PROJECT IMPLEMENTATION REPORT

Project ID:	10545
Project Name:	Managing Peatlands in Mongolia and Enhancing the Resilience of Pastoral Ecosystems and Livelihoods of Nomadic Herders
Countr(ies):	Global, Mongolia
Implementing Agency:	UNEP

TABLE OF CONTENTS

I. Overview

A. Description

Project name
Managing Peatlands in Mongolia and Enhancing the Resilience of Pastoral Ecosystems and Livelihoods of Nomadic Herders

Country
Global, Mongolia

GEF ID	Implementing Agency
10545	UNEP

Executing Entity
Ministry of Environment and Tourism (MET) of Mongolia and International Centre for Reindeer Husbandry (ICR)

Trust Fund	Project Type
GET	FSP

PIR Submission	Fiscal Year , PIR Number
9/12/2025	FY 2025 , 2nd PIR

Objective
To develop the capacity for enhancing ecosystem services of peatlands (specifically reduction of GHG emissions from degraded peatlands) in Mongolia and the capacity of indigenous reindeer herders to reduce land degradation and improve the provision of ecosystem services and increase community resilience.

B. Ratings and Disbursements

Implementation Progress	Development Objective
Moderately Satisfactory	Moderately Satisfactory

Overall risk
Moderate Risk

Project Financing	Cumulative Disbursement
4,115,000.00	400,000.00

C. Key Dates

CEO Endorsement/Approval	Agency Approval
2/4/2022	9/1/2023

Implementation Start 1/13/2023	First Disbursement 6/29/2023
Expected MTR 1/31/2026	Actual MTR
Expected Completion 3/31/2027	Actual Completion

II. PROGRESS STATUS AND ISSUES

A. Progress: Information on progress and outcomes of project implementation activities

During the reporting period, the Climate Change Research and Cooperation Center (CCRCC) continued to lead the implementation of Components 1 and 2 of the GEF–UNEP-funded project "Managing Peatlands in Mongolia and Enhancing the Resilience of Pastoral Ecosystems and Livelihoods of Nomadic Herders." Significant progress was achieved in strengthening institutional coordination, building scientific baselines, and advancing multi-stakeholder engagement in support of peatland management, aligned with Mongolia's Vision 2050, the draft Climate Law, and international environmental commitments.Component 1: National Coordination and Capacity Building for Peatland Management and Climate ResilienceThis component focused on embedding peatland considerations into Mongolia's national climate policy architecture and enhancing institutional capacities for coordinated implementation. Project Steering Committee (PSC): The Project Steering Committee was reconstituted pursuant to Ministerial Order No. A/606 (dated 28 November 2023) to reflect the revised project structure and changes within the Government. Following inter-agency consultations and formal nominations, the updated PSC was established, chaired by Mr. E. Battulga, State Secretary of the Ministry of Environment and Climate Change (MECC), and supported by J. Choikhand, Director of CCRCC, as Secretary. The Committee, comprising 11 senior representatives from relevant ministries, international organizations, and technical bodies, convened on 23 January 2025 to formally approve the revised 2025 project work plan, procurement plan, and budget, in line with national regulations governing foreign grant utilization (Annex 1). Inception Workshop (October 2024): The project was formally launched through a multi-stakeholder inception workshop in Ulaanbaatar, with over 30 participants representing government agencies, UNEP, ICR, and national experts. The event set a shared foundation for coordinated implementation of Components 1 and 2. Establishment of the Mongolia Peatland Initiative Working Group: A national technical platform, the Technical Working Group provided critical inputs to the draft Climate Law and supported the integration of peatland issues into national development planning. Meeting records and draft legislative contributions are documented in Annex 2. National Stakeholder Consultation Workshop (April 2025): The workshop facilitated cross-sectoral dialogue on aligning peatland management with Mongolia's NDC, LDN targets, and land-use policy frameworks. Key insights are captured in Annex 3. World Peatland Day 2025 – National Awareness Campaign (2–8 June): Mongolia marked its first national celebration of World Peatland Day with a week-long campaign featuring multi-media exhibitions, public lectures, policy discussions, and a peatland stewardship awards ceremony. A nationwide youth competition engaged 412 students from 7 schools across Khentii, Arkhangai, Bulgan, and Khuvsgul provinces. Activities included: Drawing competition: "Бидний нүдээр хүлэрт газар" (Peatlands Through Our Eyes) for Grades 1–5 Essay contest: "Хүлэрт газрыг аврах миний алхам" (My Step to Save the Peatlands) for Grades 6–12 Co-organized by CCRCC, MECC, UNEP, and ICR, the campaign elevated public understanding and youth engagement in peatland conservation (Annex 4). International Coordination and

