Please note that this request was initially made by the country under the Adaptation Fund Climate Innovation Accelerator (AFCIA) programme, using a template for the application (technology concept) of AFCIA. As the implementation of technical assistance under AFCIA was limited, the request was not selected; however, in discussion with the country, it was agreed in principal that the request can be implemented using CTCN resources. Hence, a reference number for the CTCN TA request is generated with the AFCIA application attached here. As soon as the signed request in CTCN TA request template is received from the country, this document (AFCIA application) will be replaced by the same. Please see the AFCIA Technology Concept from the next page onwards.

Technology concept submission form

Guidelines:

- Technology concept submission form should be completed by an applicant organisation in collaboration with the national focal points to the CTCN (National Designated Entity, NDE) and the Adaptation Fund (Designated Authority) of the country. Please see updated contact list of the NDEs and the Designated Authorities through web-links as below:
  - NDE: http://unfccc.int/ttclear/support/national-designated-entity.html
  - Designated Authority: https://www.adaptation-fund.org/apply-funding/designated-authorities/
- The form must be signed by the NDE before official submission to UNEP-CTCN.
- The form can be submitted as a Word file containing a digital signature or as a signed and scanned PDF file in combination with an un-signed Word file.
- For the technology concept submitted by multiple countries, all the NDEs of the respective countries shall sign identical forms before official submission to UNEP-CTCN.

Country or countries:	Mongolia
Title of the technology concept:	*Please reflect the objective of the technology concept in the title (maximum 200 characters).* Enhancing climate resilience and economic sustainability of livestock farming in a rural community of Mongolia
NDE:	*Please add name of the organisation, name of the focal point, position, email and address.* Climate Change Department, Ministry of Environment and Tourism of Mongolia Ms. Anand Tsog, Climate Change Senior Officer anand@mne.gov.mn, anandtsog13@gmail.com United Nations Street 5/2, Ulaanbaatar, Mongolia
Applicant:	*Please add name of the organisation, name of the contact person, position, email and address of the organisation.* Northeast-Asian Environmental and Agricultural Research Center (NEARC) L. Lhagvasuren, Executive Director Lhagva1999@gmail.com Mongolia, Dornod Province, Bayantümen sum, 4th brigade

Geographical scope:
☒ Community level

☐ Sub-national
☒ National
☐ Multi-country

If the technology concept is at a sub-national or multi-country level, please describe specific geographical areas (provinces, states, countries, regions, etc.).

Problem statement related to climate change (up to one page):

This section should answer the question "what is the problem?" Please summarise the problem related to climate change and/or the negative impacts of climate change in the country that the technology concept aims to address.

The effect of global warming in Mongolia has been well-researched and clearly observable to its residents: increased frequency of heavy storms that cause soil erosion and animal (even human) death in place of gentle hydrating rains, coupled with increasing likelihood of droughts and record-breaking hot temperatures in the summer. While the change in the frequency of the infamous "dzud" is less-obvious, society has become less prepared to cope with families suddenly losing their entire herds because of it, compared to all historical socio-political arrangements prior to privatization in the early 1990s.[a] In the absence of any binding social arrangements in the last thirty years meant to absorb the risk posed by an inherently erratic weather pattern, which is exacerbated by global climate change, the only option left to individual families has been to increase their herd size. The repercussions of this approach are now increasingly felt in most regions of the country, as pasture quality deteriorates and families are inevitably pitted against each other to compete for the limited resources. The effect of these problems on wildlife is also dire, as their access to resources is drastically reduced.[b]

