PRE-CONCEPT FOR A REGIONAL PROJECT/PROGRAMME

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Climate-proofing livestock value chains in vulnerable communities in Mongolia and Pakistan
Countries:	Mongolia, Pakistan
Thematic Focal Area[1]:	Food security
Type of Implementing Entity:	Multilateral Implementing Entity
Implementing Entity:	United Nations Industrial Development Organization (UNIDO)
Executing Entities:	UNIDO and the Asian Disaster Preparedness Center (ADPC)
Amount of Financing Requested:	20,550,000 (in U.S Dollars Equivalent)
Project Formulation Grant Request:	Yes ☒ No ☐

Amount of Requested financing for PFG: 30,000 (in U.S Dollars Equivalent)

Letters of Endorsement (LOE) signed for all countries: 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 pre-concept has been submitted before
☒This pre-concept note represents a re-submission. The previous submission was made on 21st November 2025

In case of a resubmission, please indicate the last submission date: Click or tap to enter a date.

Please note that pre-concept should not exceed 5 pages (in addition to this first cover page)

[1] Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

Project/Programme Background and Context:

In recent decades, climate change has emerged as a critical threat to the livestock sectors of both Mongolia and Pakistan, severely exacerbating existing vulnerabilities and placing increased pressure on natural ecosystems, food systems and rural livelihoods, and with direct implications for national food security. Both are among the world's most climate-vulnerable countries, Pakistan ranked eighth on the Global Climate Risk Index (2021) and Mongolia experiencing one of the fastest warming rates in Asia. Rising temperatures, extreme weather events and climate induced disasters are already having profound impacts on herders, livestock productivity and the broader value chain. As livestock products represent a cornerstone of national food security and rural employment, contributing more than half of agricultural GDP in both countries, focusing on this sector provides one of the most direct and equitable pathways to protect livelihoods under a changing climate.

In Mongolia, average temperatures rose by 2.24°C between 1940 and 2015 and are expected to increase by a further 5.3°C by the 2090's under the highest emissions scenario. These increases exceed the global average, increasing heatwave frequency. While a drying trend was previously observed, future projections indicate slightly increased annual precipitation and more extreme rainfall events. One of the most significant threats are drudz, which are severe winters that prevent grazing, causing mass animal deaths, such as the 10.3 million lost in 2009-2010[2]. These events are expected to become 5%-40% more likely by 2080. Mongolia is also projected to face more frequent droughts[3]. Pastoral systems operate under highly variable, non-equilibrium dryland conditions, where vegetation growth depends largely on rainfall variability and is managed through herd mobility. In recent years, rising herd numbers and growing cashmere demand have limited this mobility and increased localized grazing pressure, further stressing already vulnerable rangelands.

In Pakistan, warming averaged at 0.57°C over the 20th century, with hotter regions like Punjab and Balochistan experiencing up to 1.12°C[4]. Projections indicate temperature increases up to 5.3°C by 2100[5]. Though precipitation forecasts remain uncertain, increased flood and drought intensity is anticipated[6]. Water shortages already impact livestock productivity, during 2015-2017, output dropped by 48% in drought affected areas[7]. Major floods (2010, 2022) killed thousands of animals. Rising temperatures also contribute to increased outbreaks of livestock diseases, with expected production losses of 20%-30% in the coming years[8]. Climate variability also reduces reproductive performance and animal fitness, increases stillbirths, and shortens productive lifespans, which in turn further undermines household income and food security[9].

These climate-related and ecological pressures intersect with the high socioeconomic importance of the livestock sector in both countries. In Mongolia, the livestock sector accounts for over 15%[10] of GDP and supports nearly half the population. In Pakistan, it contributes 14% to GDP and supports over 8.9 million rural families (2023 Pakistan census), representing 62% of the rural workforce[11]. Both countries rely on natural rangelands for grazing, which cover about 70–80% of Mongolia's land area and around 65% of Pakistan's[12]. They follow seasonal grazing patterns, where livestock are moved to different areas based on water and fodder availability. In Mongolia, this is practiced through traditional nomadic herding across vast grasslands. In Pakistan's northern regions, herders practice transhumance, moving livestock seasonally between high- and low-altitude pastures.

[2] Mongolia: Dzud response plan, March 2024: https://mongolia.un.org/mn/node/264825
[3] Climate Risk Country Profile: Mongolia (2021): The World Bank Group and the Asian Development Bank.
[4] Climate Risk Country Profile: Pakistan (2021): The World Bank Group and the Asian Development Bank.
[5] Climate Risk Country Profile: Mongolia (2021): The World Bank Group and the Asian Development Bank.
[6] Climate Risk Country Profile: Pakistan (2021): The World Bank Group and the Asian Development Bank.
[7] Climate Risk Country Profile: Pakistan (2021): The World Bank Group and the Asian Development Bank.
[8] Jamil, M., Shakeel, I., Ullah, H., Ahmad, M., Ullah, S., Rasool, I., Tahir, M., Gull, J., Jabeen, N., & Ali, M. (2022). Livestock in Pakistan: An Insight into Climate Changes and Impacts, Journal of Bioresource Management, 9 (4).

