



Part I: Project Information

GEF ID

10816

Project Type

MSP

Type of Trust Fund

GET

CBIT/NGI

CBIT **No**

NGI **No**

Project Title

Sustainable investments for large-scale rangeland restoration (STELARR)

Countries

Global

Agency(ies)

IUCN

Other Executing Partner(s)

ILRI (International Livestock Research Institute)

Executing Partner Type

Others

GEF Focal Area

Land Degradation

Sector

Mixed & Others

Taxonomy

Influencing models, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Demonstrate innovative approaches, Deploy innovative financial instruments, Strengthen institutional capacity and decision-making, Stakeholders, Civil Society, Non-Governmental Organization, Academia, Community Based Organization, Beneficiaries, Indigenous Peoples, Communications, Education, Behavior change, Awareness Raising, Public Campaigns, Local Communities, Type of Engagement, Participation, Information Dissemination, Partnership, Consultation, Private Sector, Large corporations, Financial intermediaries and market facilitators, Individuals/Entrepreneurs, SMEs, Capacity, Knowledge and Research, Learning, Indicators to measure change, Capacity Development, Targeted Research, Knowledge Exchange, Innovation, Knowledge Generation

Rio Markers**Climate Change Mitigation**

No Contribution 0

Climate Change Adaptation

No Contribution 0

Biodiversity

No Contribution 0

Land Degradation

Significant Objective 1

Submission Date

9/1/2022

Expected Implementation Start

3/1/2023

Expected Completion Date

2/29/2024

Duration

24In Months

Agency Fee(\$)

180,000.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
LD-1-1		GET	800,000.00	1,640,818.00
LD-2-5		GET	1,200,000.00	2,461,230.00
			Total Project Cost(\$)	2,000,000.00
				4,102,048.00

B. Project description summary**Project Objective**

To reverse rangeland degradation and improve productivity of rangelands globally, through sustainable livestock value chains, and thereby reduce poverty and secure livelihoods, with inclusive benefits to women and youth.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1: Rangeland restoration investments through sustainable livestock value chains	Technical Assistance	Outcome 1.1: Increased investment in large-scale sustainable rangeland restoration (SRR) linked to livestock value chain development (LVCD), with particular focus on women and youth	<p>Output 1.1: Guidelines, tools and frameworks for increased investment in LVCD for SRR agreed with collaborating projects and partners</p> <p>Output 1.2: Inclusive and bankable investment partnerships and proposals in LVCD for SRR, in selected value chains</p>	GET	930,980.00	1,784,931.00

Component 2: Commitments to sustainable rangeland restoration	Technical Assistance	Outcome 2.1: Strong international commitments to sustainable rangeland restoration in the context of LDN, UN Decade on Ecosystem Restoration, and upcoming IYRP 2026	Output 2.1: Information on LVCD for SRR is accessible nationally and internationally through data platforms Output 2.2: Inter-governmental dialogues and agreements result in more policies and decisions that strengthen LVCD for SRR	GET	618,648.00	1,387,117.00	
Component 3: Global Monitoring Framework for Sustainable Rangeland Restoration	Technical Assistance	Outcome 3.1: Global monitoring framework for rangeland restoration available for relevant projects and programmes	Output 3.1: Global monitoring system developed Output 3.2: Global monitoring framework developed and tested	GET	344,908.00	630,000.00	
Sub Total (\$)					1,894,536.00	3,802,048.00	
Project Management Cost (PMC)							
					GET	105,464.00	300,000.00
					Sub Total(\$)	105,464.00	300,000.00
					Total Project Cost(\$)	2,000,000.00	4,102,048.00

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Other	ILRI, funded by Bill and Melinda Gates Foundation - Global Livestock Advocacy and Development	Grant	Investment mobilized	915,000.00
Other	ICARDA, funded by Kuwait Fund and Arab Fund for Social and Economic Development	Grant	Investment mobilized	617,748.00
Other	ICRAF, funded by Swedish University of Agricultural Sciences-Drylands Transform Project	Grant	Investment mobilized	50,000.00
Other	ICARDA, funded by AFESD - Enhancing Agricultural Production Systems and Conserving Natural Resources in the Countries of the Arabian Peninsula (Fifth Phase)	Grant	Investment mobilized	492,935.00
Other	ILRI, funded by UNEP- Rangeland Resource Assessment Across the Africa Continent for Improved Ecosystem Health and Sustainable Food Systems	Grant	Investment mobilized	95,000.00
Other	ILRI, funded by World Bank- Accelerating the Impact of CGIAR Climate Research for Africa (AICCRA)	Grant	Investment mobilized	132,000.00
Other	ICARDA, funded by Swiss Development Cooperation- Weather, water and climate services (WWCS), Tajikistan	Grant	Investment mobilized	199,365.00
Other	ICRAF, funded by Global Climate Fund - Twende Project, Kenya	Grant	Investment mobilized	80,000.00
Other	ILRI, funded by USAID- Local natural resource governance for community stabilization in Central Mali	Grant	Investment mobilized	1,500,000.00
GEF Agency	IUCN, in-kind	In-kind	Recurrent expenditures	20,000.00
Total Co-Financing(\$)				4,102,048.00

Describe how any "Investment Mobilized" was identified

These projects were identified and verified on the basis that they could contribute to STELARR's outcomes on increasing investment in livestock value chains for sustainable rangeland restoration, and generating the knowledge, tools, and standards necessary for it. They were also preferred because of their potential in making use of the knowledge and tools that will be generated through the STELLAR project. Each project is currently collaborating with one of the CGIAR centers directly involved with STELARR, and they have confirmed that their outputs will be essential for achieving the outcomes of STELARR. Detailed descriptions are provided in the section on Co-finance.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
IUCN	GET	Global	Land Degradation	LD Global/Regional Set-Aside	2,000,000	180,000	2,180,000.00
Total Grant Resources(\$)					2,000,000.00	180,000.00	2,180,000.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)PPG Required **true**

PPG Amount (\$)

50,000

PPG Agency Fee (\$)

4,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
IUCN	GET	Global	Land Degradation	LD Global/Regional Set-Aside	50,000	4,500	54,500.00
Total Project Costs(\$)					50,000.00	4,500.00	54,500.00

Core Indicators

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
41000.00	0.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	41,000.00			

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type Ha (Expected at PIF) Ha (Expected at CEO Endorsement) Ha (Achieved at MTR) Ha (Achieved at TE)

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Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF) Ha (Expected at CEO Endorsement) Ha (Achieved at MTR) Ha (Achieved at TE)

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Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF) Ha (Expected at CEO Endorsement) Ha (Achieved at MTR) Ha (Achieved at TE)

41000.00	0.00	0.00	0.00
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Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF) Ha (Expected at CEO Endorsement) Ha (Achieved at MTR) Ha (Achieved at TE)

41,000.00

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type Ha (Expected at PIF) Ha (Expected at CEO Endorsement) Ha (Achieved at MTR) Ha (Achieved at TE)

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Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs WDPA-ID Total Ha (Expected at PIF) Total Ha (Expected at CEO Endorsement) Total Ha (Achieved at MTR) Total Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title Submitted

GEF 7 Core Indicators 3-15-19_STELLAR Project_Aug2021	
Theory of Change (ToC)	
LogframeResultsFrameworkSTELARR	
GEF 7 Core Indicators 3-15-19_STELLAR Project	

Indicator 11 People benefiting from GEF-financed investments

Number (Expected at PIF) Number (Expected at CEO Endorsement) Number (Achieved at MTR) Number (Achieved at TE)

Female	8,302	280,340		
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Male	8,250	284,860		
Total	16552	565200	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

1a. Project Description

DESCRIBE ANY CHANGES IN ALIGNEMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF

The final project design fully aligns with the original PIF description, except for two changes. One is that the time frame of the project (2 years) has been extended to 2.5 years, in order to mitigate any risk of delays associated with the ongoing COVID pandemic; and to provide additional time for consultations with private sector commercial entities. Another change has been that STELARR will not directly work with other GEF projects, but that its outputs will be of relevance for and can be taken up by the Drylands IP and its sister projects.

GLOBAL ENVIRONMENTAL PROBLEMS, ROOT CAUSES AND BARRIERS THAT NEED TO BE ADDRESSED

Global importance of rangelands

Rangelands occupy approximately 54% of all land on earth (ILRI et al 2021), they are home to 30% of all species, contain one third of all soil carbon, and support the livelihoods of at least half a billion livestock keepers. However, in many countries, this rich natural heritage has become synonymous with land degradation, biodiversity loss, poverty and human vulnerability. Rangelands can be found on every continent except Antarctica with two-thirds in Asia (36%) and Africa (30%).

About 91% of global rangelands are extensive rangelands with few landscape boundaries (e.g., fences) and have limited crop agriculture. The remaining 9% support a mix of grazing and cultivated land with boundaries and have low to moderate human populations. Although only 3% of the world's people live in extensive rangelands, 35% of the world's sheep, 23% of the goats, and 16% of the cattle and water buffalo graze here (Reid et al, 2008). Around 63% of rangelands are in drylands (World Desertification Atlas, 2018). Dryland rural inhabitants are often marginalised from development and policy processes, as well as political discourses, and in many countries dryland farmers and pastoralists have for long been denied sustainable development and related appropriate investments. This has contributed to entrenching a profound misunderstanding of drylands environments, leading to inappropriate and even detrimental interventions (Mortimore et al, 2009).

Properly managed rangelands can provide food security and poverty alleviation to millions of people. Rangelands provide a wide range of ecosystem services such as food and fiber, carbon storage (including ~30% of the world's soil carbon), recreation, open space, and water supply (Yahdjian et al, 2015). With improved rangeland management they could potentially sequester a further 1300-2000 MtCO₂ e by 2030 (Tennigkeit and Wilkes, 2008). Rangelands are essential resource for both maintaining environmental services like biodiversity conservation and as a source of livelihood, especially for rural communities (Asner et al, 2004). Around 30% of all species are found in rangelands. The Eastern Mongolian Steppes for example are home to the largest remaining intact

temperate grasslands of the Earth. Its main distinctive characteristic compared to other steppe ecosystems is that it is dominated by grasslands across thousands of square kilometres, with some species of bush and shrubs. 25 species of mammals, 174 species of birds, 2 species of amphibians and 5 species of reptiles have been recorded. ^[1]

The most dominant livelihood system in rangelands is pastoralism - extensive livestock production including a degree of movement/mobility, and which can be combined with other land uses including tourism, crop farming, and conservation. Pastoralism makes a strong contribution to many developing country economies; an estimated 80% of agricultural GDP in Sudan and Niger and 90% in Mongolia (Davies and Hatfield, 2006). Good livestock management goes hand-in-hand with good land and resource management for a sustainable and nature-positive livelihood system. Pastoralists have traditionally used different methods of moving their animals over the rangelands in order to take advantage of the natural variability of grazing and water resources. Today, it is recognized that mobility of animals is the best insurance against increasing variability due to climate change, and probably the most cost-efficient method for rangeland restoration (PASTRES, 2022).

When functioning well and efficiently extensive livestock-based systems are cost-effective, culturally appropriate, have value-added potential for non-food products such as wool, cashmere, and leather, and tourism providing alternative incomes whilst also better contributing to biodiversity, payments for ecosystem services, nature and a healthy environment. As such investments in extensive livestock production rather than intensive is a win-win-win for people, livestock and the environment. Livestock, when managed properly for ecological outcomes including planned grazing, can play a vital role in mitigating climate change by stimulating grassland plants to sequester carbon in soil (Johnsen et al, 2019) as well as increase nitrogen stocks (Mosier et al 2021), soil moisture, and fine litter cover (Dowhower, S. L. 2020), and forage biomass (Hillenbrand, M., 2019).

Threats to rangelands

Though there has been significant research undertaken on some rangelands in developing countries, for example in Central Asia and East Africa, there is generally a lack of national data on the distribution of rangelands and their health/productivity, which translates into a lack of verified data at global level. Figures used to describe the distribution of rangelands vary significantly and much of the data that is in current use can be traced back to studies undertaken in the 1960/70s. A significant UN report in 2019 underscored these significant data gaps under the title, "A Case of Benign Neglect: Knowledge Gaps About Sustainability in Pastoralism and Rangelands" (Johnsen et al, 2019). Similarly, information about rangeland degradation is limited and often not based on ground truthing. An initial mapping of LDN indicators at global level in the recently launched Rangelands Atlas (ILRI et al 2021) suggests that rangelands are currently relatively stable in terms of land cover, land productivity and carbon stocks. This is corroborated by the Third Edition of the World Desertification Atlas, which puts rangeland degradation across the globe at 18.5%. However, there are serious cases of degradation in some regions and countries. Additionally, it is anticipated that with climate change (also mapped in the Rangeland Atlas) and increasing land pressures especially from crop cultivation this will change.

The benefits of rangelands have not been fully appreciated. Higher productivity areas with permanent access to water such as riverine lands have been converted to crop farming. This has been shown to have high economic and environmental costs placing the whole rangeland system at risk as without access to these lands for dry season grazing, it is impossible to use the rest of the rangeland effectively (Behnke and Kerven 2013). Further, cropping lands have blocked migration routes for both livestock and wildlife, and grazing lands and wildlife habitats have been increasingly fragmented. But regrettably, these

converted cropping systems have proven to be less viable or sustainable and ill-suited to the conditions of rangelands, requiring additional external inputs and periodic food assistance to the farmers due to failed crops. The rate of conversion of rangelands has not abated over the years, and there are anecdotal reports from pastoralists that it has intensified because of government policies on achieving food security or meeting tree-planting pledges.

The conversion of rangelands to other uses has shrunk the area available for livestock, resulting in extra livestock pressures on remaining land. For example, livestock overgrazing and rangeland degradation on the steppes of Mongolia emanate from a number of interrelated factors. Following the rapid rise in livestock numbers since the 1990s, land degradation and desertification expanded, especially in the more marginal desert-steppe and desert regions[1]. In 2001 government officials reported that >70% of Mongolia was at least marginally degraded and 7% was seriously degraded. By 2007 the Mongolian government had increased their estimates of seriously degraded land to 9.0% of its land base, or some 14.08 million ha. Most of the degraded land occurred on pasturelands, with some 12.31 million ha (9.8%) of steppe pasturelands designated as seriously degraded (Reading et al 2010).^[1] As another example, field studies combined with remote sensing and Geographic information system (GIS) methodologies suggest a decline in vegetation richness of 10–30% across Sahel and a southward shift of Sahel, Sudan, and Guinea zones due to shifts in temperature and precipitation regimes (see for example Souverijns et al 2020).

The impacts of inadequate government policies and climate change leading to higher temperatures and more erratic rainfall (reduced in some places, increased in others), have exacerbated land degradation (bare soils, soil erosion and compaction), together with a loss of animal productivity, wildlife and biodiversity. Despite the commitment made by the Parties to the Convention on Biological Diversity (CBD) to reduce the rate of biodiversity loss by 2010, global biodiversity indicators show continued decline at steady or accelerating rates, while the pressures behind the decline are steady or intensifying (Butchart et al. 2010; Hudson et al. 2014; Mace et al. 2010). New challenges such as significant increases in the incidences of invasive species have made matters worse, with communities and other local land managers lacking capacity and knowledge to address these new threats.

National boundaries set up over the past century have further fragmented rangeland ecosystems and prevented the necessary mobility of animals and pastoralists. Well meaning projects that create fenced areas for the purpose of rangeland conservation and restoration have resulted in inequality among local pastoral communities, and increasing conflicts.

Land use change has been identified as a key driver/trigger for pandemics such as Covid-19 as wild animals get pushed closer to domestic livestock and humans meaning there is greater opportunity for the development of new zoonoses and “spill-over.” A key hotspot for this is forest-grassland boundaries^[2]. Preventing such land use change and monitoring it where it occurs is a recommended measure that will contribute to preventing further pandemics (Predict Consortium 2014)(UNEP & ILRI 2020).

Preventing further conversion may be feasible, if governments take the appropriate legal and policy measures related to land tenure, land use and governance. However, reversing conversion is more challenging due to entrenched interests. In many instances this is necessary for restoring fragmented rangelands and wildlife corridors. Such reversals can best be achieved through creating the appropriate economic and political incentives, alternative livelihood options, and other similar measures that would increase investment in rangeland restoration. Best practices and success stories do exist and have been catalogued by various entities, including FAO, IFAD, ILRI, IUCN's WISP, WWF, GLAD, and others.

There has been a lack of investment in halting these negative trends, preventing land use change, reversing rangeland degradation, restoring rangelands and raising their productivity. Where investments have taken place they have been piecemeal and without a common vision^[3]. In general investments in rangelands including grasslands and savannahs is significantly behind that of forests, although the lack of disaggregation of data prevents proper analysis. For example, of the entire GEF portfolio up to GEF-6, only 124 approved projects (or 1.2%) are thought to be relevant to rangelands and/or pastoralism judging by their titles, but the GEF tracking tools do not disaggregate rangelands from other agricultural and forest systems (Johnsen et.al. 2018). Similarly, in 2015 OECD funded \$76 trillion as ODA for support for multi-lateral environmental agreements (MEAs), but only 0.3% was classified as aid for “livestock and/or veterinary”, which does not necessarily imply support for rangelands or pastoralists.

The full benefits of rangelands are not fully appreciated, not least due to lack of good data, and there is a lack of understanding and clarity on the opportunities of investing in, for example, biodiversity conservation, and carbon storage and sequestration in rangelands. In the past, rangelands were perceived as risky environments, marginal lands, conflict-prone, drought-prone, inaccessible and dangerous receiving little attention including from development programmes. However, over the last two decades this has improved with infrastructure and communication linkages increasing, improved access to basic services for local populations and markets, better drought management programmes and safety-net projects, reduced conflicts and improved tenure security and good governance in many places, and greater support for development interventions including improved and more participatory land use planning. Albeit some risks still exist and there is still great room for improvement in such as provision of services, the investment environment has improved significantly.

