exposed to external demand fluctuations, commodity-price volatility, and the cascading impacts of climate change.

4. Mongolia ranks 65th in the World Economic Forum's Global Gender Gap Index 2025, achieving 1st place globally in both Educational Attainment and Health and Survival. However, significant gender disparities persist in economic participation and political empowerment. Working-age women are 15% less likely than men to participate in the labor force, earn 25% less on average, and spend twice as much time on unpaid household work.⁵ These gaps are reinforced by persistent gender norms.

5. Rural women and girls face additional challenges, including limited access to sexual and reproductive health services and heightened risks of gender-based violence. Women, children, and older persons are particularly vulnerable during dzud events. The migration of young women to urban centers reflects these hardships: women represent only 24% of herders aged 15–24 and 34% of herders aged 25–34. In the target aimags of Sukhbaatar and Dundgovi, women account for 42% of herders.⁶ These trends also highlight a reverse gender gap in education, as most rural youth pursuing tertiary education are women. However, this pattern is shifting, with increasing numbers of young male herders seeking higher education and better employment opportunities in Ulaanbaatar, the mining sector, and abroad.

Climate context: national trends and target aimags (Dundgovi and Sukhbaatar)

6. Mongolia has a highly continental climate characterized by strong seasonality, extreme temperature variability, and generally low and erratic precipitation. Due to its high elevation, the country experiences long,

¹ Ministry of Environment and Tourism (2024). Fourth National Communication of Mongolia under the UNFCCC. <https://unfccc.int/documents/638318>

² National Statistics Office of Mongolia (2025b). Statistical Yearbook 2024. Retrieved from the Mongolian Statistical Information Service <https://www.1212.mn>

³ World Bank (2025). World Bank Open Data. <https://data.worldbank.org>

⁴ National Statistics Office of Mongolia (2025a). Agriculture Sector 2024. Retrieved from the Mongolian Statistical Information Service <https://www.1212.mn>

⁵ World Economic Forum (2025). Global Gender Gap Report 2025. <https://www.weforum.org/publications/global-gender-gap-report-2025/>

⁶ National Statistics Office of Mongolia (2025a). Agriculture Sector 2024. Retrieved from the Mongolian Statistical Information Service <https://www.1212.mn>

cold winters and short, increasingly hot summers, making climate-sensitive sectors—particularly pastoral livestock systems—highly vulnerable.⁷

7. Mongolia is warming at more than twice the global average. Mean surface temperatures during 2013–2022 were approximately 2.3°C higher than in the early 20th century, with most warming occurring since the 1980s. Annual precipitation remains low overall and highly variable. While long-term averages show only a modest increase, inter-annual and intra-seasonal variability has increased sharply.⁸ Figure 1 illustrates national trends in temperature and precipitation.

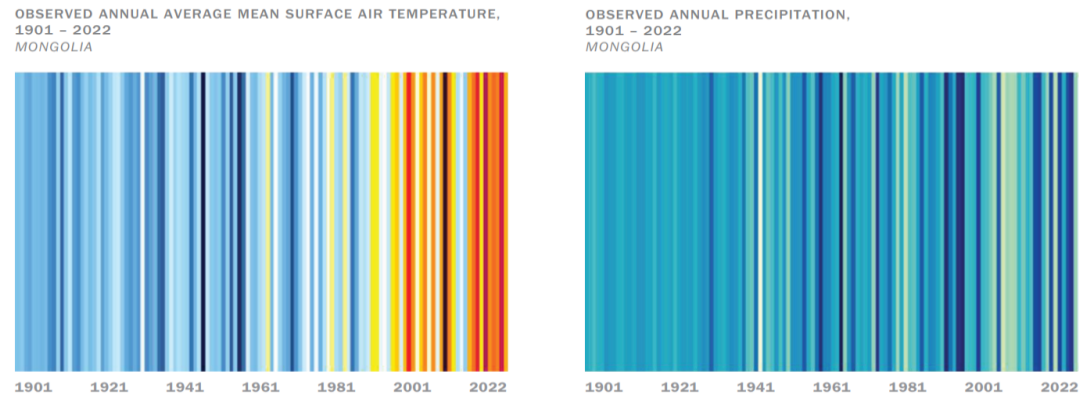
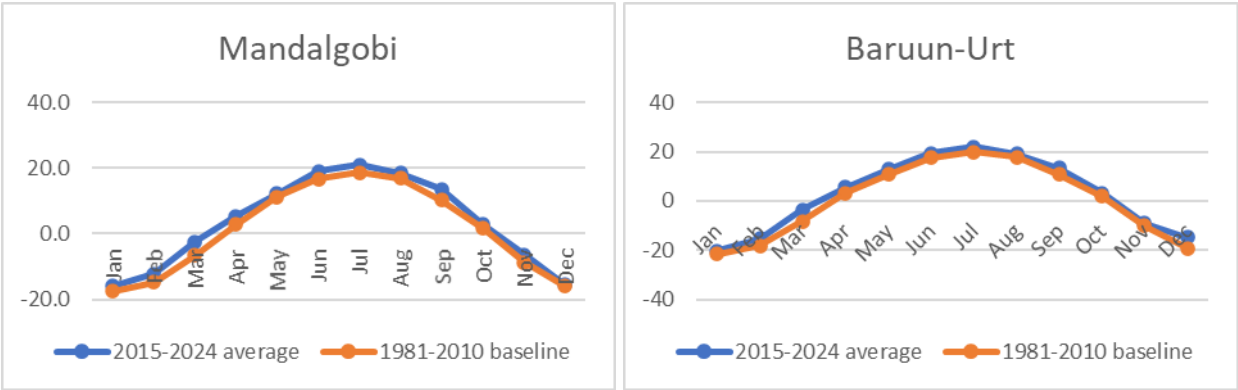


Figure 1. Temperature and precipitation patterns in Mongolia. Source: World Bank (2024)⁹

Note: In the left-hand pane, blue represents cooler temperatures and orange warmer temperatures over a range of approximately 4°C. In the right-hand pane, darker colors indicate more precipitation over a range of approximately 120 mm.

8. The target aimags reflect national climate trends. Both have experienced rapid warming over the past decade, with the strongest increases occurring in March and April, advancing snowmelt and increasing evaporation before soil recharge can occur. Although annual precipitation has increased modestly, declining early-summer rainfall limits pasture regeneration.

9. Between the 1981-2010 baseline and 2015-2024, mean annual temperature rose by 2.1°C at Mandalgobi (Dundgovi aimag center) and by 2.3°C at Baruun-Urt (Sukhbaatar aimag center), with the largest monthly increases in March (+4.2°C and +4.6°C, respectively) - confirming that the target aimags fully reflect the national warming trend, with earlier spring warming and advancing snowmelt (Figure 2). Mean annual precipitation (1991-2020) totals 120.6 mm in Dundgovi and 197.3 mm in Sukhbaatar; the 2015-2024 averages at the aimag centers are 14.9% and 18.4% above baseline, respectively, but June precipitation - critical for the onset of vegetation growth - declined in both aimags (Figure 3).^{10,11}



⁷ Information and Research Institute of Meteorology, Hydrology and Environment [IRIMHE] (2021). Atlas of monthly and annual climate norms. Ulaanbaatar.

⁸ World Bank (2024). Mongolia: Country climate and development report. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/099101624054532319>

⁹ World Bank (2024). Mongolia: Country climate and development report. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/099101624054532319>

¹⁰ National Agency of Meteorology and Environmental Monitoring [NAMEM] (2021). Climate service system.

¹¹ National Statistics Office of Mongolia (2025b). Statistical Yearbook 2024. Retrieved from the Mongolian Statistical Information Service <https://www.1212.mn>

Figure 2. Comparison of monthly mean air temperatures at Mandalgobi and Baruun-Urt stations: 2015-2024 average versus 1981-2010 baseline

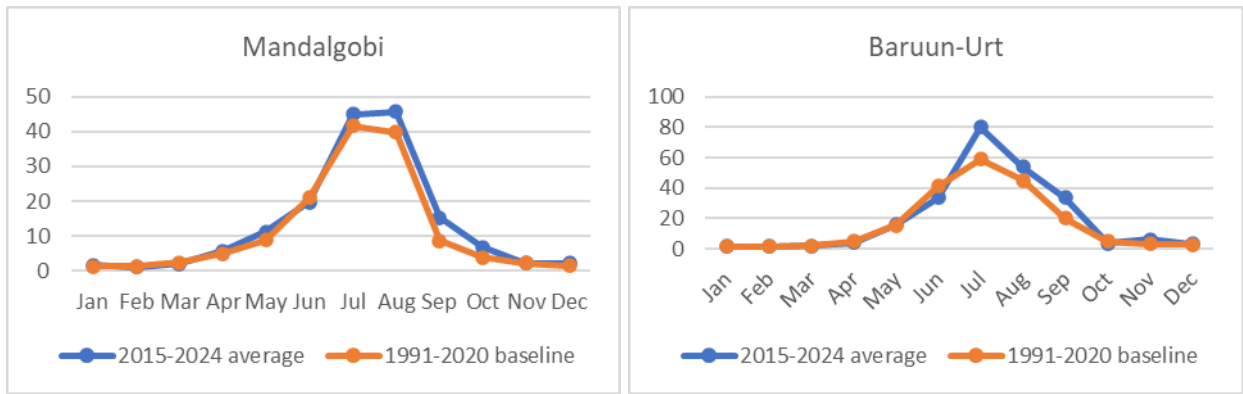


Figure 3. Comparison of monthly precipitation totals at Mandalgobi and Baruun-Urt stations: 2015-2024 average versus 1991-2020 baseline

10. These findings indicate that while overall precipitation has increased, the rapid warming in March and April causes snowmelt water to evaporate rather than infiltrate the soil. Consequently, rangeland vegetation begins its growth cycle under conditions of low antecedent soil moisture. Moreover, declining precipitation in June - when vegetation growth is most active - adversely affects rangeland productivity. This combination of early spring warming, reduced soil moisture recharge, and declining June precipitation creates unfavourable conditions for rangeland ecosystems and increases the vulnerability of herder livelihoods to climate variability.

Climate hazards and their impacts on the livestock sector

11. Hydrometeorological disasters have caused the loss of 599 human lives, 44.6 million heads of livestock and MNT 816.4 billion in economic damage between 2001 and 2024.¹² The hazard phenomena causing the highest damage to society and the economy include droughts, dzuds, forest fires, snow and dust storms and flash floods. Climate change is increasing the annual frequency of hydrometeorological hazards and disasters, which was 98 per year on average during the decade 1994-2024 - compared to 60 for the period 1990 and 2024¹³.

12. Drought frequency ranges from 10% in forest-steppe regions to 80% in desert regions, with a national average of approximately 20%, which indicates that a drought occurs roughly every five years.¹⁴ Droughts are often followed by dzud events, and vulnerability of livestock is increased when summer droughts have restricted the possibility to prepare sufficient hay and fodder reserves for the winter.

13. Dzud frequency and severity have increased significantly since the 1990s, culminating in major events during 1999–2002, 2009–2010 and in 2023–2024. The consecutive dzuds during the period 1999-2002 affected more than 80% of the country’s territory and caused the loss of 11.17 million livestock. In 2009-2010, more than 90% of the total area was affected, and the livestock losses were 10.32 million, with 43,555 households losing their entire herd while an additional 163,780 households lost at least half of their livestock.¹⁵ The 2023-2024 dzud killed 9.364 million animals, causing a 33% decline in the gross output of the livestock sector.¹⁶

14. Although characterized as an extreme weather “event”, a dzud has lasting consequences. Rangeland forage becomes scarce in April and remains so until vegetation begins in May. Mother animals have a very low survival rate even after the dzud, and this continues mostly until June. The productivity of the surviving livestock declines. Prices of live animals and livestock products drop, leading to reduced purchasing power of herders and limiting

¹² Ministry of Environment and Climate Change (2025). Status report of the environment of Mongolia 2021-2023 (in Mongolian). <https://mecc.gov.mn/storage/media/bd45b1d5-e370-4a56-92c8-dded592b646e.pdf>

¹³ National Agency of Meteorology and Environmental Monitoring [NAMEM] (2025). Meteorological disasters in 2024. <https://namem.gov.mn/d/danger/282>

¹⁴ Gomboluudev et al. (2018). Climate of Mongolia. In: Rangeland Ecosystem of Mongolia. pp. 75-107.

¹⁵ Save the Children Mongolia [SCM] (2016). Rapid Needs Assessment Report Mongolian Dzud, 2015-2016. https://reliefweb.int/sites/reliefweb.int/files/resources/Mongolia%20Dzud%202016%20Assessment%20Summary%20Report_Save%20the%20Children_8%20February%202016.pdf

¹⁶ National Statistics Office of Mongolia (2025a). Agriculture Sector 2024. Retrieved from the Mongolian Statistical Information Service <https://www.1212.mn>

their capacity to overcome the dzud e.g., by purchasing hay and fodder¹⁷. Poor and vulnerable herder households suffer the difficulties and consequences of dzuds most, often facing food shortages and malnutrition. Many herders who lost their livestock and migrated to Ulaanbaatar live in ger areas without adequate sanitation and with exposure to indoor and outdoor pollution¹⁸. As of April 2026, registered unemployment increased by 71.4% year-on-year in Sukhbaatar (288 persons, 47.9% women) and 86.6% in Dundgovi (181 persons, 56.9% women), with only 8.5% and 36.0% of job seekers placed in employment respectively. While other climate-related disasters such as floods, high-intensity rainfall events, and dust and snowstorms endanger human lives and health, cause livestock losses, and damage essential infrastructure, the dzud remains the principal disaster directly threatening herder livelihoods at both regional and national scales. Therefore, the proposed project focuses on dzud resilience as the foundation for strengthening adaptive capacity among herder communities.

15. **Rangeland degradation.** The Government of Mongolia's National Adaptation Plan (2024–2030) identifies three interrelated drivers of national vulnerability: high exposure to multiple climate hazards (dzud, drought, floods, and dust storms). Climate change increases the frequency and intensity of droughts, and the scale of aridity throughout the country¹⁹. Drought is the main climatic reason leading to rangeland degradation, which is further exacerbated by the increase in dust blowing days.²⁰ An estimated 76.9% of the country's territory is affected by desertification²¹.

16. **Increasing threat of dzud.** The increasing frequency and intensity of droughts correlates with an increase in the frequency and severity of dzuds.²² Causing mass losses of livestock, dzuds pose a direct threat to the livelihoods of herder households, who earn 90 to 96.4% of their income in animal husbandry.²⁴

17. **Decrease in livestock productivity.** Live weights of livestock are decreasing due to heat stress, reduced time of grazing resulting from the increasing number of extremely hot days, delayed summer seasons and the decline of rangeland biomass. There is also a declining tendency in the sheep wool output, while the goat shedding time has been shifted back by 5-10 days, reducing quality and market value of cashmere.²⁵

18. **Reduced availability of water.** The total flow norm of rivers in Mongolia for the period 1991-2020 decreased by 10% compared with the 1975-1990 period. In comparison with 1945, total number and area of lakes decreased by 13.4% and 7.4%, respectively, by 2020. The total area of glaciers decreased from 535 km² in 1940 by 37% to 338 km² in 2019. The proportion of the country's territory covered by permafrost declined from 63% in 1971 to 29.3% in 2016. Overall, water availability for both rangeland vegetation and livestock as well as for human consumption has reduced.²⁶

¹⁷ UNDP (2025). Socio-economic impact assessment of dzud 2023-2024: Dzud resilience strategy policy recommendations. United Nations Development Programme. <https://www.undp.org/mongolia/publications/socio-economic-impact-assessment-dzud-2023-2024-dzud-resilience-strategy-policy-recommendations>

¹⁸ World Bank (2025). Assessing the Adaptability of Social Protection and Enhancing Herder Resilience Against Climate Shocks in Mongolia. Washington, D.C.: World Bank Group. <https://documents1.worldbank.org/curated/en/099052125093016118/pdf/P174453-41f7d063-50f0-413d-b3a7-527b20e6a658.pdf>

¹⁹ Natsagdorj, L. and Erdenetsetseg, B. (2020). Impacts of climate change on crop production. In: Gantulga, G., Erdenebolor, B. (eds.), Climate adapted crop farming (in Mongolian). Ulaanbaatar: German-Mongolian cooperation project Sustainable Agriculture.

²⁰ Ministry of Environment and Tourism (2024). Fourth National Communication of Mongolia under the UNFCCC. <https://unfccc.int/documents/638318>

²¹ Ministry of Environment and Tourism (2024). Fourth National Communication of Mongolia under the UNFCCC. <https://unfccc.int/documents/638318>

²² Ministry of Environment and Tourism (2024). Fourth National Communication of Mongolia under the UNFCCC. <https://unfccc.int/documents/638318>

²³ Tsedevsuren, D. (1988). Catalog of steel and dzud in Mongolian historical documents. Ulaanbaatar.

²⁴ Research Institute of Labour and Social Welfare & Ministry of Labour and Social Protection (2018). Study on herders' livelihoods. Ulaanbaatar.

²⁵ Ministry of Environment and Tourism (2024). Fourth National Communication of Mongolia under the UNFCCC. <https://unfccc.int/documents/638318>

²⁶ Ministry of Environment and Tourism (2024). Fourth National Communication of Mongolia under the UNFCCC. <https://unfccc.int/documents/638318>

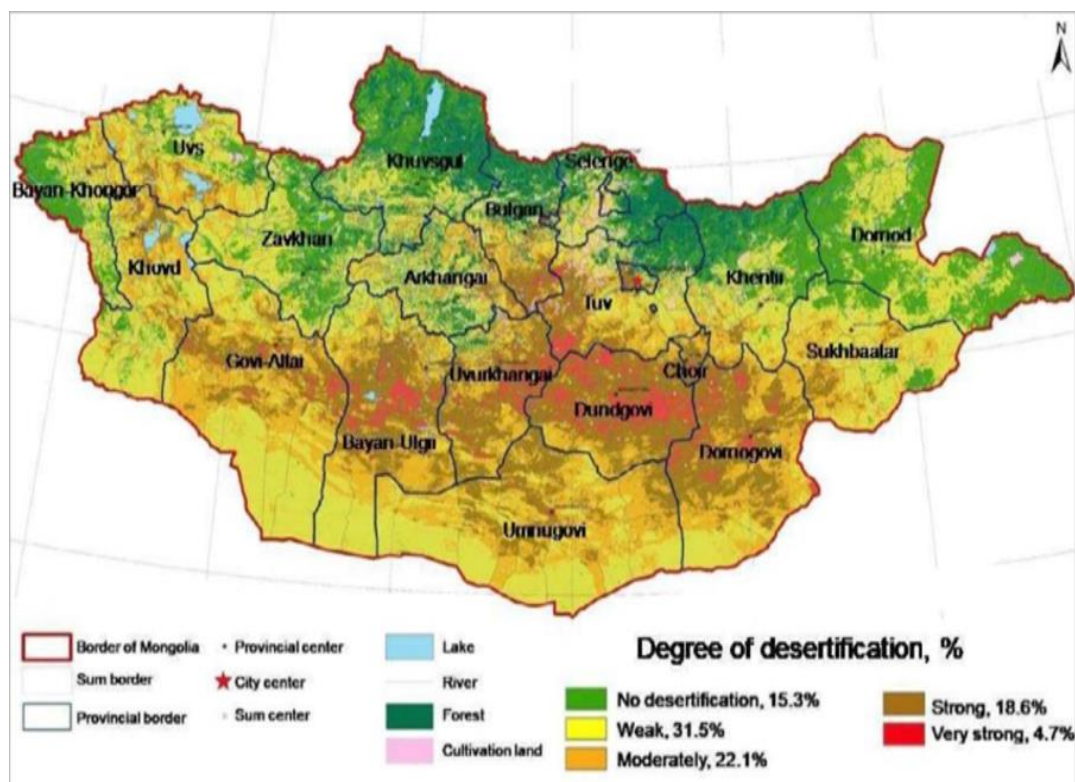


Figure 4. Desertification map of Mongolia (IRIMHE, 2020)

Future projections of climate change and expected impacts on the livestock sector

19. Surface temperature is expected to increase by 0.7-1.4°C until 2030; 1.1-2.9°C until 2050 and 1.2-6.5°C until 2080, depending on emissions scenarios. Winter temperatures will increase rapidly while summer heatwaves will be prolonged by 3.5 days on average. The number of cold days is likely to decrease by 9-37 days and shorter cold spells by 3 days. Winter precipitation is expected to increase by 9-55% and result in thicker snowpacks. The amount of summer precipitation will not change significantly, but an increase in the number of consecutive dry days leading to frequent and severe droughts is expected. The frequency of drought is expected to increase by 5-45%.²⁷

20. The expected increase of aridity over the next 30 years will accelerate rangeland degradation. This will be further exacerbated by scarcity of surface water, which will increase the concentration of livestock - thus overgrazing - in areas with sufficient water availability. The above-ground biomass is projected to decline by 15 to 25% by 2050 and 2080. As an indicator of soil fertility and water retention capacity, the organic carbon content is expected to decrease by 18 to 28% in different regions by 2050²⁸. Rangeland degradation will substantially increase the vulnerability of herders to climate change.

21. By 2050, dzuds are expected to occur once every three years. If no adaptation measures are taken, average annual losses from dzuds could be about 5.8% of the stock by 2050 and 9.6% by 2100 (Figure 5).²⁹ Past dzuds have had the hardest impact on herder households with up to 200 animals, often forcing them into poverty and migration to Ulaanbaatar. As of 2024, 54.3% of herder households fall in this category.³⁰ In Sukhbaatar aimag, end-2025 data confirms average herd size of 202.4 animals per livestock-owning household; households below the 200-livestock threshold average only 83.5 animals — well below the economic viability threshold.

²⁷ Ministry of Environment and Tourism (2024). Fourth National Communication of Mongolia under the UNFCCC. <https://unfccc.int/documents/638318>

²⁸ Ministry of Environment and Tourism (2024). Fourth National Communication of Mongolia under the UNFCCC. <https://unfccc.int/documents/638318>

²⁹ World Bank (2024). Mongolia: Country climate and development report. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/099101624054532319>

³⁰ National Statistics Office of Mongolia (2025a). Agriculture Sector 2024. Retrieved from the Mongolian Statistical Information Service <https://www.1212.mn>

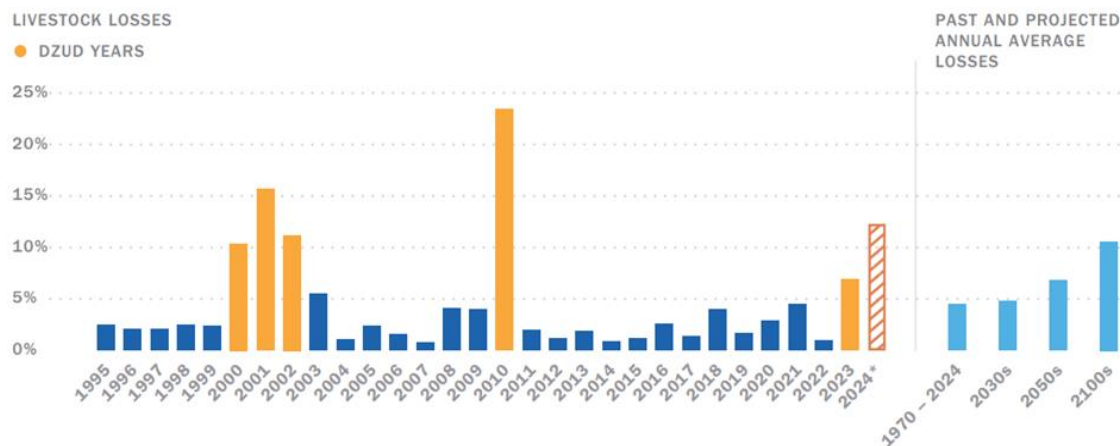


Figure 5. Past and projected livestock losses (The World Bank Group, 2024)

Problems the proposed project is aiming to solve

22. Livestock–rangeland systems are the core of the nation’s climate vulnerability. Mongolia contributes minimally to global greenhouse-gas emissions yet bears disproportionate impacts due to its reliance on climate-sensitive rangelands. Recurrent droughts and dzuds, coupled with open-access grazing and weak safety nets, perpetuate cycles of ecological collapse.³¹ At the herder household scale, declining productivity, increasing livestock mortality and debt amplify social vulnerability. Nationally, reduced rangeland resilience undermines the sector responsible for most agricultural output, rural employment, and export potential. Urban residents whose livelihoods depend on processing livestock products are impacted directly when supply chains fail. Wholesale and retail chains have been built around livestock products. Meat and milk are regarded as strategic foods³². The climate vulnerability of the livestock sector endangers the entire economy and food security of Mongolia.
23. The root causes of vulnerability span four interlinked domains that the project addresses through its four integrated components: (i) regulatory and institutional frameworks that fail to translate policy into enforceable practice; (ii) limited climate-risk preparedness infrastructure, extension services, and adaptive management capacity at community level; (iii) underdeveloped value chains that fail to incentivize sustainable production; and (iv) fragmented knowledge systems that prevent learning and scaling. The following analysis sequences these problems in alignment with the project components.
24. Regulatory instruments for sustainable rangeland use are available but not applied effectively. Mongolia’s rangelands remain state-owned while the livestock was privatized in the beginning of the 1990s³³. Under the combined pressures of poverty and migration, informal rules eroded and overgrazing has spread. As of 2024, the total number of livestock equals 110.8 million sheep heads³⁴, exceeding the total carrying capacity of rangelands by 49%³⁵. The Law on livestock tax was approved in 2020 with the aim to set a restriction on the number of livestock through headcount-based taxation. The 2024 legal reform, consisting of the approval of the Law on the Legal Status of the Association of Herder Households and amendment to the Land Law, legislated the Aimag-level Integrated Land Management Plan (ILMP), the Soum-level Annual Land Management Plan (ALMP), and Rangeland Use Agreements (RUAs) between the soum government and Herder Household Associations (HHAs) as the main regulatory instruments. In most soums, however, RUAs are either not approved, not implemented or not monitored. The main reasons include lack of awareness among herders, limited knowledge of soum administrators and land management officers, and lack of HHAs. The establishment of the HHAs is only starting, and this is expected to be a slow process since most herders lack expertise in founding and managing an

³¹ Ministry of Environment and Climate Change (2025). National Adaptation Plan to Climate Change Mongolia 2024–2030. Ulaanbaatar, March 2025. https://unfccc.int/sites/default/files/resource/NAP_Mongolia_2025.pdf

³² Parliament of Mongolia (2012). Food Law of Mongolia, 2012 (last amended in 2024). Retrieved from the Unified Legal Information System <https://legalinfo.mn>

³³ Fernandez-Gimenez, M.E. and B. Batbuyan (2008). Implementation of Mongolia’s 2002 land law: implications for herders and rangelands. In: Multifunctional Grasslands in a Changing World: Proceedings of the VIII International Rangeland Congress. June 29 – July 5, 2008.