Visibility: A side event proposal was submitted to UNEP for the 7th UN Environment Assembly (UNEA-7). CCRCC joined planning discussions for a joint event at UNCCD COP17 in 2026. In preparation for UNFCCC COP30, CCRCC collaborated with Dr. Vera Kuklina (George Washington University) to support a side event highlighting the intersection of Indigenous knowledge, climate science, and art. CCRCC was invited to nominate Mongolian speakers and institutional partners, including the International Centre for Reindeer Husbandry (ICR). Digital Knowledge Infrastructure: A dedicated project website is currently under development to provide public access to peatland-related data, technical reports, multimedia documentation, and interactive Page 12 of 91

maps.Component 2: Knowledge and Data Systems for Peatland Monitoring and Policy IntegrationThis component aimed to establish a robust scientific and technical foundation for evidence-based policy formulation and adaptive peatland management.Standardization of Field Protocols and Inventory Systems: In collaboration with the National University of Mongolia, the Institute of Geography and Geoecology, and the General Agency for Specialized Inspection (GASI), peatland inventory protocols were harmonized with IPCC Wetlands Supplement and Ramsar guidance to ensure methodological integrity and compatibility with national reporting. Vulnerability Mapping (February–September 2025): Climate vulnerability and degradation risk maps were developed for four key peatland landscapes: Ögii Lake, Khurkh–Khuiten Valley, Darhad Depression, and Tsagaan Lake. These serve as baseline inputs for targeted restoration and adaptation planning (Annex 5). Field-Based Scientific Research and Monitoring: Ögii Lake: Seasonal water balance modeling revealed patterns of inflow-outflow variation influenced by upstream grazing and land-use intensity. Khurkh–Khuiten Valley: Groundwater-permafrost interactions were assessed using borehole data, remote sensing, and frost-susceptibility modeling to identify high-risk degradation zones. Joint Field Missions with SESTRA (August 2025): CCRCC, in partnership with George Washington University, led collaborative research and training in Bayanzurkh, Tsagaannuur, Khatgal, and Sukhbaatar. Activities included: UAV surveys and GIS mapping Groundwater and permafrost monitoring Participatory photovoice documentation with Indigenous Dukha herders ArtScienceLink workshops on ecological memory and storytelling Capacity building on socio-ecological modeling and resilience indicators Co-Design of Monitoring Indicators (Workshop scheduled for September 2025): Preparations are underway to validate a core set of indicators for peatland health and GHG monitoring, including vegetation cover change, hydrological integrity, and thermokarst development. Integration with External Assessments and Datasets: Research findings informed and complemented: The Ögii Lake Management Plan The Khentii Groundwater Quality Assessment The Khankhentii Ecosystem Management Plan The ADAPT Project’s Onon River Basin Vulnerability Study Conclusion and Forward OutlookThe reporting period saw the successful establishment of foundational institutional mechanisms and scientific baselines for peatland governance. Looking forward, priority will be given to: Operationalizing the Peatland Information System Launching the official project website Deepening knowledge co-production with Indigenous and local communities Embedding monitoring results into Mongolia’s Biennial Transparency Report (BTR) and Fifth National Communication (NC5)Preparing Mongolia’s engagement at UNEA-7 (December 2025), UNFCCC COP30 (November 2025), and UNCCD COP17 (2026)Deliverables in the reporting period include: Refinement of the policy recommendations for Prevention of Land Degradation, Permafrost Thaw, and Wildfire Mitigation Incorporating Indigenous Knowledge of Reindeer Herders based on the Arctic Congress 2024 Bodø session “Framing Adaptation and Enhancing Resilience to Climate Change in the Arctic through the Lens of Indigenous Knowledge” (Annex 1); Reindeer Herding and Resilience Progress Report 2023 available at the RHR knowledge hub (Annex 2); Feasibility Study Report on Dukha Communication Centre based on the results of the field mission to Tsagaannuur (Annex 3); Traditional Knowledge of Milking Reindeer field trip and course reporting (Annex 4, 4.1) and KM products (available here); Youth as Agents of Change in Promoting Resilience of Reindeer Herding Communities round table report delivered at the Project Inception meeting (Annex 5, Annex 6); Dissemination materials for the Norwegian Parliamentarians (Annex 7); Arctic Innovation Lab training course at the Harvard Kennedy School Belfer Center (Annex 8); Resilience in Reindeer Husbandry lecture for the Harvard Kennedy School (available at: https://drive.google.com/file/d/1MidooabVC9mdWwPD6OP6HnutBnU8-sf0/view?usp=drive_link); Reindeer Herding and Resilience panel at the Arctic Council Youth Conference