Land degradation neutrality (LDN) provides a framework for addressing these threats^[4]. However, response options for achieving LDN in rangelands are restricted due to, amongst other, poor science-based and up-to-date evidence and data on rangelands (distribution, status, economic value including of ecosystem services and investment benefits), few documented good practices of rangeland restoration (particularly at scale), limited understanding of risks and opportunities for investment particularly amongst the private sector, lack of coordination (at regional/continental and national levels) and low capacity amongst governments to restore rangelands at scale including working with local rangeland users/communities.

The Livestock Value Chain (LVC)

A preliminary analysis of livestock value chain development (LVCD) in the target regions was conducted during the PPG phase. The products associated with the pastoral livestock value chain are very diverse because of the diversity of pastoral and rangeland systems. The most well developed sustainability value chains are for Cashmere wool and milk/milk by-products. These are also the value chains most targeted by philanthropic and development projects for private-public partnerships. A good example is Kering Co. (the owner of Gucci and several other fashion houses) that has partnered with Conservation International to establish the “Regenerative Fund for Nature” that by 2025 is expected to improve 1 million ha of crop and rangeland systems, including in Mongolia’s cashmere regions, Patagonia’s alpaca regions and Gran Chaco’s cattle pastoralism (for leather). Alpaca and Vicuña wool only capture 1% of the wool trade because of the low rate of production – nevertheless they are also an area of active growth.

There are less well known value chains that appear to be growing due to their health benefits, such as camel’s milk and goat milk powder for infant formula, and those that have a potential for growth as exotic products or for growth of traditional culinary recipes, such as African goat cheeses. Non-livestock rangeland products (NLRP) also offer a growth potential in several value chains, such as Frankincense, Gum Arabic, wild cereals, and pharmaceuticals,

especially from West Africa's Sahel and Horn of Africa.

Livestock is also a polluter of the environment emitting significant amounts of methane and in industrialised systems in particular having a high carbon footprint. Developing and supporting more productive, efficient and low-emission livestock value chains is a must including in pastoral areas. Clear steps must be made to reduce emissions and de-carbonize livestock value chains. Sequestering of more carbon in grasslands (including significant soil organic carbon) can reduce the carbon footprint of livestock value chains and is a growth area that can be applied to all regions and can form the basis for selling carbon credits to raise funds for restoration (see below).

Standards, protocols and guidelines have been developed. The most globally recognized ones are sector-specific and apply primarily to the processing and packaging of the product. Some of these are well established, ISEAL and ISO 14001 compliant, and apply to the industry as a whole, such as the Responsible Wool Standard from Textile Exchange, and the Leather Working Group Standard. However, not all are globally known, accepted or applied (such as the Sustainable Textile Production Guidelines of Mongolia).

There are also global standards that apply to animal welfare, such as the Four Paws International standards that primarily focus on industrial, confined livestock systems. Only a few standards and guidelines have been developed that address rangeland management and pastoralism, notably, portions of the Responsible Wool Standard (that adopts some of the Holistic Management/Regenerative Agriculture principles but does not address pastoralism), and the WISP Minimum Standards and Good Practices for Sustainable Pastoralism. Savory Institute's Land to Market Program has been successful in convincing several milk value chain investors to incorporate regenerative grazing, especially in Latin America. However, regenerative grazing and holistic principles are best applied to private ranches, rather than community enterprises, and are therefore not easily scalable in many parts of the world.

Several platforms, roundtable dialogues and networks exist that can be built upon. Of note is the Sustainable Fiber Alliance (SFA), whose partners focus mostly on cashmere, but have also expanded to other sectors. Fashion Pact, Sustainable Apparel Coalition, Sustainable Dairy Partnership, are all examples of existing industry coalitions that have come together to further their Corporate Social Responsibility goals. The GEF-supported FOLUR (Food and Land Use Restoration) platform, and managed by the World Bank and partners, provides a knowledge base and a sustainable beef roundtable that is aimed at diversifying farmers away from Livestock, supporting the planting trees, and protecting biodiversity in the humid and sub-humid livestock systems (savannahs, forest margins, the Amazon). The Global Agenda for Sustainable Livestock (GASL) is a partnership of livestock sector stakeholders committed to the sustainable development of the sector. The Agenda builds consensus on the path towards sustainability and catalyzes coherent and collective practice change through dialogue, consultation and joint analysis. Several of the commercial actors are members of the Global Commons Alliance, which does not focus necessarily on livestock, but on land, biodiversity and climate change. The Sustainable Apparel Alliance has issued the Higgs Index, which is a suite of tools for the standardized measurement of value chain sustainability, focusing on the processing to retail parts of LVCD. Table 1 in Annex I provides a summary of these and many other actors along several livestock value chains.

The fashion and apparel industries are far more organized than other livestock value chains, such as dairy and pharmaceuticals. In these value chains, competition within a growing industry has prevented cooperation. Raising awareness of the value of dialogue and coalition building, and development of common sustainability standards in these value chains would fill a clear sectoral gap.

Rangeland restoration and its financing

Rangeland restoration techniques vary from highly mechanized operations that replace native species with pasture forage, to techniques involving grazing management changes that nudge the native ecosystem towards recovery and restoration. There are many best practices and examples of successful technologies, such as revitalizing transhumance (Starrs 2018), managing animal mobility through public regulations on movement and access (such as in Mongolia), and community-based arrangements and cooperation on rangeland use and protection (Niamir-Fuller 2005; Flintan and Cullis 2010), and moving animals between different landscapes that relies on herders rather than fencing. Living with uncertainty is a hallmark of pastoral life, and with climate change, managing variability becomes even more important (Scoones 1994).

'Regenerative grazing' has been the main method for rangeland restoration in North America and Australia since 2000. It is based on Holistic Management principles propounded by the Savory Institute, that for example, relies on hoof action to break up soil compaction, and more intensive management of livestock rotation. It has gained widespread use among many private sector ranches in the USA, and among LVC investors such as Johnston of Elgin (Cashmere), Louis Vuitton (leather) and Nestlé (dairy). In addition, several carbon traders/brokers rely on it carbon credits projects from rangelands and grasslands. However, it is open to criticism and at least one law suit has been taken out against its use in the Point Reyes National Park. The US National Park Service (NPS) allows a few ranches to operate in the National Park on the grounds that they are compatible with wildlife. Compatibility is not doubted, but it is claimed that the NPS has chosen to fence off the domestic from the wild animals in such a way that it favors the ranches more than the wildlife^[5]. Another criticism levelled at Regenerative grazing is that it is not scalable, especially in developing countries and Europe where the use of unfenced community-based rangelands and grasslands allowing mobility of livestock and wildlife is a traditional and sustainable alternative.

Despite a limited number of relatively small-scale, project-based rangeland interventions and investments, global and regional actors and national governments have been slow to commit to large-scale restoration and public-private partnerships are scarce. Furthermore, the techniques used for such small-scale project-based interventions are seldom scalable to entire landscapes. For example, the Company Naadam^[6] has been successful in adjusting cashmere goat stocking rates to the resources available in the Gobi Desert by fencing off an area. However, fencing off the entire Gobi Desert is not feasible, and working on such a piece-meal basis results in inequality among pastoralists. Other techniques and incentive structures need to be applied at landscape scale, including greater mobility of animals and other nature-based solutions, clarification of communal land tenure, land use regulations agreed to by all pastoralists, and incentives for rangeland restoration at scale.

The cost of restoring forests in developing countries has been catalogued extensively. For example, Duguma et al. 2020 estimate \$610 per hectare for forest restoration in Africa. But very few studies have been done of the cost of restoring rangelands. The average cost of restoring a grassland varies tremendously from a few dollars per acre to thousand dollars (Knight & Overbeck 2021), depending on the landscape characteristics and restoration method used. For example, after 7 years of trial and error (2011-2018), various cycles of drought, and using open-source (not licenced) seed restoration methodologies based on clearing, drilling seed and mowing, a UC-Davis project funded by Caltrans (California Dept of Transportation), estimates that it cost \$225,000 per acre to restore a small 2000 acre area of grassland with native species (Dremann 2018). On the other hand, the Savory Institute has started a campaign of "30 for 100", where a \$30 donation promises to restore 100 acres of rangeland (or \$1 per hectare).

Large scale financing for rangeland restoration is scarce. Most of the banks and funds that engage in LVCD are financing actions that have little to do with rangelands or their restoration. Exceptions are the LDN Fund, recently established and under management of Mirovia/Althelia, that aims to invest in financially viable private projects on land rehabilitation and sustainable land management worldwide. Other sources that are promising and should be explored is the

Althelia Climate Fund, run by the European Investment Bank, which has an African Food Security Fund that provides growth capital (Equity participation) in agricultural investment with a focus on small and medium-sized enterprises (SME) companies across the Sub-Saharan agriculture sector spanning the entire food value chain from primary to tertiary services. The &GreenFund invests in reforestation and afforestation projects, primarily in tropical forest areas. The Yunus Fund provides flexible small loans to SMEs, primarily in Brazil, Colombia, India, Kenya, Rwanda, and Uganda. For example, in India, it has funded RangSutra Crafts Company which among other activities, is innovating with how to use the indigenous Chokhla Wool (from the Magra sheep and used mainly for carpets) to arrive at market friendly apparel product options.

There are a handful of carbon credit projects from grasslands so far worldwide, and most are based on Protocols established by the American Climate Registry. Other standards, such as the Verified Carbon Standards of Verra, as yet do not cover grasslands^[7]. Grassland carbon credit projects are not as expensive as forest carbon projects; however, grasslands also generate fewer credits per acre than forests with much carbon found in the soil, which means that grassland projects also require parcels to be at least several thousand acres in size, if not tens of thousands of acres^[8]. The BCarbon Institute of Rice University, Texas, verifies soil carbon for credits, and charges \$5/acre for soil testing, which has to be done every 5 years^[9]. However the methodologies for measuring and monitoring soil carbon at the scale needed for widescale application is still in development.

The lack of sufficiently tested and verified global standards, tools and frameworks for rangeland restoration hampers the up-scaling of successful techniques in developing countries. Techniques and methods used in developed countries are not replicable nor scalable in developing countries and need to be adapted, and consolidated with local and indigenous knowledge.

The scalability problem is compounded by inadequate enabling environments, such as lack of conducive land tenure policies, lack of incentives and financial resources for SMEs operating in rangelands. Large commercial enterprises often hesitate to work with local [pastoralists'] SMEs because the latter primarily function within the informal sector and are not subject to regulation, standardization or taxes. SME businesses often face significant barriers to transitioning to formalisation. While this situation varies across the world, in Senegal, for example, some larger enterprises operate with a capital exceeding millions of West African CFA franc, but remain in the informal sector because of a poor business climate, which includes high taxes, high compliance costs and burdensome business regulations and reporting requirements.

There is a need for strengthening the enabling environment in such a way as to reduce the perceived risks of the commercial investor. The accepted characteristics of an enabling environment for private sector growth and development have changed over time. Earlier research on private sector development typically recommended regulatory reform and reduced government intervention, focusing primarily on deregulation, property rights and the effective functioning of markets. Yet such approaches have proven insufficient, with over emphasis on the importance of regulatory reform, leading to public intervention being neglected and other constraints in the business environment being overlooked, such as access to start-up finance, and land ownership being required as collateral for loans (Crick et al, 2018).

Role of women and youth

The linkages with livestock-based value chains including the participation of women and youth have not been fully explored and exploited: increasing the value of livestock and incomes from them can result in a higher appreciation of their value and more investment in ensuring a healthy resource base. During the PPG phase, a preliminary analysis of LVCs showed that many private sector actors have signed onto ESG principles, and therefore include policies and

guidance on gender equality, child labor, diversity and inclusion, etc.. This report focused on “at source gender analysis” meaning the analysis of whether and how these actors also apply gender safeguards and guidelines at the producer/pastoralist level. Women have a major role in many pastoral societies for the processing of livestock products other than meat and leather (fibre, milk, etc.) and for gathering pharmaceuticals, wild foods, and other non-livestock rangeland products (NLRP). While in many regions the young adults are leaving the homestead for employment elsewhere, there are good examples of young adults returning to engage in enterprises valued by the community, such as renewable energy, processing and trading of livestock products, etc..

Undervaluing rangelands and pastoralism appears across the board and is not limited to policy makers and technical experts. Many pastoralists, having felt neglected for decades, are abandoning rangelands and searching for other off-land economic opportunities. Migration of young pastoralists, mostly men, is a key element in the weakening of herding practices due to labor shortages back home, resulting in more sedentarization and reduced mobility of animals – itself leading to more degradation of rangelands. An FAO study classifies the forces for migrating out in Burkina Faso and Chad, and points out that in many households, there are not enough livestock to be passed down to all the children. Some have to leave, and some do so permanently, but others remain engaged with the pastoral family (e.g. through sending remunerations) or in the livestock value chain (e.g. becoming livestock traders in the towns) (Ancy et al, 2020). In some countries in East Africa and South Asia, young people face a 20-80% shortfall in work opportunities, prompting several investors along the LVCs to focus on them (e.g. IKEA Foundation^[10]). Increasing opportunities for investment in local production and processing of animal and rangeland products will help to reduce unemployment and the need for out-migration.

The advent of ‘modern’ education has inadvertently become another force for outmigration, especially where the curricula do not cover vocational issues such as animal or pasture health. Recently however, the SDGs (especially Target 4.3) have helped create greater awareness for the need for vocational training adapted to local situations, and more effort is being placed on improving the education curricula, for example in the Andean mountains where children are being taught to value conservation of camelids (Vila et al, 2020).

There are NGOs especially in Africa, who are focusing on empowering pastoralist youth, such as engaging pastoralist youth in peace building efforts in Northern Kenya^[11] and teaching rights and self-help projects for poverty reduction^[12]. But examples of initiatives to involve young pastoralists in rangeland restoration are rare.

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There is a strong potential for women and youth to be involved in LVCD for rangeland restoration, especially if it results in an alternative income generation for them. The cashmere and alpaca value chains in particular are dominated at the local level by women-owned enterprises^[13]. Similarly, the tasks of milking, processing and marketing the products of milk are often done by women and youth.

Whether women engage with rangeland management depends on the division of labor within a household. However, women know as much about it as men do, even if these are not documented sufficiently (Niamir-Fuller 1994). For example, both shepherds and shepherdesses have good knowledge of the best grazing grounds among the Yemenis of the Dhamar Montaine Plains (Kessler 1987), and among the Maasai, women manage small ruminant grazing and deliberately use them to control bush encroachment (Jabocs 1980). Among the Samburu of Northern Kenya, girls between 12 and 18 years of age herd the sheep and goats, and it is recognized that they have a tougher job as these are harder to control than cattle (Shikano 1984).

In the Chichillapi Puno of Bolivia and Peru, the Aymara women regularly monitor the productivity of the wool clips they shear from sheep to tell them about overgrazing and rangeland quality (Palacios Rios 1977). In Huancavelica, Peru, livestock production is entirely the responsibility of women, and families establish common agreements about stocking density so as to avoid overgrazing of common pasture land (CENCIRA 1980).

The Zaghawa and Teda women of Chad harvest wild cereals at the end of the wet season, returning to the homestead every 15 days with 3-4 camel loads (130 kg each). It is estimated that this manual method of harvesting still leaves 50-60% of seed to allow natural regeneration (Tubiana 1969).

These examples show that even where men may be responsible for rangeland management, women and youth are just as knowledgeable and have a vested interest in ensuring that the rangelands remain healthy.

Male and female-owned enterprises face very similar constraints in their business environment, but that some constraints, including crime, corruption, education levels and access to finance, affect female-owned enterprises more severely. In addition, traditional gender roles and associated discrimination that limit access to factors such as finance and land ownership can present significant additional barriers to entry into entrepreneurship for women. Limited access to financial products and services, as outlined above, means SMEs often struggle to cover the high upfront capital costs.

Baseline scenario and any associated baseline projects

Understanding of rangelands and their benefits amongst the scientific community have improved significantly over the last thirty years, and particularly in terms of rangeland ecology, the benefits of rangelands and the role of pastoralism in maintaining rangeland ecosystems. However, generally there is a lack of national data on the distribution of rangelands and their health/productivity, which translates into a lack of verified data at global level.

However, this scientific knowledge has failed to have been adequately taken up by governments and other stakeholders, including in policy and legislation, still reflecting a bias against pastoralism and prioritising other land use systems for investment including in restoration efforts. The economic benefits of rangelands have not been fully appreciated. Higher productivity areas with permanent access to water such as riverine lands have been converted to crop farming. Cropping lands have blocked migration routes for both livestock and wildlife, and grazing lands and wildlife habitats have been increasingly fragmented. National boundaries have split rangeland ecosystems. Land degradation has increased together with a loss of animal productivity, wildlife and biodiversity.

Though there have been signs in a shift of thinking amongst some member states and within the global arena – such as the West Africa Member States CEDEAO agreement in 1998 on transboundary transhumance (A/DEC.5/10/1998), and the recognition of transhumance as an Intangible World Cultural Heritage by UNESCO. In addition, pastoralists' voices have been heard more loudly, such as through the Ndjamena Declaration, Nouakchott Declaration and Kiserian Declaration. But this has not led to any appreciable investment in rangelands particularly from the private sector. And though the world has seen a phenomenal increase in global efforts to restore land, the majority has been targeted to forests and planting of trees.

Conversely, this effort has in fact put rangelands at greater threat as several tree-planting initiatives have seen rangelands as vacant ground for these. In general investments in rangelands including grasslands and savannahs is significantly behind that of forests. The linkages with livestock-based value chains particularly targeting women and youth have not been fully explored and exploited: increasing the value of livestock and incomes from them can result in a higher appreciation of their value and more investment in ensuring a healthy resource base. This is despite the fact that over the last two decades the risk environment has improved with infrastructure and communication linkages increasing, improved access to basic services for local populations and markets, better drought management programmes, reduced conflicts etc.

Land degradation neutrality (LDN) provides a framework for addressing these threats. However, response options for achieving LDN in rangelands have been restricted. Despite a limited number of relatively small-scale, project-based rangeland interventions and investments, seldom are these successes technically scalable, public-private partnerships are scarce, and global and regional actors and national governments have been slow to commit to large-scale restoration.