³⁴ National Statistics Office of Mongolia (2025a). Agriculture Sector 2024. Retrieved from the Mongolian Statistical Information Service <https://www.1212.mn>

³⁵ Ministry of Environment and Climate Change (2025). National Adaptation Plan to Climate Change Mongolia 2024–2030. Ulaanbaatar, March 2025. https://unfccc.int/sites/default/files/resource/NAP_Mongolia_2025.pdf

association. Meanwhile, the livestock tax has yet to generate consistent reinvestment in rangeland restoration³⁶.

25. This regulatory failure is also a gender equality issue. Weak implementation of governance frameworks continues to obscure women's land-use rights and decision-making authority. Women make up 42% of herders in the two target aimags, yet women-headed households represent only 9.7% of registered herder households in Sukhbaatar, while Dundgovi does not collect sex-disaggregated data on household heads. Women are also absent from leadership positions in both aimag- and soum-level Pasture User Associations. Land administration and registration systems typically recognize only the household head, limiting the visibility of women's ownership and decision-making roles. Consequently, the 2025 reform permitting joint livestock ownership registration—which could help address these disparities—is neither systematically monitored nor actively promoted. Similarly, while married couples may register winter and spring camps under two household members' names, single-headed households, including many women-headed households and unmarried male herders, remain eligible to hold rights to only one camp.

26. Herders' knowledge of climate-smart practices and access to training and extension services is limited. Mongolia's long tradition of pastoral livestock husbandry has generated extensive knowledge of rangeland management and adaptation to climatic variability. However, many of today's herders entered the sector through livestock privatization in the 1990s and did not inherit the full depth of traditional pastoral knowledge. Moreover, the growing impacts of climate change require a combination of indigenous knowledge, climate-smart practices, applied research, and modern technologies. Yet, herders have limited access to training, extension services, and continuous learning opportunities. Extension services are delivered through soum livestock officers, bagh governors, Pasture User Group leaders, and private veterinarians, but outreach remains irregular and advisors often lack sufficient expertise in climate-smart approaches.

27. Water infrastructure for livestock is inadequate to cope with increasing climate variability. Climate change is reducing surface water availability and increasing the concentration of livestock around remaining water sources, exacerbating localized overgrazing. Snowmelt patterns are shifting, causing water to evaporate rather than infiltrate the soil. Wells and water points are unevenly distributed, and many are poorly maintained.

28. Veterinary services are inadequate to support climate-resilient livestock production. Weak veterinary services allow the spread of animal diseases, reducing livestock productivity and product quality. Parasite damage and poor animal health result in hide and skin damage that wastes up to one quarter of hides produced. Disease outbreaks during dzud recovery periods compound livestock losses and prolong herder vulnerability.

Climate-risk preparedness infrastructure is inadequate: early warning systems, forage reserves, and insurance coverage remain limited. Climate projections show dzud frequency and severity will increase, making preparedness a national priority under NDC 3.0 and NAP. While instruments exist—including Aimag/Soum Response Action Plans, Herder Development Funds, and Index-Based Livestock Insurance (IBLI) – effectiveness and local-level implementation are weak. Response Action Plans with preventive measures are not systematically developed or implemented. Early warning systems exist but lack localized capacity to translate forecasts into timely action at soum and bagh levels. Emergency fodder reserves are insufficient, with most herders lacking adequate hay and prepared forage to sustain livestock through severe winters. IBLI, specifically designed to compensate economic damages caused by dzuds, covers only 11.3% of herder households and 6.8% of total livestock as of 2024, and remains widely perceived as ineffective among herders in both target aimags.

29. Weak preparedness and extension are experienced differently by women and men. Extension scheduling collides with women's peak-labour periods (cashmere combing, milking, fodder preparation), and delivery rarely reaches women, elderly herders or persons with disabilities at camp; early-warning information flows primarily through male-dominated herder networks. The preparedness gap has a documented gendered harm pathway: after dzud, livestock loss and male economic stress, often with alcohol use, drive a measurable rise in domestic violence, which herders rarely report. Intimate-partner violence already affects an estimated 52.8% of women in Sukhbaatar and 53.2% in Dundgovi and rises after climate shocks. A preparedness system that ignores these differences will fail to protect the very people — women, who carry roughly two thirds of total household labour and absorb the largest share of disaster labour and risk.

30. Underdeveloped value chains and low prices of livestock products force herders to emphasize herd size rather than productivity. Mongolia's NAP emphasizes increased and export-oriented meat production as a key strategy to align the number of livestock with the carrying capacity of rangelands. While meat exports have increased during recent years, export prices comparable to or below domestic market prices provide little

³⁶ FAO (2025). The Implementation of the Livestock Tax Law: An Opportunity for Climate Action – Mongolia. Ulaanbaatar. <https://doi.org/10.4060/cd6870en>

incentive.³⁷ The by-products hide and skin have little value with average cowhides selling for barely USD 1.5. Hence, cashmere production has been established as the main source of herders' income, and the number of goats has risen five-fold, from roughly 5 million in 1989 to nearly 25 million in 2024³⁸ with Mongolia now producing roughly 40 percent of the world's raw cashmere³⁹.

31. The underlying reasons for the low prices include underdeveloped processing capacity and value chains. The meat industry has the potential for grass-fed, low carbon exports but remains constrained by gaps in disease control, certification, and logistics. Roughly 120 meat processors and 25 tanneries operate below 30% capacity while 70–90 percent of livestock continue to be slaughtered informally in rural areas⁴⁰. Carcass grading, hygienic handling, and animal-welfare standards remain limited, preventing processors from transmitting price signals upstream. About 80 percent of cashmere is exported with minimal processing. Herders are paid by weight, not by fineness, provenance, or rangeland stewardship. The result is predictable: herders maintain large, under-conditioned herds as a hedge against winter mortality rather than investing in quality.

32. Market incentives for sustainable rangeland management are being piloted but participation is insufficient and unequal. Global markets are shifting toward regenerative production that links ecosystem stewardship to brand integrity, and this trend is already affecting Mongolia. The “Responsible Nomads Code of Practice” introduced by the SDC-funded Green Gold project and the “SFA Animal Fibre Standard 1.0” introduced by Sustainable Fibre Alliance (SFA) are required for soft loans offered by Khan Bank⁴¹. SFA's Animal Fibre Standard is directly linked to premium pricing offered by SFA itself. As of 2024, approximately 19 thousand herders organized in 208 herder cooperatives have joined SFA⁴². These efforts are largely focused on export cashmere, with limited domestic private sector participation, only confined to GOBI and a few other large cashmere processors. However, they demonstrate commercial viability and potential for scaling up.

33. The current transition from a quantity-based to a quality-based livestock production model relies heavily on work that is predominantly performed by women, including cashmere grading, dairy and camel-milk processing and wool sorting. However, since certification schemes and premium payments are usually channelled through household heads, the benefits and recognition associated with this labour are likely to accrue primarily to men. This weakens women's incentives to participate and invest in quality improvement. Minimum herd-size requirements and collateral thresholds for market participation exclude many women-headed households and households with fewer than 200 livestock. The latter account for 62.3% of all herder households in Sukhbaatar and 30.5% in Dundgovi. In addition, requirements for male guarantors, combined with barriers to accessing information, continue to limit women- and youth-led enterprises' access to finance.

34. Data systems are fragmented and lack the integration needed for adaptive management. While detailed data exists on livestock numbers, rangeland condition, and climatic trends, this information is rarely translated or incorporated into market standards, policy decisions or local planning. The e-Gazar digital land information system and ALAMGaC's database have significant potential but are not yet integrated with climate monitoring, early warning systems, or value chain traceability.

35. A knowledge system that cannot see gender cannot correct it. Because data are held at household and spatial level, intra-household inequality is invisible, and the MRV platform that will oversee certification, credit and premiums would, if built only on head-of-household records, route benefits to men. Knowledge products present a generic “herder”, erasing women's innovations — including the documented finding that women-led cooperatives and partnerships now operate more actively and effectively than the largely dormant male-dominated PUGs. Individual-level monitoring fields (sex, age, household type, disability and herd size) are therefore not a reporting refinement but a precondition for the project to track and correct who actually benefits.

36. Interventions supporting herders, promoting sustainable rangeland use and addressing climate vulnerability of the livestock sector are fragmented and lack a connective architecture. Pilot initiatives often result in a proliferation of well-intentioned individual initiatives without the connective architecture that would make them self-sustaining or scalable. National initiatives and legislative reforms such as the livestock tax and RUAs lack

³⁷ In 2024, the average price of beef, mutton, horse and goat meat exported was USD 3.53 per kg, whereas the retail price in Ulaanbaatar in December 2024 was around USD 4.0 per kg.

³⁸ National Statistics Office of Mongolia (2025b). Statistical Yearbook 2024. Retrieved from the Mongolian Statistical Information Service <https://www.1212.mn>

³⁹ European Bank for Reconstruction and Development [EBRD] (2023). EBRD supports sustainable cashmere production in Mongolia. <https://www.ebrd.com/home/news-and-events/news/2023/ebd-supports-sustainable-cashmere-production-in-mongolia.html>

⁴⁰ Information provided by the Mongolian Meat Association.

⁴¹ Khan Bank (2025). Green loan for responsible herders. <https://www.khanbank.com/personal/product/detail/personal-responsible-herder-loan/>

⁴² Sustainable Fibre Alliance [SFA] (2025). Overview of the activities of SFA's Mongolia branch in 2024. <https://sustainablefibre.org>

enforcement mechanisms and institutional capacity for implementation at the local level. Value chains rarely differentiate between sustainably and unsustainably produced livestock products. In the absence of a national system linking grazing compliance with market rewards or budget transfers, both herders and local governments have few incentives to maintain ecological thresholds once external interventions end.

Theory of Change

37. Mongolia's rangeland–livestock system sits at the intersection of climate, economy, and governance, but remains locked in a fragmented, high-volume/low-value model. ILMPs, ALMPs and RUAs value-chain pilots, and insurance schemes exist, yet operate as parallel initiatives rather than as components of a single adaptive governance and market framework. Rangelands are state-owned but function as de facto open access; voluntary grazing rules lapse when projects end; Soum administrations and herder groups lack stable budgets to enforce agreements or maintain monitoring systems. Income structures reward herd size rather than productivity, fiscal instruments such as the livestock tax are not yet systematically reinvested in restoration, while index-based livestock insurance covers only a small fraction of herders. Emergency fodder reserves are inadequate, and early warning systems lack the local capacity to trigger timely action. Water infrastructure constraints limit rotational grazing options. International investments have generated strong technical tools, but these remain localized because incentives, financing, and mandates are not yet aligned.

38. The Theory of Change considers the following key assumptions: that the enabling policy and institutional environment will remain supportive, and that herders, local authorities, and private actors will be willing and able to take ownership of the proposed measures. It further assumes that women, youth, women-headed and below-200-head households, and persons with disabilities can participate in and influence governance, extension and value-chain decisions - which requires removing time, mobility, tenure and information barriers; that individual-producer recognition and payment does not trigger household backlash, given “do no harm” and GBV safeguards; and that male herders engage with the quality-over-quantity transition as its profitability and shared household benefit are made explicit.

39. IF (i) a coherent regulatory, institutional, and fiscal framework empowers herder household associations and local governments to restore rangeland ecosystems and strengthen climate resilience; (ii) herders and local authorities adopt adaptive grazing and livestock-management practices that restore rangeland health, improve water security, and enhance resilience to climate shocks through modern extension services, mobile technologies, and targeted ecosystem restoration; (iii) profitable livestock value chains create market-based incentives that reward climate-smart and regenerative rangeland-management practices; and (iv) holistic knowledge and learning systems improve information sharing, amplify best practices, and expand climate-smart innovation and profitability in the livestock sector; THEN herder communities, local governments, and private actors will have the governance structures, technical capacity, financial incentives, and knowledge systems needed to manage rangelands regeneratively, adopt climate-smart practices, and build resilience to climate variability and extremes, BECAUSE when rangeland governance is coherent, practices are adaptive, markets reward sustainability, and decisions are informed by evidence, regenerative management becomes the rational and profitable choice for all stakeholders, LEADING TO Improved rangeland ecosystem health, reduced vulnerability to droughts and dzuds, enhanced livestock productivity, strengthened herder livelihoods, and a systemic shift from reactive crisis response to proactive climate adaptation.

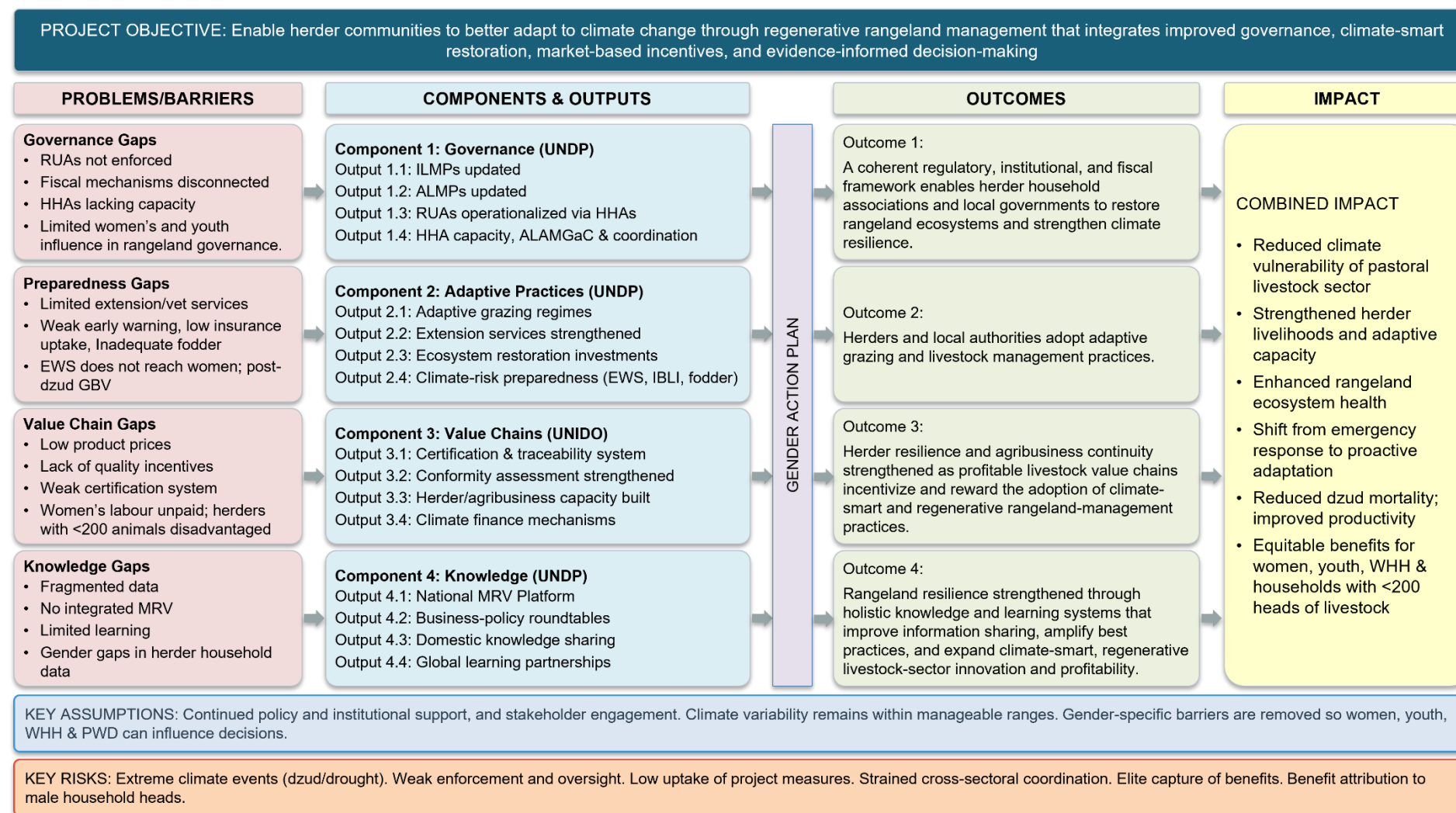
40. **Gender within the causal logic.** The four IF pathways above hold if gender is built into each. Pathway (i) requires that the coherent governance framework also ensures women hold real decision authority — gender-responsive HHA bylaws before registration, named women's leadership roles, vulnerability-based fiscal allocation, and active promotion of joint/individual (A-account) asset registration. Pathway (ii) requires that extension and preparedness systems reach women, youth, elderly herders and persons with disabilities, transfer eroding traditional knowledge across generations, and mitigate the post-dzud GBV pathway.

41. The project tackles four interconnected challenges through four integrated components (Figure 6). Component 1 updates ILMPs/ALMPs/SLMPs, operationalizes RUAs via Herder Household Associations, links fiscal instruments to compliance, and digitizes monitoring through the e-Gazar platform; Component 2 revitalizes extension and veterinary services, implements adaptive grazing, restores degraded rangelands, improves water infrastructure, and builds climate-risk preparedness through Response Action Plans, early warning systems, fodder reserves, and expanded insurance; Component 3 develops certification and traceability systems, strengthens conformity assessment bodies, builds capacity for quality-focused production, and establishes climate-responsive financial mechanisms; and Component 4 establishes a national MRV platform, institutionalizes policy and business roundtables, and operationalizes domestic and global learning mechanisms.

42. Key risks include: (i) increasing climate variability and extreme events, particularly dzuds and droughts that could divert resources to emergency response; (ii) weak enforcement and oversight of rangeland governance instruments; (iii) low uptake of project-supported measures by herders or private sector actors; (iv) limited cross-sectoral coordination among implementing agencies; and (v) disputes over grazing boundaries or elite capture of benefits by large herd owners. The project design addresses to these risks by combining policy support, local capacity building, practical incentives, and targeted investments across the full rangeland–livestock value chain. Risks are further reduced by an implementation approach that builds on existing government systems, established policies and local institutions, and ongoing national programs rather than creating parallel structures. All risks will be monitored through the project’s M&E system and managed through adaptive management, stakeholder engagement, and coordination with government contingency planning.

43. The risk set further includes four gender-specific risks: (vi) elite capture excluding herders with less than 200 animals from investments and finance; (vii) the post-dzud GBV pathway, in which livestock loss and male economic stress escalate intimate-partner violence; (viii) benefit attribution to male household heads for production performed by women; and (ix) a gatekeeper monitoring system that, if built only on household-head data, routes certification, credit and premiums to men and hides intra-household inequality. These will be carried in full, with likelihood, impact and mitigation, in the Gender Risk & Safeguard Matrix accompanying the already available Gender Action Plan during the full proposal development.

Figure 6. Theory of Change: Climate-Smart Rangelands and Livestock Value Chains for Sustainable Adaptation



IF inclusive governance + preparedness + market incentives → THEN sustainable practices adopted by women and men → BECAUSE management becomes profitable, enforceable & equitable → LEADING TO reduced vulnerability

44. The whole-of-value-chain model is enabled by the complementary strengths of UNDP and UNIDO. UNDP brings experience in governance reform, climate-risk analysis, ILMP/RUA development, community-based adaptation, and integrated MRV; UNIDO contributes cleaner production, certification, traceability, and private-sector engagement in the meat, leather, wool, and cashmere value chains. Together, the two agencies close the “governance-to-market” loop: aligning science-based thresholds, adaptive grazing and restoration, fiscal incentives, and market rewards so that regenerative rangeland management becomes the rational economic choice, driving a self-reinforcing cycle of resilience from rangeland to market.

Project sites

45. The project will be implemented in Dundgovi and Sukhbaatar aimags, selected against criteria aligned with Adaptation Fund requirements (Table 1). Dundgovi exemplifies Mongolia's desert steppe ecosystem with observable degradation, established community organizations and strong market connectivity to Ulaanbaatar, while Sukhbaatar represents the Eastern steppe with high climate vulnerability, ongoing GCF-ADAPT project infrastructure, and strategic cross-border connectivity to China.

Table 1. Project site selection criteria

Criterion	Dundgovi Aimag	Sukhbaatar Aimag
1. Alignment with the Adaptation Fund Strategy	● 50-70% of land affected by desertification ● Desert steppe limits afforestation;	● 47.5% livestock mortality in 2023-2024 (19.5% of national losses) ● Climate variables explain 53.7% of livestock mortality variance (above national median)
2. Logistics	● 260 km from Ulaanbaatar (3-4 hours by paved road) ● Direct access to central processing facilities and export hubs	● 565 km from Ulaanbaatar (8-9 hours by paved road) ● Strategic China border position via Bichigt crossing; planned railway connectivity
3. Government and community commitment	● Both Aimag governments formally committed to support project implementation and enforce RUAs ● Herder cooperatives and PUGs in both aimags confirmed commitment to innovative, gender-sensitive approaches	
4. Baseline investments ⁴³	● 8 Soum Federations of PUGs, 66 PUGs with 2205 herder households; ● RUAs cover 1.6 million ha; 591 herder cooperatives under “New cooperative” movement; ● SLP I-III and Green Gold project foundations.	● 6 Soum Federations of PUGs, 37 PUGs with 1465 herder households; ● RUAs cover 1.3 million hectares; ILMP (2023-2037) approved ● GCF- ADAPT project (2021-2028); GEF-Dryland Landscapes project (2020-2025).
5. Avoidance of duplication	● The proposed project complements existing investments through digital MRV, systematic rangeland rehabilitation, conditional market access, and enforceable governance mechanisms tied to adaptation outcomes (details in Section F).	
6. Rangeland condition	● ~40% of rangelands in recovery classes I-III; additional 30% in class IV; ● Recover potential on ~70% of rangelands within project timeframe.	● ~60% of rangelands in recovery classes I-III; additional 20% in class IV; ● Recover potential on ~ 80% of rangelands within project timeframe.
7. Water and hydro-met integration	● Both aimags covered by IRIMHE dzud early warning systems; ADAPT strengthening climate data capacity; ● SDC groundwater studies (2020) provide technical baselines for Gobi regions; ● Coordination planned with River Basin Authorities for integrated water resource management.	
8. Demonstration and learning potential	● Ecological contrasts enable testing across major rangeland types (desert steppe vs. Eastern steppe); ● Market access differences (central vs. border) enable comparative assessment of incentive mechanisms; ● 2.9 million ha under RUAs provides backbone for participatory rangeland management demonstration.	
9. Extension and veterinary services	● World Bank LCP strengthening veterinary services and disease surveillance ● Extension delivered through soum Divisions of Agriculture, bagh governors, and PUG leaders ● Both aimags covered by IBLI; governments committed to expanding extension service quality	

⁴³ Detailed information is provided in Section F.

10. Value-chain linkages	● Direct road access to Ulaanbaatar processing facilities and Chinggis Khan Airport export hub.	● Two meat processing factories export to China; ● Four SFA- certified herder cooperatives; ● A Planned 846 km railway will enhance international connectivity.
11. Risk and stability	● Stable local governance systems; strong social capital through traditional herder networks; ● Climate stresses manageable for project operations; winter-hardened infrastructure in all soum centers; ● International organizations have operated without significant security incidents	

46. Within each Aimag, specific Soums will be selected using clear criteria. During the Project Formulation Grant, UNDP and UNIDO in collaboration with MECC, MOFALI, and Aimag governments will conduct comprehensive Soum-level assessments through field verification, stakeholder consultations, ILMP documentation review, and market connectivity mapping. Priority will be given to Soums that (i) contain highly degraded but ecologically recoverable rangelands with measurable LDN improvement potential; (ii) include critical ecosystem features such as biodiversity corridors, riparian zones, spring catchments, and dzud-reserve pastures; (iii) demonstrate high climate vulnerability where improved management can reduce risk; (iv) offer safe, cost-efficient logistics for multi-agency operations; and (v) show strong governance commitment, and a willingness to adopt enforceable RUAs and conditional offtake contracts. Final site selections, including supporting evidence and signed commitments, will be validated through multi-stakeholder review and published through e-Gazar and the project's digital MRV platform.

B. Project Objectives

Project Objective

47. The project objective is to enable herder communities to better adapt to climate change through regenerative rangeland management that integrates improved governance, climate-smart restoration, market-based incentives, and evidence-informed decision-making.

Outcomes

Outcome 1: A coherent regulatory, institutional and fiscal framework enables herder household associations and local governments to restore rangeland ecosystems and strengthen climate resilience.

Outcome 2: Herders and local authorities adopt adaptive grazing and livestock-management practices that restore rangeland health, improve water security, and strengthen resilience to climate shocks through modern extension services, mobile technologies, and targeted ecosystem restoration.

Outcome 3: Herder resilience and agribusiness continuity are strengthened as profitable livestock value chains incentivize and reward the adoption of climate-smart and regenerative rangeland-management practices.