(Annex 9); Dissemination materials for the 'Lavvu' dialogue with Arctic Parliamentarians; Online lecture on Storytelling Through Participatory Mapping: An introduction to participatory topological mapping; Field mission to Tsagaannuur, Mongolia (Annex 10; 10.1); Session at the Arctic Science Summit Week in Boulder, Colorado (Annex 11, 11.1, available at: https://youtu.be/4di0lJS0ztQ); Mapping workshop with Sámi reindeer herders and Woodwell Climate Research Center: Fála Migration Route map (Annex 12); A side-event at the United Nations Permanent Forum on Indigenous Issues on "Challenges of Land Fragmentation and UNDRIP Implementation" (Annex 13, available at: https://youtu.be/0IjnWqDeD6w); Final concluding Statement for the UNPFII Side Event submitted to DOCIP & UNPFII (Annex 14, 14.1); Margaret Mead Film Festival 2025: young Sámi reindeer herder reflecting on the Arctic life (available at: https://youtu.be/3uuUQh4OxFo); Submission of an exhibition (Annex 15) and a session for UNEA 2025 "Indigenous Knowledge for Sustainable Land Stewardship: Resilient Solutions from the Dukha and Sámi Reindeer Pastoralists of Mongolia and the Arctic under the UN IYRP" (Annex 16) followed by a merged session submission (Annex 17) Submissions for the "The Economy of the North ECONOR 2025", a report on the Arctic economy, from an international network of statisticians and researchers, coordinated by Statistics Norway (SSB) in cooperation with CICERO Center for International Climate Research and Laval University in Quebec, Canada, including "Resilience of nomadic reindeer herding in peatlands in the circumpolar north" and "Sámi reindeer pastoralism in Norway: the role of traditional knowledge for economy and governance" (Annex 18); Publication Circumpolar Reindeer Husbandry Trapped Between Science and Indigenous Knowledge for Harvard Business History Review (Annex 19. 19.1); Partner meeting with the UArctic Board for Project briefing (Annex 20); Syllabus and structure for reindeer herders' training course on Traditional Knowledge documentation (Annex 21); Book "From the Past to the Future: 300 Years of Sámi Reindeer Herding Knowledge. Perceptions of the Sámi from 1725 by Knud Leem" conducted together by the ICR and Sámi University of Applied Sciences. DOI: 10.1007/978-3-031-93339-4 (Annex 22); Arctic Council SDWG Report EALLU 2021-2025 (Annex 23); Collection of the pictures of Dukha reindeer husbandry from 1950-1990; Collection of the pictures of the Sámi reindeer herders from the 1960s. The ICR representatives participated in the Inception meeting of Components 1 and 2 of the Project on 1st October 2024 (Ulaanbaatar, Mongolia) and presented the progress on Component 3 implementation; between July 2024-2025,