Baseline of associated scientific and knowledge management projects

New initiatives and upcoming ones being launched this year are an opportunity to reverse these trends, fill information and knowledge gaps and move forward from 'business as usual' to a situation where rangelands are given the attention that they deserve. A strengthening global partnership on rangelands has been established and is still growing, reflected in the recent launch of the global Rangelands Atlas^[14] produced through a partnership of ILRI, IUCN, FAO, WWF, UNEP and the ILC Rangelands Initiative. This Atlas is launched as a working document that will continue to grow (as will the partnership), and will be key resource for this project, feeding into the development of the proposed global rangelands data platform. To help fill the data gaps on rangelands a global rangelands data platform is being developed by ILRI and partners. Improvements in geoinformatics and the availability of higher-resolution satellite imagery presents exciting times for good quality monitoring of status and trends in rangelands, and increasing the accuracy of the Rangelands Atlas. Another important baseline is the development of the Global Pastoralist Map by the League for Pastoral Peoples^[15].

There are internationally agreed frameworks such as the VGGTs (Voluntary Guidelines on Good Governance and Tenure) and Principles for Responsible Investment in Agriculture and Food Systems of FAO, the Global Standard for Nature-based Solutions^[16], as well as standards developed by civil society, such as the Accountability Framework^[17], the World Initiative for Sustainable Pastoralism's "Minimum Standards in Sustainable Pastoralist Development"^[18], and several standards related to animal welfare, and reducing the footprint of processing and marketing of livestock products, including the Sustainable Livestock Principles under development by FOLUR. In addition, there are ESG standards that most Commercial Investors follow, such as the Fiduciary Duty in the 21st Century program, led by the United Nations Environment Programme Finance Initiative and the Principles for Responsible Investment (PRI) of UNEP FI. These provide a framework for the development of a global standard, and tools and processes for large-scale rangeland restoration. Sustainability standard setting processes are being criticized for not including the key-actors such as producers and growers in their processes. Many voluntary sustainability standards such as Forest Stewardship Council (FSC), Marine Stewardship Council (MSC), Better Cotton Initiative (BCI), Fair Trade USA, Sustainable Fibre Alliance (SFA) recognize the importance of inclusiveness. The rise of national, regional and global federations of pastoralists offers the opportunity for greater inclusion in global processes.

The UNCCD Science-Policy Interface (SPI) has released the Scientific Conceptual Framework for Land Degradation Neutrality: this provides a scientific basis for understanding, implementing and monitoring LDN. It has been designed to create a bridge between the vision and the practical implementation of LDN, including through the LDN Target Setting Programme. The GEF Scientific and Technical Advisory Panel (STAP) has also issued guidelines offering practical help in developing GEF projects which contribute to Land Degradation Neutrality^[19].

STELARR will contribute to the forthcoming project of WOCAT and UNCCD Secretariat that is part of the Dryland Sustainable Landscapes IP, on gender-sensitive SLM Technologies and Approaches. WOCAT is expected to develop a methodology for assessment, as well as evaluate a number of technologies already existing in the WOCAT Database in view of their gender-sensitiveness.

ILRI, IUCN and partners have updated and consolidated the most accurate Rangeland Atlas to date. The Atlas is still evolving and data is continuously being added. The information will be vital for ground truthing the guidelines, frameworks and standards of STELARR. In particular, information about the impacts of climate change on rangelands will be incorporated, including the prediction that approximately 31% of rangelands will be affected by one or more climate change thresholds by the year 2050 (Rangeland Atlas, ILRI et al 2021). IUCN and ILRI are also partners in the Evergreening Alliance, which promotes the Evergreening the Earth Global Campaign^[20] which targets the goal of net annual sequestration of 20 bt CO₂-eq on farmlands, forestland and grazing land, including 650 m ha of degraded pasturelands through managed natural regeneration and scaling out local successes. ILRI and more specifically its Mazingira Center^[21], is carrying out ground-breaking work on understand the GHGe from different livestock production systems and how to reduce these. This will be vital input for supporting low missions value chains in STELARR. ILRI is also a member and contributee to the Global Research Alliance that seeks to reduce greenhouse gas emissions in food production systems globally^[22].

ILRI and CGIAR centers have recently developed new core programmes for the One CGIAR going forward from 2022. Of note is the Livestock, Climate and System Resilience initiative which has core research components on development of innovations to mitigate the impact of livestock on climate change including a programme on reduction of GHGe and to assist communities and other actors to adapt to climate change. It also aims to improve understanding on resilience of pastoral and mixed crop-livestock systems and how to strengthen this resilience through such as participatory rangeland management, improved land use planning and rangeland restoration. Amongst others it will develop a cost-benefit analysis framework for rangelands restoration and improve data collection for rangelands. And it has components on improving the enabling environment for sustainable pastoralism and engagement with the private sector and harnessing of green financing for investments in livestock value chains that align well with STELARR's objectives. There is an opportunity here to link to this initiative and others, benefiting from the rich expertise and experiences of CGIAR centers, increasingly realising the opportunities of working more closely with development and conservation partners and governments for greater impact on the ground.

Baseline of associated global policy initiatives, decisions, and platforms

The United Nations Environment Assembly (UNEA) recognized the importance of rangelands during its second meeting in May 2016 (UNEA-2), when 158 countries passed Resolution UNEA L.24 on "Combating desertification, land degradation and drought and promoting sustainable pastoralism and rangelands". This decision reflects the growing awareness of rangeland degradation and interest in supporting pastoralists as guardians of the rangelands. The UN General Assembly has designated 2026 as the International Year of Rangelands and Pastoralists, and the support and co-sponsorship by 102 Member States, and 300+ non-governmental organizations for this proposal led by the Government of Mongolia, is testimony to the increasing global awareness.

Indeed, while the UNCCD has not developed explicit recommendations on rangeland restoration, discussions with parties to the convention are ongoing to strengthen support under it. While progress towards clear international support for rangeland restoration remains tentative, these examples show that there is growing opportunity to accelerate action for rangeland restoration through international dialogue. The principles of LDN, as well as other international commitments (e.g. pledges for Forest Landscape Restoration under the Bonn Challenge) clearly state the need for balanced responses across ecosystems and land use types. During UNCCD COP14, a number of countries raised concerns over imbalances in restoration efforts, including the neglect of dryland and grassland biomes in restoration initiatives. Furthermore, the *Grassland, Savanna and Rangeland Coalition* was launched at UNCCD COP 15. This demonstrates a growing impatience among some countries to see greater action in these marginal environments. Parties to the UNCCD recently held the first inter-actor dialogue and agreed to push rangeland restoration as an agenda item through the next UNCCD COPs.

Of great significance in 2021 is the launch of the UN Decade of Ecosystem Restoration on 5th June in which Grasslands, Shrublands and Savannahs have been identified as one of six ecosystems requiring urgent attention. ^[23] All activities proposed here align with the proposed ten actions of Decade, including financing, shifting behaviours, and building capacity for restoration implementation at multiple levels. As IUCN, ILRI and ICRAF are both Global Partners of the Decade, activities, communication, and outputs will be aligned with the decade goal(s) and will be communicated through the Decade's communication channels to ensure wide dissemination and reach. ILRI is currently expanding a partnership agreement with UNEP on rangelands including how to support the UN Decade. It is yet to be seen how the implementation of the Decade will move forward, however it is understood that there will be significant opportunities to align this project with the goals and implementation of the Decade and this will be explored more with UNEP and partners during project implementation.

Further, the consultative process and dialogues carried out for the UNFSS (UN Food Systems Summit) have identified in Action Track 3 the game-changing solution: "Restoration of Grasslands, Shrublands and Savannahs through Extensive Livestock Production", recognising the important role that livestock can play. The Sustainable Beef Roundtable and ILRI led that process. Additionally, the game changing solution "Mobile Pastoralism Valuing Rangeland Variability" was submitted through the Climate change adaptation track by the IYRP Coalition, recognizing the importance of maintaining and supporting pastoral extensive production. Most recently in 2022 as part of the UNFSS response, WWF, IUCN and UNCCD launched the Grassland, Savannah and Rangeland Global Coalition involving member states and other stakeholders.

The Global Landscapes Forum (GLF) is an important platform for convening different stakeholders, sharing experience and knowledge, for dialogue for the UN Decade of Ecosystem Restoration. This includes the involvement of the private sector. For example, in November 2019 the GLF convened in Luxembourg for its fourth annual Investment Case Symposium focused on how can sustainable land-use financing be moved into the mainstream, The event brought together nearly 500 of the world's leaders of sustainable finance institutions to ease the process of channeling investment into landscape sustainability projects and supply chains. The Luxembourg Government has recently agreed to extend this platform for three years. GLF is working with UNEP on the launch of the UN Decade of Ecosystem Restoration for which the German Government has provided US\$20 million, with GLF receiving US\$3.5 million over 2 years.

Additional important platforms and events where rangelands will be discussed are World Conservation Congress, the One Planet One Health initiative, the UNCCD Global Mechanism and knowledge hub, the World Overview of Conservation Approaches and Technologies (WOCAT), the Just Rural Transition, the Working Group on Dryland Forests and Agrosilvopastoral systems (an inter-governmental body of the Committee on Forestry of FAO), the Pastoralist Knowledge Hub of FAO, Evergreening Alliance and the Global Alliance for Sustainable Livestock (GASL), together with the global and regional groups established as part of the call for an International Year of Rangelands and Pastoralists (IYRP). Furthermore, there are LVCD platforms, such as the Sustainable

Fibre Alliance, Sustainable Apparel Coalition, Global Commons Alliance, International Wool Textile Organization, Mongolia Sustainable Cashmere Platform and the Cashmere Roundtables run by UNDP-Mongolia. The project will work with these in order to extend the reach of the project in terms of consolidating good practices and influencing.

Baseline of associated rangeland restoration and sustainable pastoralism initiatives

Work conducted by IUCN, the World Initiative for Sustainable Pastoralism (WISP), and others demonstrates the high value of ecosystem services in rangelands and shows the opportunities for public and private investment. Innovation in local action has increased in recent years, including through projects funded by the GEF, creating new avenues for experience sharing and scaling up including IUCN's HERD initiative generating new lessons on rangeland investment in Africa and Asia, while the GEF7 Dryland Impact Programme demonstrates a significant effort to scale up dry forest landscape restoration in these areas. The Global Child Project on Sustainable Drylands Landscapes led by FAO will contribute to promoting regional dialogue over rangeland restoration opportunities. Regions that have paid little attention to restoration in the past such as the Arab region are now pushing for regional restoration processes – see the Arab Land Conference that took place in February 2021 ^[24]. IUCN and WWF are collaborating in a new Latin America Grasslands project (in Paraguay, Colombia and Argentina) under the International Climate Initiative, which will provide new partnerships in a region that has been relatively disconnected from global discourse on rangelands. And development agencies such as IFAD are increasing their investments in rangelands and initiatives such as the Great Green Wall, in which IUCN is lobbying for greater attention to rangeland restoration. IUCN is also supporting the Drylands Impact Program with two studies that could complement/leverage STELARR's activities on identifying rangeland restoration opportunities, including a review of dryland degradation levels and transboundary dryland restoration opportunities in targeted regions, and analysis of OECMs (Other Effective area based Conservation Measures) in dryland production landscapes.

The AVSF project (2019-2022) ^[25] worked on strengthening the role of 30 women's groups (cooperatives, organizations, groups) in the production systems, fiber of yak and cashmere sectors, in the provinces of Khentii and Arkhangai, Mongolia. Within this traditional patriarchal agro-pastoral rurality, women's place and role is fragile and lacks mainstreaming and mentoring schemes to bridge the current gender gap and improve both gender equality and rural economic development locally and at policy level nation-wide. The project aimed at increasing capacities of organisations involved in livestock and small-scale vegetable production to strengthen women's participation in local and community decision-making in regards to their economic well-being. The Swiss Agency for Development and Cooperation (SDC) : Green Gold and Animal health project, Mongolia ^[26]. The project ran from 2017 to 2020. The project promoted good practices for sustainable rangeland management, the marketing of livestock products and improved animal health to contribute to the improved livelihoods of herders' households, which comprise 70 percent of the rural population. An internationally recognized, science based rangeland assessment and monitoring system was introduced and is now used by government agencies to regularly assess rangeland health in Mongolia.

At the local level in many countries, elected leaders and civil society organisations are representing communities more effectively, and support is growing for upholding the rights of these populations. The IYRP 2026 Coalition includes support from 20 pastoralists organizations and associations in Latin America, MENA, Central Asia and Africa, who will be invited to participate in the project as champions, including Asociación Nacional de Ganaderos Diversificados Criadores de Fauna (Mexico), Magallanes Farmers Association (Chile), Pasto-Arabic (MENA Region), and the Kyrgyz Jayity (Kyrgyzstan).

The IUCN Policy on Youth is based on several resolutions adopted at the World Conservation Congress, and includes Resolution WCC-2020-RES-062 Para.(2e) which calls on all Members to develop community-based approaches to encourage the participation of children and youth, vulnerable groups and women, including through family-based nature activities.

Improvements in land tenure, governance and sustainable and participatory rangeland management are taking place, creating further incentives to invest in rangeland restoration. This combination of growing policy support, emerging knowledge, built capacities and stronger voice creates a unique opportunity to give impetus to innovations and investments accelerating LDN attainment in the most remote regions. An emerging group of international and local actors, including CGIAR centres, the Rangelands Initiative of the International Land Coalition (ILC), the Global Grassland Dialogue Platform led by WWF, and the Dryland Restoration Initiative Platform (DRIP) are building momentum for change and creating further opportunities to strengthen global investment in restoration and sustainable management of remote landscapes. Existing regional coordination and implementation mechanisms can be leveraged within the context of this project, such as the Great Green Wall Initiative in northern and southern Africa, and the Central Asia Countries Integrated Land Management (CACILM) Initiative in Central Asia.

Through the efforts of several private investors in Mongolia, the Sustainable Fibre Alliance, and other partners, a global “Rangeland Stewardship Council” is being proposed that will work to certify all products from rangelands as being environmentally friendly and benefiting pastoralists, similar to the model of the Forest Stewardship Council. It is expected to be soft launched in September 2022, followed by a dedicated Symposium in SRM Boise in 2023, so as to garner global attention and acceptance.

The time is right to connect and reinforce these nascent initiatives and global opportunities, and support their coalescence into a global rangeland restoration movement through sustainable extensive livestock production systems with a common vision for the future of rangelands and the pastoralism that it supports.

Proposed alternative scenario with a brief description of expected outcomes and components of the project

The Sustainable Investments for Large-Scale Rangeland Restoration (STELARR) will work with livestock value chain actors including the commercial sector to make those value chains more sustainable and climate-friendly by ensuring that investment is made in the resource base (the rangeland) to sustainably raise productivity of rangelands and restore them where needed. That is, rangeland restoration and sustainable use will become an intricately part of these value chains, incentivized by not only environmental concerns but by the fact that unless these investments are made the resource base and the value chains which rely on them will disappear.

Countries and locations will be defined in the inception phase, strongly influenced by the value chains and value chain actors that STELARR will engage with. Responding to the challenges outlined above and taking advantage of current opportunities for enhanced investment in rangeland restoration requires action on three levels: STELARR will support the development of more sustainable livestock-based value chains for rangeland restoration and more sustainable use including mobilizing private investments and green financing for pilot bankable project concepts. The (perceived) risks for investment in rangelands restoration, bottlenecks and challenges will be identified with value chain actors, and jointly seek solutions to overcome them. Particular attention will be given to livestock-based value chains involving women and youth, seeking out high-value business opportunities where client and supplier can work together to develop sustainable enterprises that also invest in rangeland restoration and increase in productivity.

STELARR will also contribute to building international commitment and action for rangeland restoration through a combination of convening influential actors and alliances and strengthening evidence-based knowledge. Where enabling conditions allow, model investment partnerships (including private-public) will be developed that apply the best practices, guidelines, frameworks and tools that will be developed by STELARR. STELARR will facilitate the consolidation of this knowledge and experiences, and through engagement with value chain actors will facilitate the development of a preliminary global standard for rangeland restoration and stewardship based on scientifically supported indicators of rangelands health etc that will contribute to the proposed Rangeland Stewardship Council.

The overarching goal of STELARR is that “rangelands are restored and sustainably managed in line with national voluntary targets for Land Degradation Neutrality”.

The objective of STELARR is “to reverse rangeland degradation and improve productivity of rangelands globally through sustainable livestock value chains, and thereby reduce poverty and secure livelihoods, with inclusive benefits to women and youth”.

STELARR will have three Components, each of which is an intermediary Outcome for indirectly achieving global environmental outcomes. **Please see attached theory of change and logframe/results framework.**

Project Components, expected Outcomes and Outputs

Component 1: Rangeland restoration investments through sustainable livestock value chains

Component 1 is the core of the project focusing on increasing rangeland restoration investments through more sustainable livestock value chains, and particularly targeting livestock value chains that support women and youth.

A full sector analysis will be carried out, based on the preliminary analysis conducted during the PPG, of (perceived) risks, challenges and opportunities of sustainable rangelands restoration (SRR), and key global public and private players with potential for restoration through sustainable livestock value chains. The sector analysis will: 1) explore in more detail potential livestock value chains to engage with through the project and actors involved better understanding risks, bottlenecks and barriers to investment in rangeland restoration through and along the livestock value chains (from producer to buyer) and ways to address or mitigate them; 2) compile information on the political, social economy of relevance to the LVC, including land tenure and governance; 3) map the benefits (both public and individual/collective) of the rangelands to public and private players and identify how best livestock value chain actors, including women and youth, can support investments in the rangeland resource base and restoration going forward; 4) build understanding of incentives and motivations for such investments along the value chain including influence of an enabling environment such as secure land rights for producers; and 5) identify synergistic opportunities where it makes sense to combine public and private investments.