ISSN: 2309-3854 online
9 Ali, A. & Erenstein, O. (2017). "Climate change and livestock herders' wellbeing in Pakistan: does nexus of risk perception, adaptation and their drivers matter?" Climate Risk Management, 16, 183–194.
[10] Available online: https://www.standardsfacility.org/pg-534
[11] Tariq, M. 2023. Available online: https://sdgs.un.org/sites/default/files/2023-05/C15%20-%20Tariq%20-%20Future%20policy%20interventions%20for%20the%20development%20of%20livestock%20sector%20in%20Pakistan.pdf
[12] Jamil, M., Mansoor, M., Anwar, F., Muhammad, S. and Awan, A.A. 2018. A Review on Rangeland Management in Pakistan, Bottlenecks and Recommendations. Pak. j. sci. ind. res. Ser. B: biol. sci. 61B (2) 115-120.

However, these traditional grazing and herding systems are increasingly strained as climate pressures intensify pre-existing vulnerabilities in grazing areas and livestock management[13] has tripled over the past four decades, with herders increasingly prioritizing goats for cashmere production, contributing to pasture degradation by grazing close to the root. More frequent dzuds, droughts and sandstorms are further degrading rangelands and reducing the availability of [14] water. In Pakistan, rangelands are overstocked by six to seven times their carrying capacity. Prolonged droughts and erratic rainfall patterns have significantly reduced pasture growth, while traditional grazing rotation practices has led to overuse in some regions. These dynamics have contributed to the loss of native plant species and grassland cover, increasing soil vulnerability to erosion and desertification. As a result, overgrazed lands are less able to support livestock, leading to reduced production, declining herd health and higher mortality risks. Climate variability and constrained herd mobility further limit the ability of rangelands to recover. As both economies depend heavily on extensive dryland grazing rather than crop agriculture, addressing rangeland and livestock resilience presents the most climate-relevant and economically significant adaptation entry point.

These environmental and climate pressures translate into tangible economic impacts for herders and Small and Medium Enterprises (SMEs) across the livestock value chain. In Mongolia, climate related shocks and degraded rangelands are increasing feed and water costs, lowering animal productivity and reducing the quality and quantity of outputs. In Pakistan, extreme weather affects animal health, water and fodder availability and results in reduced milk and meat yields. High temperatures and humidity increase disease outbreaks and spoilage rates in dairy, meat and hides, leading to greater waste, higher refrigeration costs and lower product quality. These impacts are particularly severe for SMEs involved in processing, storage and transportation sectors, which often lack climate-resilient infrastructure. Under these conditions, many SMEs face rising operational costs and reduced competitiveness in domestic and export markets, particularly in leather and dairy. In this context, SMEs represent an important pressure point in the livestock economy, as disruptions in processing, storage or transport tend to amplify the impacts herders already face. This helps explain why interventions at this level are often considered alongside producer-level measures when evaluating adaptation options.

Building on this shared context, Mongolia and Pakistan face similar adaptation challenges in their dryland livestock economies. Pastoral and smallholder systems are central to rural livelihoods in both countries but are increasingly affected by multiple climate-related hazards including droughts, dzuds, floods and land degradation that disrupt production, processing and market access. Herders and SMEs face comparable barriers to adaptation, such as limited access to water and feed resources, insufficient veterinary and climate-information services, lack of affordable credit and insurance and inadequate climate-resilient infrastructure. Strengthening resilience along the livestock value chain therefore requires coordinated actions that address these shared vulnerabilities across production and post-harvest stages.

The regional approach is essential to achieve these outcomes efficiently and to maximize impact. Although Mongolia faces more frequent cold-related shocks and Pakistan is exposed to heat and drought stress, both countries depend on similar adaptation measures, including resilient storage and transport infrastructure, improved grazing and water management, as well as risk-management mechanisms for SMEs. A joint framework enables the two countries to apply proven adaptation solutions and exchange technical expertise, thereby reducing duplication and increasing cost-effectiveness. Mongolia's experience in sustainable pasture management, early-warning systems and cold-chain logistics complements Pakistan's progress in livestock insurance, community-based adaptation and value-chain integration. During the initial consultations, stakeholders in both countries also pointed to practical opportunities for shared learning, for example, Mongolia's long experience with nomadic livestock systems and emerging green-tech initiatives, as well as lessons from past livestock value-chain work in Pakistan that could be relevant for Mongolian herders. Experts from both sides expressed interest in establishing regular exchanges or small technical working groups to share lessons and approaches. Taken together, this cooperation supports both countries' NDC and NAP priorities for livestock resilience and offers a model that could be useful for other dryland regions facing similar climate pressures.

Project/Programme Objectives:

The overall objective of the project is to climate-proof livestock value chains in Mongolia and Pakistan and enhance national and regional food security and related climate change adaptation capacities.

[13] Fourth National Communication of Mongolia Under the United Nations Framework Convention on Climate Change. 2024.
[14] FAO. 2016. Rangelands of Pakistan: Current status, threats and potential. Islamabad.