B. Challenges: Information on challenges of project implementation activities

Project implementation across Components 1 and 2 encountered several interrelated challenges: Legal and Policy Uncertainty: The ongoing drafting of the Climate Change Law and Soil Conservation Law delayed Output 1.1.4. Key legal issues—including carbon-credit ownership, Article 6 compliance, and benefit-sharing with Indigenous/local communities—remain unresolved, hindering integration of peatland and permafrost governance. Cross-Sector Coordination Delays: Outputs 1.1.2 and 1.1.3 faced slow validation due to limited engagement and delayed inputs from key ministries (Environment, Energy, Agriculture, NSO), affecting data-sharing agreements and MRV framework development. A national validation workshop has been postponed. Co-Financing Gaps: As of this reporting period, only USD 20,000 of in-kind co-financing has materialized—primarily through CCRCC staff time and cost-sharing. Delays stem from unmet financial commitments by government partners, academic institutions, and pending technical agreements. Stakeholder Engagement Constraints: In Component 3, engagement with Dukha reindeer herders was constrained by seasonal inaccessibility, cultural barriers, and unclear governance over pastureland in protected areas. Component 2 engagement with Ulaanbaatar Municipality slowed due to administrative changes. Technical and Institutional Capacity: National expertise in peatland hydrology, permafrost monitoring, and carbon flux modeling remains limited. High staff turnover in implementing agencies affected institutional memory and coordination. Seasonal and Climatic Impacts: Field activities were delayed by prolonged spring thaw and unseasonal weather in northern and high-altitude sites, disrupting surveys and data collection. Knowledge Management Delays: The development of a digital knowledge platform was postponed due to procurement delays, legacy data limitations, and metadata harmonization issues between CCRCC and MECC systems. Main challenges

encountered in implementing Component 3 Reindeer Herding and Resilience (RHR) project activities: Increasing land fragmentation and restricted access to pastures and grazing areas due to industrial development significantly limit traditional land use and seasonal migration routes of reindeer herders. Climate change leads to warmer winters, less snowfall, drier rivers, and changes in vegetation, all of which negatively impact reindeer herding Page 14 of 91

practices, forcing herders to adjust traditional seasonal practices, leading to increased vulnerability for both reindeer and herders. An increasing number of predators, wolves and eagles, pose significant threats to reindeer herds, exacerbating economic and livelihood risks. Younger generations of Dukha herders increasingly migrate to urban areas, creating a demographic challenge and decreasing engagement in traditional herding. Attraction to modern lifestyles makes it difficult to retain youth within traditional reindeer herding communities. Tourism provides economic opportunities but also poses several challenges. Frequent visits by tourists disrupt traditional lifestyles and create environmental pressures on summer pastures. There is a need to enhance capacity-building for Indigenous youth and herders, particularly in areas such as international diplomacy, environmental agreements, GIS technology, participatory mapping, and monitoring. Bridging traditional Indigenous knowledge with scientific methodologies presents methodological and practical challenges. Gaps in effective communication between herders and governmental or environmental bodies limit the herders' ability to advocate for their needs and rights. Administrative bottlenecks, unclear guidelines, and limited local participation in decision-making processes hamper the project's effectiveness. Constraints related to institutional support and resource allocation hinder smooth implementation. For example, healthcare, education, and other social services in remote herding communities are limited and insufficiently tailored to nomadic lifestyles. Coordination challenges among international partners, Indigenous groups, and government agencies have been observed during project implementation. Difficulties in collecting historical documentation, photographs, and local knowledge, vital for comprehensive mapping and understanding of changes in land-use practices, have been identified as an ongoing challenge. The development and effective use of participatory monitoring systems, which incorporate both scientific and Indigenous knowledge, are progressing slowly and need significant refinement based on field implementation feedback. The development of indicators of change based on traditional knowledge and science. Overall, addressing these challenges requires continued efforts to strengthen cross-sectoral collaborations, better integrate Indigenous knowledge into policymaking, enhance local stakeholder participation, improve socio-economic resilience, and streamline governance mechanisms.

C. Stakeholder Engagement

Stakeholder engagement activities for Components 1 and 2 were implemented in alignment with the approved Stakeholder Engagement Plan and focused on facilitating coordinated national action for peatland management and policy integration in Mongolia.
Progress

•A reconstituted Project Steering Committee (PSC) was formally established under MECC leadership through Ministerial Order A/606 and convened on 23 January 2025, followed by technical clearance at the Steering Committee meeting on 01 October 2024.