Outcome 4: Rangeland resilience is strengthened through holistic knowledge and learning systems that improve information sharing, amplify best practices, and expand climate-smart, regenerative livestock-sector innovation and profitability

Project Components and Financing

Project / Programme Components	Expected Outcomes	Expected Outputs	Executing Entity	Amount (US\$)
Component 1: Climate-Resilient Rangeland Governance and Stewardship	Outcome 1: A coherent regulatory, institutional, and fiscal framework enables herder household associations and local governments to restore rangeland ecosystems and strengthen climate resilience.	Output 1.1: Integrated Land Management Plans (ILMPs) updated and operationalized for climate-smart rangeland management. USD 700,000 Output 1.2: Aimag-level Integrated Land Management Plans and Soum-level Annual Land Management Plans updated. USD 500,000 Output 1.3: Institutional capacity-building of ALAMGaC and National land-information system USD 650,000 Output 1.4: – Inter-agency coordination, Herder Household Association capacity, and policy alignment strengthened. USD 600,000	MECC 75% UNDP 25%	2,450,000
Component 2: Rangeland Restoration, Extension, and Climate Adaptation Practices	Outcome 2: Herders and local authorities adopt climate-smart grazing and livestock management practices.	Output 2.1: Adaptive rangeland use regimes implemented based on ecological thresholds and traditional knowledge. USD 1,200,000 Output 2.2: Extension services for climate-smart rangeland and livestock management strengthened. USD 1,100,000 Output 2.3: Community-level adaptation and ecosystem restoration investments implemented through conditional access mechanisms. USD 2,000,000 Output 2.4: Climate-risk preparedness and social inclusion mainstreamed in herder communities. USD 450,000	MECC 75% UNDP 25%	4,750,000
Component 3: Climate-Smart Livestock Value Chains and Competitive Agribusinesses	Outcome 3: Herder resilience and agribusiness continuity are strengthened as profitable livestock value chains incentivize and reward the adoption of climate-smart and regenerative rangeland-management practices.	Output 3.1: National certification and traceability system established to create market incentives for climate-resilient rangeland management USD 1,000,000 Output 3.2: Conformity assessment bodies strengthened to sustain market-based incentives for climate-resilient production. USD 1,000,000 Output 3.3: Capacity of herders and agribusinesses strengthened to reduce climate vulnerability through quality-over-quantity production that improves herd resilience to climate shocks. USD 1,000,000 Output 3.4: Climate and gender responsive financial mechanisms established to accelerate herder transition to resilient production systems and support post-disaster recovery. USD 1,364,375	UNIDO	4,364,375
Component 4: Climate-Adaptive Rangeland	Outcome 4: Rangeland resilience strengthened through holistic knowledge	Output 4.1: National Rangeland MRV Platform established and operational. USD 465,000 Output 4.2: Business and Policy Roundtables		

Knowledge and Learning System	and learning systems that improve information sharing, amplify best practices, and expand climate-smart, regenerative livestock-sector innovation and profitability.	institutionalized to align data, finance, and markets. USD 256,000 Output 4.3: Domestic knowledge sharing and upscaling mechanisms operationalized. USD 225,000 Output 4.4: Global learning and partnerships advanced. USD 170,000	MECC 75% UNDP 25%	1,116,000
Project / Programme Execution Cost				1,144,510
Total Project / Programme Cost				13,824,885
Project / Programme Cycle Management Fee (Implementing Entity)				1,175,115
Total Amount of Financing Requested				15,000,000

48. The proposed financing structure reflects the integrated design of Mongolia's climate-resilient rangeland system and allocates resources proportionately to the institutional, ecological, economic, and knowledge pillars required for transformational adaptation.

- Component 1 (USD 2.45 million) builds the *institutional backbone* for adaptation—upgrading ILMPs, legalizing RUAs, and operationalizing fiscal instruments that convert voluntary rangeland use rules into enforceable, incentive-linked governance.
- Component 2 (USD 4.75 million) translates governance into *field-level resilience* through adaptive grazing, water-based NbS, revitalized extension and veterinary systems, and institutionalized dzud preparedness.
- Component 3 (USD 4.365 million) creates the economic engine for sustainable adaptation, rewarding verified stewardship through certification, cleaner processing, and results-based finance that link ecological health to profitability.
- Component 4 (USD 0.95 million) secures sustainability and replication by embedding MRV, analytics, and learning systems into national institutions and markets.

49. Execution costs (USD 1.3 million) cover national coordination, fiduciary management, and technical supervision, while the Implementing Entity management fee (USD 1.17 million) ensures quality assurance, compliance with Adaptation Fund policies, and results-based reporting. Together, these four components create a fully integrated adaptation economy—linking rangeland governance, ecological restoration, value-chain incentives, and national learning systems into a single, scalable framework that strengthens Mongolia's resilience to climate change while generating inclusive, measurable, and enduring economic benefits.

Table 2. Projected Calendar

Milestones	Expected Dates
Start of Project/Programme Implementation	1 January 2028
Mid-term Review (if planned)	1 December 2030
Project Completion	1 January 2033
Project Closing	1 April 2033
Terminal Evaluation	1 July 2033

PART II: PROJECT JUSTIFICATION

A. Describe the project/programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

Component 1: Climate-Resilient Rangeland Governance and Stewardship

Lead Agency: MECC and UNDP in partnership with the MOFALI, and ALAMGaC

Outcome 1: A coherent regulatory, institutional, and fiscal framework enables herder household associations and local governments to restore rangeland ecosystems and strengthen climate resilience.

50. As mobility systems have fragmented and ecological carrying capacity has declined, herder livelihoods have become increasingly vulnerable to climate shocks. The 2024 Law on Herder Household Associations marks a major policy advance, providing the legal foundation for collective action by granting herder household associations (HHAs) the authority to sign contracts, hold budgets, and manage rangeland collectively. Component 1 operationalizes these reforms by creating the spatial, regulatory, and fiscal architecture through which herder household associations and Soum administrations can jointly manage rangelands within ecological limits.

51. The component consolidates four structural pillars: (i) upgraded Integrated Land-Use Plans (ILMPs); (ii) updated Aimag-level Integrated Land Management Plans and Soum-level Annual Land Management Plans; (iii) performance-based fiscal mechanisms, including livestock tax reinvestment, Soum Performance-Based Grants (PBGs), and Rangeland Risk Funds; and (iv) the Institutional capacity-building of ALAMGaC and National land-information system. Component 1 will be a pre-requisite for Components 2 and 3. Participation in and benefiting from extension services, restoration investments, and value-chain finance (Components 2 and 3) will be conditional on verified RUA compliance, ensuring that incentives reward stewardship and directly reduce climate risk.

52. The component establishes equity, accountability, and institutional durability. Soum-level governance packages will include standard legal templates, monitoring and mediation training, and basic equipment (vehicles, GPS units, tablets). Women and youth will comprise at least 50 percent of all RUA and HA decision bodies. A three-tier grievance system (HA → Soum → Aimag) and public scorecards will provide transparency and trust. Cross-Soum agreements, coordinated with River Basin Authorities (RBAs), will maintain seasonal mobility and ensure equitable access to drought-refuge pastures.

53. Upgrading ALAMGaC and the e-Gazar system provides national ownership and long-term functionality. For the first time, ILMPs, RUAs, and fiscal instruments will be spatially linked to ecological and hydrological data and automatically flagged when thresholds are exceeded. Training for ALAMGaC and Soum officers will lead to national accreditation for rangeland-management and spatial-planning professionals, creating a permanent human-resource base for future replication. By consolidating spatial planning, legal enforcement, fiscal incentives, and digital monitoring, Component 1 creates the institutional backbone for all other project investments.

54. By project completion, twelve Soums covering approximately one million hectares will implement ALMPs updated with carrying capacity data and operational RUAs. The e-Gazar system will be fully interoperable with IRIMHE and MRV platforms, producing automated alerts and public compliance dashboards. ALAMGaC will function as the national center for regenerative-rangeland spatial planning. At least 50 percent of governance participants will be women or youth, and policy reforms will institutionalize the ILMP/RUA system nationwide, with cross-Soum agreements maintaining adaptive mobility.

Output 1.1 Integrated Land Management Planning (ILMP) updated and operationalized for climate-smart rangeland management

55. Mongolia's ILMP system is intended to be the fundamental instrument to ensure sustainable land management, and reduction of climate change exposure and risk.

56. Revised ALMPs will embed carrying capacity datasets to guide seasonal use, rest periods, and restoration priorities. Each target Soum will delineate seasonal pastures, otor corridors, reserve and dzud pastures, biodiversity corridors, and water-protection zones, validated by RBAs for hydrological coherence. Participatory mapping with herder household associations will align traditional mobility with climate-risk and IRIMHE early warning data, ensuring that rotational-use regimes remain both ecologically sound and culturally legitimate.

57. Digitized ILMPs and ALMPs will be uploaded into the national e-Gazar allowing for transparent oversight and monitoring along with linkage to fiscal instruments. Restoration and conservation priorities (e.g., reseeding zones, reserve pastures, and water NbS) will be explicitly budgeted under livestock tax by-laws and Soum PBGs, ensuring sustained financing.

Output 1.2. Soum-level Annual Land Management Plans (SLMP) updated.

58. Effective rangeland governance requires that land management planning instruments are grounded in reliable data on rangeland conditions and carrying capacity. Currently, Sukhbaatar Aimag's Integrated Land Management Plan lacks an evidence-based rangeland management component, while Dundgovi Aimag has yet to develop an ILMP. At soum level, Annual Land Management Plans similarly lack systematic integration of carrying capacity thresholds and climate-responsive provisions. This output will address these gaps by supporting the development or updating of ILMPs in both target aimags and ALMPs in 12 selected Soums.

59. The project will facilitate a participatory planning process under ALAMGaC's technical guidance. Herder communities will be actively engaged in plan development to ensure that local knowledge and rangeland use practices inform the updated instruments. Plan content will be strengthened through integration of carrying capacity thresholds derived from the enhanced assessment methods under Output 1.1, climate-responsive provisions including dzud preparedness protocols and drought response triggers, and spatial zoning for seasonal rangeland use. The updated ILMPs and ALMPs will establish the regulatory foundation for Rangeland Use Agreements under Output 1.3. Updated plans will be formally approved by Aimag and soum Citizens' Representatives Khurals, ensuring institutional endorsement and legal standing for implementation.

Output 1.3 Institutional capacity-building of ALAMGaC and National land-information system

60. Transparent, climate-aware data systems are essential for long-term adaptation. ALAMGaC currently manages e-Gazar as a cadastral registry but lacks analytical capacity for ecological monitoring and fiscal integration particularly in terms of regenerative grazing, biodiversity conservation, and climate risk assessments. This output upgrades both the institution and the platform so that e-Gazar functions as a national decision-support tool for regenerative rangeland planning.

61. The project will build this capacity by providing training alongside the procurement of necessary hardware, software, and spatial-analytics modules. These tools will enable real-time tracking of rangeland conditions, climate risk assessments, biodiversity, and fiscal performance. Application-programming interfaces (APIs) may support de-siloing, including coordinating target site e-Gazar with IRIMHE's dzud indices, RBA water databases, and the MRV platform (Component 4), generating a much more efficient and effective system for monitoring carrying capacity thresholds. Public dashboards will display verified spatial and financial information to all users, increasing transparency and coordination across ministries, herders, and investors.

62. Under Component 2, the project will support the use and integration of satellite tracking data for domestic herds within the target zones linked to the e-Gazar to promote real-time observations to inform monitoring, modelling and decision-making. ALAMGaC staff will be trained and nationally certified in advanced GIS, carrying capacity modelling, and state-and-transition analysis, while joint MECC-ALAMGaC guidance on climate-risk indicators will institutionalize common standards.

63. Illustrative activities: institutional assessment and capacity-building plan for ALAMGaC; installation of hardware and analytics software; configuration of carrying capacity and fiscal modules; development of APIs linking e-Gazar with IRIMHE, RBA, and MRV; training and certification of staff; publication of national technical guidance.

Output 1.4 Inter-agency coordination, Herder Household Association capacity, and policy alignment strengthened

64. This output creates permanent coordination and learning mechanisms linking national policy, local governance, and community practice. Building on the intent of the Law on Herder Household Associations, an Inter-Ministerial Working Group (IMWG) composed of MECC, MOFALI, ALAMGaC, the Ministry of Economy and Development (MED), and RBAs will harmonize the Land, Water, and Herder Household Association laws and oversee standardized ILMP and RUA implementation.

65. Soum land officers will receive capacity packages such as transport, GPS units, tablets, and Standard Operating Procedure manuals to strengthen enforcement, service delivery and generate comparable data sets. Each participating herder household association will be supported to develop by-laws, financial-management systems, and grievance procedures. Leadership and mediation training will institutionalize women's and youth's participation. Cross-Soum mobility MoUs will formalize seasonal corridors with clear activation and dispute-resolution protocols, reducing conflict and ensuring access to emergency climate resiliency grazing zones.

66. As HHAs are only beginning to be established, there is a unique opportunity to embed gender-responsive governance rules, representation requirements, and accountability mechanisms from the outset. Policy-learning activities will analyse historical lessons and best international practices in terms of adaptive quota systems and fee design while explicitly respecting traditional grazing regimes that avoid rangeland privatization or elite capture. Annual policy labs and cross-Aimag exchanges, inclusive of the suite of on-going donor, government

and private sector investments, will feed directly into national reform processes linking with established platforms (e.g., White Gold).

67. Illustrative activities: convene quarterly IMWG meetings; conduct annual policy labs and cross-Aimag exchanges; publish legal and fiscal briefs; provide equipment and training for Soum officers; deliver leadership programs for women and youth; formalize cross-Soum mobility agreements with RBA concurrence.

Component 2: Rangeland Restoration, Extension, and Climate Adaptation Practices

Lead Agency: UNDP, in partnership with the MECC, the MOFALI, the IRIMHE, and the MULS.

Outcome 2: Herders and local authorities adopt climate-smart grazing and livestock management practices that restore rangeland health, improve water security, and strengthen resilience to climate shocks through modern extension services, mobile technologies, and targeted ecosystem restoration.

68. Component 2 is the operational arm of the project, supporting a climate-resilient rangeland system. It translates the spatial, institutional (e.g., herder household association) and legal frameworks established under Component 1 into tangible field outcomes that regenerate degraded landscapes, stabilize ecosystems, and reduce the vulnerability of herder households to climate change risks. The component introduces adaptive grazing regimes, targeted restoration, revitalized extension and veterinary systems, and standardized preparedness for climate shocks. These interventions are anchored in resilient and regenerative grazing thresholds data and are conditional on verified Rangeland Use Agreement (RUA) and Integrated Land Management Plan (ILMP) compliance.

Outcome 2: Herders and local authorities adopt adaptive grazing and livestock management practices.

69. Capacity building demands a professional, high-capacity delivery mechanism. Extension, veterinary, and field staff capacity is a major focus. With project support, each target Soum will host at least two trained officers. All training will lead to accredited professional certification by MOFALI, building a national cadre of rangeland and livestock-extension professionals capable of supporting adaptive management beyond the project's lifespan. Herder Field Schools (HFS) will provide peer learning at the household and herder-association levels, ensuring gender and youth inclusion and emphasizing the economic benefits of improved practices. These officers will be linked to national ministries and institutions through digital platforms for continuous learning, data exchange, and feedback.

70. The component also focuses on Mongolia's critical water-rangeland interface. By restoring degraded springs, riparian zones, and wetlands, the project enhances infiltration, groundwater recharge, and the water-storage capacity of rangelands. Vegetation restoration, fodder reserves, and cut-and-carry systems will reduce dry-season pressure on rangelands. Hydrological NbS interventions will be annexed to ILMPs, ensuring that local governments can plan and finance ongoing maintenance. Preparedness for dzud will be institutionalized through early-warning indices, reserve closures, mobility guidance, and feed release protocols financed through Soum Rangeland Risk Funds.

71. By project completion, approximately twelve Soums will operate adaptive grazing regimes with verified carrying capacity thresholds, measurable improvements in vegetation cover, and higher rangeland productivity on at least one million hectares. At least twenty-four extension/veterinary officers will be trained, certified, and deployed, while two thousand herder households will complete HFS or digital training. At least sixty water NbS and restoration investments will be constructed or rehabilitated and maintained with operational plans. Dzud early-warning and SOP systems will function in all target Soums. Women and youth will represent at least 40 percent of direct participants. Adaptive grazing and NbS approaches will be replicated by non-project Soums through the learning mechanisms established under Component 4.

Output 2.1 – Adaptive rangeland use regimes implemented based on ecological thresholds and traditional knowledge

72. Mongolia's nomadic grazing system evolved to largely withstand climate variability, but climate change presents new challenges. This output will help build herder capacity to engage in adaptive mobility and seasonal balance with community-based grazing systems guided by carrying capacity data and ILMP guidance. Each target Soum will delineate rotational blocks and reserve/dzud pastures within its ILMP and establish RUAs that define seasonal use, rest periods, utilization limits, and reserve management. These agreements will integrate IRIMHE early-warning data and MRV indicators to adjust rules every three to five years as conditions evolve. Herders will receive practical training to identify recovery indicators—plant density, composition, and soil stability—and use mobile and satellite applications to record data, synchronize rotation calendars, and receive alerts. Localized dashboards will display rotation schedules, rest periods, and reserve closures, reinforcing transparency and accountability.

73. Adaptive regimes reduce overgrazing, maintain ground cover, and store biomass for harsh winters. As rangelands recover, herders will experience reduced livestock losses, improved feed quality, and greater economic stability and profitability.

74. Illustrative activities: participatory carrying capacity mapping and community validation; delineation of rotational and reserve blocks; updating RUAs with rotation schedules and thresholds; training herders on ecological indicators; installing lightweight fencing or natural markers for protected zones; uploading seasonal rotation data to e-Gazar and MRV systems.

Output 2.2 Extension services for climate-smart rangeland and livestock management strengthened.

75. Less than effective extension coverage has limited Mongolia's capacity to maintain herd health and climate-adaptive practices. This output revitalizes public extension by embedding trained officers in each target Soum, linked to MULS and national agencies through a digital platform for learning, diagnostics, and two-way communication with herders. Each project associated extension/veterinary officer will provide integrated services covering herd health, breeding, disease prevention, nutrition, rangeland management, and business planning focused upon reducing climate change vulnerability at scale. FFS cycles and para-veterinary training will disseminate adaptive practices and encourage peer to peer learning and innovation. E-learning modules coordinated with on-going advances (e.g., World Bank projects) will ensure accessibility and broad uptake. All extension officer training will lead to nationally recognized accreditation through MULS and MOFALI, building a professionalized system for livestock extension and rangeland management. Access to extension support and associated benefits will be conditional on verified RUA/ILMP compliance.

76. Illustrative activities: recruit and train extension/veterinary officers; equip with diagnostic kits, and tablets; develop and localize digital learning modules in partnership with MULS; establish e-learning hubs at Aimag agricultural offices; accredit training curricula nationally; conduct FFS and leadership courses for herders and youth; integrate extension data into MRV dashboards.

Output 2.3 – Community-level adaptation and ecosystem restoration investments implemented through conditional access mechanisms

77. Degraded rangelands and damaged hydrological systems are major amplifiers of climate vulnerability. This output finances tangible, community-managed adaptation assets that restore ecosystem function and buffer climate extremes. These investments will be strategic, predicated upon and guided by the adopted ILMPs and RUA. Again, participation in and completion of Component 1 fundamentals will be a pre-requisite for receiving Component 2 benefits. Ultimately, priority investments will be determined via ILMP on a site-by-site basis depending upon vulnerability assessments that clearly identify climate risks and root causes

78. Illustrative investments may include spring and riparian restoration, vegetative stabilization of erosion hotspots, over-sowing and reseedling of native grasses, willow regeneration, and micro-catchments (e.g., beaver dam analogs) that increase infiltration and groundwater recharge. Fodder banks, natural hayfields, and cut-and-carry systems will reduce grazing pressure during critical periods, while biodiversity corridors will be mapped and maintained to preserve connectivity for wildlife and ecosystem services. Each investment will carry a clear custodianship linked to herder household associations with an operational and management plan. These will be connected to fiscal allocations through livestock tax by-laws and PBG budgets. Access to these assets will be strictly conditional on RUA compliance. Implementation will use local labor and small enterprises to build ownership and provide short-term income for vulnerable households.

79. Illustrative activities: participatory identification and design of NbS and restoration investments; fencing and re-vegetation of springs and riparian zones; over-sowing and reseedling priority sites; construction of small weirs and micro-catchments; establishment of fodder reserves and hayfields with O&M/user-fee plans; annexation of assets to ILMPs and integration with MRV monitoring.

Output 2.4. Climate-risk preparedness and social inclusion mainstreamed in herder communities

80. Recurrent dzuds and droughts remain the most immediate climate threats to Mongolia's pastoral livelihoods. This output institutionalizes climate-risk preparedness at community level and strengthens the participation of women and youth in adaptation leadership.

81. The primary instrument for institutionalizing preparedness is the Response Action Plan (RAP) provided for under the Law on Herders. The project will collaborate with soum governments and HHAs to prepare gender-sensitive and youth-inclusive RAPs for each target soum. RAPs will specify preventive measures including emergency fodder reserve requirements, early-warning triggers, reserve pasture activation protocols, mobility guidance, controlled off-take arrangements, and feed release procedures. RAPs will define roles and responsibilities for soum governments, HHAs, and other stakeholders, and will be linked to financing through Herder Development Funds established under Output 1.4.

82. Working with the Information and Research Institute of Meteorology, Hydrology and Environment (IRIMHE) and the National Emergency Management Agency (NEMA), the project will strengthen early-warning systems and link them to the rangeland monitoring framework under Output 1.1. Climate alerts will trigger pre-agreed standard operating procedures: reserve pasture openings, mobility coordination, timed feed releases, and facilitated off-take to processors under Component 3. This forecast-based approach converts early warning into early action, reducing livestock mortality and emergency response costs. Index-Based Livestock Insurance will be promoted as a complementary risk management tool. The project will support awareness campaigns and facilitate herder access to IBLI products, enabling households to transfer catastrophic risk while maintaining productive assets. Linkages with Component 3 value chain actors will explore opportunities for bundling insurance with market access agreements.

83. Women and youth will be positioned as leaders in community-level adaptation. The project will deliver targeted leadership and management training for women and youth within HHAs, building skills for roles in association governance, fodder production enterprises, veterinary services, and climate-smart agribusinesses. Micro-grants channelled through Herder Development Funds will support women-headed households and youth entrepreneurs to establish adaptation-oriented enterprises. The micro-grant mechanism will be managed by UNDP during the project period, applying the proven UNDP-GEF Small Grants Programme (SGP) model - operational since 1992 with over 28,000 community grants across 136 countries, including Mongolia - and will be handed over to Government administration through the Herder Development Fund structures upon project completion. Key safeguards include: (i) transparent selection criteria reviewed by a multi-stakeholder National Steering Committee; (ii) priority scoring for proposals demonstrating women's and youth leadership; (iii) phased disbursement tied to progress reporting; and (iv) capacity-building support for applicants from marginalized groups. These procedures ensure equitable access while building local institutional capacity for sustained operation post-project. Selection criteria for all community investments under Output 2.2 will prioritize proposals that demonstrate women's and youth participation in design and implementation.

84. Public awareness campaigns through radio, SMS, and community meetings will promote a culture of preparedness and reinforce understanding of climate-smart grazing practices. Together, these measures operationalize Mongolia's national disaster risk reduction strategy embedded in the "Medium-term strategy for implementation of the Sendai Framework for disaster risk reduction in Mongolia", and align with the Law on Promotion of Gender Equality and the Cross-Sectoral Strategic Plan for Promoting Gender Equality in Mongolia (2022-2031).

Component 3: Climate-Smart Livestock Value Chains and Competitive Agribusinesses

Lead Agency: UNIDO, in partnership with central and provincial governments, herder cooperatives, conformity assessment bodies, industry associations and vocational training institutions.

Outcome 3: Herder resilience and agribusiness competitiveness are strengthened as profitable livestock value chains incentivize and reward the adoption of climate-smart and regenerative rangeland management practices.

Component 3 addresses a core driver of climate vulnerability in Mongolia's pastoral system: the economic pressure to maintain large, low-value herds that overgraze rangelands, weaken animal condition, and collapse under dzud and drought. By creating market and financial systems that reward smaller, healthier, higher-value herds, the component reduces exposure to climate shocks while building household capacity to absorb and recover from losses. Certification, traceability, and cleaner processing convert verified rangeland stewardship into price premiums and stable market relationships, giving herders a direct financial incentive to adopt regenerative practices that restore ecological resilience.

85. Mongolia's livestock sector—nearly 5.5 percent of GDP and more than 75 percent of agricultural output—remains constrained by a low-value equilibrium.

86. Component 3 addresses this structural gap by strengthening climate-resilient production more profitable than high-risk, high-volume alternatives. The adaptation logic is direct: certification criteria tied to carrying-capacity compliance and RUA adherence ensure that market premiums flow only to herders who reduce grazing pressure and improve rangeland condition. Higher-quality products from healthier livestock command better prices, enabling herders to maintain income security with smaller herds that are less vulnerable to climate extremes.

87. Through targeted training, technical assistance, and cooperative development, herders will align regenerative grazing with productivity and quality objectives. Activities will include improved breeding, fodder and nutrition planning, veterinary support, and hygienic handling that link animal condition to market standards. Cooperatives and producer associations will receive coaching to meet export benchmarks—micron, staple length, carcass weight, hide grade, and fibre cleanliness—under decent job and gender-equity principles.

88. Component 3 scales these experiences nationally through a unified certification system for climate-smart pastoralism linked to internationally recognized standards along the lines of existing GAP and organic certification in Mongolia, QR-based traceability, and conditional financial mechanisms that reward compliance. Cleaner-production upgrades in selected meat and leather hubs—identified during full-proposal preparation—directly support adaptation by building climate-resilient processing capacity that can absorb supply-chain disruptions during dzud events, reduce resource consumption under increasing water stress, and maintain operational continuity despite climate variability. Cooperative based product consolidation, direct sales to industry and pre-processing will diversify herder income streams - a critical adaptation measure that reduces dependence on any single climate-sensitive livelihood activity. Supply chain continuity under climate stress is essential for sustaining the market linkages that reward herder adaptation.