There has not been any concerted effort to geographically distribute the meat-packing infrastructure across the country, and thus livestock-raising families partake in none of the value-adding process of the meat market – either for domestic consumption or export.[c] This technical assistance concept is therefore a novel idea. According to a recent research paper, meat processing industry in Mongolia is a 'powerful oligopoly,' and it has rapidly centralized in the last decade, while barriers-to-entry have increased as the large conglomerates can afford new and expensive equipment imported from countries such as Germany.[d] The herders must sell animals at the lowest possible price, based on its live-weight, whose natural seasonal fluctuation means that they would only sell in the late autumn-early winter window of opportunity. While industry leaders acknowledge the natural seasonality of the animal weight is a fundamental issues, only solutions proposed so far have included the introduction of large scale "agro-park" feedlots and "cutting out the middlemen" as potential solutions,[e] which is meant to improve profitability of the extant large operations, failing to address the question of exceeding the carrying capacity in rural areas, environmental and climate repercussions, not to speak of the social problems as more competition is levelled against the herders – a demographic group already structurally disadvantaged in this sector. There are no social or physical institutions in rural communities for managing animal weight, or to mitigate the winter emaciation. Yet the ability to sell meat at a non-exploitative price is essential for rural families to thrive because the only other products they can sell to the market have little chance of allowing for local value-adding processes: milk collection depends on expensive collection networks and factory-scale packing equipment, while wool/hair can only be carried out at the raw-material collection level locally, as the processing depends on a technically industrialized process.[f] Provided feasible technological solutions are identified and adopted, meat-packing can

be decentralized locally, keeping the added-value in the *bag* community (*bag* is the smallest administrative unit in Mongolia).[c]

The ability to maintain a more stable price for meat and to reduce the uncertainty of animal survival rate makes it possible for rural communities to manage the herd size within the carrying capacity, and lay the groundwork for reconstructing and further enhancing local risk-management and social service arrangements. Moreover, since the Government sets the quota for meat export, the direct involvement of herding communities with the export market has the potential for allowing the governing body to have a "lever" to manage livestock population.

Pasture management for livestock takes many shapes in different areas of the world, and for much of the twentieth century, forms of industrialized, sedentary, and farm-based methods had been accepted as 'modernized,' and therefore superior. However, scholars of the history of pastoralism have come to criticize this tendency after observing decades worth of devastation of pasture and the ensuing desertification in Inner Mongolia and Buryatia, and conclude that mobility itself is an essential management strategy for pasture and herd.[g] While maintaining mobility, the current arrangement of private-ownership of livestock without substantial forms social and economical organization is also highly unusual. Historically, most of livestock were owned by the aristocracy or ecclesiastical nobility, and later collective farms, who centrally – albeit locally – determined the distribution of animals among families and pastures, the sale/offtake, as well as the redistribution of livestock after natural disasters. Today, as citizens of a liberal democracy with a market economy, Mongolians firmly believe private ownership of livestock is a basic civil right.[h] Therefore, a desperate need arises for a collectively implemented pasture management strategy that is climate resilient and socially equitable, yet without infringements on private herd ownership rights, which is the fundamental problem we are seeking to address.

Past and on-going efforts to address the problem (up to half a page):

This section should answer the question "what has been done or is currently being done to address the problem?" Please describe past and on-going processes, projects or initiatives implemented in the country or region to tackle the climate problem as described above.

The efforts made by national and other organizations so far have addressed many important parts of the problem described above, especially in the form of building infratructure. Crucially, the penetration or improvement of roads to many parts of the country that came with the proliferation of motor transport has made rural communities more tied to markets than before, and thus they can take advantage of it, making our technological concept possible, but at the same time, they are left vulnerable to its vicissitudes. Moreover, animal tracing and tagging systems have been implemented with various rates of success across the country.[i] Luckily for Mongolia, pasture land has not been demarcated, and therefore herders are able to cope with localized droughts by taking advantage of their mobility – the key survival strategy in this part of the world for millennia.[g] Mobility has long been celebrated in Mongolia, and various private and governmentally initiated programs have made mobile technology like solar panels and low-voltage household electronics ubiquitous.[j]