This will result in herders with livelihoods more resilient to climate-related shocks, as well as SMEs in the livestock sector with business continuity in the face of extreme climate events facilitating the protection of worker livelihoods. The specific objectives of the project are:

- To strengthen the capacity of local institutions in Mongolia and Pakistan to undertake improved, gender-responsive adaptation planning and implementation in the livestock sector.
- To facilitate the sharing of knowledge, best practices, and lessons learned between Mongolia and Pakistan and regionally for more efficient and effective climate-resilient practices in the livestock sector.
- To directly increase the resilience of vulnerable herders and SMEs to the impacts of climate-related shocks, including dzuds, droughts, floods and heat stress, which threaten livestock health, productivity and market access.

Project/Programme Components and Financing:

Project/Programme Components	Expected Outcomes	Expected Outputs	Countries	Amount (US$)
1. Strengthening institutional capacity for enhanced adaptation planning for food security and livelihood resilience	1.1. Institutional capacity strengthened for improved adaptation planning and implementation	1.1.1. Training sessions, workshops, awareness raising activities and technical guidance delivered to national and local institutions to build capacity for gender responsive adaptation planning and implementation in the livestock sector	Mongolia, Pakistan	1,200,000
		1.1.2. Climate adaptation strategies and action plans for the livestock sector developed and adopted within local governments	Mongolia, Pakistan	1,100,000
	Subtotal Outcome 1.1.			*2,300,000*
Subtotal Component 1				**2,300,000**
2. Implementation of adaptation interventions to climate-proof the livestock value chain	2.1. Increased adaptive capacity of herders and SMEs in the livestock sector	2.1.1. Country-specific adaptation interventions that combine traditional knowledge with modern solutions put in place to increase resilience of herders, rangelands and livestock.	Mongolia, Pakistan	2,000,000
		2.1.2. Climate risk and vulnerability assessments undertaken for key SMEs involved in storage, processing and transportation of livestock products	Mongolia, Pakistan	800,000
		2.1.3. Selected storage and processing facilities, and transportation systems made climate resilient.	Mongolia, Pakistan	2,500,000

	Subtotal Outcome 2.1.			*5,300,000*
	2.2. Increased access to and uptake of innovative adaptation practices, tools and technologies by herder communities and SMEs.	2.2.1. Climate-resilient technology and innovation pop-ups* facilitated to promote climate adaptation technology solutions and financial tools for herder communities and SMEs.	Mongolia, Pakistan	2,500,000
	Subtotal Outcome 2.2.			*2,500,000*
Subtotal Component 2				**7,800,000**
3. Preparedness for climate-related hazards	3.1. Reduced exposure to climate-related hazards and threats	3.1.1. Early warning systems for livestock-specific climate risks strengthened in project areas	Mongolia, Pakistan	7,000,000
	Subtotal Outcome 3.1.			*7,000,000*
Subtotal Component 3				**7,000,000**
4. Knowledge Management	4.1. Improved regional knowledge and coordination	4.1.1. Best practices and lessons learned regarding climate-resilient management of rangelands, livestock and associated value chains shared regionally	Mongolia, Pakistan	600,000
	Subtotal Outcome 4.1.			*600,000*
Subtotal Component 4				**600,000**
6. Project/Programme Execution cost				981,818
7. Total Project/Programme Cost				18,681,818
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)				1,868,182
Amount of Financing Requested				20,550,000

Project Duration: 5 years

PART II: PROJECT/PROGRAMME JUSTIFICATION

While the four components share a common structure to maintain a coherent regional framework, the activities under each will be adapted to national circumstances. This approach ensures alignment and cross-learning between Mongolia and Pakistan, while allowing flexibility to address distinct climate risks and institutional settings in each country.

Component 1. Strengthening institutional capacity for enhanced adaptation planning for food security and livelihood resilience. The main objective of this component is to strengthen the capacity of local institutions in Mongolia and Pakistan to undertake improved adaptation planning and implementation in the livestock sector. Capacity-building and awareness-raising activities under Output 1.1.1 will target local institutions involved in livestock management, including rangeland, grazing and disease control. Capacity-building activities will also be conducted

with local SMEs. This will ensure local actors understand climate risks and good adaptation practices. It will also ensure the required capacity is in place to support the implementation of concrete adaptation measures under Component 2, which will directly increase the resilience of vulnerable herders and SMEs. Output 1.1.1 will also enable the adoption of climate adaptation strategies and action plans under Output 1.1.2. ensuring the sustainability of adaptation measures as they are integrated into local-level planning. These institutional strengthening activities are fully aligned with both countries' National Adaptation Plans: Mongolia's NAP prioritizes capacity-building for climate-resilient livestock and rangeland management, while Pakistan's NAP highlights the need for improved climate information services, livestock management and institutional coordination.