Output 3.1 – National certification and traceability system established to create market incentives for climate-resilient rangeland management

89. This output creates a market-based mechanism that directly incentivizes herder adoption of climate-resilient practices by translating verified rangeland stewardship into price premiums and buyer preference. The adaptation logic is explicit: certification criteria require compliance with carrying-capacity thresholds and RUA/ALMP plans established under Components 1 and 2, meaning that market rewards flow only to herders who reduce grazing pressure and adopt the regenerative practices that restore climate resilience of rangelands. Developed jointly by UNIDO, Office of the President, MASM, MOFALI, and the Mongolian Meat Association (MMA), the system will define measurable criteria covering production and processing, ALMP/RUA compliance, carrying capacity thresholds, animal welfare, water and biodiversity safeguards, cleaner-production practices, and gender and labor rights. This standard focuses mainly on the meat industry for premium market export promotion in line with the NDC3.0 priorities that complement other existing standards such as the Responsible Nomads and SFA's Code of Conduct. Verification will rely on MMA, MRV and e-Gazar data rather than costly external audits.

90. Illustrative activities: draft and validate certification criteria and performance metrics; pilot the traceability platform integrated with MRV and e-Gazar; conduct third-party audits and issue initial certificates; adopt ministerial decree and national promotion strategy; develop buyer partnerships and visibility campaigns for certified products.

Output 3.2 - Conformity assessment bodies strengthened so sustain market-based incentives for climate-resilient production.

91. The market-based adaptation incentives created under Output 3.1 depend on credible, sustained certification services that buyers trust. Building on the EDP achievements, government and private conformity assessment bodies supported by UNIDO with international accreditation on Halal and Organic products certification will be enhanced to provide internationally accredited certification for climate-smart pastoralism standards and free-range grassfed products, enabling herder and processors to access domestic and international premium markets that reward verified rangeland stewardship.

92. The certification bodies will collaborate on building capacity and availability of national auditors and assessors' pool. UNIDO will provide required capacity building interventions by mobilizing its internationally recognized experts. The internationally accredited certification bodies will provide affordable local services to the selected meat enterprises to introduce food safety and Halal standards for targeted markets.

Output 3.3 – Capacity of herders and agribusinesses strengthened to reduce climate vulnerability through quality-over-quantity production that improves herd resilience to climate shocks

93. This output builds herder capacity to shift from large, vulnerable herds to smaller, more climate-resilient ones without sacrificing income.

94. Herder Field Schools (HFS) and demonstration herds will showcase the economic advantages of “quality over quantity,” reinforcing that regenerative management, animal welfare, and product excellence drive profitability. UNIDO will deploy international and national technical experts to provide practical HFS training for the herders and engage the locally trained vocational training institutions and extension officers. Workshops and digital modules will help cooperatives align production with international buyer requirements, including environmental, social, and governance (ESG) standards. The adaptation benefit is direct: herders who complete this training will have the technical capacity to maintain income with fewer, healthier animals that survive climate shocks at higher rates and recover faster after dzud events.

95. This output will pilot climate-resilient, zero-waste meat processing that maintains business continuity during climate-disrupted supply periods. The meat enterprises will undergo environmental and operational audits followed by upgrades that enable them to process variable supply volumes typical of post-dzud recovery years

while meeting international standards such as HACCP and Halal. Collection hubs for hides and skin from the abattoirs will preserve by-products that would otherwise be lost during supply disruptions, maintaining value-chain linkages that incentivize herder adaptation. Circular use of byproducts—bones, fat, intestine, and endocrine gland supplied to cosmetic and pharmaceutical companies—diversifies processor revenue streams and reduces vulnerability to climate-affected primary supply.

96. International best practices in cooperation with Japanese Meat Academy will introduce vocational training that includes climate-risk management. Marketing interventions for free-range grassfed meat (e.g. yak, beef, horse, sheep and goat meat) to premium markets (e.g. Gulf, China, Russia).

97. Project will support Mongolian meat enterprises to seek access to the Global Value Chain to promote the free-range grassfed and Halal meat products at formal markets. Capacity building activities, B2B, connecting with business operators and networking opportunities will be provided by supporting meat industry representatives to attend international meat expos and experience sharing activities (e.g. Gulfood, Chinese Import Export Expo – CIEE, OBE Beef Australia) in cooperation with the Office of the President under the Food Revolution national programme and Mongolian Meat Association (MMA). Roadmap for Mongolian meat industry to enter the Global Value Chains will be developed. Abattoirs will require premium grassfed livestock from herders, who in turn will be recognized and certified as climate smart and premium grassfed producers and suppliers.

98. The leather value chain provides a critical secondary market for herder products, diversifying income streams and reducing dependence on volatile primary commodity markets—a key adaptation measure. Under this Output, climate-resilient business continuity in the leather value chain will be enhanced through a robust policy framework that optimizes hides and skin raw material supply chain quality in alignment with the meat value chain. Adoption of the Leather Working Group (LWG) environmental protocol and Sustainable Leather Manufacturing practices will position Mongolian leather to access premium international markets that reward verified sustainable sourcing from climate-resilient pastoral systems.

99. Branding, marketing and fashion design of leather goods will be upgraded. International exposures of the leather industry enterprises to promote the free-range grassfed leather products will be organized in cooperation with the relevant government institutions (e.g. SME Agency) and Mongolian Association of Leather Industry (MALI). This output will upgrade Mongolia's wool supply chain by introducing climate-smart, labor-saving technologies (e.g., electric shearing, sorting, grading) and improving raw material hubs for herder cooperatives and processors. Wool processing will scale from washing to finished products using international technology and environmental standards, promoting domestic and export markets. By adding value to wool, the project will help balance herd sizes, reduce rangeland degradation from cashmere goats, and create rural jobs, especially for women. UNIDO and national partners will drive sustainable fibre manufacturing, contributing to GHG reduction and climate adaptation.

100. The circular economy and zero waste approach piloted through the meat industry value chain directly supports adaptation by diversifying processor revenue streams to reduce climate vulnerability and creating demand for by-products that might otherwise be lost during supply disruptions. Importantly, reduced livestock numbers with higher individual productivity—the core adaptation strategy—will also deliver mitigation co-benefits through reduced grazing pressure and improved rangeland carbon sequestration. By-product utilization (fertilizer compost, collagen, poultry feed) creates additional value from each animal processed, reinforcing the economic viability of smaller herds. Energy-efficient technologies in cooling systems and inventory management will reduce operational costs, improving processor margins and their capacity to absorb climate-related supply variability.

101. Illustrative activities under this output include the establishment of Herder Field Schools and demonstration herds; delivery of accredited training for herders, cooperatives, and SMEs on regenerative livestock production, product quality, and international standards; upgrading of abattoirs, tanneries, and wool processors to meet climate-smart, zero-waste, food safety, and Halal requirements; establishment of collection, sorting, and grading hubs for hides, skins, and wool; and support for business matchmaking, trade exposure, and market promotion for premium Mongolian livestock products.

Output 3.4. Climate and gender responsive financial mechanisms established to accelerate herder transition to resilient production systems and support post-disaster recovery.

102. This output addresses a key barrier to herder adaptation: the upfront costs of transitioning from large, low-value herds to smaller, higher-value production systems. A performance-based soft loan programme implemented by Trade and Development Bank (TDB) of Mongolia will incentivize SMEs in the meat, leather and wool industry to invest in climate-resilient processing capacity and source from certified climate-smart herders. Interest rate reductions of up to 2% annually will be granted upon achievement of verified environmental

and food safety certifications (e.g. LWG, ISO45001, HACCP, Halal and organic) and progress towards ESG targets - creating financial incentives aligned with climate-resilience outcomes.

103. UNIDO and TDB will co-design a climate-adaptation soft loan program for Mongolia's meat and leather industry. The program will feature tiered interest rate reductions tied to climate-resilience performance, aligned with the Mongolian Green Taxonomy and TDB's Sustainability Framework. Certification milestones linked to verified climate-smart sourcing, business-continuity planning for climate disruptions, and gender-inclusive eligibility criteria will be integrated. The loans will support investments that reduce climate vulnerability across the value chain, including processing capacity upgrades that maintain operations during dzud events, inventory systems that buffer supply disruptions, and herder cooperative funds that provide emergency liquidity during climate disasters.

104. Scientific based information including meteorological data and early warning systems will be linked in establishing the financial mechanism to prevent potential risks and provide a win-win financial and insurance support system.

105. Illustrative activities under this output include the design and launch of a sustainability-linked soft loan facility with TDB; definition of eligibility criteria, ESG indicators, certification benchmarks, and audit protocols; development of sustainability pledge agreements and performance-based interest rate incentives; strengthening of cooperative and community-based savings and credit mechanisms using inclusive environmental criteria; and integration of climate-risk, meteorological, and early warning information into lending and insurance support.

Component 4: Climate-Adaptive Rangeland Knowledge and Learning System

Lead Agency: UNDP, in collaboration with UNIDO, OP, MECC, MOFALI, ALAMGaC, IRIMHE

Outcome 4: Rangeland resilience is strengthened through holistic knowledge and learning systems that improve information sharing, amplify best practices, and expand climate-smart, regenerative livestock sector innovation and profitability.

106. Component 4 is designed as Mongolia's national learning and investment engine for climate-resilient rangeland management. It consolidates ecological, climatic, livestock, fiscal, and market information into a single operational system so that verified improvements in rangeland condition, livestock productivity, and product quality immediately inform policy, planning, and financial decisions. By connecting data to budgets, credit, and procurement, the component transforms information into an engine of continuous learning, reinvestment, and scaling. This component builds on and integrates technical foundations established by recent national and international initiatives.

107. Component 4 explicitly embeds the private sector in the learning loop. The White Gold Initiative (WGI) and the Mongolian Chamber of Commerce and Industry (MNCCI) will co-chair market and finance working groups, feeding price and demand data into the system and receiving verified ecological and productivity metrics to de-risk procurement and justify premiums. Verified performance will trigger grants, tax reinvestment, certification support, and inform credit lines and offtake contracts.

Output 4.1. National Rangeland MRV Platform established and operational

108. This output creates the analytical backbone of Mongolia's national adaptation system and ensures its long-term integration with national planning, budgeting and market systems. At present, Mongolia's relevant data are scattered across agencies - satellite imagery at ALAMGaC, meteorological observations and dzud indices at IRIMHE, livestock and veterinary data at MOFALI, and price and quality metrics within private markets—but these streams rarely intersect. The MRV Platform transforms this fragmentation into coherence, providing a unified view of how climate, management, and markets interact to influence resilience, productivity, and profitability.

109. The platform will operate through a joint analytics unit in MECC with support from MOFALI, ALAMGaC, and IRIMHE. Application programming interfaces will connect e-Gazar, IRIMHE feeds, and market databases so that information flows automatically and is visible on open dashboards at Soum, Aimag, and national levels. Standardized indicators and verification protocols will be developed in consultation with MECC, MOFALI, ALAMGaC, and IRIMHE so that the same dataset supports domestic policy and budgeting as well as Mongolia's international reporting to the UNFCCC, UNCCD, and CBD. Data privacy, free prior informed consent, and grievance procedures will ensure trust and participation among herders, cooperatives, and private partners.

110. Illustrative activities under this output include the design and hosting of the MRV and analytics platform; integration of e-Gazar, IRIMHE, MOFALI, and Components 1–3 data through APIs; adoption of standardized indicators and verification protocols; training of national and local staff and private partners in data collection, verification, analysis, and dashboard use; and the regular publication of Rangeland Resilience and Profitability

Briefs that communicate progress to both government and market audiences.

Output 4.2 – Business and Policy Roundtables institutionalized to align data, finance, and markets

111. Output 4.2 establishes Mongolia’s permanent mechanism for translating verified adaptation results into real financial and market action. Evidence changes behaviour when it moves money, and this output institutionalizes that connection. The Business and Policy Roundtables will be co-chaired by the Mongolian Chamber of Commerce and Industry (MNCCI) and the White Gold Initiative (WGI) with technical support from UNDP and UNIDO. They will convene government ministries, local authorities, herder household associations, processors, buyers, banks, insurers, and development partners in structured dialogues that use data from the MRV and Financial-Analytics Platform to adjust incentives, budgets, and market arrangements.

112. The Roundtables will meet twice each year, time-aligned to the national budget cycle and seasonal purchasing periods so that evidence feeds into fiscal allocations and contract negotiations in real time. Each meeting will review the latest Rangeland Resilience and Profitability Briefs, analyse the distribution of benefits across sectors, and agree on adjustments to premium structures, green-credit lines, and public-spending priorities.

113. Each year, Roundtables will publish reports summarizing commitments, actions, and outcomes—such as credit extended to verified herders, certified supply purchased at premiums, and grants awarded based on resilience and profitability. Gender and inclusion indicators will ensure equitable benefits. When MRV data reveals barriers, targeted solutions will be commissioned via the MRV platform or Coordination Facility.

114. Illustrative activities under this output include establishing the governance charter and membership of the Roundtables; organizing semi-annual evidence-to-investment dialogues; aligning indicators and financial triggers with national and international frameworks; publishing annual Adaptation-Economy Reports and public communiqués; and adopting procurement and credit preferences tied to MRV-verified results.

Output 4.3. Domestic knowledge sharing and upscaling mechanisms operationalized.

115. This output ensures that innovations, best practices, and lessons generated by the project are systematically shared and replicated across Mongolia. While Output 4.4 focuses on global learning, this output targets national upscaling—enabling non-project Soums and aimags to adopt climate-smart rangeland management approaches without direct project support. The project will establish a structured program of national conferences, regional workshops, and peer-learning exchanges. An annual National Climate-Smart Herder Conference will convene policymakers, local government representatives, herders, HHA leaders, private sector actors, researchers, and development partners to share results, discuss challenges, and identify opportunities for replication. Regional workshops in each target Aimag will facilitate experience sharing between project and non-project Soums, with practical demonstrations of rangeland monitoring methods, RUA implementation, and climate-smart livestock practices.

116. Herder-to-herder learning exchanges will enable HHA leaders and members from target Soums to share experiences directly with herders in other areas. These exchanges will build on the peer advisory capacity developed under Output 2.3, with trained HHA leaders serving as ambassadors for climate-smart practices. The Herder Development Centers piloted under Output 2.3 will serve as hubs for hosting visiting delegations and organizing local learning events.

117. The project will develop multimedia content to reach herders and stakeholders who cannot attend in-person events. Video documentation of best practices—covering rotational grazing, rangeland restoration, climate-smart livestock management, and HHA governance—will be produced and disseminated through social media, television, and the digital platforms established under Output 2.3. Short-format content suitable for mobile viewing will target youth and herders in remote areas. Radio programming will complement digital content to reach households without reliable internet access.

118. Technical guidelines and training materials developed under Components 1, 2, and 3 will be compiled into a Climate-Smart Pastoralism Resource Kit for use by Aimag and Soum governments, extension services, and HHAs seeking to replicate project approaches. The Resource Kit will be available in print and digital formats and will be updated annually based on MRV findings and user feedback.

119. The project will work with MOFALI and the National Agency for Meteorology and Environmental Monitoring (NAMEM) to integrate climate-smart pastoralism content into existing information channels, including livestock management recommendations published by MOFALI, early-warning communications, and agricultural extension bulletins disseminated by the Research and Development Center for Food, Agriculture and Light Industry under MOFALI. This mainstreaming ensures that project knowledge reaches herders through trusted, established channels.

120. Collaboration with academic and research institutions will support documentation and analysis of project innovations. The project will engage Mongolian universities and research institutes to conduct applied research

on rangeland restoration, carrying capacity assessment, and climate-smart livestock practices, building a domestic knowledge base that outlasts the project period.

Output 4.4. Global learning and partnerships advanced.

121. This output transforms Mongolia's adaptation experience into a global public good while drawing new knowledge and investment back into national practice. Mongolia's integrated model - legally enforceable rangeland governance, conditional field investments, market-based incentives, and a national evidence platform - has deep relevance for dryland economies worldwide. This output curates, shares, and leverages the lessons, data, and tools generated under Components 1–4 to strengthen international cooperation, promote investment in climate-smart pastoral value chains, and position Mongolia as a regional leader in regenerative livestock management.

122. The project will engage actively with global learning platforms through partnerships with the Adaptation Fund, UNDP and UNIDO networks, the GEF, and the UNCCD's Land Degradation Neutrality knowledge exchange. Case studies and policy briefs will document how verified adaptation reduces losses, increases productivity, and generates economic returns while protecting biodiversity and carbon stocks. These materials will feed directly into Adaptation Fund knowledge products and global dialogues on financing adaptation through value-chain transformation. Participation in international trade fairs and buyer events supported under Output 3.3 will be coordinated with global learning activities to maximize Mongolia's visibility as a source of verified sustainable livestock products.

123. Output 4.4 will facilitate peer-to-peer exchange across dryland countries in Central and East Asia, promoting technical cooperation on impact-based forecasting, ILMP/ALMP and RUA integration, and National Rangeland MRV system design. Study tours and virtual exchanges will enable Mongolian experts, herder representatives, and policymakers to share experiences on adaptive rangeland governance, participatory monitoring, and private-sector engagement. The same partnerships will allow Mongolia to incorporate global innovations—such as new data tools, nature-based solutions methodologies, or financing mechanisms—into the continuous evolution of its national system.

124. International visibility and peer exchange reinforce domestic incentives and crowd in buyers and capital for regenerative supply chains. By demonstrating that verified adaptation generates measurable returns for producers, investors, and ecosystems, Mongolia strengthens its credibility as a global reference point for climate-resilient pastoral economies. The partnerships built under this output will sustain learning, attract new finance, and keep Mongolia's adaptation economy aligned with emerging best practices in sustainable trade, biodiversity stewardship, and carbon accounting.

125. Illustrative activities under this output include compiling and publishing case studies and policy briefs; co-authoring knowledge products with the Adaptation Fund, UNDP, and UNIDO; hosting and participating in regional and international exchanges with buyers, investors, and research networks; organizing joint sessions with sustainable-fibre, leather, and regenerative agriculture platforms; and presenting Mongolia's model and verified results at global adaptation, trade, and finance forums.

B. Economic, Social and Environmental Benefits

Describe how the project/programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project/programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

126. **Selection of beneficiaries.** The proposed project will generate significant and sustained economic, social, and environmental benefits for 4,000 herder households comprising an estimated 16,000 individuals - Mongolia's most climate-vulnerable population - who are dependent on increasingly fragile rangeland ecosystems and exposed to intensifying climate shocks. Of these direct beneficiaries, at least 50 percent will be women (8,000 individuals), and at least 30 percent will be youth under age 35 (4,800 individuals). Indirect benefits will extend to approximately 20,000 additional herders in target aimags through improved market access, knowledge sharing, and strengthened early warning systems. Within the herder communities in Dundgovi and Sukhbaatar, the project will target the most vulnerable herders through a systematic, participatory, selection process aligned with the Adaptation Fund's principles of equity and vulnerability-based targeting.

127. During project inception, Community Vulnerability Mapping will identify priority areas based on rangeland degradation, dzud exposure, and socio-economic vulnerability, including households with fewer than 200 livestock and limited alternative income sources. Beneficiaries will be selected through consultations with soum governments, Herder Household Associations (HHAs), and cooperatives. Of the 4,000 participating herder

households, the project will ensure at least 50% women's participation, 30% participation by youth under 35, and 30% representation of particularly vulnerable groups, including women-headed households, households headed by persons with disabilities, households with limited labor capacity, and youth-led households. This targeted approach will ensure adaptation benefits reach those most exposed to climate risks and are least able to recover from climate shocks.

128. **Equitable distribution of benefits.** Social Inclusion Assessments conducted in each target soum will inform Benefit Distribution Plans that prioritize women, youth, persons with disabilities, female-headed households, and vulnerable households with fewer than 200 livestock. The project will reserve at least 50% of training, extension, and micro-grant opportunities for women, apply priority scoring for vulnerable groups, and ensure activities are accessible and responsive to participants' time and mobility constraints. Progress will be tracked through gender-, age-, and vulnerability-disaggregated indicators, with quarterly reviews by the Project Management Unit and annual reporting to the Project Board. Transparent beneficiary registries, community scorecards, and a multi-level grievance redress mechanism will provide oversight, accountability, and recourse for individuals or groups who believe they have been unfairly excluded from project benefits.

129. **Economic benefits.** The project will strengthen the climate resilience and economic viability of herder livelihoods in Dundgovi and Sukhbaatar aimags. Expected outcomes include a 15–25% reduction in livestock mortality during climate shocks through improved preparedness and early warning systems, a 10–20% increase in livestock productivity through climate-smart husbandry and animal health services, and 15–30% price premiums for certified climate-smart livestock products accessing higher-value markets. Together, these interventions are expected to increase participating herders' incomes by 20–30%.

130. The project will also enhance the competitiveness of livestock value chains by improving traceability, certification, and cleaner production practices. Approximately 500 jobs are expected to be created or sustained in processing, quality assurance, grading, and extension services, contributing to rural employment, economic diversification, and reduced vulnerability.

131. **Social benefits.** The project will generate significant social benefits by strengthening inclusion, skills, and community participation. At least 2,000 women (50% of direct beneficiaries) and 1,200 youth (30%) will receive training in climate-smart livestock management, animal health, quality assurance, grading, and value-added processing. Women will hold at least 50% of leadership positions in Herder Household Associations (HHAs), cooperatives, and other community governance structures, while vulnerable groups will gain a stronger voice in local decision-making through formal representation in HHAs.

132. The project will promote women's and youth leadership, entrepreneurship, and digital skills in line with Mongolia's gender equality commitments. Gender-responsive and youth-inclusive approaches—including flexible training schedules, targeted outreach, and tailored extension services—will improve access to opportunities, strengthen social cohesion, expand livelihood options, enhance resilience to climate shocks, and help reduce rural out-migration, particularly among women and young herders.

133. **Environmental benefits.** At the ecosystem level, the project will deliver measurable restoration of degraded rangelands, rehabilitation of biodiversity corridors, and protection of critical water resources. The project targets: (i) approximately one million hectares of rangeland under improved management through enforceable RUAs and adaptive grazing regimes across 12 target Soums; (ii) at least 60 water points and nature-based restoration investments constructed or rehabilitated; and (iii) measurable improvements in vegetation cover and biomass productivity in target areas by project end. Resilience threshold mapping will underpin grazing plans and restoration activities to ensure rangeland use remains within ecological limits. Nature-based solutions for water management will protect natural springs, riparian rangelands, and wetlands, improve infiltration, soil moisture retention, and drought resilience while maintaining downstream water quality. By integrating biodiversity objectives into ILMPs/ALMPs and RUAs, the project will safeguard migratory routes for iconic wildlife such as gazelle and khulan, and will reduce desertification, soil erosion, and dust-storm frequency that affect both rural and urban populations.

134. Cleaner-production upgrades in the meat and leather sectors will reduce water use, chemical pollution, and greenhouse-gas emissions, contributing to circular economy and environmental-quality targets in Mongolia's Vision 2050 long-term development policy. At national scale, the project will advance progress toward NDC 3.0 commitments while increasing soil-carbon storage and enhancing the country's reputation for sustainable livestock production and processing.

135. **Safeguards and risk management.** All activities will comply with the Adaptation Fund's Environmental and Social Policy and Gender Policy as well as national environmental and labour standards. The project will avoid or minimize negative impacts through careful site selection and participatory planning. No activity will expand grazing into fragile or high-conservation-value ecosystems. Water-related infrastructure will be designed

using hydrological and ecological assessments to ensure that extraction or diversion does not exceed sustainable limits. All cleaner-production investments will undergo environmental screening and adopt pollution-control technologies consistent with MECC guidelines.

136. A grievance-redress mechanism and free, prior, and informed consent process will protect community rights. Independent audits, open MRV dashboards, and public scorecards will provide transparency and accountability. Potential gender or social inequities will be addressed through the Gender Action Plan and ongoing monitoring of gender-disaggregated indicators. A comprehensive, context-specific Gender Assessment and an associated Gender Action Plan have already been developed for the full proposal, drawing on a desk review of national and aimag-level statistics and policy and on primary field research in both target aimags. The Gender Assessment analyses gender-differentiated climate vulnerabilities, roles in livestock management, barriers to participation, and opportunities for women's empowerment. The accompanying Gender Action Plan is a fieldwork-integrated, aimag-differentiated plan designed to meet the Gender Transformative (GEN3) standard under the AF Gender Policy (2017), specifying targets, activities, responsibilities, indicators, and budget allocations across the project's four components. It is supported by a Gender Risk and Safeguard Matrix that identifies and rates gender-specific risks — including elite capture of finance and investments, the post-dzud GBV pathway, benefit attribution to male household heads, and a head-of-household-based monitoring system that would route benefits to men — with likelihood, impact, and mitigation measures, and by a GBV-sensitive grievance-redress design. Consistent with that design, the GRM applies survivor-centered handling for GBV and sexual exploitation and abuse cases, excludes community mediation of GBV complaints, embeds confidentiality and a non-retaliation guarantee, and routes survivors to the Mongolian Red Cross Society aimag branches as the designated first-level referral partner for psychosocial support. During the full proposal stage, PFG resources will be used to deepen and validate these instruments, including closing the documented data gaps (notably aimag-level sex-disaggregation of household heads and a baseline for joint A-account registration). A detailed Environmental and Social Management Plan building on the gender documents already prepared will be prepared during the full proposal stage to ensure that project activities avoid or mitigate negative impacts and deliver inclusive, measurable resilience outcomes.