Also, our own e-Nomads program has been building a social network of rural communities under our E-Nomads program, focusing on their *bag* administrations and individual families. Currently, the network is used for spreading reliable information on the prevention of COVID-19 through broadcasting interviews with doctors and producing podcasts tailored for herders.[k] The herders and officials in other areas have uniformly responded with enthusiasm to the pilot project as a model for the future of rural Mongolia. So far, we have been planting small plots of nutrition-dense animal

fodder, running a vegetable greenhouse, testing various forms of sustainable energy sources, collecting environmental data such as temperature, soil composition, changes in soil salinity and pH levels because of irrigation, changes in ground-water, etc.[l]

Specific technology[1] barriers (up to one page):

This section should answer the questions "what are the technology barriers that hinder national efforts described above" and "how will the technology concept complement these efforts?" Building upon the problem statement and taking into consideration the existing efforts described above, please describe the specific technology barriers encountered by the applicant to identify, assess or deploy climate technology(ies) in an effort to address the problem statement. The described barriers should be within the scope of the technology concept (described in the section below).

Since the transition to a market economy, it has been all stakeholders' quest to find a stable source of income for herding families, because, in the absence of socially organized income and risk-management arrangements, the herding families are in-effect small-scale firms that must compete in markets, and must face the inevitable instabilities. Some have proposed the insurance model for risk-mitigation and called for a universal basic income, etc., but these come with their own problems, and from our perspective, they do not fully address underlying structural problems. Resolving this social issue is simultaneously the key to mitigating the exacerbating effects of human activity in the steppe ecology, which is under severe stress from a warming climate.

Mongolian livestock has been exported for centuries, and so off-take rate has generally been high.[m] However, Mongolian meat has not been steadily exported in recent decades due to concerns over zoonotic/animal diseases and the lack of traceability, as the whole country must be disease-free for three years before the export ban is lifted.[n] While animal tagging and barcoding has already been introduced, with no direct access to the export market, herders have no reason to maintain these databases. More importantly, the centralized facilities make the tagging and tracing mechanisms practically irrelevant since each case of disease would contaminate the few facilities, disqualifying the entire country's meat exports. This also exposes the problem with highly centralized nature of the industry, since any outbreak, regardless how small and localized, shuts down the entire country's meat exports. An overall decentralization of the industry enhances the food security of the country as well as its ability to export meat reliably, not to speak of making the previous efforts to establish traceability relevant. However, it would naturally create competition with the large corporations, and will likely meet resistance as a result.

The centralized slaughtering facilities generally buy live animals through middlemen, and thus the overall structure takes the value-adding process several steps away from rural communities, concentrating its resultant profits in the hands of the slaughterhouse operators. This results in very little leveraging power on the part of livestock raising households when it comes to sale prices.[c] The concept of processing and packaging meat locally, with cooperative-based producer ownership, while maintaining an export-ready standard, would help create a robust meat industry that simultaneously allows herders to maintain a smaller number of animals without having a detrimental effect on their household economy and increasing pressure on the environment.

There are several barriers to Mongolian herders for locally organizing value-adding processes to prepare their meat for the national and international supply chains, the first and most fundamental

[1] *"**any equipment, techniques, practical knowledge and skills** needed for reducing greenhouse gas emissions and adapting to climate change" (Special Report on Technology Transfer, IPCC, 2000)*

of which is the lack of financing – herding communities simply cannot pool enough cash and expertise to identify and build a technologically suitable facility, purchase the equipment, and receive training on industry-standard butchering practices. This is also the reason why concepts similar to ours have not been tried before. Moreover, many *bag* or *sum* administrative centers settlements (roughly analogous to a town and a county in the West) are not connected to electricity grids, which makes electric refrigeration difficult. Although this is not a problem for the 4th *bag* of Bayantümen *sum*, it should be considered when planning for replication or scaling up of this concept.

Currently, herders sell only when animals are at their maximum weight, as there are no systems in place to fatten animals with feeds during lean-seasons before slaughter. Our concept integrates feed-lot with slaughterhouse, which allows the local producers to better control the seasonality of the animal weight, or even overcome this limitation. If a steady supply of meat with reliable quality can be created locally, by identifying feasible technical options and sound business models, Mongolian meat in-fact is highly marketable, being purely grass-fed, pasture-raised, and "organic" by default.