This component will increase the institutional capacity in both countries for improved adaptation planning and implementation of adaptation interventions in the livestock sector, both pre- and post-harvest. This component will also enable cross-country learning and institutional coordination, allowing both countries to benefit from shared practices in livestock adaptation planning. This cross-country capacity building will also promote harmonized data standards and early-warning coordination across comparable dryland zones, avoiding parallel system development and strengthening regional preparedness.

Component 2. Implementation of adaptation interventions to climate-proof the livestock value chain. This component aims to directly increase the resilience of vulnerable herders and SMEs in the livestock sector to climate impacts. It contributes to NAP implementation in both countries by translating livestock-sector adaptation priorities into concrete pilot measures, including sustainable rangeland management, resilient fodder systems, and climate-proof storage and processing infrastructure. These align with Mongolia's NAP focus on strengthening rangeland ecosystem resilience, and with Pakistan's NAP priorities on adaptive livestock and water management in arid and semi-arid regions. Under Output 2.1.1, pilot adaptation measures will be introduced for herders, livestock and rangelands, drawing from traditional knowledge and modern practices. Possible interventions under consideration include flood-resilient livestock shelters in flood-prone lowlands, heat-tolerant fodder varieties for arid and semi-arid zones, and mobile insulated barns and water troughs for cold-prone rangelands. Where applicable, interventions will follow internationally recognized guidelines such as the FAO Livestock Emergency Guidelines and WOAH disease control standards.

Building on the shared regional farmwork, climate risk and vulnerability assessments will be conducted under Output 2.1.2 for key SMEs engaged in post-harvest activities like wool and leather processing, slaughterhouses, feed production and veterinary inputs. In the context of Pakistan, the focus will be on SMEs operating in feed manufacturing, veterinary services, which are particularly relevant to a climate-adaptive livestock sector. The findings from these assessments will directly inform the selection and design of interventions under Output 2.1.3, ensuring that infrastructure and technology upgrades are tailored to the specific vulnerabilities and operational needs of SMEs. Shared technical guidelines developed jointly by the two countries will ensure comparable design standards and facilitate mutual learning on climate-resilient infrastructure for dryland value chains. Adaptation options may include modern processing tools, improved fodder seed varieties, and community-based storage hubs, as well as solar milk chillers for remote SMEs and solar fodder dryers for winter reserves (to be further assessed at concept stage). Close engagement with herder cooperatives will be key here, not only for informing risk assessments and selecting priority interventions, but also for supporting testing, local ownership and long-term maintenance of adaptation solutions introduced under Output 2.1.3. All target areas and participating SMEs will be identified and validated during the concept and full proposal stages to ensure readiness and alignment with national priorities before implementation begins. SME selection criteria will be determined based on preliminary considerations such as exposure to climate risks, value chain role and relevance to rural livelihoods.

While Output 2.1.1 focuses on piloting concrete adaptation measures, such as improved livestock management, emergency fodder supply and water harvesting structures, within herding communities, Output 2.2.1 aims to promote wider access to emerging technologies and financial tools through demonstration-based platforms. These platforms will enable hands-on demonstrations tailored to local climate challenges and co-developed with herders and SMEs. Examples include mobile weather alerts, livestock tracking, microfinance, climate insurance and livestock credit schemes, and could also feature solar mobile chillers, blockchain traceability for wool and microinsurance linked to early warning data. By enabling practical demonstrations and tailored support, this output will strengthen uptake of scalable solutions and promote resilience across diverse settings

Component 3. Preparedness for climate-related hazards. The objective of this component is to reduce the exposure of vulnerable herders and SMEs in Pakistan and Mongolia's livestock sectors to climate-related risks and hazards. Existing early warning and disaster preparedness systems, including livestock disease surveillance, are limited, especially in rural areas, leaving populations vulnerable to climate threats. Under Output 3.1.1, the project will enhance existing systems and, where needed, introduce complementary mechanisms to better address risks such as disease outbreaks, heat stress, fodder shortages and dzuds. Planned improvements may include digital alert systems, integration of pasture and livestock data into early warning platforms and locally tailored protocols for timely response, along with options such as biomass sensors, disease outbreak triggers, mobile alerts, heat-stress warnings and dzud risk maps (subject to further consultation). Institutions such as Mongolia's National Emergency Management Agency (NEMA) and Meteorological Institute for Early Warning Systems, as well as Pakistan's National Disaster Management Authority (NDMA) and Meteorological Department, will be closely engaged in implementation. The project will coordinate with relevant national stakeholders and explore synergies with ongoing initiatives to avoid duplication and build on existing capacities. During the next phase, additional consultations and technical assessments will guide investment and ensure interventions are tailored to livestock-specific needs and local contexts. The regional framework will allow institutions to jointly analyze transboundary climate risks and exchange experience on rangeland monitoring, dzud and drought forecasting, and livestock disease surveillance.