C. Describe or provide an analysis of the cost-effectiveness of the proposed project/programme.

137. The proposed project offers a cost-effective approach to climate resilience by replacing fragmented interventions with an integrated system linking governance, restoration, and market incentives. Concentrating \$15 million in two rangeland clusters (12 Soums, ~1M ha) ensures measurable ecological recovery, income stability, and policy reform while minimizing transaction costs through existing legal instruments and data systems (RUAs, ILMPs/ALMPs, livestock tax, national monitoring). By leveraging established institutions and prior donor investments (SLP, Green Gold, PMPMD), the project maximizes returns and creates a scalable national model.

138. Unlike costly post-dzud relief, the project invests in prevention through enforceable governance, adaptive management, and market transformation. Since 1999, dzud events have killed 40M animals, erasing billions in value. Evidence from the World Bank shows resilient practices can prevent losses entirely and boost productivity by 36%. Each avoided dzud saves hundreds of millions, far exceeding the project's budget.

139. Component designs minimize costs by sharing enforcement and monitoring across soum governments, herder household associations, and agencies, using existing revenue streams. Component 1 integrates ILMPs, ALMPs, RUAs, and fiscal tools to eliminate reliance on external grants. Component 2 applies community-based restoration and adaptive grazing—cheaper than engineering or emergency aid. Component 3 leverages private investment through compliance-linked market access, multiplying public finance. Component 4 consolidates data into one MRV Platform, avoiding duplication and enabling evidence-based planning and reporting.

140. Cost-effectiveness is further enhanced by a market-based architecture that mobilizes private co-finance and converts time-bound grants into recurring, self-financing systems. By aligning climate-smart certification and traceability with ILMP/ALMP and RUA compliance, the project channels existing private incentives toward sustainable land management at no additional public cost. The project ties finance directly to performance—using fiscal mechanisms such as livestock tax reinvestment and performance-based grants. Herders who adopt traceable, regenerative practices access premium offtake contracts and price premiums through arrangements with the White Gold Initiative and industry associations, while performance-based grants bridge short-term adjustment costs until market rewards sustain compliance without subsidies. Cleaner, certified processing in meat, leather, and wool attracts impact investment and trade-finance facilities, multiplying Adaptation Fund resources.

141. The delivery of the project's essential outputs will not depend upon private co-financing. Adaptation Fund resources will finance the core public and community adaptation functions—governance frameworks, rangeland

restoration, climate-risk preparedness, extension services, and knowledge systems—that deliver measurable resilience outcomes independently. The market-based architecture is intended to leverage additional investment for scaling commercially viable activities and enhancing sustainability beyond the grant period, not to substitute for AF-financed adaptation. This will be phased and risk-managed: AF grant resources will first establish the foundational governance, capacity, and infrastructure (Components 1 and 2) before market-based mechanisms under Component 3 are fully operationalized. Any shortfalls in private co-finance will not delay or compromise AF-funded implementation. Private investment will be primarily used to improve the scale of commercially viable activities—such as certified processing, premium market access, and green finance products—and help sustain enduring impact after the project closes. The Project Board will monitor private sector engagement through annual reviews and, if market-based mechanisms underperform expectations, will ensure that AF resources are reallocated to maximize adaptation outcomes within the approved budget.

142. Long-term financial sustainability is secured by embedding MRV operations in soum subscriptions and service fees, institutionalizing livestock tax and performance-based grant systems through budget circulars and by-laws, and transitioning certification governance to the Mongolian Agency for Standardization and Metrology (MASM) and industry bodies. Mobile applications and community scorecards make compliance largely self-enforcing, while transparent data dashboards reduce the need for expensive third-party audits. Community labour, co-financing, and public-private partnerships for processing upgrades further reduce net costs to the project.

143. In sum, each project dollar generates multiple returns—reducing livestock losses, restoring degraded land, strengthening biodiversity and water regulation, increasing rural incomes, and expanding fiscal revenues through higher-value exports. The integrated, law-anchored, and market-driven design shifts Mongolia's pastoral sector from a high-risk, low-return model to a resilient, self-sustaining, and globally competitive economy. At the full proposal stage, a comprehensive cost-benefit and alternatives analysis will be undertaken to quantify these efficiencies with supporting data and to demonstrate that the project represents the most cost-effective pathway for building resilience in Mongolia's rangeland systems.

D. Describe how the project/programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national adaptation plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

144. The project is fully aligned with Mongolia's national policy framework for sustainable development, climate adaptation, and sectoral development. Table 3 summarizes the project's alignment with key national strategies, plans, and programmes.

Table 3. Alignment of the project with national strategies, plans and programmes

Plan/Strategy	Main Objective(s)	Project Alignment
Vision 2050 Long-term Development Policy of Mongolia (2020-2050)	Develop a low-carbon, productive, inclusive green economy; rehabilitate natural resources; develop agriculture into an environmentally sustainable, climate-resilient, and socially inclusive sector	Aligned under Objectives 6.2 (rehabilitate natural resources), 6.4 (low-carbon green economy) and 8.3 (climate-resilient agriculture), contributing to climate-smart rangeland management and livestock value chain development.
National Adaptation Plan (NAP) (2024-2030)	Implement 99 climate adaptation measures across 15 targets covering environmental, social, and economic sectors	Aligned under 8 targets and 23 specific actions, contributing to rangeland restoration, livestock-sector resilience, early warning, and livelihood protection (detail in the table below).
Nationally Determined Contribution (NDC 3.0) (2025-2030)	Reduce GHG emissions by 52.8% by 2030; implement adaptation measures in livestock sector including rangeland restoration, smart technologies, and sustainable management	Aligned under all four livestock-sector adaptation priorities, contributing to reduced rangeland pressure, improved water and feed supply, smart-technology adoption, and expanded restoration.
Sendai Framework Implementation Strategy (Second Phase) (2021-2025)	Establish disaster risk assessment systems and enhance preparedness for disaster protection	Aligned under Objectives 1.2 and 1.3, contributing to climate-risk assessment, early warning, and dzud/drought preparedness.
White Gold National Programme	Transform livestock-based industries; strengthen wool,	Aligned under measures for compliance certification, green financing, traceability, and climate-resilient practices,

(Parliament Resolution No. 63) (2024-2028)	cashmere, and leather sectors; increase value-added processing; boost export value to USD 800 million; create 8,000+ jobs through sustainable production and traceability	contributing to value-added processing, quality standards, and export competitiveness in livestock value chains.
Food Revolution Programme (Parliament Resolution No. 36) (2022-ongoing)	Secure food supplies through increased domestic production, improved logistics, and strict safety standards	Aligned under priorities for domestic food production and safety standards, contributing to upgraded meat value chains and food security through climate-resilient production.
National Water Policy and Water Sector Strategy (2020-2030)	Ensure sustainable water resource management; protect water sources; improve water supply for rural populations and livestock	Aligned under priorities for water-point rehabilitation and sustainable water management, contributing to improved water infrastructure, spring and wetland protection, and nature-based solutions for water security.
National Biodiversity Programme (2020-2030)	Conserve biodiversity; protect ecosystems and wildlife corridors; reduce desertification	Aligned under priorities for ecosystem protection and wildlife corridors, contributing to safeguarded migratory routes, reduced desertification, and biodiversity integration in rangeland plans.
Cross-Sectoral Strategic Plan for Promoting Gender Equality (2022-2031)	Mainstream gender equality; increase women's economic participation and leadership	Aligned under priorities for women's economic empowerment and governance participation, contributing to at least 50% women's participation, HHA leadership roles, and gender-responsive extension services.
Law on Herder Household Associations (2024)	Establish legal framework for herder organizations; enable collective rangeland management	Operationalizes the Law by building HHA capacity, supporting RUA development and enforcement, and establishing Herder Development Funds.
Livestock Tax Law (2020)	Generate revenue from livestock sector for reinvestment in rangeland and livestock management	Supports implementation by linking tax revenues to Performance-Based Grants and Herder Development Funds.

145. **Note on Vision 2030:** Mongolia's Sustainable Development Vision 2030 was superseded by the Vision-2050 Long-term Development Policy, approved by Parliament Resolution No. 52 in 2020. Vision 2050 is now the overarching framework guiding all national and sub-national policies and development strategies.

146. The National Adaptation Plan (NAP) 2024-2030 includes 99 climate change adaptation measures structured in 15 targets. The proposed project directly relates to 23 measures under 8 targets. Table 4 provides detailed alignment of project outcomes with specific NAP targets and actions.

Table 4. Alignment with the National Adaptation Plan

Project outcomes	National Adaptation Plan (2024-2030)
Outcome 1: A coherent spatial, legal, and fiscal framework enables herder household associations and local governments to strategically restore rangeland ecosystems and strengthen climate resilience.	Target 1 (adaptation policy, legal and institutional environment) - Action 1.9. Target 2 (stakeholder knowledge, capacity and research) - Action 2.5. Target 4 (reduce desertification, land degradation and permafrost loss) - Action 4.4. Target 10 (productive, climate-resilient livestock sector) - Action 10.1. Target 15 (welfare, protection and insurance for vulnerable groups) - Action 15.3.
Outcome 2: Herders and local authorities adopt climate-resilient grazing and livestock management practices.	Target 1 - Action 1.6. Target 2 - Actions 2.4 and 2.5. Target 4 - Actions 4.3 and 4.4. Target 8 (reduce climate-induced disaster risks, improve resilience) - Actions 8.3 and 8.4. Target 9 (multi-hazard impact-based early warning) - Action 9.4. Target 10 - Actions 10.2-10.5. Target 11 (livestock quality and economic turnover, reduced pasture loads) - Action 11.2.
Outcome 3: Herder resilience and agribusiness continuity are strengthened as profitable livestock value chains incentivize and reward the adoption of climate-smart and regenerative rangeland-management practices.	Target 11 - Actions 11.1 and 11.4 Target 15 - Action 15.4.

Outcome 4: Holistic knowledge and learning systems that improve information sharing, amplify best practices, and expand climate-smart, regenerative livestock-sector innovation and profitability.	Target 1 - Action 1.9. Target 2 - Action 2.10. Target 9 - Action 9.3.
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147. The project contributes to all four livestock sector adaptation targets in the NDC 3.0 and will enhance carbon sequestration, thereby contributing to the NDC target of reducing GHG emissions by 52.8% by 2030.

148. By strengthening participatory rangeland governance, enhancing the capacity of herder communities and facilitating reinvestment of the livestock tax into sustainable rangeland and livestock management, the project translates Mongolia's recent reforms - including the Livestock Tax Law (2020), the Law on Herder Household Associations (2024), the Law on Herders and the 2024 amendment to the Land Law into practical, enforceable, and financially sustained adaptation systems. Gender sensitivity and youth inclusion will be mainstreamed throughout project implementation, consistent with the Cross-Sectoral Strategic Plan for Promoting Gender Equality (2022–2031).

E. Describe how the project/programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

149. The project will comply with Mongolia's national technical standards and the Adaptation Fund's Environmental and Social Policy (ESP). All activities were developed through national consultation and will be implemented in accordance with relevant regulations, technical standards (MNS), and international norms. The project aligns with AF principles including protection of marginalized groups, gender equity, and environmental sustainability. Relevant technical standards and regulations are organized thematically below:

- **Environmental assessment:** All infrastructure (wells, water-point rehabilitation, fodder storage, processing facility upgrades) will undergo environmental screening under the Law on Environmental Impact Assessment (2012, amended 2021), with general or detailed EIAs approved by MECC as required.
- **Land and rangeland management:** Rangeland Use Agreements will comply with Land Law (2002, amended 2024) and cadastral standards issued by ALAMGaC. All RUAs will be spatially mapped and aligned with Soum-level ALMPs.
- **Water resources:** Water-point restoration will follow the Law on Water (2012, amended 2023) including basin planning, licensing, and protection-zone requirements.
- **Livestock and animal health:** Veterinary activities will comply with the Law on Animal Health (2017), MOFALI regulations, and relevant MNS standards for livestock management and disease control.
- **Livestock product processing:** Processing activities will comply with relevant national standards (MNS), including MNS 6891:2020 (Responsible Nomad Code of Practice), MNS 6926:2021 (Sustainable Textile Production), and product-specific standards for meat, wool, cashmere, and leather. International standards including HACCP, ISO 9001, ISO 14001, and Leather Working Group protocols will be applied as appropriate. MASM will oversee alignment of the climate-smart pastoralism certification with national and export market requirements.
- **Occupational safety:** Project activities will comply with the Labour Law (2021) and Law on Occupational Safety and Hygiene (2008, amended 2023).
- **Waste management:** Construction and operational waste will be managed in accordance with the Law on Waste (2017, amended 2023).

150. **Procedures for compliance.** The project will implement the following procedures to ensure compliance with the above standards throughout the project cycle.

- **Screening and assessment:** Prior to implementation, all physical investments (water points, fodder storage, processing facility upgrades) will undergo environmental and social screening using standardized checklists aligned with both AF's ESP principles and Mongolia's EIA Law. Activities triggering general or detailed EIA requirements will not proceed until MECC approval is obtained. The PMU Environmental and Social Safeguards Officer will conduct initial screening, with results documented in the project's safeguards registry.
- **Approval and clearance:** Technical designs for infrastructure will require clearance from the relevant line agency (ALAMGaC for land/rangeland, Water Authority for water points, MOFALI for livestock facilities) before procurement. Processing facility investments will require MASM verification of compliance with applicable MNS standards. The PMU will maintain a clearance tracker ensuring no activity proceeds without required approvals.
- **Monitoring and reporting:** Compliance will be monitored through quarterly site inspections by the PMU Safeguards Officer, with findings reported to the Project Board. Annual environmental and social audits will

be conducted by independent reviewers. Compliance indicators will be integrated into the project's M&E framework and reported in Annual Project Reports to the Adaptation Fund. The National Rangeland MRV Platform will track RUA compliance and rangeland condition indicators in real time.

- **Non-compliance and corrective action:** Any identified non-compliance will trigger immediate corrective action. The PMU will issue a Non-Compliance Notice specifying the violation, required remediation, and timeline. Continued non-compliance may result in suspension of disbursements to the relevant activity until remediation is verified. Serious violations will be escalated to the Project Board and reported to the Adaptation Fund Secretariat. The three-tier grievance redress mechanism (HHA, soum, Aimag levels) will enable stakeholders to report suspected violations.

151. Consistent with the AF ESP, the project has undergone initial safeguards screening and is expected to deliver predominantly positive environmental and social impacts, with moderate risk. A comprehensive Environmental and Social Management Plan (ESMP) will be prepared during full proposal development, incorporating screening criteria, mitigation measures, monitoring indicators, grievance mechanisms, FPIC, and gender-responsive participation. The project will not finance activities causing involuntary resettlement, natural-habitat conversion, or harm to Indigenous Peoples, cultural heritage, or critical biodiversity.

F. Describe if there is duplication of project/programme with other funding sources, if any.

152. The proposed project has been designed to complement and build upon existing investments in Mongolia's pastoral sector while avoiding duplication. The table below summarizes related projects and programmes, identifies synergies to leverage, and explains the unique value added by this project.

Table 5. Synergies and non-duplication of projects with other funding sources

Project / Donor / Period	Geographic Focus	Synergies (What to Leverage)	Non-Duplication (Unique Value Added)
Livestock Commercialization Project (LCP) World Bank \$30M 2020–2025	12 aimags including Dundgovi (overlap)	Build on animal health systems, traceability infrastructure, and Marketplace Solutions established by LCP.	LCP focuses on commercialization infrastructure; this project adds climate-smart certification, enforceable RUAs and performance-based fiscal and market incentives not addressed by LCP.
Aimag and Soum Green Development Investment Programme (ASDIP) ADB/GCF/EIB \$735M 2025–2035,	Tranche 1 in Bayan-Ulgii, Khovd, Uvs, aimags (no overlap)	Align approaches on rangeland management and livestock value chains; share lessons learned on climate adaptation.	No geographic overlap with Tranche 1; ASDIP focuses on western aimags while this project targets Dundgovi and Sukhbaatar.
Virtual Cooperatives Project World Bank \$3.5M 2024–ongoing	Nationwide	Leverage digital learning platforms developed under Virtual Cooperatives.	Virtual Cooperatives provides digital infrastructure; this project adds climate-smart content, MRV integration, and certification functionality.
Improving Adaptive Capacity and Risk Management of Rural Communities (ADAPT) UNDP/GCF \$23.1M; 2021–2028	4 aimags including Sukhbaatar (overlap)	Coordinate climate forecasting integration, align ecosystem-based approaches, share market access innovations; participate in joint coordination mechanisms.	ADAPT focuses on climate-informed planning and ecosystem-based approaches; this project adds enforceable rangeland governance, digital MRV, market-linked compliance, and certification systems. Geographic targeting within Sukhbaatar Aimag will prioritize non-ADAPT Soums.
Promoting Dryland Sustainable Landscapes and Biodiversity Conservation in the Eastern Steppe of Mongolia FAO/WWF/GEF \$5.3M; 2020–2025	Sukhbaatar (overlap)	Build on the project's biodiversity monitoring and landscape approaches; coordinate rangeland assessment methodologies.	The GEF/FAO/WWF project focuses on dryland biodiversity and landscape connectivity; this project adds rangeland governance, certification, and market linkages, and targets both the eastern steppe and southern desert steppe regions.
Project for Pasture Management and Market Development (PMPMD) IFAD \$22M+ Phase 2: 2018–2024; Phase 3: 2026–?	6 aimags including both Dundgovi and Sukhbaatar (Phase 2)	Build on herder group and cooperative structures, and market linkages established by PMPMD; coordinate with Phase 3 planning.	PMPMD focuses on diversification and market access; this project adds climate-smart certification, enforceable RUAs, digital MRV, and performance-based incentives.

UNIDO Programmes (SECIM, EDP, GCIP) UNIDO/various Various/ongoing	Nationwide	Leverage cleaner production expertise, processing technology upgrades, certification schemes and SME support systems; UNIDO as executing partner of this project.	UNIDO provides industrial processing expertise; this project integrates these with pastoral value chains and adds climate-smart certification requirements.
Sustainable Livelihoods Project (SLP) Phase I–III World Bank Completed 2023	Nationwide	Build on Local Development Fund infrastructure, local governance mechanisms and community participation capacity established by SLP.	SLP completed; this project builds on its foundations while adding Soum-level Herder Development Funds, digital MRV, enforceable RUAs, market-linked compliance mechanisms and climate-resilient value chain development.
Green Gold Project SDC approx. \$30M Completed 2021	18 aimags including both Dundgovi and Sukhbaatar	Build on PUG formation expertise, RUAs, rangeland monitoring approaches piloted and results of sustainable rangeland use demonstrated by Green Gold.	This project operationalizes and enforces RUAs through Herder Household Associations, digital MRV, fiscal and market incentives, and links to dzud protection and export-oriented value chain development.

153. **Coordination mechanisms:** The project will coordinate with all listed initiatives through the Ministry of Environment and Climate Change (Designated Authority), Ministry of Food, Agriculture and Light Industry, project implementation units of active projects, and Aimag-level authorities. A Climate-Smart Pastoralism Working Group will serve as the primary coordination platform.

154. **Unique Project Value:** This project integrates fragmented past tools into a coherent system through: (i) enforceable RUAs with legal backing; (ii) digital MRV linking rangeland monitoring to compliance verification; (iii) climate-smart certification creating market incentives for sustainable practices; and (iv) performance-based fiscal incentives through Herder Development Funds.

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

155. The project embeds learning and knowledge management at its core through Component 4, building on two decades of experience from the World Bank's Sustainable Livelihoods Programme, SDC's Green Gold, UNDP's Ecosystem-based Adaptation projects, FAO/GEF's Dryland Landscape project, IFAD's PMPMD, and the GCF-financed ADAPT programme. Earlier initiatives generated technical innovations- including RUAs, carrying capacity thresholds, performance-based grants, participatory planning, and value-chain pilots - but impacts were often localized due to weak incentives and fragmented scale-up pathways. This project addresses these gaps by integrating learning and replication into national systems through a National Rangeland MRV Platform that channels verified evidence to local governments, MECC, ALAMGaC, IRIMHE, private-sector actors, and producer associations. Knowledge will flow horizontally - herder-to-herder, soum-to-soum, Aimag-to-Aimag - through comparative performance scorecards, peer exchanges, and Herder Development Centers demonstrating the profitability of regenerative grazing within ecological thresholds. It will also flow vertically, with verified field data informing policy, budgets, certification standards, procurement decisions, and restoration finance.

156. **Institutional responsibility for knowledge management.** The Project Management Unit (PMU), housed at UNDP, will have primary responsibility for systematically tracking and managing the collection of experiences and lessons learned throughout the project cycle. A dedicated Knowledge Management and Communications Officer within the PMU will be responsible for: (i) maintaining a project knowledge repository documenting innovations, challenges, and solutions; (ii) coordinating quarterly lesson-learning reviews with implementing partners; (iii) producing knowledge products including case studies, policy briefs, and technical guidelines; (iv) managing content for the National Rangeland MRV Platform's knowledge portal; (v) facilitating peer exchanges and learning events; and (vi) ensuring lessons feed back into adaptive management decisions. The Knowledge Management and Communications Officer will report to the Project Manager and work closely with the Climate-Smart Pastoralism Working Group to ensure that knowledge products respond to stakeholder needs and inform policy and market decisions. Data oversight and quality assurance will be the joint responsibility of MECC and ALAMGaC through a formal data governance protocol established during project inception.

157. The project will systematically capture and analyse lessons through mechanisms aligned with the Adaptation Fund's Knowledge Management Framework. A Climate-Smart Pastoralism Working Group—modelled on the White Gold Platform and co-chaired by the Office of the President and MOFALI, with UNDP and UNIDO providing secretariat support—will convene ministries, local authorities, Herder Household Associations, processors, buyers, banks, and development partners to translate MRV data into policy and market

adjustments. Annual Resilience and Profitability Reports will quantify returns from regenerative grazing, rangeland restoration, and compliance-linked market incentives—documenting avoided dzud losses, productivity gains, premium revenues, and ecosystem service values.

158. Knowledge dissemination will employ blended digital and traditional channels. Knowledge will be shared through conferences, workshops, digital dashboards, media, and e-learning platforms, and institutionalized via partnerships with universities and global networks. Mongolia will engage in South-South exchanges and international trade fairs, positioning itself as a regional leader in regenerative pastoralism and linking verified ecological data to global procurement decisions.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

159. The concept note was developed through an inclusive, multi-stakeholder consultative process. In September 2025, a dedicated mission by the lead consultant was conducted in Mongolia, followed by in-person and online meetings and phone interviews by UNDP, UNIDO, and a local consultant between October and November 2025. A total of **182 stakeholders (93 women, 89 men)** were consulted. The process was designed to be gender-responsive: stakeholders with a gender mandate were specifically engaged (National Committee on Gender Equality, Aimag gender focal points); separate focus groups were held with women herders; and vulnerable groups (poor households, youth, persons with disabilities) were consulted. Subsequently, field consultations were conducted in Sukhbaatar Aimag (May 7–8, 2026) and Dundgovi Aimag (May 13–14, 2026). These field consultations comprised **25 meetings with 49 participants (22F/27M)** and were complemented by consultation via phone covering aimag and soum governments, herder households including vulnerable groups, civil society, and private sector actors in both target aimags. Table 6 provides a comprehensive summary.

Table 6. Summary of stakeholder consultations during the Concept Note development

Stakeholder	Participants (F/M)	Key issues discussed	How incorporated in proposal
National government: MECC; MOFALI/RDCAES; MED; MFLSP; ALAMGaC; NAMEM/IRIMHE; MASM; Water Authority	34 (16F/18M)	NAP 2024-2030 and NDC alignment; 2024 Law on Herder Household Associations and livestock-tax reform; Herder Development Fund and fiscal transfers; vulnerable-household targeting; ILMP/ALMP/RUA registration; dzud early warning and climate data; MNS standards and certification; water-point standards.	Outcomes linked to NAP/NDC targets; Component 1 operationalizes the HHA Law and ALAMGaC procedures; performance-based grants via Herder Development Funds; beneficiary criteria per MFLSP definitions; EWS builds on IRIMHE indices; Component 3 certification aligned with MNS; Output 2.2 complies with the Water Law.
Gender-mandate stakeholders: National Committee on Gender Equality; Gender Focal Points of Dundgovi and Sukhbaatar aimags	5 (5F/0M)	Gender mainstreaming, gender-responsive budgeting and indicators; barriers to women's participation in rangeland governance; challenges of women herders.	50% women-participation target; women's leadership quotas in HHAs; gender-disaggregated baselines and Aimag-level gender monitoring.
Research institutions: NUM; MULS; RIAH; Institute of Geography and Geo-Ecology; Research Institute for Light Industry	16 (7F/9M)	Monitoring and MRV methodologies; carrying capacity and resilience thresholds; climate-resilient breeding and husbandry; degradation mapping and climate projections; fibre and leather processing research.	MRV methodology (NUM); resilience thresholds (MULS); extension content (RIAH); Section A analysis grounded in Institute of Geography research; Component 3 quality standards (RILI).
Private sector and value chain: SFA; MMA; MALI; meat and leather processors; MNCCI; Trade and Development Bank	23 (10F/13M)	Responsible Nomad certification experience; meat and leather standards and cold chain; cleaner-production technology needs; market data and trade facilitation; green finance for herders.	Component 3 certification builds on the SFA Responsible Nomad Code; value-chain analysis reflects MMA/MALI priorities; UNIDO cleaner-production support; MNCCI in Output 4.2 roundtables; Output 3.4 green-finance design with banking input.
Civil society: NAMAC; MNFPUG; Center for Policy Research; Association for	12 (6F/6M)	Cooperative development and herder organization capacity; PUG experience with RUAs; payment-for-	HHA capacity building informed by NAMAC; RUA design and grievance mechanisms per

Sustainable Rural Development		ecosystem-services approaches; inclusion of vulnerable groups.	MNFPUG lessons; Component 2 restoration investments; participatory monitoring.
Development partners and projects: World Bank LCP/VCP (two consultations); UNDP/GCF ADAPT; FAO-WWF/GEF Dryland Sustainable Landscapes	13 (5F/8M)	Lessons from the Sustainable Livelihoods Programme; complementarity and non-duplication; IBLI expansion and early-warning experience; Eastern Steppe biodiversity integration.	Section G lessons; geographic complementarity confirmed; IBLI expansion under Output 2.3; biodiversity objectives in ILMPs and RUAs.
Aimag and Soum governments: Governor's Offices of Dundgovi and Sukhbaatar; Soum governments in 6 Soums	27 (12F/15M)	Aimag priorities and ILMP status in target Soums; dzud preparedness gaps; Soum implementation capacity and HHA readiness; infrastructure needs.	Target-Soum selection informed by Aimag priorities; ILMP/ALMP alignment confirmed; Soum-level implementation arrangements and capacity building designed.
Herder communities incl. vulnerable groups: PUG federation leaders (8 Soums); leaders of 5 cooperatives; women herders (women-only focus groups); youth herders; vulnerable households (<200 head, women-headed, herders with disabilities)	52 (32F/20M)	RUA implementation and conflict resolution; marketing and value-chain constraints; women's time constraints and workload peaks; youth aspirations and employment; vulnerability-specific constraints (labour, assets, market access).	RUA design incorporates PUG lessons; cooperative strengthening under Output 3.2; gender-responsive scheduling and mobile approaches; 30% youth target and digital literacy; <200-head vulnerability targeting and priority selection.
Subtotal (Sept-Nov 2025)	182 (93F/89M)	51% women participation in consultations	
Field consultations, May 2026: Sukhbaatar Aimag institutions, herder communities, CSOs and private sector (13 meetings, 7-8 May); Dundgovi Aimag institutions, Soum governance and herder communities (11 meetings, 13-14 May)	47 (21F/26M)	Dzud impacts and livelihoods; IBLI threshold recalibration; fodder supply; water-pasture conflict risk; Aimag land-use plan timing; SME/cooperative support.	Vulnerability-targeting criteria validated; camp-level consultation modality adopted; Component 1 timing aligned with Aimag land-use plan finalization; Gobi soil conditions reflected in restoration design.
UNDP ADAPT national coordination meeting (Ulaanbaatar, 1 meeting); TVET colleges in both aimags consulted by phone (not included in participant count)	2 (1F/1M)	ADAPT lessons on IBLI, early warning and community-based adaptation; TVET colleges active but under-equipped as extension assets.	ADAPT lessons integrated in Outputs 2.3 and 4.1; Output 2.2 uses both colleges as decentralized extension and skills hubs.

