UNDP Funding Proposal to GCF: Improving Adaptive Capacity and Risk Management of Rural Communities in Mongolia

Financial Analysis

I. Introduction

1. With an observed temperature increase of 2.1°C over the past 70 years[1], Mongolia is among the countries most impacted by climate change. Increased temperatures, coupled with decreased precipitation, have resulted in a drying trend impacting pastures and water sources, and shifting natural zones. Changes have also been observed related to the frequency and intensity of extreme events, including harsh winter disasters (dzud), drought, snow and dust storms, flash floods and both cold and heat waves.

2. Especially herder households that rely on natural resources for their livelihoods feel these combined impacts. Livestock productivity has been declining in the changing landscape due to drought conditions, heat stress and harsh winters, resulting also in reductions in outputs for subsistence and important income sources. Studies indicate that livestock sector production decreased by 26% compared to that of the 1980s, along with its contribution to the country's economy. Responses to climate impacts by herders have not been informed by climate information or by the potential impact of responses on the landscape, fragile ecosystems and related ecosystem services.

3. The proposed GCF project aims to significantly enhance the resilience of the herder population by Integrating climate information into land and water use planning at the national and sub-national levels, Up-scaling community level ecosystems-based adaptation measures and cooperative herder approaches towards climate-informed use of natural resources, Building herder capacity to access markets for sustainably sourced, climate resilient livestock products. The proposed project brings together climate-informed natural resources management and sustainable livestock practices, building on traditional cooperative approaches among herders. Innovative technologies, such as blockchain are used for traceability of sustainably sourced, climate resilient, livestock products and a responsible private sector investment fund to ensure long term, market-driven sustainability.

4. Herder households make up one third of the population in Mongolia, approximately 160,000 households or 90% of the agriculture sector. Around 85% of all 332 soum economies in 21 provinces of the country are agriculture based. While these are the most exposed Households to climate risks, their scale and thus potential impact also means that tailored interventions can support transformational change for livelihoods, the sector, for the economy and for the environment.

II. Approach and Methodology

5. As indicated in the funding proposal, the project will deliver 3 outputs. These outputs are further classified into activities as shown in Table 1 below.

[1] Technology Needs Assessment, Volume 1 – Climate Change Adaptation in Mongolia, Ministry of Environment and Green Development, 2013

Table 1 – Outputs, Activities and Sub-activities

Output 1: Integrate climate information into land and water use planning at the national and sub-national levels		Direct quantifiable savings / revenues?
Activity 1.1	Enhance technical capacity for long-term climate resilient development planning, and medium-term response planning capacity	NO
Activity 1.2	Integration of climate change and climate-informed carrying capacity into aimag and soum level development plan (incl. Integrated River Basin Management Plans (IRBMP))	NO
Activity 1.3	Analytical products to support policy and regulatory reform promoting sustainable land and water management and resilient herder livelihoods	NO
Output 2: Scaling up climate-resilient water and soil management practices for enhanced small scale herder resource management		
Activity 2.1	Enhance cooperation among herders on sustainable use and stewardship of shared land and water resources (formalized through Resource User Agreements)	NO
Activity 2.2	Reforestation of critical catchment areas to protect water resources and ecosystem services	NO
Activity 2.3	Establish haymaking and pasture reserve areas, and emergency fodder storage facilities to reduce volatility to livelihoods related to climate change induced extreme events	NO
Activity 2.4	Improve water access through protection of natural springs, construction of new water wells, rehabilitation of existing wells and water harvesting measures	NO
Output 3: Build herder capacity to access markets for sustainably sourced, climate-resilient livestock products		
Activity 3.1	Identify public-private-community partnerships for sustainably sourced, climate resilient livestock products	NO
Activity 3.2	Establishment and training of Herder Producer Organizations (or cooperatives)	NO
Activity 3.3	Improve traceability for sustainably sourced, climate-resilient livestock products	NO
Activity 3.4	Generation and dissemination of knowledge products to support private-sector engagement and herder enfranchisement in climate-resilient and sustainable production in Mongolia	NO

6. This financial analysis has been carried out in accordance with the *Guidelines for the Financial Analysis of Projects of United Nations Development Program (UNDP).* These guidelines clearly mandate that a Financial Analysis of project cash flows be computed and a Financial Internal Rate of Return (FIRR) calculated only for activities or outputs that can clearly result in direct and quantifiable revenue generation (incremental earnings from baseline) or a direct and quantifiable savings potential to the project owners or to the project beneficiaries within a reasonably predictable time period. These guidelines stand to ensure that GCF's Minimum concession policy is always

protected in the project proposal by ensuring that concessional instruments such as grants are used only when other / commercial instruments are not feasible.

7. In all there are 3 Outputs and 11 Activities that constitute this Funding Proposal to GCF. However, as can be seen from Table 1 above, none of the activities or outputs clearly result in a direct, quantifiable and incremental earnings or direct, quantifiable and incremental savings to the project owners or to the project beneficiaries within a predicable time period, thus leading to a scenario in which the FIRR cannot be calculated. It is only pertinent to mention here that all the activities and outputs of this Funding Proposal result only in non-attributable savings that are larger good in nature to the at-risk herding communities of Mongolia.