Component 4. Knowledge Management and Monitoring. This component will support the documentation and sharing of best practices and lessons learned from project activities to promote replication and regional scaling. By adopting a regional approach, the project institutionalizes structured knowledge exchange and cross-learning between Mongolia and Pakistan, enabling scalable and context adaptable solutions. Specifically, Output 4.1.1 will facilitate the development of knowledge products, exchange visits and technical cooperation between both countries. In October 2024, Mongolia and Pakistan agreed to establish a Joint Ministerial Commission and an inter-parliamentary mechanism to deepen cooperation. While these forums are at an early stage, they offer a high-level channel that can host regular technical exchanges on livestock adaptation, rangeland monitoring and livestock-relevant early warning services. And as highlighted during pre-concept consultations (see Part I), stakeholders in both countries expressed strong interest in more regular and structured opportunities for knowledge sharing. Component 4 responds to this demand by facilitating continuous exchange of lessons, technical insights and practical experience throughout implementation and beyond.

A multi-criteria selection process will be used during the concept development phase to determine target communities for the project. Current indicative areas include the Western and Gobi regions of Mongolia, and selected districts across Sindh, Balochistan, Punjab and Khyber Pakhtunkhwa in Pakistan.

New and innovative solutions to climate change adaptation. As described above, the project will promote new and innovative solutions through a value chain approach, including climate-resilient technology and innovation pop-ups for herder communities and SMEs. These platforms will support hands-on demonstrations, reduce skepticism, and encourage faster uptake. Digital tools such as mobile weather alerts, livestock tracking apps, and disease monitoring can strengthen decision-making. Climate-smart financial tools, including microfinance, and livestock credit schemes, will help build partnerships between farmers, SMEs, and financial institutions.

Cost-effectiveness of the proposed project. Cost-effectiveness will be a key criterion in selecting climate adaptation strategies and pilot interventions for vulnerable herding communities and SMEs. The regional approach enhances value for money by pooling technical resources, such as shared training materials, regional knowledge products, and coordinated monitoring systems, while allowing country-specific adaptation measures. This approach increases efficiency in project design and delivery without assuming identical interventions across both countries. While Mongolia and Pakistan differ in geography, both face similar climate challenges in the livestock sector and rely heavily on it for rural livelihoods. The regional structure is also supported by strong stakeholder interest in collaboration and shared learning, allowing each country to contribute its complementary strengths, such as Mongolia's pasture management systems and Pakistan's flood response experience to co-develop scalable efficient solutions.

Consistency with national policies, strategies, and plans. The project has been designed in close alignment with the sustainable development and climate change adaptation priorities of both countries. In Mongolia, it supports objectives outlines in the NDC, NAP and Vision 2050, including sustainable pasture management, improved forage supply, enhanced livestock productivity and value-added processing for export. In Pakistan, the project aligns with

the NCCP, NAP, updated NDC and NSDS, contributing to post-harvest infrastructure development, promotion of climate-smart water and land practices and improved inputs and livestock management. Although no formal bilateral climate cooperation framework is in place, the recent high-level agreements mentioned above between Mongolia and Pakistan to strengthen cooperation provide a potential platform to support the project's regional knowledge-sharing and coordination objectives.

Consultative process. During pre-concept development, stakeholder engagement was conducted with the Mongolia Designated Authority, herders' cooperatives and key ministries in both Mongolia and Pakistan, alongside UNIDO and a climate finance expert. Feedback from these consultations was set to tailor the proposal to local priorities. Further engagement with government institutions and beneficiaries will be central to concept and proposal development. In both countries, livestock production is largely family-based, with women and men sharing responsibilities across herding, animal care and product processing. Women's contributions are particularly significant in household-level production and rural SMEs, yet they often have less access to training, finance and decision-making. Consultations during pre-concept development involved herders' cooperatives, including women led groups and SME representatives, whose feedback helped identify adaptation needs and priorities. Gender balance and the inclusion of vulnerable groups will remain key principles in upcoming consultations. A more detailed gender analysis will be undertaken during the PFG phase, in line with the Adaptation Fund and UNIDO gender policies.

Sustainability. The project promotes political, institutional, financial and environmental sustainability. National ownership will be fostered through close government engagement. Institutional capacity will be strengthened via local training, securing the continuation of activities beyond the duration of the project. Financial sustainability will be supported through integration of adaptation plans into local budgets and access to microfinance, insurance and livestock schemes. Environmentally, the proposed interventions will enhance long-term resilience by safeguarding productivity and reducing climate vulnerability. At the regional level, sustainability will be reinforced through the joint knowledge and coordination mechanisms established under Component 4, which will continue to facilitate technical exchange and policy dialogue between Mongolia and Pakistan beyond the project's lifetime.

Economic, social, and environmental benefits. The project will improve rural incomes, especially for women and SMEs, through resilient value chains. Socially, it will empower women, youth and marginalized groups through training and equitable access to adaptation resources. Environmentally, sustainable grazing and water management will help restore rangelands and reduce land degradation. During the concept note stage, UNIDO will conduct an Environmental and Social Screening in line with the Adaptation Fund's Environmental and Social Policy to identify and categorize potential risks and impacts. At the full proposal stage, a detailed Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP) will be prepared, ensuring all risks are fully addressed and mitigation measures are integrated into project design.