160. Of the 231 stakeholders consulted during the concept note development phase, 64 (28%) were herder community members representing direct beneficiaries. Among these, 42 (66%) were women. The discussions with women herders focused on time constraints, safety, and leadership barriers that are specifically faced by women. Vulnerable group representation included: 16 youth herders under age 35; 22 representatives from poor households (with fewer than 200 head of livestock); 8 representatives from women-headed households and 5 representatives from households with disabled members.

161. These consultations directly informed the 50% women participation target, women's leadership quotas in Herder Household Associations, gender-responsive scheduling of activities, and preparation of a Gender Assessment and Gender Action Plan.

162. Consultations with vulnerable groups informed specific design features: (i) the vulnerability threshold of fewer than 200 head of livestock for priority targeting was validated with herders and Social Policy Departments; (ii) priority scoring for women-headed households, youth-led enterprises, and households with limited workforce was developed based on herder input; (iii) mobile service delivery and flexible scheduling were incorporated to address women's time and mobility constraints; (iv) accessible formats for persons with disabilities were specified based on consultation with affected households. A Stakeholder Engagement Plan has been prepared as part of the full proposal package. The SEP will guide continued inclusive consultation throughout project implementation, in accordance with the Adaptation Fund's Environmental and Social Policy and Gender Policy.

163. **Stakeholder Analysis.** Field consultations in both aimags prompted several significant updates to the power-interest analysis, which will be presented in the full proposal. Myangat malchin (herders with 1,000+ livestock) were elevated to Medium Power / High Interest based on confirmed social authority and peer influence roles. Bag governors were reclassified as Medium-Low Power given election-cycle turnover dynamics requiring backup focal points at every project bag. IBLI providers were elevated to High Interest given widespread herder grievances over soum-level thresholds and exclusion of fire risk coverage. Gender sub-committees in Sukhbaatar

Aimag (established in all 13 soums by Resolution A/484, September 2025, 22 members including 11 women) were upgraded to Active Engagement status. Displaced herder households in aimag and soum centers were added as a distinct stakeholder subgroup requiring separate urban outreach. The Mongolian Red Cross Society (national and aimag branches) was formally added as Medium Power / High Interest, confirmed as the primary community partner for reaching displaced and vulnerable households, providing a politically neutral engagement channel, and serving as first-level referral for psychosocial support and gender-based violence cases.

164. Socioeconomic Context at the Time of Consultations. The field consultations were conducted in the aftermath of the 2024–2025 dzud, which caused the loss of approximately 2 million livestock in Sukhbaatar Aimag alone (roughly 50% of the total herd). Registered unemployment increased 71.4% year-on-year in Sukhbaatar and 86.6% in Dundgovi by April 2026. Statistical data from the NSO April 2026 Socioeconomic Bulletins and the 2025 Year-End Livestock Census, integrated with consultation findings, document the scale of post-dzud displacement: 288 registered unemployed in Sukhbaatar (47.9% women); 181 in Dundgovi (56.9% women). Criminal offenses rose 39.4% in Sukhbaatar and 44.1% in Dundgovi year-on-year in the first four months of 2026, with intoxication-related incidents consistent with psychosocial stress among displaced households documented by the Red Cross Sukhbaatar branch. Livestock prices have risen sharply: a young bull reached 2.8 million MNT in Sukhbaatar (up 40% year-on-year), while male sheep prices rose 49.6% year-on-year in Dundgovi — directly undermining the affordability of livestock replenishment programmes. Food inflation reached 19.0% year-on-year in Dundgovi, and non-performing loans rose by 52.4% year-on-year, indicating compounding financial stress on herder households.

165. Key Thematic Findings Informing Project Design. Consultations in Sukhbaatar and Dundgovi identified priorities that directly informed project design. Sukhbaatar’s 254 photo-monitoring points and five weather stations provide a strong foundation for the project’s MRV system, while Dundgovi’s territorial development plan is 90% complete, creating an opportunity to align the project’s target of 1 million ha under improved management with emerging land-use planning. Existing PUGs offer a platform for HHA formation, although institutional responsibilities require clarification. Value-chain assessments highlighted significant market potential, including a processor operating at only 20% capacity in Sukhbaatar, while a 40% rejection rate in a Dundgovi sheep-skin auction exposed weaknesses in quality management. Cooperative assessments revealed capacity gaps, with only around 100 of Sukhbaatar’s 400+ cooperatives active and most of Dundgovi’s 692 registered cooperatives lacking meaningful economic activity. Herders also reported low confidence in index-based livestock insurance, identified January as the preferred training period (avoiding April–May cashmere season), and emphasized peer-to-peer and camp-level outreach through *khot ail* networks. Growing enclosure of 1–5 ha around winter camps was identified as a rising source of pasture conflict, highlighting the need for strengthened participatory governance and conflict-resolution mechanisms.

166. Gender and Vulnerable Group Findings. By April 2026, women account for 47.9% of registered unemployed in Sukhbaatar and 56.9% in Dundgovi, reflecting disproportionate displacement into urban labor markets for which most are unprepared. In both aimags, women herders do not contribute to social insurance, making them ineligible for pensions upon retirement — a critical structural vulnerability. The 2025 joint household asset account (A dans) registration policy for both spouses is new in Sukhbaatar, but awareness remains low and women still cannot independently access loans even when jointly registered. Over 30 housing support applications from female-headed households were received in Dundgovi alone. Women herders in both aimags actively encourage their daughters to leave herding due to social protection exclusion, healthcare barriers, and limited economic returns — a generational shift with direct implications for pastoral succession and youth engagement. The 15–34 age group is the smallest herder cohort in Dundgovi, and in Sukhbaatar children leave herding camps at age 6 for school and rarely return. Sukhbaatar Aimag had 2,979 registered persons with disabilities in 2025, of whom 1,215 (40.8%) are women; this intersectional group is explicitly identified as requiring proactive outreach through female focal points, Red Cross volunteers, and community health workers.

167. Grievance Redress Mechanism (GRM) Design. The project will implement a multi-tiered, accessible, and survivor-centered GRM aligned with the Adaptation Fund Environmental and Social Policy, UNDP Social and Environmental Standards, FAO stakeholder engagement guidance, and Mongolia’s national grievance framework. The mechanism will operate through four levels—community, aimag, project, and Project Steering Committee—with multiple entry points, including local administrations, HHA/PUG assemblies, hotline, email, and mobile outreach. Building on the strong performance of existing aimag grievance systems, the GRM incorporates trusted and politically neutral community focal points, continuity measures across election cycles, and a formal non-retaliation policy. The Mongolian Red Cross Society will serve as the designated referral partner for psychosocial support and GBV/SEA cases, ensuring safe, confidential, and timely access to support services for vulnerable groups.

168. Programme Continuity and Policy Alignment. The project builds on and scales established initiatives to

ensure continuity and sustainability. Certified herder groups and 264 herder–processor partnerships established under UNDP’s ADAPT project in Sukhbaatar provide an immediate platform for Component 3 implementation. The project also aligns with the completion of the STREAM+ programme (2024–2028), enabling a seamless transition in TVET reform, livestock value-chain development, breeding services, and integrated landscape management. It is further aligned with Mongolia’s emerging climate policy architecture, including the proposed Climate Change Law, which introduces aimag-level adaptation planning, a national MRV system, and a carbon market framework. In response to consultations, the project will also support the development of care economy and eco-tourism training pathways through local polytechnic colleges, creating alternative income opportunities for women herders, particularly those temporarily relocating to aimag centers for their children's education, while strengthening their long-term economic resilience and opportunities to re-engage in pastoral livelihoods.

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

169. **Business-as-usual scenario:** Without Adaptation Fund support, Mongolia’s pastoral sector will continue to face worsening rangeland degradation, weak grazing governance, and increasing climate pressures. With 65% of rangelands already degraded and over 40 million livestock lost to drought and dzud since 1999, ecosystem health, herder livelihoods, and food security will become increasingly vulnerable. Existing policies and incentives are likely to remain weakly implemented, while herders continue to rely on larger herd sizes as a coping strategy, further accelerating degradation. Without an integrated approach linking rangeland governance, climate adaptation, and market incentives, rural poverty and dependence on costly emergency relief will continue to rise.

170. **Adaptation Fund additionality and rationale.** Adaptation Fund support is essential to address the interconnected governance, ecological, and market failures driving climate vulnerability in Mongolia’s pastoral sector. The project’s additionality lies in establishing an integrated adaptation system that links policy, governance, fiscal incentives, and market mechanisms to reward climate-resilient rangeland management. Building on existing initiatives—including the FAO/GEF Eastern Steppe project, GCF ADAPT, UNIDO programmes, and World Bank and IFAD investments—the project moves beyond pilot interventions by creating a national framework that embeds adaptation within the 2024 Law on Herder Household Associations, the National Adaptation Plan (2024–2030), and NDC 3.0. Crucially, it introduces mechanisms that incentivize verified adaptation performance through fiscal transfers and market-based rewards, aligning environmental stewardship with sustained economic benefits for herder communities.

171. **Adaptation logic and impact pathways.** The project’s theory of change follows four integrated adaptation pathways - organize and enable, equip and adapt, reward and sustain, and measure and amplify - as detailed in the Theory of Change in Part II.A.

172. Together, these pathways reduce vulnerability to drought and dzud, stabilize household income, create employment, improve livestock productivity, and restore degraded ecosystems—turning reactive coping strategies into proactive, data-driven adaptation.

173. **Full cost of adaptation reasoning.** The requested Adaptation Fund investment of USD 15 million represents the cost required to transform Mongolia’s livestock sector from a conventional, production-oriented system into one that is climate-resilient, incentive-driven, and ecologically sustainable. Each component delivers a distinct adaptation function:

- Component 1: Climate-Resilient Rangeland Governance and Stewardship (USD 2.45 million): Finances enhanced analytical capacity for rangeland monitoring and carrying capacity assessment, strengthened planning and regulatory instruments (ILMPs, ALMPs, RUAs), institutional arrangements for RUA implementation through Herder Household Associations, and performance-based fiscal mechanisms. These are adaptation-specific costs—without which ILMPs, ALMPs, RUAs, and the livestock tax would remain underused administrative tools rather than instruments for resilience.
- Component 2: Rangeland Restoration, Extension, and Climate Adaptation Practices (USD 4.75 million): Supports climate-smart rangeland use regimes, community-level investments in ecosystem restoration and climate-smart livestock practices, strengthened extension services, and institutionalized climate-risk preparedness with strengthened social inclusion. These measures go beyond standard rural development by addressing explicit climate hazards and variability while building dzud preparedness and restoring ecosystem functions that buffer drought.
- Component 3: Climate-Smart Livestock Value Chains and Competitive Agribusinesses (USD 4.365 million): Creates a national certification and traceability system for climate-smart pastoralism, strengthened conformity assessment services, capacity building for herders and agribusinesses to meet international market standards, and sustainable financial mechanisms to reward regenerative production and processing. These public and private financial and market instruments constitute the economic backbone of adaptation,

transforming environmental compliance into profitability.

- Component 4: Climate-Adaptive Rangeland Knowledge and Learning System (USD 1.142 million): Institutionalizes a Rangeland MRV Platform with decision-support and sustainability mechanisms, domestic knowledge sharing and upscaling mechanisms, and global learning partnerships. Without such evidence systems, adaptation cannot be verified, scaled, or sustained.

174. Adaptation Fund financing covers the critical incremental costs of climate adaptation that cannot be met through domestic budgets or existing development programmes, including enforcement of rangeland management agreements, integration of ecological monitoring into fiscal systems, climate-risk analytics, and the development of incentive-based adaptation markets. The project enables a transition from fragmented, short-term interventions to a coherent national model where climate resilience is measurable, rewarded, and financially sustainable.

175. The investment also helps offset the short-term costs of adaptation for herders by creating incentives, infrastructure, and market benefits needed to support sustainable grazing practices and improved livestock management. In addition to restoring key ecosystem functions such as water regulation, soil carbon retention, and biodiversity conservation, the project strengthens inclusive governance and social resilience by promoting the meaningful participation of women and youth, with targets of 50% women's participation and 30% youth participation in governance, training, and capacity-building activities.

176. Transformational outcomes and sustainability. With Adaptation Fund support, the project will establish a scalable and self-sustaining model that links rangeland governance, ecological restoration, fiscal incentives, and market rewards to strengthen climate resilience across Mongolia's pastoral sector. The project will deliver lasting benefits through improved rangeland health, reduced climate-related livestock losses, enhanced productivity, and stronger institutional capacity. By connecting legal, financial, and market mechanisms, the project moves beyond conventional development approaches to create a sustainable adaptation system in which ecological stewardship generates tangible economic benefits.

177. In summary, the Adaptation Fund investment represents a catalytic and transformational step: converting decades of fragmented donor projects into a unified, incentive-based adaptation economy that restores degraded landscapes, strengthens livelihoods, and reduces national vulnerability to climate change. The project will demonstrate that verified adaptation generates measurable returns for producers, investors, and ecosystems while positioning Mongolia as a regional leader in regenerative pastoralism.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project/programme.

178. **Learning from past investments and legal anchoring.** The project's sustainability strategy directly responds to lessons from past investments—World Bank's Sustainable Livelihoods Programme (SLP I–III), FAO/GEF's Dryland Sustainable Landscapes project, EU SECIM and EDP (implemented by UNIDO), UNDP's GCF-financed ADAPT programme, and SDC's Green Gold initiative—which demonstrated that successful pilots fade when not embedded in law, financed through recurrent budgets, or reinforced by functioning markets. Every intervention under this project is therefore anchored in legally enforceable and fiscally supported systems. The 2024 Law on Herder Household Associations and the Land Law provide the statutory foundation for ILMPs, ALMPs, and RUAs that define clear rights, obligations, seasonal rules, and reserve-pasture requirements. Restoration activities, fodder reserves, and water-point protection will only be implemented where they are explicitly included in these planning instruments. Carrying capacity thresholds, updated bi-annually through the National Rangeland MRV Platform, will ensure continuity of adaptive management long after project closure.

179. **Institutional sustainability.** The project operates entirely within the mandates of existing national institutions - MOFALI, MECC, ALAMGaC and IRIMHE - ensuring that all outputs are owned and maintained by government systems beyond project completion. ALAMGaC will serve as the national center for rangeland spatial planning, with the e-gazar database fully interoperable with the National Rangeland MRV Platform. Herder Household Associations, legislated under the 2024 Law, will assume permanent responsibility for RUA implementation, providing a durable community-level governance structure.

180. **Fiscal and financial sustainability.** The livestock tax (2020) will be earmarked for rangeland management, monitoring, and dzud preparedness, creating a predictable domestic funding stream. The Mongolian Agency for Standardization and Metrology (MASM) and industry bodies will assume governance of climate-smart certification standards, ensuring market-based revenue streams continue to reward verified ecological performance.

181. **Market sustainability.** The climate-smart pastoralism standard—anchored in MASM and aligned with the White Gold Initiative, Sustainable Fibre Alliance, and Mongolian Sustainable Cashmere Platform—links

ecological verification with commercial reward. Processors, exporters, and investors gain clear evidence that production originates from rangelands managed within carrying capacity limits, enabling premium pricing and conditional offtake contracts.

182. Social sustainability. Co-signed RUAs involving soum governors, HHA leadership, and absentee herd owners establish shared accountability for rangeland stewardship. Quotas requiring at least 40 percent participation of women and 30 percent youth in governance bodies, training programs, and decision-making ensure equitable distribution of benefits and build the next generation of climate-smart herders. Transparent scorecards and a three-tier grievance mechanism (HHA → Soum → Aimag) provide accountability and trust. Recognition programs for model herders and HHAs will shift social norms toward stewardship and productivity.

183. Environmental sustainability. ILMPs, ALMPs, and RUAs will incorporate carrying capacity thresholds, rotational grazing schedules, seasonal mobility rules, and reserve-pasture designations—all updated annually based on MRV data. Restoration investments in degraded rangelands, water nature-based solutions, and fodder reserves will be explicitly tied to RUA compliance, ensuring that infrastructure is maintained through community obligation and fiscal incentive rather than external supervision.

184. Technical sustainability and knowledge systems. Training programs for ALAMGaC specialists, Aimag and soum land management officers, and extension staff will lead to nationally recognized accreditation. Herder Development Centers - established in target Soums—will serve as permanent hubs for learning and experience-sharing, with the low-cost model easily replicable through Component 4 knowledge-sharing mechanisms. Digital platforms—including e-learning modules, social media extension channels, and mobile-based monitoring tools—will ensure accessibility for herders unable to attend in-person training. Integration with the World Bank's Livestock Commercialization Project and Virtual Cooperatives Project digital platforms will leverage existing infrastructure and maximize reach.

185. Replication and scaling. The project is designed explicitly for replication and national scale-up. By demonstrating enforceable RUAs, digital MRV systems, conditional market access, and performance-based governance mechanisms across 12 Soums covering approximately one million hectares, the project creates a proven model that can be extended to other aimags through domestic budgets and complementary donor investments. The National Rangeland MRV Platform—providing standardized indicators for UNFCCC Adaptation Communications, UNCCD Land Degradation Neutrality reporting, and CBD/GBF biodiversity targets—establishes the operational foundation for evidence-based decision-making across Mongolia's entire rangeland economy. Output 4.3 operationalizes domestic knowledge-sharing through annual conferences, peer exchanges, and resource kits, while Output 4.4 advances global learning partnerships through UNCCD knowledge networks and South-South cooperation with other dryland countries.

186. The Adaptation Fund investment represents a catalytic step: converting decades of fragmented donor projects into a unified, incentive-based adaptation economy that delivers lasting ecological, social, and economic resilience across Mongolia's pastoral landscapes. Adaptation benefits achieved through the project will be sustained after its end and will enable replication and scaling with domestic resources and complementary climate finance.

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project/programme.

187. The project was screened against the fifteen environmental and social principles of the Adaptation Fund's Environmental and Social Policy (ESP). The screening process covers all potential direct, indirect, transboundary and cumulative impacts and risks that could result from the proposed project. Based on the nature of activities and the results of the initial risk screening, the project is classified as Category B (moderate risk), as potential adverse impacts are site-specific, reversible, and readily mitigated through well-established procedures. No large-scale or irreversible environmental or social risks are anticipated. The project will not involve resettlement, conversion of critical habitats, or activities with significant downstream pollution risks.

Gender Assessment

188. Gender context at national level. Mongolia ranks 65th in the Global Gender Gap Index 2025, with notable gender gaps in economic participation and political empowerment despite achieving near-parity in education and health. Women of working age are 15% less likely than men to be in the labour force, earn 25% less than men, and dedicate twice the time to unpaid household activities. These disparities are rooted in persistent social norms: 47% of men and 48% of women agree that men should have priority access to jobs when employment is scarce, and 52% of men believe men make better political leaders. Although women are employed at high rates in public administration, they constitute only 30% of mid-level managers and 15% of senior leaders, limiting their voice in policy-making processes.

189. ***Gender roles and division of labour in the pastoral sector.*** Herder livelihoods in Mongolia remain characterized by distinct gender roles that shape participation in the livestock economy and access to resources. Men typically manage larger livestock, negotiate sales, and represent households in governance structures, while women are primarily responsible for milking, dairy processing, fibre preparation, childcare, cooking, and care of small livestock. This division of labor creates significant barriers for women, including time poverty during peak agricultural seasons, limited mobility due to caregiving responsibilities, lower participation in decision-making on livestock and income, and reduced access to extension, veterinary, financial and market services.

- Applying an intersectional lens highlights groups facing compounded vulnerabilities while also recognizing their capacities and contributions. Women-headed households (WHHs) face a structural triple constraint of reduced labor availability, exclusion from male-dominated pasture management networks, and high levels of economic vulnerability. WHHs are disproportionately concentrated among herders owning fewer than 200 head of livestock, the threshold commonly associated with viable pastoral livelihoods. Nationally, 54.3% of herder households own fewer than 200 animals, making low-income herders the majority of the sector and particularly vulnerable to climate shocks and exclusion from certification schemes, insurance products and collective governance processes.
- Young herders represent another priority group. The share of herders aged 15–34 declined from 57.7% in 1995 to approximately 24.5% in 2024, with young women leaving pastoral livelihoods at the fastest rate. Women account for only about 24% of the current 15–34-year-old herder cohort, posing risks to the long-term sustainability and demographic renewal of the sector. At the same time, young herders are the most digitally connected and innovation-oriented segment of the herder population, making them well positioned to champion climate-smart livestock management, certification systems and value-chain development.
- Persons with disabilities (PWDs) face heightened climate vulnerability and social exclusion. In 2024, 18.6% of beneficiaries of dzud-related humanitarian assistance were persons with disabilities, indicating that disability significantly compounds the impacts of climate shocks. However, the absence of reliable aimag-level baseline data limits targeted interventions. Conventional training modalities, remote meeting locations and inaccessible grievance mechanisms often restrict participation by PWDs despite their valuable knowledge and experience in monitoring environmental and livestock conditions.

190. The project will address these disparities through gender-responsive and socially inclusive approaches, including targeted outreach to WHHs, youth, PWDs and low-income herders; flexible and locally accessible training modalities; improved access to information and services; and strengthened participation in decision-making and governance processes. Special attention will be given to generating disaggregated baseline data and ensuring that marginalized groups are engaged not only as beneficiaries but also as leaders and agents of climate-resilient pastoral development.

191. ***Quantitative gender data for the pastoral sector.*** Key statistics illustrate women's position in the pastoral economy:

- Herder demographics: Women comprise 35–40% of Mongolia's herders and about 42% of the herder labor force in the target aimags (42.1% in Sukhbaatar; 41.8% in Dundgovi). However, women remain underrepresented in asset registration and benefit allocation systems, while the declining share of young women herders (24% of those aged 15–24 and 34% of those aged 25–34) reflects continued migration to urban areas.
- Female-headed households: Female-headed households constitute approximately 12–15% of herder households nationally (9.7% in Sukhbaatar) and typically manage smaller herds (150–200 animals compared with 300+ for male-headed households), limiting their labor capacity, resilience, and access to livelihood opportunities.
- Pasture User Group participation: Women comprise only 25–30% of Pasture User Group members and hold just 10–15% of leadership positions, with no women represented in leadership roles within pasture user associations in the target aimags. This underrepresentation limits women's influence over rangeland governance, resource allocation and collective decision-making despite their significant contribution to livestock production and natural resource management.
- Access to credit: Women herders receive only 20–25% of agricultural loans, largely because livestock assets used as collateral are typically registered in the name of male household heads. Social and institutional barriers further restrict women's ability to obtain credit independently, limiting their financial inclusion, economic autonomy, and participation in livestock enterprises, value chains, and entrepreneurship.
- Income from value-added products: Women generate an estimated 60–70% of household income from dairy and fibre processing yet control only 30–40% of income derived from livestock sales. This disparity highlights persistent gender gaps in economic decision-making and benefit sharing, underscoring the need for mechanisms that strengthen women's direct access to income and financial rewards.