Through this analysis and related consultations at least three livestock-based value chains will be identified upon which the project will focus working closely with the livestock value chain actors – at least one in each geographical area. Where possible this will link with other GEF-funded projects and programmes. This will necessitate more in-depth analysis and engagement with all value chain actors along these chains from producer to buyer, and including potential

financiers, investors and knowledge brokers. The value chains could include typical livestock products such as meat, wool and dairy, as well as non-livestock rangeland products (NLRP) such as wild rice and cereals, gums and resins, aloe vera and other medicinal products. Understanding the GHGe and carbon footprint of these value chains will be an important part of this analysis and from which ILRI and other CGIAR centers will draw from its expertise in Mazingira Center, among others, in this regard – this will lead to identification of ways to effectively de-carbonize these value chains and reduce their emissions, making them more sustainable. The results of working with LVC actors along these value chains will lead to the development of agreed guidelines, tools and frameworks for increased investment in LVCD for SRR. Information collected will contribute to a global data platform on rangelands and rangeland restoration opportunities.

This analysis will also include understanding potential linkages between these more sustainable value chains and green financiers. Using existing dialogue platforms such as the Global Landscapes Forum the these actors will be brought together and dialogue facilitated. It will develop promising bankable public-private project concepts along the livestock value chain and develop proposals for these with livestock value chain actors. To strengthen the chance of success of these proposals capacity building of VC actors along the chains will be built through awareness raising, consultations, information exchange, visits, trainings and other using STELARR knowledge products.

An analysis of existing tools, guidelines and standards will also be carried out, to understand where a global standard for livestock products contributing to rangeland restoration and/or stewardship would sit and how it could function. This will involve consultations with private sector and other actors and lead to the development of the first global standard for rangeland restoration and stewardship that will contribute to the work of the proposed Rangeland Stewardship Council. Once agreed and developed awareness raising campaign will be carried out.

Outcome 1. Increased incentives and reduced risks for investment in large-scale sustainable rangeland restoration linked to livestock value chains, with particular focus on women and youth

Output 1.1. Guidelines, tools and frameworks for increased investment in LVCD for SRR, agreed with collaborating projects and partners

1.1.1. A detailed sector analysis of (perceived) risks, challenges and opportunities of sustainable rangelands restoration (SRR), and key global public and private players with potential for restoration through sustainable livestock value chains

1.1.2. Good practice guidelines for investments in LVCD for SRR (particularly targeting women and youth) are collected, verified, consolidated into frameworks and tools, and published

1.1.3. Development of a preliminary global standard for sustainable livestock products contributing to rangeland restoration, including compliance with established standards, tools, processes, and internationally agreed frameworks e.g. VGGTs, FPIC, and guidelines for safeguards drawing from component 3 on rangeland restoration indicators.

1.1.4. Targeted awareness campaigns conducted with key investor groups (investors and producers) including workshops held with collaborating projects and partners on the LVCD for SRR data, tools and guidelines, and the preliminary global standard; agreement reached by relevant platforms such as the (anticipated) Rangeland Stewardship Council.

Output 1.2. Inclusive and bankable investment partnerships and proposals in LVCD for SRR, in selected value chains

1.2.1. Investment roundtable dialogues convened between major categories of investors, financiers and other value chain actors, including government

1.2.2. At least five investment partnerships and proposals for LVCD for SRR developed following global standard

1.2.3. Capacity of value chain actors built for implementing these bankable projects

Component 2: Commitments to sustainable rangeland restoration

Whilst working on more sustainable value chains in Component 1, Component 2 will raise understanding globally of the importance of rangelands, their restoration and linkages to sustainable value chains amongst stakeholders at the national, regional and international levels. Good practice restoration efforts with opportunity for upscaling will be showcased and corresponding guidelines, frameworks and tools disseminated. At the regional and international levels, multi-sectoral and inter-governmental dialogues to reach agreement on rangeland restoration pathways and priorities will be supported with the help of scientists, experts, civil society advocates, and international influencers. These will connect to and build upon other related global dialogues including the UNFSS, global environmental conventions, Global Landscapes Forum, the International Year of Rangelands and Pastoralists, and the UN Decade for Ecosystem Restoration among others. The outcomes of these rangeland restoration dialogues will be synthesized and developed into information and guidance materials that would help prioritize and mobilize actions of parties to the UNCCD, UNFCCC and the CBD, and harness the potential of rangeland restoration for achieving LDN, biodiversity, climate change adaptation and mitigation targets.

The knowledge generated on sustainable rangeland restoration under Component 2 will also be shared with rangeland restoration actors at the local, national and regional levels. The project will strengthen the capacity of existing global and regional rangeland leaders to be “Rangeland champions” and to enable the transfer of knowledge on best-practice rangeland restoration and mobilize actions at the regional, national and local levels. They would be selected by existing regional pastoralist organizations and by civil society organizations already active in supporting pastoralism and rangeland restoration in the regions. The project would support their training, organize relevant workshops and dialogues at the regional level, and provide the tools necessary for them to disseminate the knowledge further afield through their own networks, thus expanding the direct reach of the project (see Stakeholder Engagement Table for further information).

The STELARR knowledge products will also be integrated into national data platforms and [the global data platform to be established by ILRI and partners building on the recently launched global rangeland atlas https://www.rangelandsdata.org/atlas/](https://www.rangelandsdata.org/atlas/) , and published in peer reviewed journals, so as to ensure greater accessibility by governments and civil society and sustained knowledge generation. A mapping of rangeland restoration opportunities will be made at national and regional levels as per agreed livestock value chains, and at global level as an online data platform (potentially with WRI linked to their Atlas of Forest and Landscape Restoration Opportunities map that very much focuses on forests) .^[27]

Outcome 2. Strong international commitments to sustainable rangeland restoration in the context of LDN, UN Decade on Ecosystem Restoration and upcoming IYRP 2026

Output 2.1. Information on LVCD for SRR is accessible nationally and internationally through data platforms

2.1.1. Data and information on rangelands and rangeland restoration opportunities and benefits is incorporated into a new global rangelands data platform

2.1.2. Information on rangeland degradation and restoration opportunities including through livestock value chains are published in a peer-review journal

Output 2.2. Inter-governmental dialogues and agreements result in more policies and decisions that strengthen LVCD for SRR

2.2.1. Intergovernmental dialogue and sharing of STELARR results on restoration and investment, during the Rio Conventions and other international fora including the UN Decade of Ecosystem Restoration and IYRP 2026

2.2.2. Rangeland champions are supported to promote LVCD for SRR in regional and international fora, and through their own networks

2.2.3. Global media campaigns conducted so as to enhance understanding of sustainable rangeland restoration, and how LVCD can be a vehicle for stronger commitment for rangeland restoration

Component 3: Global Monitoring Framework for Sustainable Rangeland Restoration

Component 3 will develop a global framework for monitoring, measuring and verifying the impacts of LVCD for SRR including the pilot bankable projects. It will create a monitoring system for LVCD for SRR that will set globally agreed indicators for monitoring rangeland health, productivity and restoration that will be used to develop the global standard for sustainable livestock value chains (see Component 1). This will include standardized definitions, indicators, data sources and measurement protocols of sustainable land management, sustainable investment, and achieving impacts at scale. It will draw upon existing measurement systems and standards identified in Component 1.

This Component will then develop a Global Monitoring Framework for SRR that will provide additional guidance on how to implement the Monitoring System for LVCD for SRR, whether at project scale or at programmatic scale. It will include suggested elements for stakeholder engagement, measuring and verifying sustainability, and how to achieve “rangeland-friendly” certification.

This Component will draw from the experience of ICRAF and their extensive experience in rangelands health working with the other partners. It will be carried out in a participatory way requiring testing with value chain actors before being peer reviewed and agreed by relevant stakeholders through a series of consultations. It will then be used as the foundation of the global standard for LVCD for SRR.

The output of this component will be applied to monitor project activities but will also act as a guideline for monitoring rangeland restoration across other Dryland IP projects, and other global programs and projects.

Outcome 3. Global monitoring framework for sustainable rangeland restoration available for relevant projects and programs

Output 3.1. Global monitoring system for LVCD for SRR developed and tested

3.1.1. Definitions and indicators for sustainable rangeland restoration elaborated

3.1.2. Measurement protocols established and tested in project’s LVCs

Output 3.2. Global Monitoring Framework developed and tested

3.2.1. Monitoring framework on LVCD for SRR developed and tested in project’s LVCs and bankable projects

3.2.2. Global monitoring framework peer reviewed and accepted by relevant stakeholders as a basis for a global standard for LVCD for SRR

Alignment with GEF focal area and/or Impact Program strategies

As highlighted in GEF-7 Programming Directions, "...SFM investments have been isolated to certain small forest lands across all of GEF's eligible countries with no sustained vision nor potential for ecosystem or biome level outcomes. Fragmented and isolated investments while good for small area of forest, fall short of maintaining the integrity of entire biomes where there is that potential". This project makes the same point about grasslands, savannas, shrublands and other rangelands, and responds to the recognition in GEF-7 Programming Directions that "Because of the scale of these biomes a comprehensive and large-scale set of investment is needed as fragmented and isolated projects will not be sufficient in these large ecosystems to maintain the integrity of these unique and globally important areas". The novelty of this projects resides in the fact that GEF will be aiming at maintaining the ecological integrity of entire biomes by concentrating efforts, focus, and investments, as well as ensuring strong regional cross-border coordination ^[28]. In addition, STELARR will strengthen platforms for public-private interface, and as noted in the GEF-7 Programming Directions, "Platforms are vitally needed to bring key actors, including businesses, together to encourage them to transition to sustainable business practices".

The project outlined in this concept is aligned with the GEF LD Focal Area strategy, and specifically Goal 1, "aligning GEF support to promote UNCCD's Land Degradation Neutrality (LDN) concept through an appropriate mix of investments". The primary aim of the project is to boost investment in rangeland restoration and sustainable livestock product value chains as part of this, which represent prominent degradation 'hotspots' in the LDN targets of many countries, but where investment is currently very low, meaning that LDN implementation is not proceeding in line with the recommendation of the LDN Scientific Conceptual Framework.

The project will contribute to LD Focal Area Objective 1, to "Support on the ground implementation of SLM to achieve LDN". It will collaborate with the Sustainable Forest Management Impact Program sub programme on "Dryland Sustainable Landscapes" (see below).

The project will also contribute to LD Focal Area Objective 2, "creating an enabling environment to support voluntary LDN target implementation". In particular the project will help to institutionalise rangeland restoration, strengthen governance of rangeland landscapes, provide technical assistance for leveraging private investment, engage smallholders (in this case pastoralists including agropastoralists), build capacity and strengthen both knowledge and monitoring.

Specifically, STELARR will coordinate with GEF's Dryland Sustainable Landscapes (DSL) initiative under the Sustainable Forest Management Impact Program in particular the Global Coordination Project (GCP) under development, by generating complementary knowledge and tools, strengthening engagement with regions that are not strongly included in the impact programme, and strengthening investment in specifically rangelands, which are neglected in restoration initiatives in many countries. In particular, this project will strengthen knowledge and capacity for rangeland restoration and will strengthen institutional commitment to balance restoration of rangeland and forest landscapes. The two projects will collaborate on knowledge management and on the use of platforms for stakeholder engagement. STELARR will emphasise work on grasslands, shrublands and savannahs, which are among the most neglected and poorly understood components of the rangelands, including:

- Generate knowledge and evidence on rangeland restoration opportunities, as relevant to LDN voluntary targets, and gaps or imbalances in investment responses
- Strengthen capacity to restore and sustainably manage healthy rangelands as part of landscape restoration actions, including capacity to effectively engage rangeland communities and uphold their land and resource rights
- Build institutional commitment to rangeland restoration, including addressing institutional gaps over jurisdiction and mandates for rangeland management,
- Provide knowledge and standards for DSL activities working through Farmer Field Schools in pastoral areas,
- Promote private investment in rangeland restoration.

The project will also cooperate and contribute to the knowledge base for achieving impact at scale in the Food Systems, Land use and Restoration Impact Program (FOLUR), particularly in dryland rangelands.

Incremental/additional cost reasoning and expected contributions from the baseline the GEFTF, LDCF, SCCF and co-financing

GEFTF will build on existing initiatives to finance the additional cost of knowledge generation and management, and linking private sector financing on LVCD to the financing of sustainable rangeland restoration. The baseline is gradually catching onto the global importance and significance of rangelands, including the conservation of grasslands, and that pastoralists are their stewards not the victims. But land degradation continues, due in part to insufficient attention and financing for rangeland restoration. A very few large commercial investors along the LVC are investing in rangeland restoration methods and in offsetting their carbon footprint. However, their efforts are projectized (often on land that they have purchased) and not scalable, potentially leading to increasing inequality among pastoralists and greater degradation of rangelands outside of the projects. Other actors along the value chain, such as SMEs and women-owned enterprises, do not understand the link between their enterprises and the necessity of investing in rangeland health and restoration. Unlocking this potential along the LVC can release a sustainable source of financing for upscaling rangeland restoration. To unlock it, the enabling environment needs to be strengthened and perceived risks mitigated. This requires stronger science-to-policy advocacy and dialogue with governments, greater outreach to commercial investors, and greater outreach to pastoralists. Development of supporting tools, such as a global standard for responsible rangeland restoration, risk reduction guidelines and tools, and indicators and M&E framework for verifying it, will build on initiatives to establish a Rangeland Stewardship Council.

This project will promote land restoration at scale in rangelands by leveraging and capitalizing on opportunities offered by existing investments in livestock value chains. It will develop the incentive structures, identify the risk mitigation factors, foster investor roundtable dialogues, and broker pilot partnerships between investors and local communities (and by ensuring fair benefits for women and youth) for linking LVCD to SRR. The success of developing such local partnerships, will further test the best practices, guidelines, and tools for upscaling, that will be disseminated in the regions through trained champions, national and global data platforms, and be shared internationally through inter-governmental dialogues. Increasing access to data on rangelands, good practices on restoration so that projects planning to and/or currently implementing investments in rangelands can do so in a more informed way. Development of global standards for SRR through LVCD will also mitigate the risks that investors perceive for investing end-to-end in the value chains.

As a project focusing on enhancing the enabling environment, its outputs and intermediary outcomes fill a void, and by disseminating them through the voices of pastoral champions and scientists at regional and international dialogues, it will set the stage for influencing and enhancing the direction already started by many stakeholders for upscaling global commitment to investment in sustainable restoration of rangelands and a stronger understanding of rangelands, role

of pastoralists as stewards. This in turn will help countries meet their global environmental goals. In addition to enhancing sustainable land management and facilitating achievement of LDN targets, the project's actions will have knock-on positive impacts for climate change adaptation, mitigation and biodiversity.

Co-financing

Co-financing includes:

- *Global Livestock Advocacy and Development (Phase 3: 2022-2024)* – with funding from the Bill and Melinda Gates Foundation, and executed by ILRI, this project will support STELARR with advocacy and media campaigns in Component 2. It will also provide co-financing for the PMC. The GLAD is a project that aims to provide compelling evidence, well-presented and communicated, through targeted engagement processes to help investors and decision-makers understand why and how investing in sustainable livestock systems and enterprises in low- and middle-income countries contributes to the achievement of the Sustainable Development Goals. This project will support STELARR with advocacy and media campaigns in Component 2. It will also provide co-financing for the PMC in terms of 5% time of the Project Lead and office supplies. (US\$915,000)
- *Rangeland Resource Assessment Across the Africa Continent for Improved Ecosystem Health and Sustainable Food Systems (2022-2023)* – This project, led by ILRI and funded by UNEP, is consolidating big data on rangelands as a baseline of information on the status of rangelands and trends taking place in rangelands in Africa. This will be an important resource for STELARR and identification of rangeland restoration opportunities linked to livestock value chains in Component 1 and provision of information for the rangelands database in Component 2. (US\$95,000)
- *Kuwait Fund and Arab Fund for Social and Economic Development – Enhancing Food Security and Sustainable Management of Natural Resources through Fostering Integrated Agricultural Production Systems in the Arabian Peninsula (2022-2023)* – Led by ICARDA, the project will contribute to the national goals of the Arabian Peninsula countries through the development of more sustainable and resilient agricultural production systems, adapted to climate change, that enhance food security and reduce demands for imports, increase the resilience of farmers and farming systems to climatic change and enhance the capacity of these systems to sequester carbon and mitigate climate change including rangelands in Saudi Arabia, Oman, Qatar, Kuwait, UAE, Bahrain and Yemen. It will support Component 1 through opportunities to identify and work on livestock value chains, Component 2 in provision of information for the rangelands database, and Component 3 as areas for testing rangeland restoration monitoring framework. (US\$617,748)
- *Enhancing Agricultural Production Systems and Conserving Natural Resources in the Countries of the Arabian Peninsula (Fifth Phase: 2022-2023)* – Led by ICARDA and working together with the above project, it will support Component 1 through opportunities to identify and work on livestock value chains, Component 2 in provision of information for the rangelands database, and Component 3 as areas for testing rangeland restoration monitoring framework. (US\$492,935)
- *Drylands Transform Project, Kenya (2022-2024)* - Funded through Swedish University of Agricultural Sciences, it will provide lessons on rangeland restoration and indicators for use in STELARR's Component 3 (US\$50,000)
- *Twende Project, Kenya (2022-2024)* – With funding from the Global Climate Fund, it will provide lessons on rangeland restoration and indicators for use in STELARR's Component 3 (US\$80,000)

- *Weather, water and climate services (WWCS) (2022-2025)* - WWCS are increasingly becoming key factors for the resilience and well-being of rural communities in Tajikistan. The multi-phase initiative launched by Caritas Switzerland (CaCH) and the Swiss Agency for Development and Cooperation (SDC) in Tajikistan attempts to operationalize the development and delivery of WWCS to pilot communities of Laksh and Muminabad with the ultimate goal of scaling lessons learnt to the national level. It will provide important lessons learned for STELLAR on the risks for investments in livestock value chains and rangeland restoration and tools to overcome them. (US\$199,365)
- *Accelerating the Impact of CGIAR Climate Research for Africa (AICCRA)(2021-2023)* - Funded by the World Bank, and executed by ILRI, AICCRA works to make climate information services and climate-smart agriculture more accessible to millions of smallholder farmers across Africa. With better access to technology and advisory services—linked to information about effective response measures—farmers can better anticipate climate-related events to take preventative action that helps their communities safeguard livelihoods and the environment. AICCRA has a strong component on rangelands and rangeland restoration including participatory rangeland management that will provide important input for the development of processes that can support rangeland restoration as part of livestock value chains, and will contribute lessons learned and data as contributions to Component 1, 2 and 3. (US\$132,000)
- *Local natural resource governance for community stabilization in Central Mali (2022-2025)*. The project is set to empower local communities for the implementation of collaborative management strategies of land and water resources at the local level. The activity is also designed to support livestock and feed values transformation as sources of livelihoods diversification for women and youth and as a strategy to help communities' transition and recover from conflict. It will contribute lessons learned on community driven (Local Conventions) Bourgou floodplains and upland grazing areas ecosystems restoration to Components 1 and 2 . (US\$1,500,000)

This is a global project primarily aimed at knowledge management and strengthening the enabling environment in support of the DSL IP. At the time of project design it is not possible to identify investment mobilized as co-financing. However, there is a strong likelihood that during project implementation, and as soon as the 5 bankable projects are developed, there will be co-financing leveraged especially from the private sector. This will be reported in the PIRs and TE of the project.