•Stakeholder consultations engaged 11 national institutions—including MECC, MOFALI, NSO, Ministry of Energy, GASI, and the Ulaanbaatar Municipality—through bilateral and multi-agency dialogues on data sharing, institutional roles, and MRV responsibilities.

•A National Stakeholder Consultation Workshop (April 2025) gathered technical experts, sectoral focal points, and civil society to validate project baselines and strengthen alignment with Mongolia's NDC, LDN, and land-use frameworks.

•The Mongolia Peatland Initiative Working Group was activated to guide integration of peatland issues into national policy and legal reforms.

•Gender-balanced participation was promoted in all events, and sex-disaggregated data was collected across training, consultation, and awareness activities.

Challenges
•Validation inputs from select institutions, such as UB Municipality and NSO, were delayed due to internal restructuring and limited technical bandwidth.

•Sectoral engagement required continuous facilitation due to uneven familiarity with peatland and ETF/LDN reporting requirements.

Outcomes
•Stakeholder feedback informed the design of Mongolia's peatland MRV templates, institutional coordination matrix, and data-sharing workflows.

•Multi-stakeholder ownership was established for both policy and knowledge components, ensuring future scalability of monitoring and integration into national reporting (e.g., BTR2, NC5).

•A foundation was laid for long-term cross-sector collaboration on peatland resilience, including science-policy dialogue and awareness-raising.
Supporting documents (e.g., meeting minutes, participation lists, validation reports) will be uploaded at Step 5 of the GEF Portal.
Stakeholder engagement activities involving Dukha and Sámi communities in Component 3 Reindeer Herding and Resilience (RHR) project:

•An international reference group comprising reindeer youth and elders from Norway, Finland, Sweden, and Mongolia was established for Component 3.
•Regular consultations were held in Tsagaannuur, Mongolia, and Sápmi, Norway, involving Dukha and Sámi reindeer herders. These meetings discussed traditional pasture management, access to grazing areas, and impacts from Protected Area regulations.

•Community meetings in Tsagaannuur (in 2024 and 2025) allowed Dukha herders to express their concerns about increasing pastureland restrictions and land-use rights within the Tengis-Shishged National Park and Ulaan Taiga Specially Protected Areas. During this meeting, a working group was formed to draft statutes for a new Dukha reindeer herders' organization, aiming to represent their interests.

•Sámi and Dukha representatives actively participated in high-level international events, including the Arctic Council Ministerial Meeting, UN Permanent Forum on Indigenous Issues (UNPFII), and the Arctic Youth Conference. They engaged in advocacy related to land fragmentation, sustainable land management, and Indigenous rights, elevating Sámi and Dukha perspectives in global discussions.

•Dukha representatives participated in dialogues and meetings facilitated by ICR with local government officials, such as the Governor of Tsagaannuur, to negotiate greater access and rights to traditional grazing lands, particularly within Protected Areas.

•Plans were initiated for the World Reindeer Herders Congress in Tsagaannuur (August 2026), which will serve as a platform for Dukha herders to present their culture and practices to an international audience, strengthening their advocacy and visibility at a global scale.

•Dukha and Sámi herders participated in cross-learning exchanges, including field visits to Kautokeino, Norway, and Tsagaannuur, Mongolia, to learn about land-use changes, sustainable herding practices, and Indigenous food systems.

•Dukha and Sámi youth and herders engaged in training programs at Harvard Kennedy School and Tufts Fletcher School designed to enhance skills related to traditional knowledge documentation, participatory environmental monitoring, and sustainable land-use management. Activities like the Arctic Innovation Lab facilitated the development of young Sámi and Dukha leaders, providing tools for advocacy and sustainable development initiatives.

•Specific gender-focused activities, including cooking masterclasses held at the NOMAD Indigenous FoodLab in Kautokeino, involved young Sámi women and students from the Sámi Upper Secondary School, emphasizing empowerment through cultural heritage and traditional food systems.