Recent research has stressed that any sustainable and equitable way to address climate change and/or desertification must work with the rural communities,[o] as the actual circumstances in each location respond dynamically to a complex set of factors and vary geographically.[p] That is, the generalizations about the impact of climate change in Mongolia are not always true at all times. Finding rangeland management strategies that are based on local circumstances is therefore a barrier that all rural communities face. As a part of our concept, the appropriate changes in herd structure, pasture use patterns, etc., will be defined based on local data.

Sectors:

Please indicate the main sector(s) related to the technology concept:

☒ Agriculture	☐ Coastal zone management	☒ Disaster risk reduction	☒ Food security
☐ Forests	☒ Human health	☐ Marine and fishery	☒ Rural development (resilience)
☐ Urban development (resilience)	☒ Water management		

Please add other relevant sectors:

Cross-sectoral enablers and approaches:

Please indicate the main cross-sectoral enablers and approaches:

☒ Communication and awareness	☐ Economics and financial decision-making	☐ Governance and planning	☒ Community based
☒ Disaster risk reduction	☒ Ecosystems and biodiversity	☒ Gender	

Technology concept requested (up to one page):

Founded on the problem statement, past/on-going efforts and technology barriers, please describe the technology concept. The technology concept should clearly contribute to adaptation to climate change as described in the problem statement and contribute to overcome the specific technology barriers.

Within a clearly defined scope, the description of the technology concept should be structured into the following:

- *Overall objective*
- *Anticipated groups of activities to be performed by the micro-grants project*
- *Anticipated products to be delivered by the micro-grants project*

Please note that UNEP-CTCN facilitates technical assistance and is not a project financing mechanism.

Overall objective

The objective of this technology concept is to strengthen climate resilience and economic sustainability of the traditional way-of-life (animal husbandry) in a rural community (Bayantümen sum) of Mongolia.

Anticipated groups of activities to be performed by the micro-grants project

- (Activity 1) Inception meeting and stakeholder consultations
- (Activity 2) Site visit (Bayantümen sum) and climate change vulnerability assessment
- (Activity 3) Identification of pastureland management options for climate-resilient livestock farming at the selected site (Bayantümen sum)
- (Activity 4) Feasibility assessment of installing and operating a meat-processing center (efficiency, replicability, cost benefit, etc.) at rural community levels
- (Activity 5) Design of cooperative-based business model(s) for climate-resilient livestock farming with a meat-processing center at the selected site (Bayantümen sum)
- (Activity 6) Pilot testing of a meat-processing center at the selected site (Bayantümen sum)
- (Activity 7) Stakeholder workshop on climate-resilient livestock farming with a meat-processing center

Anticipated products to be delivered by the micro-grants project

A climate- and environment-resilient approach to pastureland management in the selected site (Bayantümen sum) to mitigate climate change impact will be identified. Moreover, the feasibility of operating a small, community-scale slaughtering and meat-packing complex will be assessed in consideration with different technical options available, and sustainable business model(s) that can bring about economic incomes and capital accumulation in the selected site (Bayantümen sum) will be developed and tested.

Expected timeframe:

Please indicate the expected duration period for the micro-grants project. Please note that the micro-grants project is limited to a maximum duration of 18 months.

18 months

Anticipated gender and other co-benefits from the technology concept:

Please describe the activities with gender linkages as well as the anticipated gender and other co-benefits (e.g. biodiversity, economic, social, cultural, etc.) that are likely to be generated as a result of the micro-grants project.

For more information you can find guidelines on the CTCN's website here:
https://www.ctc-n.org/technologies/ctcn-gender-mainstreaming-tool-response-plan-development

Further reading on gender can be found on the CTCN website here:
https://www.ctc-n.org/technology-sectors/gender

By operating a meat-processing center at rural livestock farms, reliance on motor transport to and from town centers for individuals' sale of livestock to dealers will be decreased, which will eventually contribute to reducing fossil-fuel usage. Moreover, business concept of the sustainable livestock farming with a meat-processing center will be able to be adopted at rural community levels and will reduce the migration of rural residents to cities.