Global environmental benefits (GEFTF)

The project seeks to strengthen international commitment, national support for, and public-private investment in rangeland restoration. By targeting its knowledge products to address key barriers, by building on ongoing initiatives, and by using all available means to disseminate its knowledge products to all stakeholders, the project will be able to set the stage for mitigating perceived risks and achieving stronger global commitment to sustainable rangeland restoration. These indirect benefits will provide the enabling environment for upscaling of restoration efforts, and thereby achieving global environmental benefits. The project will also pilot innovative public-private partnerships for bankable proposals in each region that harnesses the strengths of the LVCD (from end to end) to adopt STELLAR-generated tools, guidelines and standards for sustainable rangeland restoration.

STELLAR's knowledge products and their dissemination will help lift the barriers countries face to meet their Land Degradation Neutrality (LDN) targets, thereby contributing to the achievement of UNCCD 2018-2030 Strategic Framework Strategic Objective 1: Improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality.

The Core Indicators calculated at PIF stage assumed that each of the bankable projects to be developed would have an immediate impact on rangelands restored, however, the calculations were based on certain assumptions about the size of the bankable projects and cost/hectare of rangeland restoration, which have large uncertainties around them. Despite the lack of accurate, up to date and verified data on rangeland degradation in the target regions, an updated estimate has been made of the GEBs that would be generated through the impacts and outcomes of this project by taking data from the Rangeland Atlas showing that the land classified as rangeland^[29] in the 3 target regions comes to a total of 4,506 million hectares (see Annex for more details). Taking only the top 10 countries in each region with the highest area of rangeland, brings us to a total of 2,218 million hectares of rangeland. According to the World Desertification Atlas (3rd edition), these regions are experiencing decreasing productivity in 22-35% of the rangelands. Therefore, there is a total estimated 604 million ha of degraded rangeland. The Drylands Sustainable Livelihoods IP assumes that its Child projects will impact 10% of degraded land. However, STELARR is primarily an enabling project, therefore its impact will be indirect and in such a short time period, will likely impact only 1% of degraded rangelands. Thus we can estimate that STELARR's outcomes will indirectly generate GEBs from rangeland restoration on 6 million hectares of degraded rangeland (Core Indicator 4.3) .

In addition, the number of beneficiaries benefiting from the project was calculated based on an estimated average density of pastoralist populations in a sample of 6 countries in the project regions where data exists. An average pastoralist population density of 0.0942 people per ha, applied to the expected GEB of 6 million hectares, gives an estimated total beneficiaries of 565,200 people. With an average sex ratio today of 50.4% male, 49.6% female, then the total indirect beneficiaries will be 284,860 male and 280,340 female (including children).

Innovation, sustainability and potential for scaling up

STELARR supports the development and adaptation of sustainable restoration approaches to rangelands. It recognizes the increasing interest by commercial companies to invest in the livestock value chain, and aims to convince companies and enterprises that normally only fund social and economic sustainability projects along the LVC, to also fund rangeland restoration. Private sector investment in rangeland restoration is considered too challenging for most commercial investors, but the rationale that investment in rangeland restoration will directly benefit them by ensuring sustainable sourcing, may be the deal-breaker. By leveraging sustainable financing for scaling up and enhancing productivity of rangelands and livestock, the project will help countries to achieve global environmental goals.

Another innovative feature is how the project will address the lack of a globally accepted common vision and standards for rangeland restoration. There is growing recognition that this gap is hampering achievement of LDN and other goals and not mitigating the perceived risks faced by commercial actors. By consolidating all existing relevant standards relevant to the value chain, and by addressing root causes such as land tenure insecurity and governance issues, the project builds upon and works with existing projects, experts and platforms, to arrive at a commonly agreed global standard, including standards for monitoring, verification and traceability. This will provide incentives for commercial actors to invest in "rangeland-friendly" products.

The project is also innovative in supporting model/pilot partnerships between governments, communities and other stakeholders with investors in rangeland products. This will increase the ability of pastoralists, particularly women and youth, and other national actors to identify opportunities for partnerships with the private sector (for example through value chains or financial services), and also empowering them and increasing their bargaining power, enabling them

collectively to negotiate favourable terms of trade in regional and global value chains.

The project is sustainable because it is timely: it will ride on the momentum of increasing recognition and appreciation of the role of pastoralists as stewards of rangelands in mitigating climate change and conserving biodiversity, culminating in the International Year of Rangelands and Pastoralists. It will build on the growing body of scientific evidence, and leverage the growing activism of pastoralists and their advocates to act as Rangeland Champions in international events and dialogues.

By sharing its knowledge products with existing national and global data platforms, and by disseminating its knowledge products in strategically chosen international and regional events, it will enhance the increasing recognition by government agencies of the significance of rangelands and the need for changing the old livestock intensification paradigm to extensive nature-based solutions, and contribute to sustainability of actions and scaling up of rangeland restoration. Working with the Drylands Sustainable Landscapes IP Child projects and others will further provide opportunity for scaling-up. By convincing several large scale commercial investors on the best ways to contribute to rangeland restoration, how a global standard and verification of “rangeland-friendly” products will enhance their stature and dominance in the market, and how this will ensure sustainable sourcing for their products and value chains, the project should be in a position to scale up private sector financing.

[1] <https://whc.unesco.org/en/tentativelists/5946/>

[2] (<https://events.globallandscapesforum.org/agenda/biodiversity-2020/28-october-2020/a-one-health-approach-for-environmental-animal-and-human-health/>)

[3] As highlighted in GEF-7 Programming Directions, “...*SFM investments have been isolated to certain small forest lands across all of GEF’s eligible countries with no sustained vision nor potential for ecosystem or biome level outcomes. Fragmented and isolated investments while good for small area of forest, fall short of maintaining the integrity of entire biomes where there is that potential*”.

[4] <https://www.unccd.int/actions/ldn-target-setting-programme>

[5] <https://newrepublic.com/article/163735/myth-regenerative-ranching>

[6] <https://naadam.co/pages/sustainability>

[7] At the time of writing, Verra was due to launch its “Landscape” program focusing on agriculture, in collaboration with Rainforest Alliance and Conservation International.

[8] <https://westernlandowners.org/carbon-crediting/>

[9] <https://www.agriculture.com/crops/carbon-markets/capturing-carbon-credits-from-grassland>

[10] <https://ikeafoundation.org/>

- [11] <https://www.ileia.org/2016/12/19/pastoralist-youth-agents-peace/>
- [12] [https://orgs.tigweb.org/pastoralist-youth-centre-for-rightsdemocracy-and-empowerment-\)](https://orgs.tigweb.org/pastoralist-youth-centre-for-rightsdemocracy-and-empowerment-).
- [13] Report prepared by M. Niamir-Fuller for IUCN, during the PPG phase of STELARR
- [14] <http://www.rangelandsdata.org/atlas>
- [15] <http://www.pastoralpeoples.org/pastoralist-map/>
- [16] <https://www.iucn.org/resources/publication/iucn-global-standard-nature-based-solutions-first-edition>
- [17] <https://accountability-framework.org/>
- [18] English <https://www.iucn.org/content/supporting-sustainable-pastoral-livelihoods-a-global-perspective-minimum-standards-and-good-practices>
PDF at https://www.iucn.org/sites/default/files/import/downloads/manual_for_min_standards_low_resolution_may_2012.pdf.
- [19] <https://stapgef.org/guidelines-land-degradation-neutrality>
- [20] https://www.evergreening.org/wp-content/uploads/2019/11/EverGreening_CampaignPaper.pdf
- [21] <https://mazingira.ilri.org>
- [22] <https://globalresearchalliance.org>
- [23] See: <https://www.decadeonrestoration.org/types-ecosystem-restoration/grasslands-shrublands-and-savannahs>
- [24] <https://arabstates.gltm.net/second-arab-land-conference/>
- [25] <https://www.avsf.org/en/posts/2545/full/economic-empowerment-of-rural-women-in-mongolia>
- [26] . <https://www.avsf.org/en/posts/2545/full/economic-empowerment-of-rural-women-in-mongolia>
- [27] <https://www.wri.org/data/atlas-forest-and-landscape-restoration-opportunities>.
- [28] GEF-7 Replenishment Programming Directions. GEF/R.7/19. April 2, 2018
- [29] Rangeland Atlas classification is based on WWF eco-zones, and the rangeland class includes: desert and xeric shrublands, flooded grasslands and savannah, Mediterranean forest woodland and scrub, tropical and sub-tropical grasslands, savannas and shrublands.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

The project acts both globally and regionally emphasizing the Middle East, Central Asia and South America. Aside from Africa, these regions are currently under-represented in rangeland projects. Aside from the wool LVC in Central Asia, these regions are under-represented in LVCD. These regions have also been chosen because a preliminary analysis shows that several commercial investors are doing interesting social and economic philanthropy along the LVC, but have not extended their commitment yet to upscaling rangeland restoration.

The project will be targeting three regions: Africa; South America; Middle East, and Central Asia including Mongolia.

All data has been obtained from the Rangeland Atlas. "Rangelands" were classified using the WWF eco-zone classification, and include:

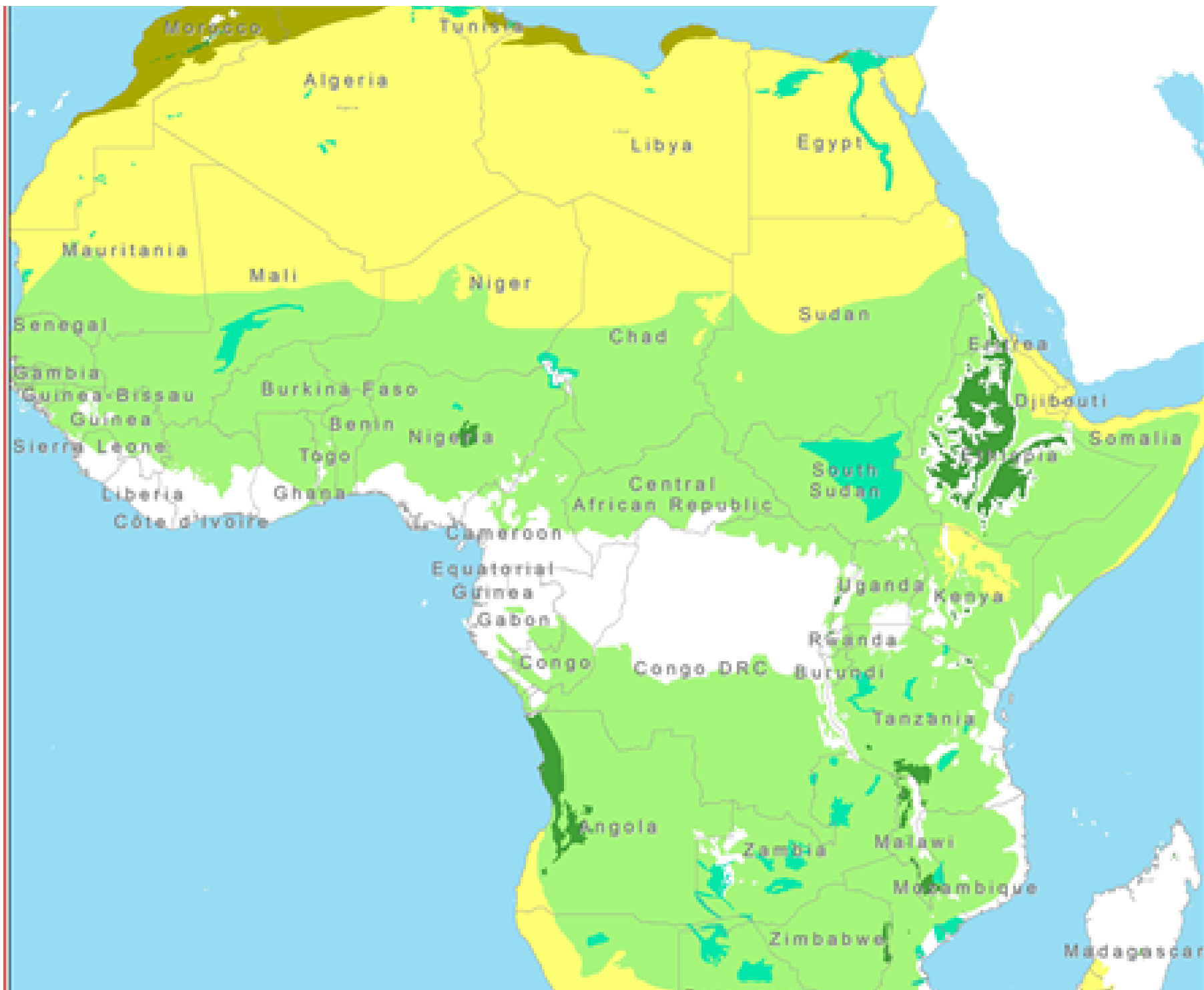
- ü•Deserts and xeric shrublands
- ü•Temperate grasslands, savannahs and shrublands
- ü•Montane grasslands and shrublands
- ü•Mediterranean forests, woodlands and scrub
- ü•Flooded grasslands and savannahs
- ü Tropical and subtropical grasslands, savannahs and shrublands

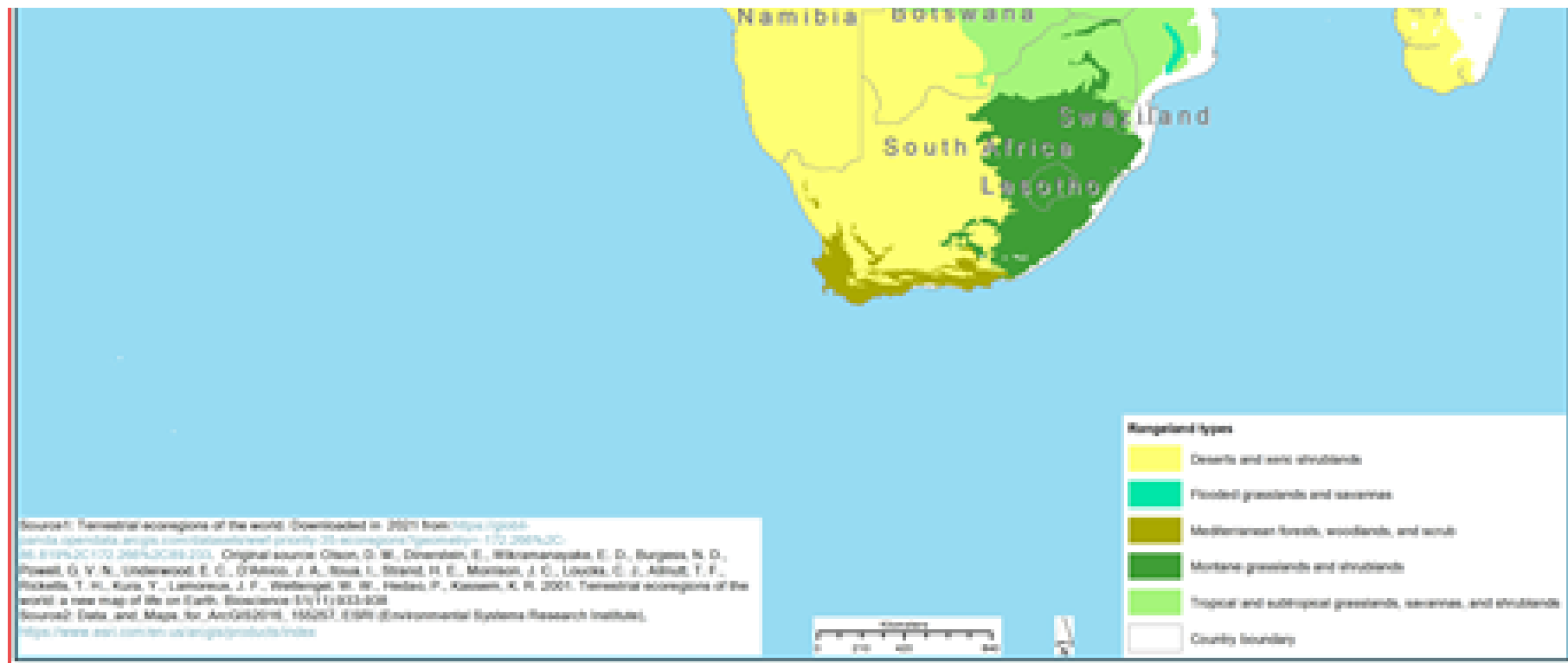
Africa

This region comprises 2,611 million hectares of rangeland, which constitutes 86% of the total land area of the 47 countries in this continent. The World Atlas of Desertification (3rd Ed) estimates that 22% of African rangelands are experiencing decreasing productivity.