•Historical documentation efforts were undertaken, including the collection and preservation of archival photographs from the Mongolian National Central Archives, Ulaan-Uul Soum Museum, and Central Museum of Khuvsgul, capturing traditional Dukha reindeer husbandry practices and past land-use patterns.

•The Dukha community participated actively in participatory topological mapping exercises, which documented traditional seasonal migrations, grazing areas, and areas impacted by Protected Area regulations. These maps have been crucial for advocating the Dukha's rights and traditional land use in policy dialogues.

•Sámi herders actively engaged in participatory mapping and research, documenting seasonal migration patterns, traditional food systems, and climate adaptation strategies. This research directly contributed to project outputs, including GIS-based maps that integrate traditional knowledge with scientific data to support policy advocacy developed in cooperation with the Woodwell Climate Research Centre and awarded ICA-IMIA Recognition of Excellence in Cartography 2025, Envisioning the Future Award, and Cartography Special Interest Group Excellence Award.

•Academic publications, such as the Springer Polar Sciences series "Reindeer Husbandry: Resilience in the Changing Arctic," and an upcoming "300 years of reindeer herders' knowledge," featured contributions from Sámi knowledge holders, ensuring Sámi traditional knowledge was effectively documented and disseminated internationally.

•"Lavvu Dialogues" provided a culturally relevant space for Sámi herders to engage in direct dialogue with policymakers, industry representatives, and international stakeholders, facilitating knowledge exchange and building mutual understanding about Sámi land-use practices and sustainable livelihoods.
Most important principles and activities include:

•Respect for Indigenous Knowledge: Dukha and Sámi reindeer herders' knowledge was extensively documented and integrated into management and monitoring frameworks.

•Capacity Building: Emphasis on building capacities in youth and community leaders to enable meaningful participation in decision-making.

•Participatory Approaches: Dukha and Sámi reindeer herder communities actively participated in developing maps, indicators, and management plans through workshops and stakeholder meetings.

•International Visibility: Active involvement in international events helped both Dukha and Sámi communities voice their needs and gain global attention to their specific issues, including land-use rights, cultural sustainability, and climate resilience.

Through these targeted engagement strategies, Component 3 of the project ensures meaningful participation, effective capacity-building, and genuine empowerment of both Dukha and Sámi reindeer herding communities, aligning with global goals on Indigenous rights and sustainable land management.

D. Gender Equality

Does the project have a gender action plan?
Yes
Gender mainstreaming (will be uploaded to GEF Portal):
The Climate Change Research and Cooperation Center (CCRCC), as the national executing agency, maintains a formal Gender Policy that is fully compliant with the Green Climate Fund (GCF) Gender Policy and aligned with UNEP's Environmental and Social Safeguards and Gender Equality and Social Inclusion Policy. This institutional framework ensures that gender equality, women's empowerment, and the meaningful participation of women and marginalized groups are mainstreamed across all project activities under Components 1 and 2.
To operationalize this commitment:

•Sex-disaggregated data were systematically collected and reported for all stakeholder consultations, trainings, and field missions;

•Women-led institutions, including the NUM Department of Geography and the Institute of Botany, served as technical leads in spatial mapping, indicator co-design, and scientific review;

•Early-career female researchers and Indigenous youth were actively involved in field-based activities, including UAV surveys, peatland assessments, and participatory consultations;

•Gender-responsive design principles were applied in knowledge-sharing platforms and usability testing, ensuring accessibility and representation of women's traditional ecological knowledge;

•Gender considerations were reflected in policy dialogues and national awareness campaigns, including visibility of women's roles in ecosystem stewardship during World Peatland Day events.