Duplication of project with other funding sources. The project will be designed to avoid duplication with other funded activities in the same areas. Similar initiatives identified include the SMART-Herders project in Mongolia and the GCF-funded project on rural adaptation through UNDP. During the concept and full proposal stages, additional mapping of related national and regional projects will be carried out in coordination with government partners and development agencies to ensure complementarity, synergy and knowledge exchange rather than overlap.

PART III: IMPLEMENTATION ARRANGEMENTS

UNIDO will act as the Implementing Entity (IE) and provide overall coordination, fiduciary management, monitoring and reporting in line with Adaptation Fund requirements. In addition to its IE role, UNIDO will execute Components 2 and 4, drawing on its technical experience in climate-resilient value chains, SME upgrading and regional knowledge management. UNIDO has an operational presence in Pakistan through its Field Office, and it collaborates closely with national counterparts in Mongolia through its Regional Office in China as well as UNIDO country programme which is managed by in country staff in Ulaanbaatar. This setup will facilitate effective coordination and engagement in both countries. **The Asian Disaster Preparedness Center (ADPC)** will execute Components 1 and 3. ADPC brings substantial experience in climate information services, early warning systems and institutional capacity-building across Asia. It has a formal presence in Pakistan and has worked with Mongolian institutions through regional disaster risk reduction initiatives, which provides a practical basis for implementation in both countries.

National stakeholders in Mongolia and Pakistan will play an important role in supporting project delivery and ensuring alignment with national priorities during the next design stages. In Mongolia, key partners may include the Ministry of Environment and Climate Change (MECC) and the National Agency for Meteorology and Environmental Monitoring (NAMEM), as well as herders' cooperatives representing local beneficiaries. In Pakistan, key institutions may include the Ministry of Climate Change and Environmental Coordination and the provincial Livestock & Dairy Development Departments. Additional national and local partners will be engaged as project activities and pilot sites are further refined during the concept and full-proposal phases. During the concept and full-proposal phases, roles and responsibilities will be jointly confirmed with UNIDO, ADPC and national ministries to ensure full government ownership and clarity of implementation arrangements prior to the start of execution.

A Regional Project Steering Committee (RPSC) will monitor progress, provide technical oversight, address strategic issues and support knowledge sharing. The RPSC will be co-chaired by the Ministry of Climate Change and Environmental Coordination of Pakistan and the Ministry of Environment and Climate Change of Mongolia, with participation from UNIDO, ADPC and other relevant national stakeholders. Given the regional nature of the project, the RPSC will meet virtually at regular intervals, with in-person meetings held when feasible during major project milestones. Final hosting and meeting arrangements will be confirmed during the concept and full-proposal stages.

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

A. Record of endorsement on behalf of the government[15]

Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project/programme. Add more lines as necessary. The endorsement letters should be attached as annexes to the project/programme proposal.

Primary contact: *Dr. Zamba Batjargal* *Special Envoy for Climate Change* *Ministry of Environment and Tourism*	Date*: (Month, day, year)*
Ms. Sameera Sheikh *Joint Secretary,* *Ministry of Climate Change and Environmental Coordination*	Date*: (Month, day, year)*

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 the guidelines provided by the Adaptation Fund Board and the prevailing national development and adaptation plans of the Islamic Republic of Pakistan and the Government of Mongolia. Subject to the approval of the Adaptation Fund Board, we commit to implementing the project/programme in compliance with the Environmental and Social 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.

[15] Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

Ganna Onysko Ms. Ganna Onysko Senior GEF, GCF, AF Coordinator Division of Funding Partner Relations Directorate of Global Partnerships and External Relations United Nations Industrial Development Organization - UNIDO Implementing Entity Coordinator	
Date: *19 December 2025*	Tel. and email: +43 1 26026 3647; G.ONYSKO@unido.org
Project Contact Person: Ms. Meryem Sghir	
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Date 17 November 2025
Ref. 1/162

Subject: Justification for UNIDO's execution role in Components 2 and 4 in Mongolia

Dear Adaptation Fund Secretariat,

As the Designated Authority of Mongolia for the Adaptation Fund, I am writing to provide justification for the role of the United Nations Industrial Development Organization (UNIDO) as Executing Entity for Components 2 and 4 under the proposed regional project entitled:

'Climate-proofing livestock value chains in vulnerable communities in Mongolia and Pakistan.'

Component 2 will implement practical adaptation measures to strengthen the resilience of herders and livestock value chains. This includes introducing climate-smart livestock and rangeland management practices, supporting sustainable grazing and pasture restoration, and improving storage, processing, and transportation systems to reduce climate-related losses and disruptions. Component 4 will facilitate knowledge exchange and the documentation of lessons learned, supporting the scaling and sustainability of successful adaptation practices within Mongolia and across the region.

UNIDO is being requested to execute these components due to its established technical expertise in livestock value chain development, climate-resilient agrifood systems and support to rural and community-based enterprises in Mongolia. Globally, UNIDO has a proven track record in designing and implementing value chain upgrading programmes, introducing climate-resilient processing and storage technologies and supporting producer organizations to adopt improved and climate-informed production practices. This experience is directly relevant to the needs of herder communities and small enterprises in climate-vulnerable livestock systems.