8. However, in order to satisfy the GCF's Minimum concession policy criteria and in order to protect the policy's objective, this financial analysis approaches / analyses the funding proposal from a Macro / Govt / Economy / Budgetary / Decision making perspective to answer key questions on why a GCF grant is the only feasible instrument to this proposal.

III. Financial Analysis

9. **Nature of Benefits warrants grant instruments –** The activities of Output 1 are technical capacity building and long-term development planning in nature. The benefits from Output 1 take the form of incorporation of climate change into development planning, inter-ministerial dialogue to encourage co-operation between decision makers and development of tools such as scenario analyses to inform planning. The activities of Output 2 are institutional building in nature involving activities such as creation of Resource User Groups (RUGs), developing Resource User Agreements (RUAs) and establishment of Risk sharing fund. In addition to these, Output 2 also builds small-scale infrastructure units such as wells, fences and fodder storage capacities, which will be provided as an essential public service to the herder community. Output 3 is technical assistance in nature with an objective to enhance herder population's capacity and skillsets in accessing and developing markets for sustainably sourced and climate-resilient livestock products. Output 3 involves activities such as identification of public-private community partnership (PPCP) opportunities, creation of Herder Producer Organizations (HPO), Provision of technical assistance to HPO on post-Harvest activities, Promotion of livestock investments through fairs and improving traceability of sustainably sourced products. While Output 3 substantially advances the capacities of the herder communities to achieve higher and sustainable income, the herder population will need more support through complementary actions such as access to finance and substantial capital investments in backward integration and sustainable value chains.

   A closer look at the nature of benefits point to the fact that they are long-term and larger good in nature with an objective to improve rangeland and animal health and do not provide direct and quantifiable revenue generation or cost savings – opportunities that are worthy of being considered a business activity from a commercial perspective. Therefore, the project outputs and its activities won't generate any "directly identifiable, attributable and quantifiable" incremental revenues or produce any "directly identifiable, attributable and quantifiable" tangible cost recovery of resources to either the project owner (GoM) or to the project beneficiaries during or after implementation of the project. Due to this larger public good nature of the benefits derived from this proposal, repayment of any kind of resource from the project benefits is not feasible. For this reason, even a concessional loan with 0% interest rate cannot be repaid and hence Grants are ideal instruments.

10. **100% climate driver limiting other participants and zeroing in on GCF** – GCF involvement is critical for this proposal since there is overwhelming evidence of climate change being the only factor behind the drying pattern impacting water and pasture resources in Mongolia. With an observed

temperature increase of 2.1°C over the past 70 years[2], Mongolia is among the countries most impacted by climate change. This warming and drying trend has contributed to desertification in Mongolia, affecting 70% of the grasslands of the country to varying degrees. While Public-Private Partnerships (PPP) or private commercial actors such as small-infrastructure investors, Micro finance institutions, Impact advisory consultancies or insurance service providers can participate and derive financial returns, these returns will come at a cost of additional burden on the already vulnerable societies.

Moreover, the provision of these services to the population is considered to be basic and essential responsibility of Governments including that of Mongolia. Based on the current legal framework, only the Government of Mongolia is responsible for weather, climate and hydrological monitoring and warnings in Mongolia. Hence, due to its mandate for enhancing resilience of vulnerable communities to climate change, the GCF is best positioned to reduce / close the existing financing and knowledge gaps and barriers to improved resilience of Mongolia's herder population to climate change hazards.

11. **Poor, Rural and Vulnerable target population that cannot pay for climate services** – This funding proposal aims to directly improve the resilience of 26,000 households, 130,000 individuals (4.5% of the population), and indirectly 160,000 households, 800,000 individuals (47% of the population), majority of them being vulnerable nomadic / semi-nomadic communities in rural areas. Herding (Livestock Husbandry) contributes to 90% of Agricultural activity, 85% of 332 soum economies are agriculture-based and 15% of Mongolia's economy (down from 38% in 1995). The overall poverty rate in Mongolia was 29.6% in 2016, with a higher rate of 34.9% in rural areas where herder households are concentrated. Nearly 50% of the people in the four target aimags for this project are herders by livelihood and these Project target areas are some of the furthest from the capital. The poverty rates are higher than the national average by 4% in the western provinces and almost 10% in these areas.

    As described above, the majority of victims from climate change hazards come from economically disadvantaged rural areas and nomadic communities. Their livelihood prospects are already shrinking as indicated by their lower economic output trend and they significantly lag behind the larger population on income levels. Therefore, they will not be able to pay for climate resilience services and without GCF funding, the most vulnerable communities in remote rural areas and nomadic communities will remain at risk from the climate change induced pressure on water and pasture resources.