Component 3 of the project ensures equal participation and representation of women and men in project implementation. It addresses social and gender issues in policy planning and community-based management. It promotes sustainable landscape management with gender integration, ensuring that gender perspectives are incorporated across all policies, sectoral plans, and project activities, involving women and youth in stakeholder consultations and decision-making. Component 3 integrated gender considerations early in the project, educating staff about gender issues and their relevance to project goals, including gender-specific monitoring and sex-disaggregated data. Gender aspects are integrated evenly across project

E. Knowledge Management

CCRCC, as Mongolia's mandated compiler of Biennial Transparency Reports (BTRs) and National Communications (NCs), plays a central role in advancing the project's knowledge management (KM)

approach under Components 1 and 2. CCRCC's technical leadership in coordinating ETF-aligned data flows and sectoral contributions directly informed the knowledge generation, institutional learning, and system development objectives. Under Component 1, knowledge management efforts centered on institutional coordination and systematization of MRV and LDN reporting practices. Stakeholder consultations, bilateral meetings, and technical workshops were documented, analyzed, and synthesized into actionable KM outputs—such as role-specific guidance notes, reporting templates, and institutional coordination matrices. These products were stored within CCRCC's internal KM system and shared with national stakeholders to build institutional memory and support upcoming BTR/NC submissions. Under Component 2, KM activities emphasized participatory learning in the co-development of Mongolia's peatland and permafrost digital knowledge system. The platform is being designed as a central repository for geospatial data, monitoring indicators, policy references, and metadata standards. Stakeholder feedback, collected through structured sessions and surveys, directly shaped the system's modular architecture, data visualization layers, and access protocols. Key achievements in KM and learning under Components 1 and 2 include:

• Establishment of an ETF- and LDN-compliant MRV/data-sharing framework, validated through multi-stakeholder engagement; • Development of draft institutional reporting templates and metadata protocols for integration into national reporting and the Component 2 knowledge portal; • Co-design of a peatland-permafrost knowledge platform that reflects stakeholder use cases, technical standards, and gender-responsive data requirements;

• Consolidation of lessons from multi-agency collaboration, stored for future application in BTR-2 and NC6 compilation processes. Learning-by-doing was emphasized through adaptive management, where CCRCC collected real-time feedback during stakeholder engagements and reflected it in revised workflows, system specifications, and validation tools. Peer learning among sectoral data providers, particularly NSO, MOFALI, the Ministry of Energy, and Ulaanbaatar Municipality, was facilitated through cross-sectoral coordination platforms supported by CCRCC. Gender and social inclusion were integrated into KM processes:

• Participation data was sex-disaggregated across all consultations and workshops; • Women-led academic and government departments provided inputs on system design and user interface testing;

• Knowledge products and digital content were tailored to reflect gender-differentiated access and usability considerations. All KM outputs are being archived by CCRCC and MECC for institutional continuity and future upscaling. These knowledge assets are intended to feed directly into national policy development, support Article 13 transparency compliance, and serve as replicable models for other land and climate-related reporting systems.

Progress on the implementation of Component 3 KM approach in the reporting period include:
•Refinement of the policy recommendations for Prevention of Land Degradation, Permafrost Thaw, and Wildfire Mitigation Incorporating Indigenous Knowledge of Reindeer Herders based on the Arctic Congress 2024 Bodo session "Framing Adaptation and Enhancing Resilience to Climate Change in the Arctic through the Lens of Indigenous Knowledge" (Annex 1);

•Reindeer Herding and Resilience Progress Report 2023 available at the RHR knowledge hub (Annex 2);

•Feasibility Study Report on Dukha Communication Centre based on the results of the field mission to Tsagaannuur (Annex 3);

•Traditional Knowledge of Milking Reindeer field trip and course reporting (Annex 4, 4.1) and KM products (available here);

•Youth as Agents of Change in Promoting Resilience of Reindeer Herding Communities round table report delivered at the Project Inception meeting (Annex 5, Annex 6);

•Dissemination materials for the Norwegian Parliamentarians (Annex 7);

•Arctic Innovation Lab training course at the Harvard Kennedy School Belfer Center (Annex 8);

•Resilience in Reindeer Husbandry lecture for the Harvard Kennedy School (available at: https://drive.google.com/file/d/1MidooabVC9mdWwPD6OP6HnutBnU8-sf0/view?usp=drive_link);

•Reindeer Herding and Resilience panel at the Arctic Council Youth Conference (Annex 9);

•Dissemination materials for the 'Lavvu' dialogue with Arctic Parliamentarians;

•Online lecture on Storytelling Through Participatory Mapping: An introduction to participatory topological mapping;