We confirm that relevant Mongolian governmental institutions and local stakeholders will continue to play a central role in guiding and coordinating the project to ensure alignment with national policies and priorities. UNIDO's role is focused on carrying out the technical activities under Components 2 and 4 and is intended to support and reinforce national efforts. UNIDO will work in close collaboration with national experts and institutions on the ground to ensure that the activities are informed by local knowledge and experience.

It is important to also note that UNIDO's role is limited in scope, covering a small share of the overall project activity budget and execution costs. The project remains fully country-driven and aligns with national development and adaptation priorities.

We hope this explanation provides the necessary clarity. Please do not hesitate to reach out should further information be needed.

Sincerely,

Dr.Batjargal Zamba, National Focal Point for the Adaptation Fund.
Science Advisor to the information and Research Institute on Meteorology, Hydrology and Environment, Ministry of Environment and climate Change

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Tel: (976-11) 32 66 14, Fax: (976-11) 32 99 68,
Web: www.irimhe.namen.gov.mn

Date 17 November 2025
Ref. 1/161

TO: THE ADAPTATION FUND BOARD
C/O ADAPTATION FUND BOARD SECRETARIAT
EMAIL: AFBSEC@ADAPTATION-FUND.ORG
FAX: 202 522 3240/5

Subject: Endorsement for the Concept Proposal **"Climate-proofing livestock value chains in vulnerable communities in Mongolia and Pakistan"**

In my capacity as designated authority for the Adaptation Fund in Mongolia, I confirm that the above regional pre-concept 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 Mongolia.

Accordingly, I am pleased to endorse the above pre-concept note with support from the Adaptation Fund. If approved, the project will be implemented by the United Nations Industrial Development Organization (UNIDO) and executed by the Asian Disaster Preparedness Center (ADPC), with UNIDO also acting as a partial executing entity.

Sincerely,

Dr.Batjargal Zamba, National Focal Point for the Adaptation Fund.
Science Advisor to the information and Research Institute on Meteorology, Hydrology and Environment, Ministry of Environment and climate Change

Tel: +92-51-9245531

JOINT SECRETARY
(CC&ENV)

No. F. 1(13)/Adaptation Fund/25/SOCC
GOVERNMENT OF PAKISTAN
MINISTRY OF CLIMATE CHANGE
(LG & RD Complex, G-5/2, Islamabad)
******

Islamabad, the 16th September, 2025

To:
Adaptation Fund Board Secretariat
1818 H Street NW
MNS N7-700
Washington D.C, 20433
United States of America
Email:secretariat@adaptation-fund.org

SUBJECT: ENDORSEMENT FOR THE PRECONCEPT NOTE OF "CLIMATE PROOFING LIVESTOCK VALUE CHAINS IN VULNERABLE COMMUNITIES IN MONGOLIA AND PAKISTAN"

In my capacity as a primary focal point (with signing authority) for the Pakistan's Designated Entity to the Adaptation Fund, I confirm that the above pre-concept is in accordance with the government's national priorities in implementing adaptation activities to reduce and manage adverse impacts of climate change in Pakistan.

2. Accordingly, I am pleased to endorse the above pre-concept note with support from the Adaptation Fund. If approved, the project will be implemented by the United Nations Industrial Development Organization (UNIDO) and executed by the Asian Disaster Preparedness Center (ADPC), with UNIDO also acting as a partial executing entity.

Sameera Sheikh

Sameera Sheikh
(Focal Point Adaptation Fund Pakistan)

Copy to:

PS to Secretary, Ministry of Climate Change & Environmental Coordination, Islamabad.

Phone +92-51-9245529
Fax +92-51-9204126

D.O No. 1(13)/ADAPTATION FUND/25/SOCC
Government of Pakistan
Ministry of Climate Change
& Environmental Coordination Islamabad
****

Islamabad the 13th January, 2026

Deputy Secretary (Climate Change)

To:
Adaptation Fund Board Secretariat
1818 H Street NW
MNS N7-700
Washington D.C, 20433
United States of America
Email:secrearit@adaptationfund.org

SUBJECT: **JUSTIFICATION FOR UNIDO EXECUTION ROLE IN COMPONENTS 2 AND 4 IN PAKISTAN**

With reference to the earlier Letter of Endorsement No. F.1(13) Adaptation Fund/25/SOCC dated 16-9-2025, as the Designated Authority for Pakistan to the Adaptation Fund, concurrence is provided for the United Nations Industrial Development Organisation (UNIDO) to serve as the Executing Entity for Components 2 and 4 of concept note under the proposed regional project titled "Climate-proofing livestock value chains in vulnerable communities in Mongolia and Pakistan." Based on UNIDO's previous work in livestock value-chain development, climate-resilient agrifood systems, and support to rural enterprises in Pakistan, together with its operational presence in the country, we consider UNIDO suitable to undertake the technical responsibilities under these two components.