Figure 1: Rangelands of Africa



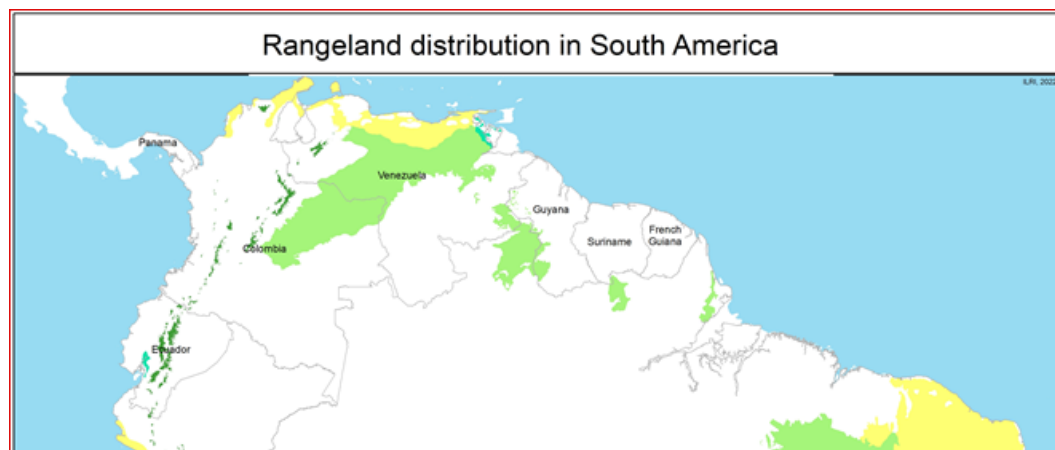


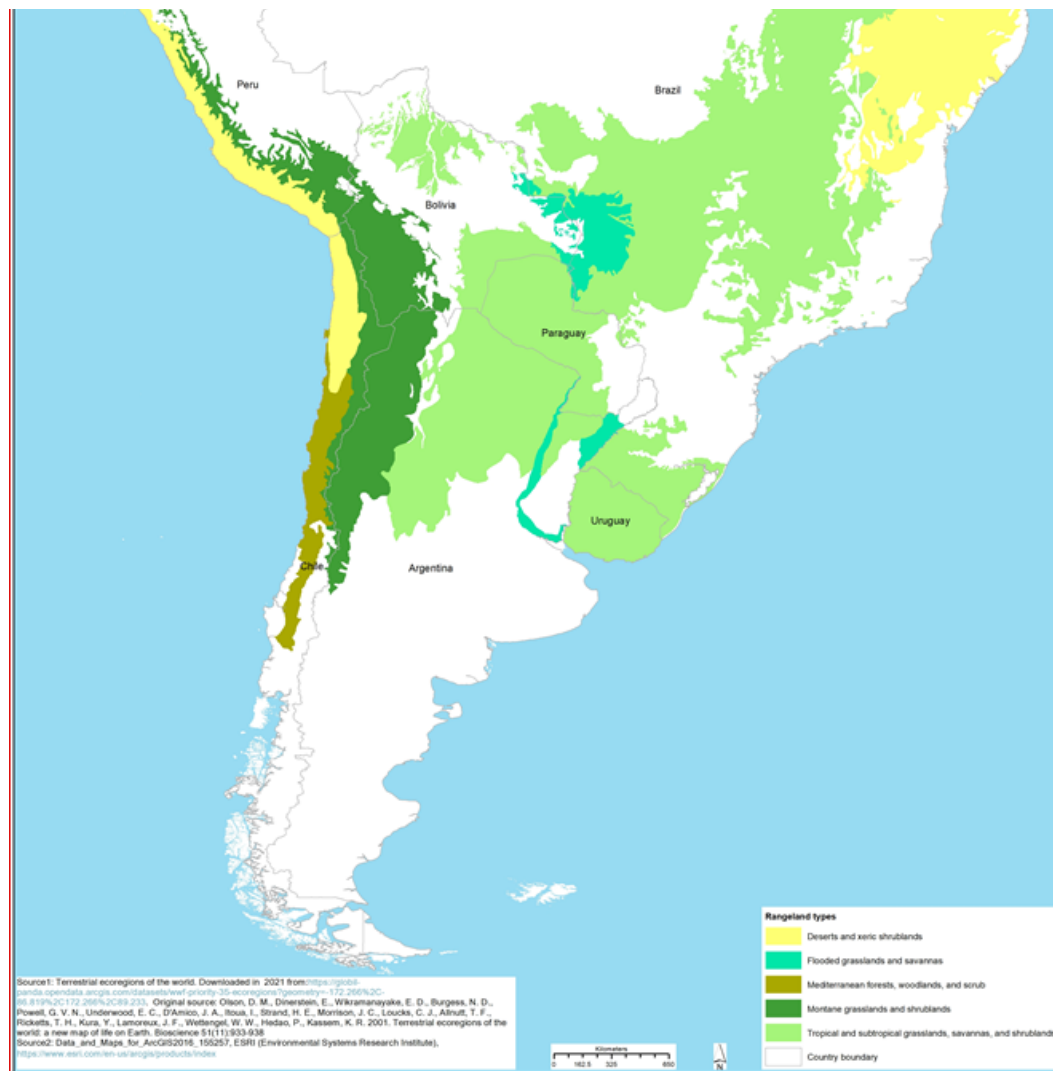


South America

This region comprises 802 million hectares of rangelands, which constitutes 45% of the total land area of 14 countries in the region. The World Atlas of Desertification (3rd Ed) estimates that 35% of South American rangelands are experiencing decreasing productivity.

Figure 2: Rangelands of South America

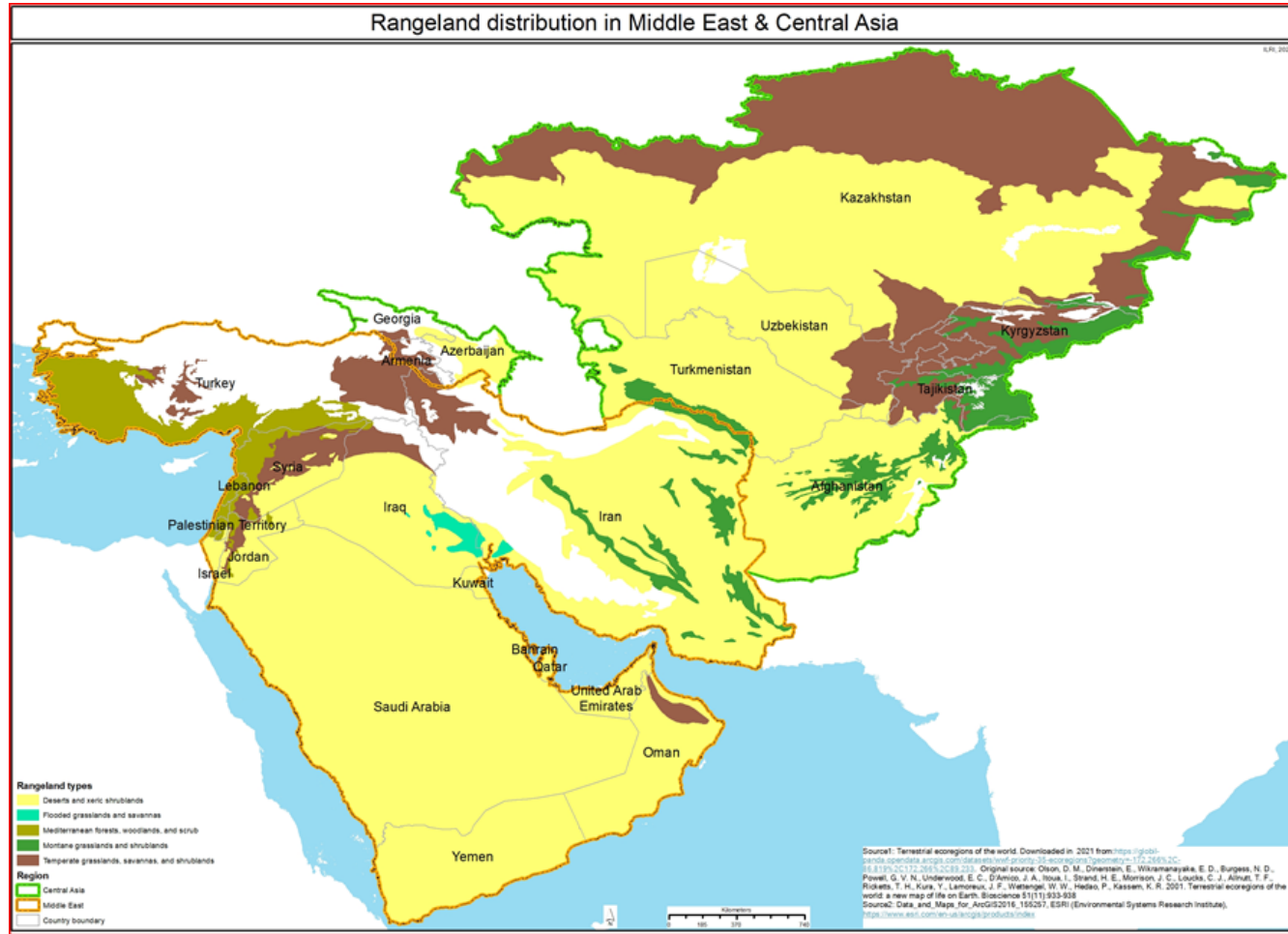




Middle East and Central Asia, including Mongolia

This region comprises 1,094 million hectares of rangelands, which constitutes 91% of the total land area of 22 countries in the region. The World Atlas of Desertification (3rd Ed) estimates that 30% of Asian rangelands are experiencing decreasing productivity.

Figure 3: Rangelands of Middle East and Central Asia (excluding Mongolia)



1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

The primary direct beneficiaries of the project are pastoralists and their communities in the target regions that engage with public-private partnership building. Many consider themselves as indigenous peoples or as traditional rights holders, including women and youth. As a global project, direct engagement in project preparation has not been possible, however, they will be involved as soon as the three LVCs are selected, and the pilot countries and communities identified through the Sector Analysis.

Of particular concern is to address the problem of inequality that has been created in some instances by projects that purport to promote sustainability but which do so only in a few selected villages or enterprises or on land purchased outright from indigenous peoples. Addressing this problem through development of targeted standards and verification methods will lead to alternative approaches that can lift one of the barriers of upscaling sustainable rangeland restoration and land management.

Women-led small businesses and those led by or engaging youth, will be the main focus of the pilot bankable projects. In many societies, land managers are men but women and youth take up the majority of herding tasks and make day-to-day decisions about resource use, rotation of animals, offtake etc. The project will adopt a whole-community approach so as to focus on upscaling rangeland restoration, but it will also actively seek women and youth as key actors throughout all of its activities (workshops, training events, media campaigns, etc.).

The project will engage with and benefit regional pastoralist representatives and the civil society that supports them, and train them in the new standards as part of creation of "Rangeland Champions". They will be involve them in awareness raising events and regional and international dialogues. Their knowledge will be a key element of the development of standards, guidelines, tools and frameworks. Their involvement will be sought early in project implementation through the Pastoralist Knowledge Hub and IYRP networks. All activities will be carried out by observing FPIC and other social/environmental standards of IUCN, CG-system and GEF.

Representatives of civil society, including knowledge hubs and platforms will be convened in a Project Inception Workshop that will also involve other CG system institution stakeholders and DSL IP and FOLUR stakeholders. The project's Theory of Change and Results Framework will be reviewed, verified, and opportunities for collaboration established.

Private sector engagement, particularly of large commercial sectors will flow from the Sector Analysis. Initial contacts and subsequent engagement will be facilitated through platforms and networks such as GASL, Sustainable Fibre Alliance, and GLF. The session being organized by ILRI at the GLF-Africa conference in mid-September 2022 will be the start of this dialogue.

Preliminary consultations have been conducted during PIF and PPG phases, through consultations between IUCN the International Livestock Research Institute, ICARDA, Alliance of Bioversity and CIAT, and the World Agroforestry Center/CIFOR to develop the ideas but also to build consensus on the goals and objectives.

At the Global Landscape Forum Africa 2022, ILRI, IUCN and GLF's Sustainable Finance Team jointly convened a consultative Session on "Financing sustainable livestock value chains for rangeland restoration" as part of the PPG phase of STELARR. It brought together corporate stakeholders, organizations, researchers and individuals working with products from different rangeland sectors. The objective was to discuss how the linkages between sustainable livestock value chains and rangeland restoration can be strengthened, and investment in rangeland restoration improved and scaled-up. The session showed how important it is to address the root causes of persistent misconceptions, including that rangelands are wastelands. Rangeland values are consistently underestimated despite their immense economic, environmental, cultural and social values, and this includes their carbon sequestration potential for carbon markets.

An example from Mongolia was given at this Session, focusing on how the cashmere trade exemplified the challenges of balancing sustainable land use and economic gain. There is no market differentiation of sustainably produced cashmere and therefore minimal incentives for land restoration. However, the consumers are becoming more aware and are demanding accountability and traceability of products, and this is driving more sustainable production. Big fashion brands are increasing their investment in ESG processes for their companies, which means that product certification will play an important role going forward.

With 54% of terrestrial surface classified as rangelands, there is a huge potential for carbon sequestration from restoring rangelands still remains largely untapped. The session emphasized that carbon financing must allow pastoralists to hold equity in the carbon projects, and must also be inclusive for women and youth. Investment should not only be in land economics but should also consider long-term livestock productivity and land health, preservation of cultures and support of livelihoods, the Session concluded.

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Stakeholder Engagement Table

Actor	Role
IUCN	Implementing Agency Linkage to GEF (and other) funded projects supporting rangeland restoration Regional and global policy influencing Chair of Project Steering Committee
ILRI	Executing agency: knowledge generation and sharing at the global and regional levels, regional and global policy influencing (promote rangeland restoration, promote private sector engagement, dialogue on regional restoration initiative), coordinator of global rangelands data platform Member of Project Steering Committee
ICARDA, ICRAF/CIFOR, Alliance of Bioversity & CIAT	CGIAR partners assisting with knowledge generation and sharing at the global and regional levels, regional and global policy influencing Participation in targeted and applied research to be carried out within the framework of the project.

	Member of Project Steering Committee
Global Landscapes Forum, Natural Fibre Connect, Grassland Savannas and Rangeland Coalition Global Research Alliance (others to be identified after the Sector Analysis)	Platforms and knowledge purveyors, as facilitators of dialogue between governments and other stakeholders, and private investors and private and green financing organisations. Some may be interested to be members of the Project Advisory Committee
GLAD (Global Livestock Advocacy and Development)	Platform implemented by ILRI. Support global media campaigns Facilitate dialogue between commercial investors and other stakeholders Member of Project Advisory Committee
Rangeland Stewardship Council (to be launched Sept 2022)	Platform and overseeing body for certification of rangeland-friendly products Representative on the Project Advisory Committee
Implementing agencies of GEF involved in DSL IP, FOLUR and other supported rangeland restoration projects (IFAD, FAO, UNEP, UNDP World Bank, WWF, to be confirmed once the relevant Child projects are identified)	Facilitating knowledge exchange, advising on opportunities for investor outreach, capacity development, and regional/global cooperation Participating in development and/or peer review of standards and frameworks Representative on the Project Advisory Committee -
Regional economic/development commissions and programs, (e.g. ECOWAS, CAREC, OAS)	Platforms for policy dialogue Participation in regional / international dialogues
Global and regional pastoralist organisations, including World Pastoralist Forum, WAMIP (World Alliance for Mobile Indigenous Peoples), AFPAT, PastoArabic, PastorAmericas, JASIL, A2N, RPPS, SAPA, and others to be verified during the Sector Analysis	Coordinated representation of pastoralist interests, and participation in the project Representation of pastoralists in dialogue and negotiations with private sector actors and in policy and planning dialogue. Training of Rangeland Champions Representative on the Project Advisory Committee
Civil society organizations engaged in LVCD in the target regions, e.g. AVSF, Sustainable Cashmere of Mongolia, Grassland Groupies, REDES CHACO, FUNDAPAZ, or providing knowledge such as LPPS	Sources of knowledge and able to channel information to their networks Peer review of knowledge products, including global standard for certification Training of Rangeland Champions
Knowledge hubs: IYBP/ISC, Sustainable	Sources of knowledge and information potentially to be channelled to the devel

Knowledge hubs: ITRF ISG, Sustainable Fibre Alliance, Pastoralist Knowledge Hub FAO, UNCCD Knowledge Hub and Global Mechanism, Working Group on Dryland Forests and Agro-silvopastoral Systems, Global Landscape Forum, WOCAT, EverGreening Alliance, GASL, GRA, etc.	Sources of knowledge and information potentially to be channelled to the development of common vision for rangelands restoration, guidelines and others. Recipients, repositories and channels for dissemination of knowledge and experiences generated through the project.
Host governments of DSL IP Child Projects	Executing Agencies of GEF and other funded projects Beneficiaries of knowledge products for national data platforms
UNCCD Global Mechanism and WOCAT	Advice on LDN indicators and relevance to rangeland restoration Facilitate outreach and knowledge sharing about the outcomes of the project with the broader UNCCD constituency, including through knowledge sharing at UNCCD events such as UNCCD CRICs and COPs Coordination and sharing of experiences with LDN Transformative Programs and Projects portfolio Establish contact with the LDN Fund manager entity (e.g. Mirova)
Private sector, such as : Burberry, Johnston of Elgin, Danone, Kering, Unilever, Camel Charisma, Alpaca, etc. to be verified during the Sector Analysis	Participation in roundtables and other dialogue to fully understand the perceived and actual risks and barriers to restoration in rangelands Participation in STELARR-facilitated exploration of opportunities for rangeland restoration through bankable projects in LVCD
Financing entities, e.g. LDN Fund (Mirovia/Althelia), Yunus Fund, GreenFund, Asian Development Bank, Althelia Climate Fund (EIB)	Potential sources of financial investment support (including innovative financing, PES and carbon payments) for rangeland restoration

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

see text above

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain)

see text above

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Women's role in livestock production is often overlooked and undermined. Normally in pastoral communities women and men share production activities to ensure optimum outputs. Often women's labour contribution can be more than men as women undertake childcare, livestock activities and are often the ones to take on new tasks such as in crop farming or alternative income generation activities. There are many best practices and examples of how women and youth have traditionally engaged in rangeland management and restoration. It will be important for this project to consider these gender dimensions in order to optimise the opportunities for rangeland restoration linked to gender-sensitive livestock value chains particularly targeting women and youth. With women involved in such activities it should be a direct route to improved health, education and social well being in households and the community.