•Field mission to Tsagaannuur, Mongolia (Annex 10; 10.1);

•Session at the Arctic Science Summit Week in Boulder, Colorado (Annex 11, 11.1, available at: https://youtu.be/4di0lJS0ztQ);

•Mapping workshop with Sami reindeer herders and Woodwell Climate Research Center: Fala Migration Route map (Annex 12);

•A side-event at the United Nations Permanent Forum on Indigenous Issues on "Challenges of Land Fragmentation and UNDRIP Implementation" (Annex 13, available at: https://youtu.be/0IjnWqDeD6w);
•Final concluding Statement for the UNPFII Side Event submitted to DOCIP & UNPFII (Annex 14, 14.1);
•Margaret Mead Film Festival 2025: young Sami reindeer herder reflecting on the Arctic life (available at: https://youtu.be/3uuUQh4OxFo);
•Submission of an exhibition (Annex 15) and a session for UNEA 2025 "Indigenous Knowledge for Sustainable Land Stewardship: Resilient Solutions from the Dukha and Sámi Reindeer Pastoralists of Mongolia and the Arctic under the UN IYRP" (Annex 16) followed by a merged session submission (Annex 17)
•Submissions for the "The Economy of the North ECONOR 2025", a report on the Arctic economy, from an international network of statisticians and researchers, coordinated by Statistics Norway (SSB) in cooperation with CICERO Center for International Climate Research and Laval University in Quebec, Canada, including "Resilience of nomadic reindeer herding in peatlands in the circumpolar north" and "Sámi reindeer pastoralism in Norway: the role of traditional knowledge for economy and governance" (Annex 18);
•Publication Circumpolar Reindeer Husbandry Trapped Between Science and Indigenous Knowledge for Harvard Business History Review (Annex 19. 19.1);
•Partner meeting with the UArctic Board for Project briefing (Annex 20);
•Syllabus and structure for reindeer herders' training course on Traditional Knowledge documentation (Annex 21);
•Book "From the Past to the Future: 300 Years of Sámi Reindeer Herding Knowledge. Perceptions of the Sámi from 1725 by Knud Leem" conducted together by the ICR and Sámi University of Applied Sciences. DOI: 10.1007/978-3-031-93339-4 (Annex 22);
•Arctic Council SDWG Report EALLU 2021-2025 (Annex 23);
•Collection of the pictures of Dukha reindeer husbandry from 1950-1990;
•Collection of the pictures of the Sami reindeer herders from the 1960s.
List of KM products

III: Minor Amendments

CONTEXT	
Result Framework	
Components and Cost	
Institutional And Implementation Arrangements	
Financial Management	
Implementation Schedule	
Executing Entity	
Executing Entity Category	
Minor Project Objective Change	
Safeguards	
Risk Analysis	
Increase of GEF Financing up to 5%	
Co-Financing	
Location of Project Activity	
others	Results framework: Indicator baselines and wording refined to align with updated national MRV and inventory methodologies. Components and cost: Internal reallocation within Components 1 and 2 to support accelerated MRV activities and expanded stakeholder engagement. Implementation schedule: Training and adaptation planning milestones delayed by 1–2 quarters due to preparatory and consultation requirements. Co-financing: In-kind contributions revised to reflect actual staff time and reduced PMC, consistent with current implementation. Other: MRV and data protocols updated in line with 2025 national guidance; emission factor calibration initiated.

IV: Geographic Coordinates of Project Activities

Location Name	Latitude	Longitude	GeoName ID

ICR HQ in Kautokeino. Finnmark. Norway	69.01247110	23.04115380	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
ICR team in Tsagaannuur. Khövsgöl. Mongolia	49.2333	99.5167	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Khurkh–Khuiten River Basin	48.1650	111.6730	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Ögii Lake Basin	47.8575	102.7983	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Darhad Depression	51.4667	99.4667	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Ulaan Taiga SPA	51.5000	98.8500	

Location Description:

Activity Description:

V. ANNEX

Uploaded Document	
Document Category M and E Document	Title 10545-PIR-UNEP-2025-Mongolia Peatlands-Nomadic Herders
Document Category M and E Document	Title Annex