13/1/2026

(Dr. Mazhar Hayat)
(Secondary Focal Point for AF Pakistan)

Copy for information to: -

i. PS to Secretary, Ministry of Climate Change & Environmental Coordination
ii. Additional Secretary-II, Ministry of Climate Change & Environmental Coordination
iii. SJS (CC), Ministry of Climate Change & Environmental Coordination, Islamabad.
iv. JS (CF), Ministry of Climate Change & Environmental Coordination, Islamabad.

Tel: +92-51-9245531

No. F. 1(13)/Adaptation Fund/25/SOCC
GOVERNMENT OF PAKISTAN
MINISTRY OF CLIMATE CHANGE
(LG & RD Complex, G-5/2, Islamabad)
******

JOINT SECRETARY
(CC&ENV)

Islamabad, the 15th September, 2025

To:
Adaptation Fund Board Secretariat
1818 H Street NW
MNS N7-700
Washington D.C, 20433
United States of America
Email:secretariat@adaptation-fund.org

SUBJECT: ENDORSEMENT FOR THE PRECONCEPT NOTE OF "CLIMATE PROOFING LIVESTOCK VALUE CHAINS IN VULNERABLE COMMUNITIES IN MONGOLIA AND PAKISTAN"

In my capacity as a primary focal point (with signing authority) for the Pakistan's Designated Entity to the Adaptation Fund, I confirm that the above pre-concept is in accordance with the government's national priorities in implementing adaptation activities to reduce and manage adverse impacts of climate change in Pakistan.

2. Accordingly, I am pleased to endorse the pre-concept note to get financing support from the Adaptation Fund for preparation of concept note.

Sameera Sheikh

Sameera Sheikh
(Focal Point Adaptation Fund Pakistan)

Copy to:

PS to Secretary, Ministry of Climate Change & Environmental Coordination, Islamabad.

Revised PFG Submission Form[1] (additions in red)

Project Formulation Grant (PFG)

Submission Date:

Adaptation Fund Project ID: XXX
Country/ies: Pakistan and Mongolia
Title of Project/Programme: Climate-proofing livestock value chains in vulnerable communities in Mongolia and Pakistan
Type of IE (NIE/RIE/MIE): MIE
Implementing Entity: UNIDO
Executing Entity/ies: UNIDO

A. Project Preparation Timeframe

Start date of PFG	June 2026
Completion date of PFG	March 2027

B. Proposed Project Preparation Activities ($)

List of Proposed Project Preparation Activities	Output of the PFG Activities	US$ Amount	Budget note[2]
1. Preparation of a concept note: 1.1 To conduct a baseline assessment to verify the proposed interventions, indicators, targets and to identify the target project sites. 1.2.To carry out stakeholders' consultations at local and national level, specifically on selected project sites, with local communities and indigenous populations.	Output 1. Full Project Concept Proposal 1.1 Baseline assessment report 1.2 Stakeholders' consultation report 1.3 Concept note 1.4 Validation workshop report	**27,000**	Technical expertise: US 10,000 Local travel: US$ 5,000 Stakeholders' workshops: US$ 5,000 Workshop expenses: US$ 2,000 Travel expenses: US$ 5,000

[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.

1.3.To prepare the Concept note as per the requirements of the Adaptation Fund. 1.4. To organize validation workshops at the national level, specifically on selected project sites, with local communities and indigenous populations. There will be at least two workshops: one in Pakistan and one in Mongolia.			
IE fee (support costs)	IE admin and technical support for project development, monitoring and supervision Compliance assurance	**3,000**	
Total Project Formulation Grant		**30,000**	

Description of the required activity	**Justification for the need and for the amount**
To conduct a baseline assessment	The preliminary baseline assessment will be conducted so that the data and information is provided to support the interventions proposed and indicators/targets aimed at. The methodology will be based on a participatory approach, collecting primary data at the local, community level and secondary data.
To carry out initial stakeholders' consultations at local and national level:	Stakeholder consultation serves as a fundamental mechanism for collecting information, perspectives, and feedback from individuals involved in a project. This activity will serve to ensure further alignment of an engagement plan with the needs, expectations, and concerns of all relevant stakeholders. The stakeholders' consultations will target specifically selected project sites, involving local communities and indigenous populations;
To organize a validation workshop	This activity will involve in person pre-validation workshops at the level of the target communities and indigenous populations in order to ensure their buy in of the proposed project interventions. This will be conducted as pre-validation workshops. Also, validation workshops will be conducted virtually separately in Pakistan and Mongolia so that each country has an opportunity to focus on the proposed project intervention and provide validation.

C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

Implementing Entity Coordinator, IE Name	Ms. Ganna Onysko Senior GEF, GCF, AF Coordinator Division of Funding Partner Relations Directorate of Global Partnerships and External Relations United Nations Industrial Development Organization - UNIDO Implementing Entity Coordinator	
Signature	Ganna Onysko	**Date:** 19 December 2025
Project Contact Person	Meryem SGHIR +43 1 26026 364743 M.SGHIR@unido.org	
Telephone	+43 1 26026 3708	
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