This project will ensure that all model public-private bankable proposals meet gender equality guidelines, and that women make up at least 60% of the beneficiaries. It will also ensure that women are part of the decision-making and brokering of such partnerships. The project will provide guidance on how to carry out gender-sensitive rangeland restoration through training and awareness raising workshops. Although the selection of pastoralist civil society representatives for training as Rangeland Champions is to be done in a participatory way through their own constituencies, the project will ensure that they are aware of international gender and human rights principles.

Good practices and guidelines for sustainable rangeland restoration will be developed through a participatory process ensuring the involvement of women and youth. Documentation, film and other media products to be used at regional and global events will show-case the role and empowerment of women and youth in LVCD for SRR. Guidance resources such as the Practical Guide for Improving Gender Equality in Territorial Issues (IGETI)(2018) and the Governing Land for Women and Men (FAO, 2013) will be part of the package of standards and guidelines that the project will compile, consolidate and use.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Does the project's results framework or logical framework include gender-sensitive indicators?

TBD

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

STELARR will work closely with the private sector mainly at global and regional levels as a core component (component 1) of the project including identifying barriers, risks and opportunities for investment in rangeland restoration, mapping benefits of rangelands to public and private players, and building understanding of incentives and motivations for investment in rangeland restoration and sustainable gender-sensitive livestock product value chains targeting women and youth. This will enable a better understanding of what an enabling environment for investment is, how risks can be mitigated, and criteria for successful and sustainable investments. Overall the project intends to improve, on a pilot or exemplary basis, the enabling environment for private (and public) sector investment and engagement in rangeland restoration and related value chains, assist the development of the investments and partnerships supporting them, and build capacity of stakeholders for their implementation.

STELARR will develop guidance for investors in rangeland restoration on compliance with established standards, tools and processes, including internationally agreed frameworks e.g. VGGTs, FPIC; and conduct targeted awareness raising campaigns on rangeland restoration benefits and opportunities with key investor groups. Guidelines, frameworks, tools and processes for investments and nature-based solutions including developing public-private partnerships on LVCD for SRR agreed across stakeholders will be developed. These guidelines will ensure fair and equitable benefits to all pastoralists, including women and youth. This knowledge will then be consolidated into the participatory development of a preliminary “global standard for rangeland-friendly products” that will be launched by 2026 during the IYRP.

The project will work with the Global Landscapes Forum (GLF), Sustainable Fibre Alliance and others, to facilitate dialogue at the global level between large and small investors such as Kering, Danone, Gobi Cashmere, Camel Charisma, and Asilya Gum Arabic, marketing associations such as Eco-Age, Sustainable Dairy Partnership, Apparel Impact Institute, non-profits like FUNDAPAZ or REDES CHACO, finance companies including development banks in the target regions and microfinance institutions, fund managers such as the LDN Fund and &GreenFund, and off-setting companies such as extractive industries. The project will also help to expand knowledge of, and innovation with, different investor interest groups, including ecotourism and other non-consumptive uses of nature (including possible payments for ecosystem services), input suppliers (e.g. seed nurseries), and niche product developers that use non-livestock rangeland products (NLRP) such as frankincense, wild cereals. It will generate awareness of innovative investment solutions, such as mobile money, risk-reducing insurance, green finance and others. The project will take advantage of opportunities presented by existing private sector platforms such as Business for Nature (B4N) ^[1], for supporting the engagement of multiple private sector actors and facilitating scaling-out across sectors and geographically.

The project will take stock of private companies with potential for rangelands investments including those with whom GEF is already partnering. The development of a preliminary rangelands stewardship certification scheme will be a concrete output of the project's compilation and consolidation of knowledge, and will be based on traceability schemes already being introduced as part of One Health schemes in such places as Mongolia ^[2]. The project will use these to influence potential investors, and to identify potential pitfalls for rangeland investments that require additional guidance. Component 1 will bring together major categories of investors and other stakeholders in target regions, including investors in livestock value chains, investors in SDG outcomes,

extractive industries investing in offsets, and potential investors in Payments for Ecosystem Services (PES) including carbon sequestration. PES may be relatively low in rangelands, but the low population density means that there are fewer people to divide such payment between, which may increase the motivation to invest.

[1] <https://www.businessfornature.org/>

[2] <https://www.youtube.com/watch?v=wfrBfD6q-4o&t=7s>.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Description of risk	Impact	Probability of occurrence	Mitigation actions	Responsible party
Lack of prioritisation of rangeland restoration by governments and projects	High	Low	Awareness raising of importance of rangelands will be carried out, and technical advice given. Champions and model countries will be identified and supported to influence reluctant parties. Countries will be encouraged to leverage their existing commitments to LDN, CC and CBD, towards benefiting rangelands as well.	Rangeland Champions and other supporting advocacy groups
Limited commitment of private sector to invest in rangeland restoration	High	Low	Project will work closely with private sector actors already on the ground, to jointly identify barriers and opportunities for rangeland restoration, support platforms for information exchange, and build a critical core of investors currently and/or willing to invest in rangelands.	Supporting private sector actors
Limited receptiveness of governments and other stakeholders to knowledge inputs	High	Low	Outreach to governments and other stakeholders regarding the potential benefits from taking on and responding to knowledge inputs; use of modern communications tools	Project partners and GLAD,
Climate change – see predicted passing of climate change thresholds including temperature rise in some rangelands in the Rangelands Atlas www.rangelandsdata.org/atlas	Low	High	Climate change will strengthen the rationale for the project, rather than undermine it. This will feature in all standards, guidelines and frameworks developed.	ILRI and partners
Conflict, violence and unrest in the target regions, or as a result of baseline private sector actions	Low	Medium	The project will work in areas where the private sector actors are already operating, and as they are risk averse, then such instances will be low. There is some evidence that private sector actions in the baseline are causing inequality among pastoralist communities. The incidence of such risks strengthen the importance of this project i.e. to develop standards for improving the productivity of rangeland in the whole territory which should positively mitigate conflict.	ILRI and partners
COVID19 and other pandemic related impacts on the internal and international travel, operation of government/ partners/ project; health impacts on general population as well as economic impacts, regionally, nationally and locally	High	Medium	It is likely that periodic closures of transport and offices as well as restrictions on organizing meetings/ training with large number of people will impact implementation of the project. The project will support stakeholders in identifying methodological alternatives that allow effective participation under these circumstances, and where necessary will arrange for technical inputs to be provided to the child projects virtually (on line). Where technical specialists are able to visit project countries, recommended safe practice	Project executing agency, and ILRI

			will be followed to minimize risk both to the specialists and the national stakeholders.	
Bankable projects catalyzed by STELARR could lead to environmental and social risks even after completion	High	Low	All proposals that will be developed as part of this project will be ensure that they comply with IUCNs environmental and social management standards, as well as all standards and guidelines to be developed by STELARR	IUCN

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

ILRI will be the executing agency (EA) responsible for the delivery of the project working and project outputs with the partners including IUCN, three other CGIAR centres, value chain actors and rangeland experts and restorers. ILRI's small project management unit will be responsible for the oversight of project outputs and results entrusted to it in full compliance with GEF and IUCN requirements, including timely reporting, effective use of GEF resources for intended purposes, and due diligence with regard to social and environmental quality standards.

A full-time Global Policy and Business Expert will be employed by ILRI to focus mainly on Components 1 and 2. S/he will work with regional focal points in the three major regions, who will be staff of ICARDA (the International Center for Agricultural Research in the Dry Areas) for Middle East and Central Asia, ABC (the Alliance of Bioversity and CIAT) for South America, and ILRI for Africa. They will assist in the Sector Analysis, identify regional stakeholders including private investors and provide introductions, strengthen regional networks, coordinate trainings, contribute to data collection and other activities. Several of these CGIAR centres are already playing a key role in regional and global dialogue on rangelands, and in providing technical advice to GEF-funded projects or other.

ICRAF (the World Agroforestry Center) will be mainly responsible for developing the rangeland restoration framework and indicators that will form the basis of the rangeland standard for sustainable livestock value chains investing in livestock restoration under Outputs 1 and 2 of Component 3 of STELARR. Together all CGIAR centers and IUCN will contribute to regional and stakeholder dialogues and round tables, and raising awareness, advocacy and lobbying on rangelands.

IUCN and ILRI will coordinate all efforts to implement the project's components, ensuring leveraging and alignment with each others' relevant ongoing initiatives and also that all deadlines are achieved in a timely manner.

A Project Steering Committee will be established and chaired by the designated Budget Holder in IUCN for the project. It will be comprised of one representative each from the executing partners and IUCN. The members of the PSC will each assume the role of Focal Point for the project in their respective agencies. As Focal Points in their agency, the concerned PSC members will (i) technically oversee activities in their sector, (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project, (iii) facilitate coordination and links between the project activities and the work plan of their agency, and (iv) facilitate the provision of co-financing to the project wherever possible.

The PSC will meet at least twice per year in person (virtually if necessary) and will meet with greater frequency as required, to ensure: i) Oversight and assurance of technical quality of outputs across the Project; ii) Close linkages between the project and other ongoing projects and programmes relevant to the project; iii) Timely availability and effectiveness of co-financing support; iv) Sustainability of key project outcomes, including up-scaling and replication; v) Effective coordination of government partner engagement under this project and across the country investments; vi) Approval of the Financial Reports, the Annual Work Plan and Budget; vii) Making consensus-based management decisions when guidance is required by the Global Project Coordinator (from ILRI).

A **Program Management Unit (PMU)** will be established within ILRI to support the PSC, and led by Fiona Flintan Senior Scientist, ILRI. The main functions of the PMU are to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/Bs). The PMU will also include the ICRAF Senior Scientist who will be managing Component 3 and ensuring coordination and alignment of Component 3 with Components 1 and 2. Furthermore, the PMU will include administration and finance staff. It will also have an M&E expert responsible for managing the M&E Budget set aside under Component 3 (see M&E section below for more details). The unit will also lead the advocacy and lobbying activities, working closely with ILRI's Global Livestock and Advocacy for Development (GLAD) project.

A **Project Technical Advisory Committee** will be established and will meet once a year, to provide advice and guidance on technical and policy aspects of the project. It will consist of key partners and stakeholders to be identified, such as key commercial investors, key alliances and platforms, GEF Dryland IP agencies, UNCCD and WOCAT, and pastoralist representatives as relevant from the regions and the selected value chains. The Committee will provide advice on value chains, private sector opportunities and rangeland restoration. It will also be a sounding-board for the development of bankable projects – a key output of the project.

Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives

This project will support and work with GEF-financed projects and other initiatives working in rangelands as much as possible and as relevant, in the proposed regions, and within the DSL IP. It will support them to share experiences including lessons learned on rangeland restoration, access data and information on rangelands, and to build their capacities through trainings. These activities will also help to build a network (community of practice) of project staff working on rangelands restoration, which will continue to be a forum for sharing experiences and knowledge. Further, the project will work to improve the enabling environment for rangeland restoration, and for public and private investment in rangelands so potentially leveraging funding for continuing and developing new restoration work in-country and regionally. This coordination support will be of fundamental importance in permitting flows of knowledge and best practices between projects, and improving scaling opportunities.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

For many countries around the world that depend on extensive livestock production as a contribution to national GDPs and local livelihoods, this project will be highly important in terms of reversing rangeland degradation and improved rangeland productivity, whilst bringing together multiple sectors (agriculture, conservation, land, water, business development, conflict/peace etc.). In particular the project will contribute knowledge and data for governments to fulfill their commitments to multiple international agreements including land degradation neutrality (LDN), Bonn Challenge, Convention on Biodiversity and other global frameworks, and with clear opportunities for mitigating climate change.

The project will in particular contribute to the generation of information to operationalise LDN targets on rangelands including consideration of DLDD (desertification, land degradation and drought) whilst also building capacities to address these and continue monitoring of them using the Indicator framework to be developed by the project. The project will contribute to a number of action items defined in the LDN: Guidelines for GEF Projects.

With the establishment and/or strengthening of data platforms for rangelands restoration and multistakeholder consultation processes involving national governments at regional level it is anticipated that capacities will be built to ensure actions will continue beyond the life of the project.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

Knowledge management is a fundamental component of this project, including knowledge generation, analysis, management, and sharing. Through knowledge it is believed that investments in rangelands will be improved and increased through more informed decisions and priority setting, better monitoring and accounting of costs and benefits, improved knowledge storage, management and accessibility for multiple stakeholders, greater buy-in from different stakeholders contributing to knowledge generation and sharing (with all knowledge valued), simplified documentation of complex terminologies etc., trainings and capacity building. Development of a global standard for "rangeland-friendly products" will mitigate some of the perceived risks that commercial investors face. The knowledge generated will also be used to influence a more enabling and supportive environment for rangeland investments with influencing of high-level dialogues and frameworks, as well as public campaigns.

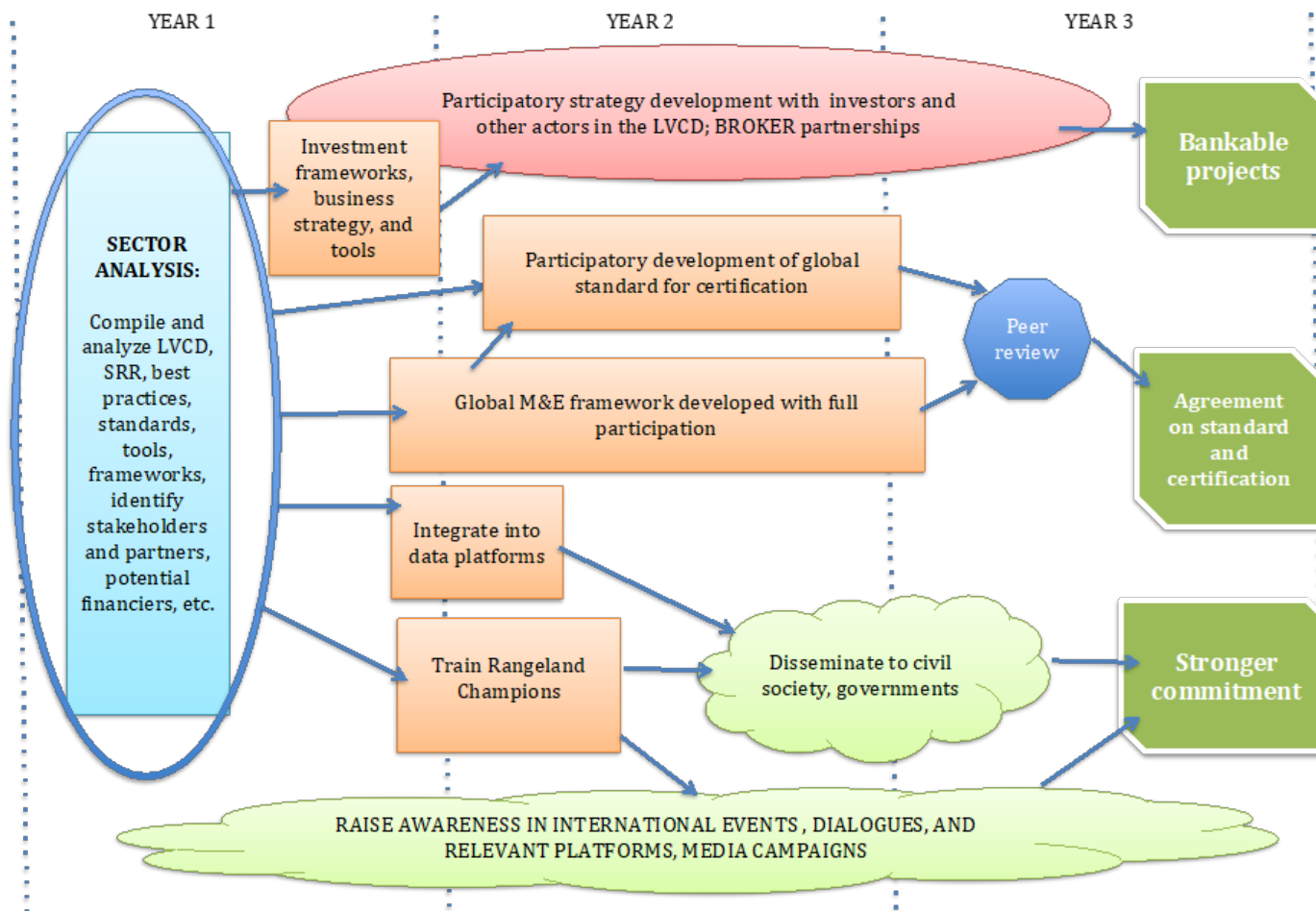
Knowledge outputs drawing from evidence-based research and analysis will build on and align with existing good practices of rangelands restoration including from WOCAT^[1], WWF's Grasslands and Savannahs Platform, FAO's Pastoralist Knowledge Hub, UN Decade of Ecosystem Restoration interactive data base, UNCCD Science-Policy Interface, and efforts of the DSL IP Child Projects.

KM and dialogue on rangeland restoration will be facilitated through national coalitions of actors (including civil society, elected representatives and others) and regional cross-sectoral, multi-country communities of practice on rangelands, rangelands degradation and restoration established or strengthened. National and regional dialogues on domestication of international commitments to rangeland restoration will also be carried out by trained Rangeland Champions. The project's knowledge products will be deposited into national and global data platforms, including the global rangelands data platform being established by ILRI. Global and regional data on rangeland degradation and restoration opportunities will be published in a peer-review journal.

A number of guidelines will be developed by this project including to support trainings on rangeland restoration science, local knowledge and globally agreed standards, tools and processes; and also for undertaking and monitoring rangeland restoration. These will be produced as complete documents for soft and hard copy accessing, as well as be made available on line in a manner to enhance online accessibility and learning including use of audio-visual aids and web-based media. A global media campaign will package the knowledge products into user-friendly outputs which will be disseminated in all events and meetings.

A schematic workflow diagram depicting the KM strategy is provided below.

STELARR indicative workplan and knowledge management strategy



[1] <https://www.wocat.net/en/>

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Monitoring is a core Component (3) of the project. This Component will develop a global Monitoring System and Framework for LVCD for SRR that will be applicable to other similar projects. This framework will draw on the expertise of the combined CGIAR system, but will be led by ICRAF. It will build upon the Sector Analysis to be conducted in Component 1, as well as the development of the global standard for LVCD for SRR.