In Mongolia, it is common to find women working as butchers in a retail setting, although men are expected to actually kill animals. Thus, a community-based slaughterhouse and meat-packing plant would offer employment opportunities to both genders. Moreover, a good economical model for a co-operative ownership structure would allow women to hold shares, and thereby strengthen their economic independence. This is important, since the gendered division of labor in the mobile-pastoralist tradition makes it difficult for many rural women to leave abusive domestic settings. [q]

Key stakeholders:

Please list the stakeholders who will be involved in the implementation of the micro-grants project and describe their role during the implementation (for example, government agencies and ministries, academic institutions and universities, private sector, community organisations, civil society, etc.).

Stakeholders	Role to support the implementation of the micro-grants project
National Designated Entity	- Support for coordination of the project and communication with stakeholders - Provision of overall feedbacks during the implementation of the project
Designated Authority	- Support for coordination of the project and communication with stakeholders - Provision of overall feedbacks during the implementation of the project
Applicant (NEARC)	- Support for coordination of the project and communication with stakeholders

	- Provision of feedbacks (practical or technical issues) during the implementation of the project
Authorities of the Dornod province and Bayantümen sum	- Consultation about pastureland management options for climate-resilient livestock farming at the selected site (Bayantümen sum) - Consultation about installing and operating a meat-processing center at rural community levels - Consultation about business model(s) for climate-resilient livestock farming with a meat-processing center at the selected site (Bayantümen sum) - Consultation about pilot testing of a meat-processing center at the selected site (Bayantümen sum)
National Agency for Meteorology and Environmental Monitoring	- Support for data collection for and consultation about climate change vulnerability assessment
Ministry of Food, Agriculture and Light Industry, Veterinary and Animal Breeding Agency (VABA)	- Consultation about installing and operating a meat-processing center at rural community levels - Consultation about industry standards to ensure the fulfilment of domestic and export marketing criteria from the beginning - Consultation about business model(s) for climate-resilient livestock farming with a meat-processing center at the selected site (Bayantümen sum) - Consultation about pilot testing of a meat-processing center at the selected site (Bayantümen sum)
General Agency for Specialized Inspection (GASI)	- Consultation about industry standards to ensure the fulfilment of domestic and export marketing criteria from the beginning
Mongolian Meat Association (MMA)	- Consultation about industry standards to ensure the fulfilment of domestic and export marketing criteria from the beginning
Herding households of Bayantümen sum, especially those of the 4th bag	- Consultation and feedback on the changes in pasture usage patterns and intensity to improve climate change resilience as compensated by the new meat-processing capacity in their community - Consultation about business model(s) for climate-resilient livestock farming with a meat-processing center at the selected site (Bayantümen sum) - Consultation about pilot testing of a meat-processing center at the selected site (Bayantümen sum)

Alignment with national priorities (up to 2000 characters including spaces):

Please describe how the technology concept is consistent with national climate priorities such as: Nationally Determined Contribution, national development plans, poverty reduction plans,