192. **Differentiated climate change impacts on women and men.** Climate change affects women and men differently due to their distinct roles, responsibilities, and access to resources:

- Dzud impacts: During and after dzud events, women's workload increases dramatically as they care for weak and young animals, process carcasses to salvage hides and meat, and manage household food security with depleted resources. Studies show women's daily working hours increase by 3-4 hours during dzud recovery periods. Women, children, and the elderly experience higher rates of respiratory illness and psychological stress during dzud events.
- Drought impacts: Declining pasture productivity forces herders to move more frequently and over longer distances, increasing men's time away from the homestead. Women left to manage the household alone face increased workload and isolation. Water scarcity increases women's labour burden as they are primarily responsible for water collection.
- Climate vulnerability and recovery: Climate change is altering seasonal patterns, affecting the timing of key activities such as kidding, shearing and cashmere combing, which are largely managed by women and require adaptation of traditional practices. Following dzud and other climate shocks, men often migrate in search of wage employment, leaving women as de facto household heads with increased responsibilities but reduced labor capacity. Female-headed households, which typically have smaller herds and limited access to credit, face greater challenges in recovering from livestock losses and rebuilding livelihoods.
- Gender-based violence: Climate-induced economic stress is associated with increased risks of domestic and intimate partner violence. National evidence indicates that over 52% of ever-partnered women in Sukhbaatar (52.8%) and Dundgovi (53.2%) have experienced intimate partner violence, with risks often exacerbated by dzud-related livelihood losses, financial insecurity and alcohol abuse. Limited support services in rural areas further constrain women's access to protection and assistance, highlighting the importance of survivor-centered grievance and referral mechanisms within project implementation.

Opportunities for women's empowerment through the project. The project presents significant opportunities to advance gender equality and strengthen women's agency in the pastoral sector. The 2024 Law on Herder Household Associations (HHAs) provides a foundation for establishing gender-balanced governance, with the project targeting at least 50% women's representation in HHA leadership and decision-making bodies. Building on women's existing roles in dairy and fibre processing, the project will enhance their participation in value chains through quality certification, skills development and improved market access. Digital extension, advisory and market information services will help overcome mobility constraints and improve women's direct access to knowledge and opportunities. Targeted micro-grants and financial inclusion measures will prioritize women-headed and vulnerable households, helping address asset and financing gaps. In addition, leadership development, financial literacy and climate-smart livestock management training will strengthen women's capacity to participate effectively in governance, entrepreneurship and climate-resilient livelihood development.

193. **Gender Action Plan.** A comprehensive, context-specific Gender Assessment and Gender Action Plan (GAP) has been developed for the project, informed by national data, policy review, and primary consultations in Sukhbaatar and Dundgovi aimags involving 52 key informants, including 27 women. The GAP outlines 37 targeted actions across all four project components and is designed to achieve the Adaptation Fund Gender Transformative (GEN3) standard. It is supported by a gender risk and safeguard matrix, gender-responsive results framework, and GBV-sensitive grievance mechanism. Key commitments include: at least 50% women's participation in training and capacity-building activities; 50% representation of women in HHA governance bodies supported by gender-responsive bylaws; enhanced joint registration and recognition of women's livestock assets and production; at least 30% of finance and micro-grant beneficiaries drawn from women-headed and vulnerable low-income households; individual-level certification and payment mechanisms to ensure women directly benefit from their contributions; and gender-responsive scheduling and delivery of project activities to accommodate women's workload and care responsibilities.

194. The following table presents the screening results against the fifteen ESP principles. For each principle, the risk level and justification are provided. Note that Principles 1 (Compliance with the Law), 4 (Human Rights), and 6 (Core Labour Rights) always apply and therefore cannot be marked as requiring no further assessment.

Table 7. Checklist of environmental and social impacts and risks against the ESP principles

Checklist of Environmental and Social Principles	No Further Assessment Required for Compliance	Potential Impacts and Risks – Further Assessment and Management Required for Compliance
1. Compliance with the Law	☒	Risk Level: Low. This principle always applies. All activities comply with Mongolia's Land Law, Law on Herder Household Associations, Law on Livestock Tax, environmental and

		labour laws, and the Adaptation Fund ESP; legal compliance is confirmed at site level during the full-proposal stage.
2. Access and Equity	☐	Risk Level: Low. Direct impacts: The project enhances equitable access to rangeland resources; RUAs are co-signed by all HHA members, ensuring transparent allocation of grazing rights. Risks of elite capture are mitigated through active-herding participation criteria, proportional representation, three-tier grievance mechanisms (HHA/Soum/Aimag), transparent beneficiary selection with priority scoring for vulnerable groups, and independent monitoring of benefit distribution.
3. Marginalized and Vulnerable Groups	☐	Risk Level: Low. Direct impacts: The project explicitly targets vulnerable groups (female-headed households, herders with <200 head, herders with disabilities, youth). Risk that the least mobile or least connected are missed is mitigated through 50% women and 30% youth participation targets, priority scoring for vulnerable households, mobile service delivery, and dedicated outreach; a Gender Assessment and vulnerability criteria guide targeting.
4. Human Rights	☒	Risk Level: Low. This principle always applies. The project promotes rights to participation, information and a healthy environment through inclusive governance, disclosure and grievance mechanisms; no human-rights risks are anticipated, and any concerns are addressed through the grievance redress mechanism.
5. Gender Equality and Women's Empowerment	☐	Risk Level: Moderate. Direct impacts: The project offers significant opportunities for women's empowerment through HHA governance, value chains and training, but could reinforce inequalities or increase women's workload without deliberate measures. Mitigation: Gender Assessment and Gender Action Plan (full-proposal stage); 50% women participation; women's leadership quotas; gender-responsive scheduling; mobile services; priority micro-grants; and gender-sensitive monitoring. See Initial Gender Assessment above.
6. Core Labour Rights	☒	Risk Level: Low. This principle always applies. All activities comply with Mongolia's Labour Law and core ILO standards; no child, forced or discriminatory labour. Cleaner-production and processing activities under Component 3 apply occupational health and safety standards, verified through certification criteria and monitoring.
7. Indigenous Peoples	☐	Risk Level: None. Direct impacts: The target aimags (Dundgovi and Sukhbaatar) have no distinct Indigenous Peoples as defined by the AF ESP; the population is ethnically Mongolian herders. This principle is not triggered; should any distinct group be identified during design, free, prior and informed consent procedures will apply.
8. Involuntary Resettlement	☐	Risk Level: None. Direct impacts: No physical or economic displacement is envisaged; the project involves no land acquisition or restriction of access that would cause resettlement. RUAs formalize existing customary grazing rights by consent. Any unforeseen access restriction would be screened and managed at the full-proposal stage in line with AF requirements.
9. Protection of Natural Habitats	☒	Risk Level: Low. Direct impacts: The project restores degraded rangelands and protects natural habitats; small-scale works may cause temporary, localized disturbance. Mitigation: site-level screening to exclude protected areas, Ramsar wetlands, critical habitats and Important Bird Areas; IRIMHE and River Basin Authority review of site plans; and biodiversity monitoring in the MRV platform. Sukhbaatar borders Eastern Steppe protected areas; design ensures landscape-level compatibility.
10. Conservation of Biological Diversity	☒	Risk Level: Low. Direct impacts: Activities enhance biodiversity through regenerative grazing and restoration; risks of introducing non-native species or disturbing wildlife are mitigated through use of native species, coordinated planning, and biodiversity safeguards in certification criteria. Wildlife corridors for migratory species are protected through ILMPs and RUAs; biodiversity outcomes are tracked in the MRV platform.
11. Climate Change	☒	Risk Level: Moderate. Direct impacts: The project is fundamentally designed for climate adaptation; maladaptation risk exists if interventions are miscalibrated. Mitigation: carrying-capacity thresholds in RUAs based on the Resilient Carrying Capacity methodology; MRV-based adaptive management; early warning and forecast-based action; and Working Group oversight. Component 3 processing has minor energy use, mitigated through cleaner production with emission co-benefits and NDC contribution via rangeland carbon sequestration.
12. Pollution Prevention and Resource Efficiency	☒	Risk Level: Low. Direct impacts: Minor pollution risks from cleaner-production and processing activities under Component 3 are mitigated through cleaner-production technologies, resource-efficiency measures, and waste management aligned with national standards and certification criteria; net effect is reduced pollution and water use in the leather and meat sectors.
13. Public Health	☐	Risk Level: Low. Direct impacts: No significant public-health risks are identified; the project improves food safety and product hygiene through certification and processing standards.

		Veterinary and animal-health activities follow national protocols, with co-benefits for zoonotic-disease prevention and herder household nutrition and incomes.
14. <i>Physical and Cultural Heritage</i>	☐	Risk Level: None. Direct impacts: Target areas have no known physical or cultural heritage sites that would be affected; restoration and water-point works are small-scale. A chance-finds procedure will apply during any ground works, and site screening at the full-proposal stage will confirm no impacts on cultural or heritage resources.
15. <i>Lands and Soil Conservation</i>	☐	Risk Level: None. (Positive Impact Expected) Direct impacts: The project delivers positive impacts on lands and soils by restoring degraded rangelands, reducing grazing pressure, and improving vegetation cover and soil moisture. No adverse soil impacts are anticipated; restoration techniques use native species and nature-based approaches, with soil and land condition tracked through the MRV platform.

195. **Environmental considerations.** The project is expected to deliver significant environmental benefits, including improved rangeland health, reduced grazing pressure, enhanced ecosystem services, and strengthened biodiversity conservation. Potential adverse impacts are minor, localized, and temporary, including soil disturbance from small-scale restoration works, risks to groundwater resources from water-point development, minor waste and effluent generation from processing facilities, and short-term wildlife disturbance during construction. All investments will be screened in accordance with Mongolia's environmental legislation and the Adaptation Fund Environmental and Social Policy. Appropriate mitigation measures will be applied, and no activities will be undertaken in protected areas, Ramsar wetlands, or critical natural habitat.

196. **Social considerations:** The project's social risks are moderate and manageable. Potential risks include: (i) disputes over grazing boundaries or seasonal mobility corridors as ILMPs/ALMPs and RUAs are formalized; (ii) inequitable access to project benefits or elite capture by large absentee herd owners; (iii) inadvertent reinforcement of gender imbalances if women's participation is not adequately supported; and (iv) data-privacy concerns related to digital monitoring tools such as GPS-collared livestock or mobile-based applications. To address these risks, all RUAs will be developed through participatory and inclusive consultation processes ensuring free, prior, and informed consent. Women and youth will have formal representation in all decision-making bodies (minimum 50% women and 30% youth participation), and a three-tier grievance redress mechanism will operate at Herder Household Association, soum, and Aimag levels.

197. **Climate change and maladaptation risks.** The project aims to mitigate the risk of maladaptation by grounding all interventions in carrying capacity thresholds, ecological monitoring, and evidence-based decision-making through the National Rangeland MRV Platform. Climate hazards including dzuds and droughts are addressed through strengthened early warning systems, forecast-based action protocols, and institutionalized climate-risk preparedness under Output 2.4. Adaptive grazing regimes based on carrying capacity assessments will ensure that stocking rates remain within ecological limits even under changing climatic conditions. The Climate-Smart Pastoralism Working Group will continuously review intervention effectiveness and adjust practices to avoid any maladaptive outcomes.

198. **Scope of impact assessment.** The screening process described above covers all potential direct impacts (immediate effects of project activities on beneficiaries, ecosystems, and resources), indirect impacts (secondary effects such as market responses, behavioural changes, or displacement of activities), transboundary impacts (effects on ecosystems and resources that cross administrative boundaries, including wildlife corridors connecting to transboundary conservation areas in the Eastern Steppe), and cumulative impacts (combined effects of project activities over time and in combination with other pressures on the pastoral system). The assessment confirms that no significant adverse impacts are anticipated in any of these categories. Site-level screening during implementation will provide additional assessment of localized impacts.

199. **Compliance and safeguards management:** All project activities will comply with Mongolia's Law on Environmental Protection, Land Law (2002, amended 2024), Law on Water (2012), Law on Animal Health (2017), and the Occupational Safety and Health Law (2015), as well as national standards for wastewater, solid waste, and industrial effluent. For processing-sector investments under Component 3, UNIDO's environmental audit protocols and Mongolia's MNS wastewater and air-emission standards will be applied. A full Environmental and Social Management Plan (ESMP) will be developed during the full proposal phase, setting out screening criteria, monitoring indicators, and clear institutional responsibilities for implementation and reporting. The ESMP will also include a Gender Action Plan, Stakeholder Engagement Plan, and specific provisions for data privacy, labour safety, and community health.

200. **Mitigation and monitoring:** Mitigation measures will include: participatory land-use mapping to prevent conflicts and maintain mobility corridors; ecological screening and buffer zones for restoration works; water-resource assessments and well-maintenance guidelines; waste-management and effluent-control systems for upgraded processing facilities; biodiversity monitoring; and cross-soum agreements coordinated with River

PART III: IMPLEMENTATION ARRANGEMENTS

Basin Authorities to ensure equitable access to drought-refuge pastures. Annual environmental and social audits will be conducted, and the project's National Rangeland MRV Platform will display compliance data to enhance transparency and accountability. M&E plans will include monitoring of ESMF implementation with gender-disaggregated indicators.

201. **Consultation and disclosure.** During the full proposal phase, the project will conduct national and local consultations with government agencies, HHAs, private-sector actors, and civil-society organizations to validate safeguard measures and confirm that all affected communities are informed and engaged. Special attention will be given to the timing and format of consultations to encourage full participation by women, youth, and other vulnerable groups. Consultation records and stakeholder feedback will be publicly disclosed in line with Adaptation Fund requirements. The project will align its safeguard monitoring with Mongolia's national EIA information system and the Adaptation Fund's Environmental and Social Management Framework to ensure consistency, accountability, and continual risk oversight.

202. In summary, the project's environmental and social risks are limited, site-specific, and manageable through standard mitigation measures. With adherence to national legislation, inclusive planning, and transparent monitoring, the project is expected to yield substantial net environmental and social benefits by restoring degraded rangelands, strengthening adaptive capacity, reducing climate vulnerability, and promoting gender equity and social inclusion across Mongolia's pastoral landscapes. Any site-specific issues will be addressed through the ESMP to be prepared at the full proposal stage.

A. Demonstrate how the project/programme aligns with the Results Framework of the Adaptation Fund

203. The proposed project is fully aligned with the Adaptation Fund's Strategic Results Framework (SRF). The 2025 revision of the SRF enhances alignment with the Global Goal on Adaptation (GGA), strengthens disaggregation by gender and vulnerable groups, introduces new indicators for locally led adaptation, and restructures innovation indicators around an identification-piloting-scale up pathway. The project contributes to all three strategic pillars: Under Action, the project strengthens ecosystem and livelihood resilience by restoring degraded rangelands, protecting water resources, and improving herder capacity to withstand dzud. Under Innovation, it introduces market-based incentives linking verified ecological performance to economic returns, including a national climate-smart pastoralism certification system, digital traceability, and results-based financial mechanisms - progressing from innovation identification toward eventual scale-up. Under Knowledge and Sharing / Locally Led Adaptation, the project institutionalizes continuous learning through the National Rangeland MRV Platform and Climate-Smart Pastoralism Working Group, generating evidence for policy decisions and enabling other aimags to replicate proven models using domestic resources.

204. The project advances the Fund's cross-cutting commitments to gender equality and locally led adaptation: at least 50 percent of training and governance participants will be women or youth, participatory planning will ensure equitable representation, and all interventions will comply with the Fund's Environmental and Social Policy and Gender Policy. By linking local adaptation with national systems of governance, finance, and monitoring, the project creates enabling conditions for sustained adaptation at scale.

205. The project's alignment with the revised SRF reflects the Fund's enhanced focus on locally led adaptation: Outcome 1 advances devolved decision-making through HHAs; Component 2 ensures vulnerable groups participate in adaptation planning and awareness activities; and Component 4 builds local institutional capacity for evidence-based adaptation through the MRV Platform and Working Group. All indicators incorporate the enhanced disaggregation requirements of the SRF 2025 - by gender, vulnerable groups, scale, and sector - enabling the Fund to report on cross-cutting themes and contribute to Global Goal on Adaptation (GGA) targets, particularly on ecosystems (Target D), infrastructure (Target E), poverty and livelihoods (Target F), and the implementation dimension of the iterative adaptation cycle.

Table 8. Alignment with Adaptation Fund's Strategic Results Framework

Project Objective	Project Objective Indicators	Adaptation Fund Outcome	Adaptation Fund Outcome Indicator	Grant Amount (USD)
Enable herder communities to better adapt to climate change through regenerative rangeland	● # of beneficiaries (direct and indirect) with strengthened adaptive capacity [disaggregated by gender and by vulnerable groups]; ● Hectares of rangeland managed for climate resilience through	Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress Outcome 6:	5. Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress 6.1 Percentage of	12,680,375

management that integrates improved governance, climate-smart restoration, market-based incentives, and evidence-informed decision-making.	improved governance and practices; ● Households with increased income or avoided decrease in income through climate-smart livestock production [disaggregated by female-headed households]	Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	households and communities having more secure access to livelihood assets 6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods	
Project Outcomes	Project Outcome Indicators	Adaptation Fund Output	Adaptation Fund Output Indicator	Grant Amount (USD)
Component 1: Climate-Resilient Rangeland Governance and Stewardship				
Outcome 1: A coherent regulatory, institutional and fiscal framework enables herder household associations and local governments to restore rangeland ecosystems and strengthen climate resilience.	● # of soums with updated ALMPs integrating climate risk and carrying capacity data; ● # of HHAs established and implementing Rangeland Use Agreements; ● % of women and youth in rangeland governance bodies. ● % of project supported HHAs with gender-responsive bylaws and women and youth in named leadership roles; ● % of couple-headed herder households with both spouses jointly registered on the livestock A-account	Output 2.1: Strengthened capacity of national and sub-national centers and networks to respond rapidly to extreme weather events Output 7: Improved integration of climate-resilience strategies into country development plans	2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale) 7.1. No. of policies introduced or adjusted to address climate change risks (by sector) 7.2. No. of targeted development strategies with incorporated climate change priorities enforced	2,450,000
Component 2: Rangeland Restoration, Extension, and Climate Adaptation Practices				
Outcome 2: Herders and local authorities adopt climate-smart grazing and livestock management practices.	● Hectares of rangeland restored or managed within ecological carrying capacity ● # of herder households trained in and applying climate-smart grazing and livestock health practices [disaggregated by gender] ● # of soums with operational dzud preparedness and early warning response systems ● % of women among herders trained in and adopting climate-smart practices; EWS reach confirmed by sex; ● # of soums with GBV-inclusive RAP and trained female focal point	Output 1.1: Risk and vulnerability assessments conducted and updated Output 2.1: Strengthened capacity of national and sub-national centers and networks to respond rapidly to extreme weather events Output 5: Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	1.2. No. of early warning systems (by scale) and no. of beneficiaries covered 2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender) 5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)	4,750,000
Component 3: Climate-Smart Livestock Value Chains and Competitive Agribusinesses				
Outcome 3: Herder resilience and agribusiness continuity are strengthened as profitable livestock value chains incentivize and reward the adoption of climate-smart and regenerative rangeland management practices.	● National climate-smart pastoralism certification and traceability system operational; ● # of herders, HHAs, cooperatives, and processors certified and accessing premium markets [disaggregated by age, gender]; ● # of SMEs adopting cleaner-production and circular-economy practices; ● Volume and value of certified climate-smart livestock products sold (domestic and export).	Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability Output 8: Viable innovations are rolled out, scaled up, encouraged and/or accelerated.	6.1.1. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies 6.2.1. Type of income sources for households generated under climate change scenario 8.1. No. of innovative adaptation practices, tools and technologies	4,364,375

	• % of women among certified producers; • Value of premium / finance accessed by women and WHHs		accelerated, scaled up and/or replicated	
Component 4: Climate-Adaptive Rangeland Knowledge and Learning System				
Outcome 4: Rangeland resilience strengthened through holistic knowledge and learning systems that improve information sharing, amplify best practices, and expand climate-smart, regenerative livestock sector innovation and profitability.	• National Rangeland MRV Platform used by ministries, local governments, and private sector; • # of knowledge products developed and disseminated for replication and upscaling; • Climate-Smart Pastoralism Working Group institutionalized with regular multi-stakeholder engagement. • MRV operates with gender/inclusion fields and triggers corrective action on gender gaps; gender-balanced training of specialists	Output 3.2: Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning	3.2.1 No. of technical committees/associations formed to ensure transfer of knowledge 3.2.2 No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders	1,116,000
Total Outcome Level Grant Amount				12,680,375

B. Describe the arrangements for project / programme implementation.

Governance: The project will be implemented under the National Implementation Modality (NIM), with the implementation and support structure clearly defining the roles of the Implementing Entity, the Executing Entity, and the designated Responsible Parties. This arrangement ensures a Whole-of-Government approach and strict compliance with UNDP and the Adaptation Fund's policies. Implementation will be carried out in close partnership with the Government of Mongolia through the Ministry of Environment and Climate Change (MECC) as the national executing counterpart, in collaboration with the Office of the President, MOFALI, ALAMGaC, the NAMEM and industry associations, aimag and soum governments, Herder Household Associations, and civil-society organizations will play essential roles in field implementation, local governance, and community participation.

206. Implementing Entity (IE): United Nations Development Programme (UNDP). UNDP's role comprises two distinct and separate functions. Programme Assurance and Oversight (IE Function): UNDP provides overall project oversight, financial accountability, and quality assurance, ensuring full compliance with UNDP and the Adaptation Fund's fiduciary standards, Environmental and Social Policy (ESP), and Gender Policy (GP). Programme Support Services (Country Office Service): Based upon request by the Ministry of Environment and Climate Change under the established NIM Support Services framework, the UNDP Mongolia Country Office will offer specific, cost-reimbursable support to augment MECC's execution capacity. This support may include, but is not limited to, procurement, recruitment, and technical implementation assistance. The costs are covered under the Project/Programme Execution Cost.

207. Executing Entity (EE): MECC, UNDP, and UNIDO. MECC leads the Programme Management Unit (PMU) and is the principal technical implementer. MECC is responsible for coordinating all Responsible Parties and delivering programme results. Project execution will be jointly undertaken by MECC, UNDP, and UNIDO as Executing Entities under a unified governance framework. MECC and UNDP will co-lead governance reform, policy integration under Component 1, Component 2, and Component 4, and UNIDO will lead implementation of Component 3 on climate-smart livestock value chains, cleaner production, certification, and market systems. All agencies will share joint accountability for delivery of project results under a single results framework, work plan, and reporting structure approved by the Government of Mongolia and the Adaptation Fund.

208. Project Steering Committee (PSC), chaired by MECC and co-chaired by MOFALI with UNDP as Implementing Entity, will provide strategic direction and policy alignment. Members include ALAMGaC, the NAMEM, the National Committee on Gender Equality, UNIDO, local administrations, industry associations, academia, and Office of the President (which coordinates the White Gold and Food revolution initiatives). The Project Board will meet at least twice per year to: i) review and approve annual workplans and budgets; ii) consider progress reports, audit findings and evaluation recommendations; iii) endorse major adjustments in project strategy or resource allocation; and iv) ensure adherence to national strategies (Vision 2050, NAP, NDC) and Adaptation Fund policies, including environmental and social safeguards and gender requirements.

209. Local-level implementation will be carried out through aimag and soum governments working with HHAS and herder cooperatives. This decentralized approach ensures ownership, alignment with ILMPs, ALMPs, and RUAs, and direct participation of herders in planning, monitoring, and benefit-sharing. Field activities will be delivered through performance-based partnerships, building the capacity of soum officers, extension services, and veterinary networks to maintain project investments beyond the project's duration. At the community level, HHAs will serve as the primary institutional vehicle for RUA implementation, collective decision-making, and grievance resolution.

210. By embedding project activities within existing legal, fiscal, and market systems—particularly through the Land Law (amended 2024), Law on Herder Household Associations (2024), the Law on Herders (2024), ILMPs, ALMPs, RUAs, and livestock tax reinvestment mechanisms—the implementation framework guarantees institutional sustainability and national ownership. Coordination with the Government of Mongolia will ensure consistency with Mongolia's overall adaptation finance strategy and reporting obligations under the UNFCCC.

211. This implementation arrangement establishes a coherent, country-driven structure that integrates national leadership, UN technical support, and multi-stakeholder participation to deliver lasting adaptation benefits for Mongolia's rangelands, ecosystems, and herder communities. The joint MECC, UNDP, and UNIDO execution model ensures that governance, ecological, and economic dimensions of adaptation are addressed through a unified, mutually reinforcing framework.

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government

Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:

Ariuntuya Dorjsuren Director General, International Cooperation Division, Ministry of Environment and Climate Change	Date: July 6, 2026
--	--------------------

B. Implementing Entity certification Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (Vision 2050, Nationally Determined Contribution 3.0, and National Adaptation Plan) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Implementing Entity Coordinator

DocuSigned by:

4EEADA5A5FE9433...

Nancy Bennet
Director, Quality and Impact Hub and
Executive Coordinator, Vertical Funds
Bureau for Policy and Programme Support (BPPS)
United Nations Development Programme

Date: 03-Aug-2026

Tel. and email: nancy.bennet@undp.org

Project Contact Person: Samar Taha, Regional Technical Specialist

Tel. And Email: samar.taha@undp.org

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government

Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:

Ariuntuya Dorjsuren Director General, International Cooperation Division, Ministry of Environment and Climate Change	Date: July 6, 2026
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B. Implementing Entity certification *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (Vision 2050, Nationally Determined Contribution 3.0, and National Adaptation Plan) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Implementing Entity Coordinator

Nancy Bennet
Director, Quality and Impact Hub and
Executive Coordinator, Vertical Funds
Bureau for Policy and Programme Support (BPPS)
United Nations Development Programme

Date:

Tel. and email: nancy.bennet@undp.org

Project Contact Person: Samar Taha, Regional Technical Specialist

Tel. And Email: samar.taha@undp.org



**MONGOLIA
MINISTRY OF ENVIRONMENT
AND CLIMATE CHANGE**

Government Building 12, Builder's Square,
Chingeltei District, Ulaanbaatar 15170, MONGOLIA
Tel: (976-51) 26 61 71, E-mail: contact@mecc.gov.mn,
Website: www.mecc.gov.mn

Date 2026. Jul 06
Ref. 05a/3928

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Letter of Endorsement by Government

Subject: Endorsement for "Climate-Smart Rangelands and Livestock Value Chains for Sustainable Adaptation (RAISE) Project"

In my capacity as designated authority for the Adaptation Fund in Mongolia, I confirm that the above regional project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the in Mongolia.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by United Nations Development Programme (UNDP) and executed by UNDP with United National Industrial Development Organization (UNIDO), also acting as a partial executing entity.