12. **Mongolia's Economic constraints and IMF's recommendations** – Mongolia grew at a double-digit annual rate over 2011-2013 as foreign investors rushed in to take advantage of its vast untapped mineral deposits. But rigid investment regulations, government overspending, and declining commodity export revenues slowed growth to as low as 1 percent in 2016 and tipped the country into an economic crisis, pushing Mongolia to avail a $5.5 billion IMF-led bailout in order to relieve the debt pressure and bolster the tugrik currency. Since then, Mongolia's economy has recovered strongly with economic growth expected to remain above 6.5% in 2019 and at around 5%-6% in the medium term.

    However, in spite of the recovery, Mongolia continues to be constrained by IMF spending cut commitments / milestones that were accepted as part of the financial package and the significant economic risks that continue to persist. The package was designed to stabilize the economy and impose fiscal discipline, with an aim to bring the budget deficit to fewer than 2 percent of its gross domestic product by 2021. IMF, in its latest review[3] observed that shocks to mineral demand can

[2] Technology Needs Assessment, Volume 1 – Climate Change Adaptation in Mongolia, Ministry of Environment and Green Development, 2013

[3] https://www.imf.org/en/Publications/CR/Issues/2019/09/17/Mongolia-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-48680

lead to sharp fall in exports, weakening growth outlook and fiscal accounts. A slowdown in growth could trigger financial instability given still inadequate capital buffers at banks and over- indebted households. In addition, IMF added that current fiscal and external buffers are still inadequate in the event downside risks materialize. Moreover, though Mongolia's credit rating improved from Caa1 to B3 [4],, it will still be classified as speculative and still be subject to high credit risk and considered a non-investment grade.

Due to these economic risks that persists and the IMF's recommendations on fiscal spending, Mongolia is currently not in a state to raise any external financing in the form of loans to replace GCF's grant contribution. In addition, due to the nature of the benefits mentioned above, the serviceability of these loans is always a question, excluding any prospective interested lenders.

13. **Substantial contribution from GoM and the catalytic nature of GCF's grants** – Of the $79.9 millions of project costing, 71% of the necessary budget resources or $56.2 Million is brought by the Government of Mongolia. Government of Mongolia, in spite of its economic and budget constraints mentioned above, bringing in substantial resources to the project demonstrates its commitment to the project and more strongly its moral responsibility to improve climate resilience of the herder community as an essential service to the population. In this scenario taking into consideration the challenges faced in attracting loans, significant hurdles in involving private commercial actors and the poor affordability of target population for climate services, GCF's grant will act as a catalytic capital that will crowd in investments from the Ministry of Environment and Tourism (MET), National Emergency Management Agency (NEMA), Ministry of Agriculture and Light Industry (MoFALI) and United National Development Program (UNDP).

In addition, the project proposal involves crowding in public and private sector financing and mobilizing community-level investments into the activities. GCF funding through this project will also facilitate sustained public and private participation. Not only does GCF's grant contribution catalyze 71% of the project budget, but also builds significant capacities which in turn is expected to attract livelihood enhancing private capital investments.

IV. Recommendations and Conclusion –

The financial analysis has been carried out in accordance with the *Guidelines for the Financial Analysis of Projects of United Nations Development Program.* These guidelines clearly mandate that a Financial Analysis of project cash flows be computed and FIRR calculated only for activities or outputs that can reliably result in direct and quantifiable revenue generation (incremental earnings from baseline) or a direct and quantifiable savings potential to the project owners or to the project beneficiaries over a predictable time period. These guidelines stand to ensure that GCF's Minimum concession policy is always protected in the proposal.

In all there are 3 Outputs and 9 Activities that constitute this Funding Proposal to GCF. However, none of the activities or outputs clearly result in a direct and quantifiable earnings or direct and quantifiable savings to the project owners or the project beneficiaries. It is only pertinent to mention here that all the activities and outputs of this Funding Proposal result only in non-attributable savings that are larger good in nature to the larger society of the at-risk population in Mongolia. Hence, a Financial Analysis has not been computed and a FIRR has not been calculated for these activities separately or as a whole.

However, in order to satisfy the GCF's Minimum concession policy criteria and in order to protect the policy's objective, this financial analysis analyses the funding proposal from a macro / Govt / Economy / Decision making perspective to answer key questions on why a GCF grant is the only

4 https://www.moodys.com/research/Moodys-Mongolias-B3-stable-credit-profile-balances-external-fiscal-risks--PBC_1201220

feasible instrument to this proposal. Hence, taking into consideration the factors such as the nature of benefit arising out of the project, Climate change being the key driver, weaker economic nature of the target population, Mongolia's at-risk economic situation, IMF's recommendations and the catalytic nature of the GCF grants, we recommend the following –

- There is significant co-financing from GoM (71%) and there is no incremental ability to stretch their contributions owing to budgetary and fiscal consolidation reasons as mentioned above.
- The nature of the benefits does not accommodate repayment of capital in whatever form or serviceability of a loan instrument.
- The nature of the beneficiaries and the level of essentiality of the service do not accommodate repayment of capital in whatever form or serviceability of a loan instrument.
- Hence, GCF is recommended to reduce / close the existing financing and knowledge gaps and barriers to improve resilience of Mongolia's herder population to climate induced impacts on water and pastureland resources by bringing in catalytic capital in the form of GCF grants.