Technology Needs Assessments, Technology Action Plans, National Adaptation Plans, sectorial strategies and plans, etc.	
Reference document (please include date of document)	**Extract** (please include chapter, page number, etc.).
Nationally Determined Contribution (NDC) (2020)	*Direct alignment and contribution to NDC implementation is required. Please include a direct reference to the INDC/NDC document (chapter, page number, etc.).* **Adaptation Targets (Animal husbandry and pastureland) (page 6):** - "Sustainable use of pastureland by increasing the forage cultivation and water supply for livestock" **Adaptation Targets (Livelihood and social safeguard) (page 8):** - "Reduce vulnerability by diversifying economic activities, increasing income, expanding income sources and supporting sustainable livelihoods"
Mongolia Sustainable Development Vision 2030 (2016)	**2.1 Sustainable economic development – 2.1.1 Agriculture sector (page 13-15):** - "Objective 1: Preserve the gene pool and resilience of pastoral livestock breeding that is adept to climate change, increase productivity; create proper flock structure of livestock in line with grazing capacity, reduce the grazing and land deterioration and rehabilitate, adopt international standards in animal disease traceability, inspection and maintenance technology, and develop livestock sector that is competitive in international markets" - "Objective 2. Develop intensive livestock farming based on the population concentration and market demand; increase the manufacture of meat and milk products; and develop the supply, storage and transportation network for raw materials and raw products" - "Objective 4. Support the business and economics of herders and herder groups, and small and medium sized farmers; provide modern techniques, technologies and electricity; and create a financial, economic and legal environment for sustainable production"
Technology Needs Assessment (2013)	**Technology prioritization (Animal husbandry) (page 39)** - High quality livestock (HQL) through selective breeding and animal disease management - Sustainable pasture management

Development of the technology concept (up to 2000 characters including spaces):

Please describe how the technology concept was developed at the national level and the process used by the NDE and the Designated Authority to approve the technology concept before submitting it (who initiated the process, who were the stakeholders involved and what were their roles?) and describe any consultations or other meetings that took place to develop and select the technology concept, etc.

In late November, Mr. Z. Batjargal (Designated Authority) informed the applicant, Mr. L. Lhagvasuren, about this program organized by the UNDP and CTCN. As the NEARC (under Lhagvasuren's leadership) has been operating for the last five years, and had repeatedly received delegation from the NDE's organization and hosted training workshops and conferences at the pilot project site in Dornod province, the aforementioned individuals have long been familiar with the NEARC projects. They recommended Lhagvasuren to develop a technology concept for the pilot project, applying to the AFCIA. The NDE and DA expressed their view that the pilot project closely fits the AFCIA's strategic goals and practical applications, suggested that the NEARC prepare an application, and later reviewed the draft that Mr. Lhagvasuren's team had composed.

Background documents and other information relevant for the technology concept:

Please list all relevant documents that will help UNEP-CTCN analyse the context of the technology concept and national priorities. Please note that all documents listed/provided should be mentioned in the technology concept in the relevant section(s), and that their linkages with the technology concept should be clearly indicated. For each document, please provide web-links (if available) or attach to the form. Please add any other relevant information as required.

a. Fernandez-Gimenez, Maria E.; Batjav, Batbuyan; Baival, Batkhishig. 2012. Lessons from the Dzud : Adaptation and Resilience in Mongolian Pastoral Social-Ecological Systems. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/26783 License: CC BY 3.0 IGO.

b. Mongolian-Manchurian grassland. Ecoregions. World Wildlife Fund. Retrieved December 24, 2020, from https://www.worldwildlife.org/ecoregions/pa0813

c. Ganchimeg, G., & Erdenechuluun, T. (2020). Does export support household income in mongolia? *SEA - Practical Application of Science*, VIII(22 (1/2020)), 43-48. https://seaopenresearch.eu/Journals/articles/SPAS_22_5.pdf

d. Munkhdelger, B. (2020) 'The Meat Processing Industry in Mongolia', *International Journal of Scientific and Research Publications (IJSRP)*, 10(3), p. p9963. doi: 10.29322/IJSRP.10.03.2020.p9963

e. Schild, D. H. J. (2017) 'The export corridor - A component of the amended Mongolian AIRS', *Report on the work carried out under the PPG (STDF/PPG/534), main activities and results of a mission to Mongolia from 13 to 25 March 2017.* See also Significant potential: Meat could prove to be a major export given the prevalence of herding (2013) Oxford Business Group. Available at: https://oxfordbusinessgroup.com/analysis/significant-potential-meat-could-prove-be-major-export-given-prevalence-herding (Accessed: 28 January 2021).