Sincerely,

MS. ARIUNTUYA DORJSUREN
DIRECTOR GENERAL
INTERNATIONAL COOPERATION DIVISION
ACTING NATIONAL FOCAL POINT

1526090195



Revised PFG Submission Form¹

Project Formulation Grant (PFG)

Submission Date: July 7, 2026

Adaptation Fund Project ID:

Country/ies: Mongolia

Title of Project/Programme: Climate-Smart Rangelands and Livestock Value Chains for Sustainable Adaptation (RAISE) project

Type of IE (NIE/RIE/MIE): Multilateral Implementing Entity

Implementing Entity: UNDP

Executing Entity/ies: UNDP

A. Project Preparation Timeframe

Start date of PFG	November 2026
Completion date of PFG	May 2027

Overall Objective: Preparation of a full project proposal for RAISE Project, demonstrating robust climate-adaptation rationale, sound technical feasibility, environmental and social safeguards, gender-responsive stakeholder ownership, cost-effective design, and a sustainable implementation & MEL system.

B. Proposed Project Preparation Activities (\$)

List of Proposed Project Preparation Activities	Output of the PFG Activities	US\$ Amount	Budget note²
1. Technical studies, feasibility, project coordination support	Conduct and complete technical pre-feasibility for Components 1–4, including site selection	28,200 Local Consultant and Contractual services	2 short missions + technical and financial feasibility (pasture, water NbS, value chains, institutional)

¹ As presented in AFB/PPRC.33/40 Annex 1.

² The proposal should include a detailed budget with budget notes indicating the break-down of costs at the activity level. It should also include a budget on the Implementing Entity management fee use.

2. Social Environmental and & inclusion instruments	Prepare safeguards related documentation and Gender Action Plan, Stakeholder Engagement Plan	16,800 Local Consultant	Recruit and engage with relevant national consultant(s) to prepare safeguards documentation, such as: ESMP, Gender Action Plan, Stakeholder Engagement Plan, Grievance & FPIC, initial screening/classification consistent with AF ESP & UNDP SES
3. Stakeholder engagement activities	Undertake structured stakeholder consultations with government, herder associations, industry, and financial institutions	30,000 (Training and Workshops)	National & Aimag/Soum workshops; private sector roundtables; translation and design and development services
4. Proposal Drafting & packaging	Define detailed Monitoring and Evaluation Plan, baselines, data flows, and sustainability; Draft and compile project proposal, edit graphics; annex assembly; QA and finalize package	35,000 International Consultant	Support and engage with relevant technical consultant(s) to draft the full AF proposal with budget, procurement plan, implementation arrangements, risk & mitigation, knowledge & scaling strategy, and annexes
Travel & logistics (local)	Field transport, per diem	28,249 (Travel, logistics and supplies)	
Subtotal		138,249	
Implementing Entity's Management Fee 8.5%		11,751	
TOTAL		150,000	

The PFG will finance targeted feasibility assessments, safeguards instruments, gender responsive stakeholder engagement, MEL/MRV design, and proposal drafting necessary to meet Adaptation Fund requirements at full proposal stage. The outputs and activities directly derive from the approved Concept

Note and from Mongolia's NAP/NDC3.0, rangeland governance reforms, and value chain upgrading priorities. The formulation work will be completed in 6 months, producing a full AF proposal and annexes ready for DA endorsement and submission.

1. Technical & climate feasibility

The Project Formulation Grant will support detailed technical and climate feasibility assessments to confirm the suitability, effectiveness, and sustainability of the proposed adaptation interventions. This will include an updated climate risk and vulnerability analysis, assessment of current and projected climate hazards and impacts, evaluation of technical options for adaptive rangeland management, EbA solutions design parameters, and value chain analysis. Moreover, the studies will evaluate the additionality and cost-effectiveness of project proposed outputs. The work will ensure that the selected measures are technically sound, climate-resilient, and aligned with national policies, sectoral strategies, and Adaptation Fund requirements.

2. Gender and Environmental and Social Risk analyses

The PFG will finance a comprehensive gender and social inclusion analysis to identify the differentiated vulnerabilities, needs, capacities, and priorities of women, men, youth, persons with disabilities, Indigenous Peoples, herder communities, and other marginalized groups. Findings will inform project design and ensure adaptation interventions are equitable, inclusive, and responsive to local needs. In line with UNDP Social and Environmental Standards (SES), the Adaptation Fund Environmental and Social and Gender Policies, and national priorities, gender equality and social inclusion will be integrated throughout project design and stakeholder engagement. A costed Gender Action Plan (GAP) will be developed, outlining targeted actions, indicators, responsibilities, timelines, and budget allocations to promote equitable participation, benefit-sharing, and women's empowerment, while ensuring compliance with Adaptation Fund and UNDP requirements.

3. Stakeholder engagement

Resources will be allocated to develop and implement a Stakeholder Engagement Plan (SEP) that ensures inclusive, participatory, and gender-responsive consultations throughout project preparation. The SEP will identify and engage relevant stakeholders at national, sub-national, and community levels, including government agencies, local authorities, civil society organizations, community representatives, vulnerable groups, the private sector, and development partners. Consultations will inform and validate the problem analysis, proposed adaptation measures, institutional arrangements, and project priorities. Consistent with UNDP Social and Environmental Standards (SES), Adaptation Fund stakeholder engagement requirements, and national priorities, the SEP will integrate gender equality and social inclusion considerations, ensure meaningful participation of marginalized groups, and establish mechanisms for stakeholder feedback, documentation, and grievance redress. Consultation outcomes will be systematically incorporated into the final project design to strengthen ownership, accountability, and sustainability.

4. Proposal writing & packaging

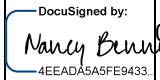
The PFG will support the development of a comprehensive Monitoring, Evaluation, Learning, and Measurement, Reporting and Verification (MEL/MRV) framework for the project. This will include the definition of a clear theory of change, results framework, indicators, baselines, targets, data collection methods, roles and responsibilities, and learning mechanisms. The framework will be aligned with Adaptation Fund guidance and will enable effective tracking of adaptation results, climate resilience

outcomes, and lessons learned during implementation. Finally, the PFG will finance the drafting, consolidation, and quality assurance of the full Adaptation Fund project proposal. This will involve integrating all technical studies, safeguards instruments, consultation outcomes, and MEL/MRV elements into a coherent, high-quality submission that fully complies with Adaptation Fund templates, policies, and Board expectations. The process will ensure internal consistency, clarity of adaptation logic, and readiness for review and approval by the Adaptation Fund Board.

Implementing Entity

UNDP will serve as the Implementing Entity, assuming overall fiduciary responsibility and providing technical oversight. UNDP will also act as the Executing Entity for the Project Formulation Grant, while UNDP and UNIDO will be jointly executing partners with MECC in the full project implementation.

The request has been prepared in full accordance with the Adaptation Fund Board's policies and procedures and satisfies the Adaptation Fund's requirements for project identification and formulation.

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
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Initial consultation report

The concept note was developed through an inclusive, multi-stakeholder consultative process. In September 2025, a dedicated mission by the lead consultant was conducted in Mongolia, followed by in-person and online meetings and phone interviews by UNDP, UNIDO, and a local consultant between October and November 2025. A total of **182 stakeholders (93 women, 89 men)** were consulted. The process was designed to be gender-responsive: stakeholders with a gender mandate were specifically engaged (National Committee on Gender Equality, Aimag gender focal points); separate focus groups were held with women herders; and vulnerable groups (poor households, youth, persons with disabilities) were consulted. Subsequently, field consultations were conducted in Sukhbaatar Aimag (May 7–8, 2026) and Dundgovi Aimag (May 13–14, 2026). These field consultations comprised **25 meetings with 49 participants (22F/27M)** and were complemented by consultation via phone covering aimag and soum governments, herder households including vulnerable groups, civil society, and private sector actors in both target aimags. Table 6 provides a comprehensive summary.

Table 6. Summary of stakeholder consultations during the Concept Note development

Stakeholder	Participants (F/M)	Key issues discussed	How incorporated in proposal
National government: MECC; MOFALI/RDCAES; MED; MFLSP; ALAMGaC; NAMEM/IRIMHE; MASM; Water Authority	34 (16F/18M)	NAP 2024-2030 and NDC alignment; 2024 Law on Herder Household Associations and livestock-tax reform; Herder Development Fund and fiscal transfers; vulnerable-household targeting; ILMP/ALMP/RUA registration; dzud early warning and climate data; MNS standards and certification; water-point standards.	Outcomes linked to NAP/NDC targets; Component 1 operationalizes the HHA Law and ALAMGaC procedures; performance-based grants via Herder Development Funds; beneficiary criteria per MFLSP definitions; EWS builds on IRIMHE indices; Component 3 certification aligned with MNS; Output 2.2 complies with the Water Law.
Gender-mandate stakeholders: National Committee on Gender Equality; Gender Focal Points of Dundgovi and Sukhbaatar aimags	5 (5F/0M)	Gender mainstreaming, gender-responsive budgeting and indicators; barriers to women's participation in rangeland governance; challenges of women herders.	50% women-participation target; women's leadership quotas in HHAs; gender-disaggregated baselines and Aimag-level gender monitoring.
Research institutions: NUM; MULS; RIAH; Institute of Geography and Geo-Ecology; Research Institute for Light Industry	16 (7F/9M)	Monitoring and MRV methodologies; carrying capacity and resilience thresholds; climate-resilient breeding and husbandry; degradation mapping and climate projections; fibre and leather processing research.	MRV methodology (NUM); resilience thresholds (MULS); extension content (RIAH); Section A analysis grounded in Institute of Geography research; Component 3 quality standards (RILI).
Private sector and value chain: SFA; MMA; MALI; meat and leather processors; MNCCI; Trade and Development Bank	23 (10F/13M)	Responsible Nomad certification experience; meat and leather standards and cold chain; cleaner-production technology needs; market data and trade facilitation; green finance for herders.	Component 3 certification builds on the SFA Responsible Nomad Code; value-chain analysis reflects MMA/MALI priorities; UNIDO cleaner-production support; MNCCI in Output 4.2 roundtables; Output 3.4 green-finance design with banking input.
Civil society: NAMAC; MNFPUG; Center for Policy Research; Association for Sustainable Rural Development	12 (6F/6M)	Cooperative development and herder organization capacity; PUG experience with RUAs; payment-for-ecosystem-services approaches; inclusion of vulnerable groups.	HHA capacity building informed by NAMAC; RUA design and grievance mechanisms per MNFPUG lessons; Component 2 restoration investments; participatory monitoring.
Development partners and projects: World Bank LCP/VCP (two consultations);	13 (5F/8M)	Lessons from the Sustainable Livelihoods Programme; complementarity and non-	Section G lessons; geographic complementarity confirmed; IBLI expansion under Output 2.3;

UNDP/GCF ADAPT; FAO-WWF/GEF Dryland Sustainable Landscapes		duplication; IBLI expansion and early-warning experience; Eastern Steppe biodiversity integration.	biodiversity objectives in ILMPs and RUAs.
Aimag and Soum governments: Governor's Offices of Dundgovi and Sukhbaatar; Soum governments in 6 Soums	27 (12F/15M)	Aimag priorities and ILMP status in target Soums; dzud preparedness gaps; Soum implementation capacity and HHA readiness; infrastructure needs.	Target-Soum selection informed by Aimag priorities; ILMP/ALMP alignment confirmed; Soum-level implementation arrangements and capacity building designed.
Herder communities incl. vulnerable groups: PUG federation leaders (8 Soums); leaders of 5 cooperatives; women herders (women-only focus groups); youth herders; vulnerable households (<200 head, women-headed, herders with disabilities)	52 (32F/20M)	RUA implementation and conflict resolution; marketing and value-chain constraints; women's time constraints and workload peaks; youth aspirations and employment; vulnerability-specific constraints (labour, assets, market access).	RUA design incorporates PUG lessons; cooperative strengthening under Output 3.2; gender-responsive scheduling and mobile approaches; 30% youth target and digital literacy; <200-head vulnerability targeting and priority selection.
Subtotal (Sept-Nov 2025)	182 (93F/89M)	51% women participation in consultations	
Field consultations, May 2026: Sukhbaatar Aimag institutions, herder communities, CSOs and private sector (13 meetings, 7-8 May); Dundgovi Aimag institutions, Soum governance and herder communities (11 meetings, 13-14 May)	47 (21F/26M)	Dzud impacts and livelihoods; IBLI threshold recalibration; fodder supply; water-pasture conflict risk; Aimag land-use plan timing; SME/cooperative support.	Vulnerability-targeting criteria validated; camp-level consultation modality adopted; Component 1 timing aligned with Aimag land-use plan finalization; Gobi soil conditions reflected in restoration design.
UNDP ADAPT national coordination meeting (Ulaanbaatar, 1 meeting); TVET colleges in both aimags consulted by phone (not included in participant count)	2 (1F/1M)	ADAPT lessons on IBLI, early warning and community-based adaptation; TVET colleges active but under-equipped as extension assets.	ADAPT lessons integrated in Outputs 2.3 and 4.1; Output 2.2 uses both colleges as decentralized extension and skills hubs.

Of the 231 stakeholders consulted during the concept note development phase, 64 (28%) were herder community members representing direct beneficiaries. Among these, 42 (66%) were women. The discussions with women herders focused on time constraints, safety, and leadership barriers that are specifically faced by women. Vulnerable group representation included: 16 youth herders under age 35; 22 representatives from poor households (with fewer than 200 head of livestock); 8 representatives from women-headed households and 5 representatives from households with disabled members.

These consultations directly informed the 50% women participation target, women's leadership quotas in Herder Household Associations, gender-responsive scheduling of activities, and preparation of a Gender Assessment and Gender Action Plan.

Consultations with vulnerable groups informed specific design features: (i) the vulnerability threshold of fewer than 200 head of livestock for priority targeting was validated with herders and Social Policy Departments; (ii) priority scoring for women-headed households, youth-led enterprises, and households with limited workforce was developed based on herder input; (iii) mobile service delivery and flexible scheduling were incorporated to address women's time and mobility constraints; (iv) accessible formats for persons with disabilities were specified based on consultation with affected households. A Stakeholder Engagement Plan has been prepared as part of the full proposal package. The SEP will guide continued inclusive consultation throughout project implementation, in accordance with the Adaptation Fund's Environmental and Social Policy and Gender Policy.

Stakeholder Analysis. Field consultations in both aimags prompted several significant updates to the power-interest analysis, which will be presented in the full proposal. Myangat malchin (herders with 1,000+ livestock) were elevated to Medium Power / High Interest based on confirmed social authority and peer influence roles. Bag governors were reclassified as Medium-Low Power given election-cycle turnover dynamics requiring backup focal points at every project bag. IBLI providers were elevated to High Interest given widespread herder

grievances over soum-level thresholds and exclusion of fire risk coverage. Gender sub-committees in Sukhbaatar Aimag (established in all 13 soums by Resolution A/484, September 2025, 22 members including 11 women) were upgraded to Active Engagement status. Displaced herder households in aimag and soum centers were added as a distinct stakeholder subgroup requiring separate urban outreach. The Mongolian Red Cross Society (national and aimag branches) was formally added as Medium Power / High Interest, confirmed as the primary community partner for reaching displaced and vulnerable households, providing a politically neutral engagement channel, and serving as first-level referral for psychosocial support and gender-based violence cases.

Socioeconomic Context at the Time of Consultations. The field consultations were conducted in the aftermath of the 2024–2025 dzud, which caused the loss of approximately 2 million livestock in Sukhbaatar Aimag alone (roughly 50% of the total herd). Registered unemployment increased 71.4% year-on-year in Sukhbaatar and 86.6% in Dundgovi by April 2026. Statistical data from the NSO April 2026 Socioeconomic Bulletins and the 2025 Year-End Livestock Census, integrated with consultation findings, document the scale of post-dzud displacement: 288 registered unemployed in Sukhbaatar (47.9% women); 181 in Dundgovi (56.9% women). Criminal offenses rose 39.4% in Sukhbaatar and 44.1% in Dundgovi year-on-year in the first four months of 2026, with intoxication-related incidents consistent with psychosocial stress among displaced households documented by the Red Cross Sukhbaatar branch. Livestock prices have risen sharply: a young bull reached 2.8 million MNT in Sukhbaatar (up 40% year-on-year), while male sheep prices rose 49.6% year-on-year in Dundgovi — directly undermining the affordability of livestock replenishment programmes. Food inflation reached 19.0% year-on-year in Dundgovi, and non-performing loans rose by 52.4% year-on-year, indicating compounding financial stress on herder households.

Key Thematic Findings Informing Project Design. Consultations in Sukhbaatar and Dundgovi identified priorities that directly informed project design. Sukhbaatar's 254 photo-monitoring points and five weather stations provide a strong foundation for the project's MRV system, while Dundgovi's territorial development plan is 90% complete, creating an opportunity to align the project's target of 1 million ha under improved management with emerging land-use planning. Existing PUGs offer a platform for HHA formation, although institutional responsibilities require clarification. Value-chain assessments highlighted significant market potential, including a processor operating at only 20% capacity in Sukhbaatar, while a 40% rejection rate in a Dundgovi sheep-skin auction exposed weaknesses in quality management. Cooperative assessments revealed capacity gaps, with only around 100 of Sukhbaatar's 400+ cooperatives active and most of Dundgovi's 692 registered cooperatives lacking meaningful economic activity. Herders also reported low confidence in index-based livestock insurance, identified January as the preferred training period (avoiding April–May cashmere season), and emphasized peer-to-peer and camp-level outreach through *khot ail* networks. Growing enclosure of 1–5 ha around winter camps was identified as a rising source of pasture conflict, highlighting the need for strengthened participatory governance and conflict-resolution mechanisms.

Initial Gender Assessment

Introduction

This Gender Assessment has been prepared to present a situational analysis of the gender dynamics and inequalities present in the national and local context and to outline the measures incorporated into the project design to ensure that women and men have equitable opportunities to strengthen their resilience, address the vulnerabilities they experience differently, and enhance their capacity to adapt to the impacts of climate change through project implementation. Moreover this initial assessment, aims to demonstrate the project's alignment with relevant international gender and climate change frameworks, and in doing so, its compliance with the Adaptation Fund Gender Policy.

This Gender Assessment should be considered preliminary in nature. It will be reviewed, deepened, and expanded during the development of the full funding proposal, so as to ensure that the project's results framework, budget allocations, and environmental and social safeguards approach are all designed to respond to the differentiated adaptation needs of women and men.

National Gender Equity Status

Mongolia ranks 65th in the World Economic Forum's Global Gender Gap Index 2025, achieving 1st place globally in both Educational Attainment and Health and Survival. However, significant gender disparities persist in economic participation and political empowerment. Working-age women are 15% less likely than men to participate in the labor force, earn 25% less on average, and spend twice as much time on unpaid household work. These gaps are reinforced by persistent gender norms.

Rural women and girls face additional challenges, including limited access to sexual and reproductive health services and heightened risks of gender-based violence. Women, children, and older persons are particularly vulnerable during dzud events. The migration of young women to urban centers reflects these hardships: women represent only 24% of herders aged 15–24 and 34% of herders aged 25–34. In the target aimags of Sukhbaatar and Dundgovi, women account for 42% of herders. These trends also highlight a reverse gender gap in education, as most rural youth pursuing tertiary education are women. However, this pattern is shifting, with increasing numbers of young male herders seeking higher education and better employment opportunities in Ulaanbaatar, the mining sector, and abroad.

Gender issues

Regulatory instruments for sustainable rangeland

Weak implementation of governance frameworks continues to obscure women's land-use rights and decision-making authority. Women make up 42% of herders in the two target aimags, yet women-headed households represent only 9.7% of registered herder households in Sukhbaatar, while Dundgovi does not collect sex-disaggregated data on household heads. Women are also absent from leadership positions in both aimag- and soum-level Pasture User Associations. Land administration and registration systems typically recognize only the

household head, limiting the visibility of women's ownership and decision-making roles. Consequently, the 2025 reform permitting joint livestock ownership registration—which could help address these disparities—is neither systematically monitored nor actively promoted. Similarly, while married couples may register winter and spring camps under two household members' names, single-headed households, including many women-headed households and unmarried male herders, remain eligible to hold rights to only one camp.

Gender Issues with Climate-risk preparedness

Weak preparedness and extension are experienced differently by women and men. Extension scheduling collides with women's peak-labour periods (cashmere combing, milking, fodder preparation), and delivery rarely reaches women, elderly herders or persons with disabilities at camp; early-warning information flows primarily through male-dominated herder networks. The preparedness gap has a documented gendered harm pathway: after dzud, livestock loss and male economic stress, often with alcohol use, drive a measurable rise in domestic violence, which herders rarely report. Intimate-partner violence already affects an estimated 52.8% of women in Sukhbaatar and 53.2% in Dundgovi and rises after climate shocks. A preparedness system that ignores these differences will fail to protect the very people — women, who carry roughly two thirds of total household labour and absorb the largest share of disaster labour and risk.

Data systems fragmentation

A knowledge system that cannot see gender cannot correct it. Because data are held at household and spatial level, intra-household inequality is invisible, and the MRV platform that will oversee certification, credit and premiums would, if built only on head-of-household records, route benefits to men. Knowledge products present a generic “herder”, erasing women's innovations — including the documented finding that women-led cooperatives and partnerships now operate more actively and effectively than the largely dormant male-dominated PUGs. Individual-level monitoring fields (sex, age, household type, disability and herd size) are therefore not a reporting refinement but a precondition for the project to track and correct who actually benefits.

Initial Gender Assessment

Gender disparities also affect access to adaptation services and economic opportunities. Extension services are often scheduled during periods when women have peak workloads, reducing their participation. Early warning information is commonly disseminated through male-dominated herder networks, limiting women's timely access to climate information. In livestock value chains, women perform much of the work associated with cashmere grading, dairy processing, wool sorting and other value-adding activities, yet certification schemes and premium payments are generally channelled through household heads, meaning that women may not directly benefit from the value they create. Access to finance is further constrained for women-headed households by collateral requirements, minimum herd-size thresholds, information barriers, and, in some cases, expectations for male guarantors.

Consultations undertaken during project preparation adopted a gender-responsive approach. Relevant national and local gender institutions were engaged, separate focus group discussions were held with women herders, and consultations included vulnerable groups such as women-headed households, youth, persons with disabilities, and poorer households. Findings from these consultations directly informed the proposed project design, including targets for women's participation, leadership within Herder Household Associations, gender-responsive scheduling of activities, and preparation of the Gender Assessment and Gender Action Plan.

Overall, the Concept Note indicates that climate vulnerability intersects with existing gender inequalities in governance, access to resources, extension services, finance, market participation, and benefit sharing. These findings justify the integration of targeted gender-responsive measures throughout project implementation to ensure that women and other vulnerable groups are able to participate meaningfully and benefit equitably from climate adaptation investments.

Gender Considerations in the proposed project

Governance and participation

The project will pursue at least 50% women's representation in HHA leadership and decision-making bodies, supported by gender-responsive bylaws developed as part of the association registration process. This directly targets the current absence of women in pasture user association leadership roles identified in the situational analysis. Consultation and outreach methods will be designed to be gender-responsive, with deliberate engagement of gender-mandated stakeholders (e.g., the National Committee on Gender Equality and aimag-level gender focal points) throughout implementation.

Economic empowerment and asset access

Building on women's existing central role in dairy and fiber processing, the project will support quality certification, skills development, and improved market access to strengthen women's position — and control over returns — in these value chains. Targeted micro-grants and financial inclusion measures will prioritize women-headed and other vulnerable households, addressing the collateral and credit-access gaps linked to asset registration practices. Enhanced joint registration of livestock assets and production between spouses is a specific GAP commitment intended to correct the current imbalance between women's labour contribution and their formal control over assets and income.

Access to services and capacity building

Recognizing the mobility and time constraints documented in the situational analysis, the project will use flexible, locally accessible, and gender-responsive scheduling for training and extension activities, complemented by digital and mobile service delivery to reach women who face restricted mobility. At least 50% women's participation is targeted across training and capacity-building activities. Leadership development and financial literacy training are included specifically to build women's capacity to participate effectively in governance and enterprise development.

Inclusion of other vulnerable groups

The project extends targeted outreach to women-headed households, youth, persons with disabilities, and low-income herders, recognizing their compounded vulnerability. This includes generating disaggregated baseline data — currently a documented gap, particularly for PWDs — to enable targeted and monitorable interventions, and ensuring these groups are engaged as leaders and agents of change, not only as beneficiaries.

Safeguarding and grievance mechanisms

Given the documented association between climate-induced economic stress and gender-based violence, the project's grievance redress mechanism will be GBV-sensitive and survivor-centred, providing accessible and confidential referral pathways. This is treated as a specific mitigation measure under the project's ESMP and Gender Risk and Safeguard Matrix, alongside monitoring for the risk of elite capture or inadvertent reinforcement of existing gender imbalances within new governance structures.

Monitoring and accountability

Progress on gender outcomes will be tracked through gender-disaggregated indicators embedded in the project's results framework, with reporting aligned to the Adaptation Fund's Social and Gender Policy requirements. This includes disaggregation by gender, vulnerable group, and scale in line with the Adaptation Fund's Strategic Results Framework (SRF 2025), ensuring the project's gender performance is verifiable and auditable over its lifetime.