f. Murphy, D.J. 2018, ""WE'Re Living From Loan-To-LoaN": Pastoral vulnerability and the cashmere-debt cycle in Mongolia", Research in economic anthropology, vol. 38, pp. 7-30. For milk, see

g. See for example Sneath, D. (1998). State policy and pasture degradation in Inner Asia. *Science (American Association for the Advancement of Science),* 281(5380), 1147-1148. doi:

10.1126/science.281.5380.1147; Humphrey, C. (1998) *Marx Went Away - But Karl Stayed Behind*. University of Michigan Press; and Ahearn, A. (2018) 'A Condensed History of the Public Administration of Pastoralism in Mongolia', *Nomadic Peoples*, 22(2), pp. 282–303. doi: 10.3197/np.2018.220206.

h. Marin, A. (2008) 'Between cash cows and golden calves: adaptations of Mongolian pastoralism in the "age of the market"', *Nomadic Peoples*, 12(2), pp. 75–102. doi: 10.3167/np.2008.120206.

i. M. Anudari. 190 thousand head of livestock to be tagged. (Feb 6, 2020). Retrieved December 24, 2020, from https://www.montsame.mn/en/read/215227

j. Sovacool, B. K. and D'Agostino, A. L. (2012) 'A comparative analysis of solar home system programmes in China, Laos, Mongolia and Papua New Guinea', *Progress in Development Studies*, 12(4), pp. 315–335. doi: 10.1177/146499341201200404.

k. See https://enomad.mn/ to see more about this project run by the NEARC

l. See our social media page for photos of some of our activities: https://www.facebook.com/DornodResearch

m. DuBois, T. D. (2019). Many roads from pasture to plate: A commodity chain approach to China's beef trade, 1732–1931. *Journal of Global History,* 14(1), 22–43. https://doi.org/10.1017/S1740022818000335; and Ahearn (2018) as cited in note g.

n. 'The meat processing industry in Mongolia: key players and activities | degruben.com' (2018), 12 November. Available at: http://www.degruben.com/the-meat-processing-industry-in-mongolia-key-players-and-activities/ (Accessed: 27 January 2021).

o. Banzaragch, T. *et al.* (2015) 'Working with land users in Mongolia to arrest and reverse desertification and capture conservation benefits', in Squires, V. R. (ed.) *Rangeland ecology, management and conservation benefits.* New York: Nova Publishers (Environmental research advances).

p. Addison, J. *et al.* (2012) 'A critical review of degradation assumptions applied to Mongolia's Gobi Desert', *The Rangeland Journal*, 34(2), p. 125. doi: 10.1071/RJ11013.

q. Buyandelger, M. (2013) *Tragic spirits: shamanism, memory, and gender in contemporary Mongolia*. Chicago ; London: The University of Chicago Press. Chapter 4.

Consultation with the Designated Authority of the country:

Please indicate whether the technology concept has been developed in consultation with the Designated Authority of the country.

☒ The Designated Authority of the country has been engaged in the design of the technology concept and will be involved in the further process leading to the implementation of the micro-grants project.

Monitoring and evaluation:

By signing this form, I affirm that processes are in place in the country to monitor and evaluate the micro-grants project funded by the Adaptation Fund through UNEP-CTCN. I understand that these processes will be explicitly identified in the Project Concept Note (response plan of the micro-grants project) and that they will be used in the country to monitor the implementation of the micro-grants project.

I understand that, after the completion of the micro-grants project, I shall support UNEP-CTCN efforts to measure the success and effects of the support provided, including its short, medium and long-term impacts in the country.

Signature:	
NDE name:	Anand Tsog
Date:	29th January 2021
Signature:	

THE COMPLETED FORM SHALL BE SUBMITTED THROUGH A WEB-LINK AS BELOW:

https://www.ctc-n.org/adaptation-fund-climate-innovation-accelerator-afcia-unep-ctcn

UNEP-CTCN is available to answer all questions and provide guidance on the application process.