In addition to the development of the Global Monitoring System and Framework for LVCD for SRR, the project's PMU will be in charge of monitoring and evaluation of the STELARR project itself, using the budget set aside for M&E under Component 3, according to GEF, IUCN and ILRI standards, and based on the project's Theory of Change and Results Framework. An analysis of the indicators chosen for project M&E was conducted during the PPG design, including the probability of data availability and who would be responsible for collecting the information. The CG system has a unified and harmonized M&E system. ILRI will collect information on project performance for quarterly and annual reporting from this system, and including that provided by the sub-granted partner CG Agencies. An innovative aspect is the development of an Index for rating 'strength of commitment' that will be applied to all relevant intergovernmental dialogues during the life of the project. This information has been incorporated into the project's Results Framework (Annex A-1).

The monitoring and evaluation of the project will be carried out by the PMU's M&E Expert. The M&E officer (10%) time will be responsible for monitoring progress of the project against its TOC and core indicators. The M&E officer will also make monitoring missions to follow up on partner reporting as deemed necessary.

The M&E officer and the project manager will organize a virtual reflection and lessons learnt meeting of progress mid-term for key stakeholders. The M&E officer will also monitor the project's compliance with all GEF, IUCN and ILRI standards, including environmental and social safeguards, gender sensitivity, and stakeholder engagement. The M&E officer will undertake the yearly monitoring of the project, and collaborate with IUCN for the Independent Terminal Evaluation, which will include an Impact Assessment.

An Inception meeting will be organized bringing in all relevant partners for a review of the project's results framework, definition of goals, expectations and roles. The M&E officer will clarify the GEF requirements for M&E at this meeting, including yearly Project Implementation Reports (PIR), the mid-term lessons and reflection review, and the Independent Terminal Evaluation. IUCN, the Project Manager and the M&E officer will also clarify IUCN's expectations in terms of quarterly and yearly fiduciary supervision and reporting. The Inception Report is a key output for subsequent monitoring and supervision of the project.

The Project Steering Committee (PSC) will provide oversight and direction for the project, the global policy and business expert, and the project manager. This steering committee will meet at least once face-to-face (likely as a follow-on to the inception meeting) and the rest of the time virtually.

The Project Technical Advisory Committee will be a sounding-board for the development of bankable projects, bringing in lessons learnt and best practices.

The budget set aside for monitoring and evaluation of the STELARR project is US\$51,549, as detailed in the M&E Table below.

Description	Year 1	Year 2	Year 2.5	Total
M&E Officer	4,620	4,620	2,309	11,549
Inception meeting	20,000			20,000
M&E Travel	3,000	2,000		5,000
Terminal Evaluation			15,000	15,000
Total	27,620	6,620	17,309	51,549

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The project works primarily at the global and regional levels, however, it is expected that Component 1 will directly benefit pastoralists and their communities through the development and brokering of at least 5 bankable public-private partnership projects in selected livestock value chains that also benefit rangeland restoration. The choice of the value chain will be based on criteria that maximize socio-economic benefits as these provide the incentives for long term sustainability, such as increased income for SMEs and women-owned enterprises, increased empowerment of women, and increased employment and training for youth.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Low	Low		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

The ESMS screening and clearance document will be submitted shortly.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
GEF ID 10816_ESMS Preliminary Screening	Project PIF ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

ANNEX A: STELARR Project Results Framework.

	Objective/outcome	Indicators	Baseline	Target	Source of verification	Assumptions and risks
	Objective: To reverse rangeland degradation and improve productivity of rangelands globally, through sustainable livestock value chains, and thereby reduce poverty and secure livelihoods, with inclusive benefits to women and youth	<u>Mandatory indicator 1</u> (GEF Core Indicator 3.3): Area of natural grass and shrubland under restoration <u>Mandatory indicator 2</u> (GEF Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment		6,000,000 hectares of rangelands under restoration indirectly influenced by STELARR 565,200 total beneficiaries of which 280,340 are women and 284,860 are men	Project reports	The lack of accurate, up to date and verified data on rangeland degradation in the target regions means that the figures for Core Indicators 3.3 and 11 can only be rough estimates. Also, STELARR is an enabling global project, and therefore its impacts will be largely indirect.
Component 1: Rangeland restoration investments through sustainable livestock value chains	Outcome 1: Increased incentives and reduced risks for investment in large-scale sustainable rangeland and restoration linked to livestock value chains, with particular focus on women and youth	No. of investors committed to securing partnerships with local communities on LVCD ^[1] for SRR No. of local communities committed to securing partnerships on LVCD for SRR	0 0	At least one investor in each project region At least one local community in each region	Project reports analyzing and verifying the partnerships	It is assumed that investment partnership proposals can be secured within the timeframe of the project, given existing national laws, company requirements, among other reasons.

Output 1.1 : Guidelines, tools and frameworks for increased investment in LVCD for SRR, agreed with collaborating projects and partners	Sector analysis	0	1 sector analysis	Project reports and technical documents
	No. of good practice guidelines compiled on investments in LVCD for SRR (particularly targeting women and youth)	0	At least one set of guidelines translated in all major country languages covered by project	
	No. of frameworks and tools for investments in LVCD for SRR	0	At least one set of framework/tools for investments tailored to each project region	
	Standard for certification of rangeland-friendly livestock products	0	Preliminary standard developed and tested by 2025 60%	
	Percentage of collaborating investors that agree to use the tools and guidelines	0		

Activity 1.1.1 : A detailed sector analysis of (perceived) risks, challenges, opportunities of investing of sustainable rangelands restoration (SRR), and key global public and private players with potential for restoration through sustainable livestock value chains

Activity 1.1.2: Good practice guidelines for investments in LVCD for SRR (particularly targeting women and youth) are collected, verified, consolidated into frameworks and tools, and published

Activity 1.1.3: Development of a preliminary global standard for sustainable livestock products contributing to sustainable rangeland restoration, including compliance with established standards, tools, processes, and internationally agreed frameworks e.g. VGGTs, FPIC, and guidelines for safeguards, drawing from Component 3 on rangeland restoration indicators

Activity 1.1.4: Targeted awareness campaigns conducted with key investor groups (investors and producers) including wo

	rkshops held with partners on the LVCD for SRR data, tools and guidelines, and the preliminary global standard; agreement reached by relevant platforms such as the (anticipated) Rangeland Stewardship Council					
	Output 1.2: Inclusive and bankable investment partnerships and proposals in LVCD for SRR, in selected value chains	No. of investment awareness campaigns	0	At least one campaign at global level and one in each project region	Project reports and websites of investment partners	It is assumed that once the risks are reduced, there will be commitment by the private sector to invest in rangeland restoration
		No. of investment roundtable dialogues	0	At least one roundtable dialogue per region in the selected value chains		
		No. of bankable investment proposal concepts in selected LVCD for SRR	0	At least 5 bankable proposal concepts distributed across the project regions		
		Percentage of women involved in the partnerships	0	At least 50%		
	<p>Activity 1.2.1: Investment roundtable dialogues convened between major categories of investors, financiers and value chain actors</p> <p>Activity 1.2.2: At least five investment partnerships and proposals for LVCD for SRR developed following global standard.</p> <p>Activity 1.2.3: Capacity of value chain actors built for implementing these bankable projects</p>					
Component 2: Commitments to sustainable rangeland restoration	Outcome 2: Strong international commitments to sustainable rangeland restoration in the context of UN Decade on	Strength of international commitments to promoting sustainable rangeland restoration in the context of UN Decade on	Weak	Moderately strong and improving	An index for rating 'strength of commitment' to be developed by project and applied to all relevant intergovernment	Lack of prioritization of rangeland restoration by governments and projects is a potential risk.

	LDN, UN Decade on Ecosystem Restoration, and upcoming IYRP 2026	Context of LDN, UN-Decade on Ecosystem Restoration, and IYRP 2026			intergovernmental dialogues during the life of the project.	It is assumed that champions and coalitions working in the
	Output 2.1: Information on LVCD for SRR is accessible nationally and internationally through data platforms	No. of new data platforms that incorporate STELARR data No. of peer reviewed journal articles on LVCD for rangelands restoration	0 0	One new global data platform At least one journal article	Project reports and technical documents Website of Journals	baseline (e.g. GSR, IYRP) will use the STELARR project's outputs to influence national and international commitments
<p>Activity 2.1.1: Data and information on rangelands and rangeland restoration opportunities and benefits is incorporated in to a new global rangelands data platform</p> <p>Activity 2.1.2: Information on rangeland degradation and restoration opportunities are published in a peer-reviewed journal</p>						
	Output 2.2: Inter-governmental dialogues and agreements result in more policies and decisions that strengthen LVCD for SRR	No. of intergovernmental dialogues on LVCD for SRR No. of rangelands champions including women and youth participating in national dialogues on LVCD for SRR No. of regional training events on LVCD for SRR	0 0 0	At least three intergovernmental dialogues At least one rangeland and champion participating in a national dialogue in each country covered by project At least one training event held in each region covered by the project At least 60% of trainees stating they had improved knowledge of rangeland r	Project reports and websites of Rio Conventions	It is assumed that increased commitments stated within intergovernmental processes will directly result in action implemented on the ground

		No. of project trainees stating improved knowledge of LVCD for SRR	0	restoration At least one global and one regional event and public media campaign in all regions covered by the project		
		No. of regional and global events and public media campaigns on LVCD for SRR				
	<p>Activity 2.2.1: Intergovernmental dialogue and sharing of STELARR results on restoration and investment, during the Rio Conventions and other international fora including the UN Decade of Ecosystem Restoration and IYRP 2026</p> <p>Activity 2.2.2: Regional champions are supported to promote LVCD for SRR in regional and international fora, and through their own networks</p> <p>Activity 2.2.3: Global media campaigns conducted so as to enhance understanding of sustainable rangeland restoration, and how LVCs can be a vehicle for stronger commitment to rangeland restoration</p>					
Component 3: Global monitoring framework for sustainable rangeland restoration	Outcome 3: Global monitoring framework for sustainable rangeland restoration available for relevant projects and programs	No. of global monitoring frameworks on LVCD for rangeland and restoration	0	1 global framework, adapted to the regions of the project, including languages	Project reports	
	Output 3.1: Global monitoring system developed	Percentage of collaborating stakeholders participating in development and ground testing of indicators	0	At least 30%	Project reports M&E reports of collaborating projects	
	<p>Activity 3.1.1: Definitions and indicators for sustainable rangeland restoration elaborated</p> <p>Activity 3.1.2: Measurement protocols established and tested in project's LVCs</p> <p>Framework of indicators for rangeland restoration elaborated</p> <p>Activity 3.1.2: STELARR M&E framework on LVCD for rangeland restoration developed and tested</p> <p>Activity 3.1.3: Global monitoring framework peer reviewed and accepted by relevant stakeholders as a basis for a global</p>					

	standard for LVCD for SRR					
	Output 3.2: Global Monitoring Framework developed and tested	A peer reviewed and accepted Global Monitoring Framework for SRR	0	1	Project reports Partners and stakeholder interviews and websites	Many different standards exist, each focusing on different segments of the value chains. However, no standards exist for SRR.
	Activity 3.2.1: Monitoring framework on LVCD for SRR developed and tested in project's LVCs and bankable projects Activity 3.2.2: Global monitoring framework peer reviewed and accepted by relevant stakeholders as a basis for a global standard for LVCD for SRR					

[1] LVCD = livestock value chain development; SRR = Sustainable Rangeland Restoration

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

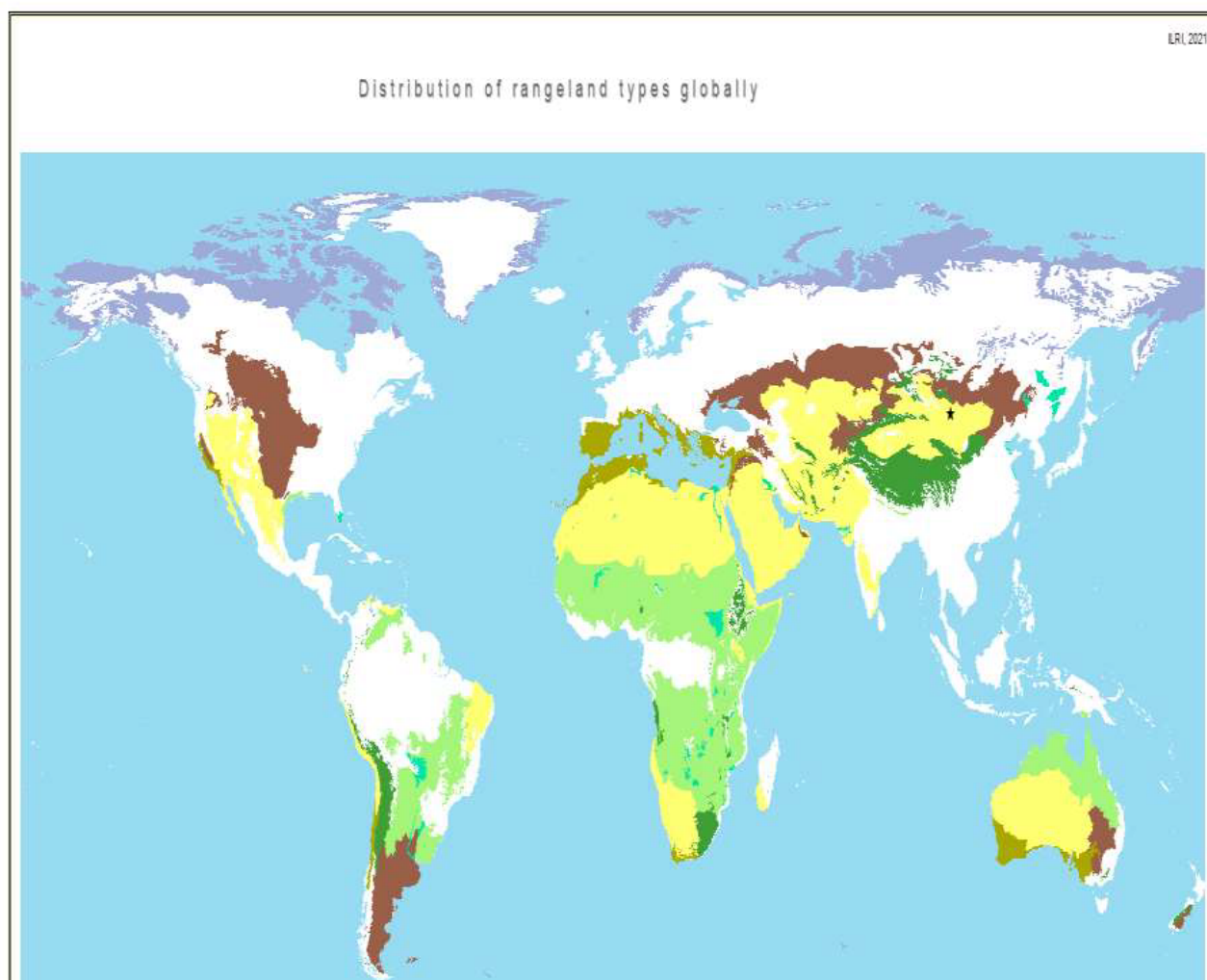
ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

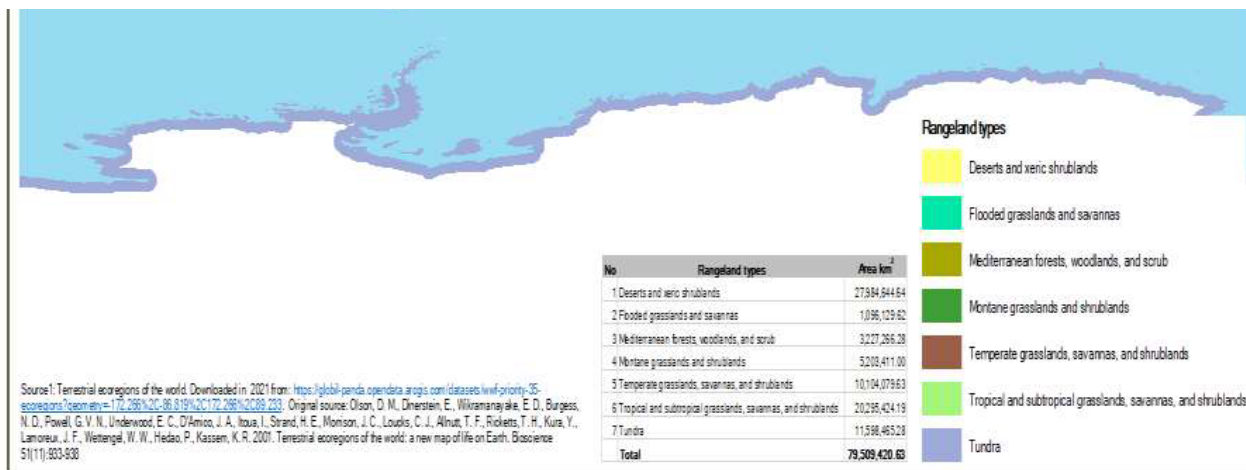
PPG Grant Approved at PIF: \$50,000			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Balance</i>
Consultancy for full proposal development	25,000	24,000	1,000
Consultation meeting with stakeholders	25,000	8,600	16,400
Total	50,000	32,600	17,400

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

The project acts both globally and regionally emphasizing the Middle East, Central Asia and South America. Aside from Africa, these regions are currently under-represented in rangeland projects. Aside from the wool LVC in Central Asia, these regions are under-represented in LVCD. These regions have also been chosen because a preliminary analysis shows that several commercial investors are doing interesting social and economic philanthropy along the LVC, but have not extended their commitment yet to upscaling rangeland restoration. The following map, developed by ILRI and its partners in 2021, illustrates the significance of rangelands in the target regions. Annex E provides greater details.





ANNEX E: Project Budget Table

Please attach a project budget table.

Annex E.

Expenditure category	Detailed description	Component 1	Component 2	Component 3	Project M&E (under component 3)	PMC	Total
Salary and benefits	Project manager: (Fiona Flintan)/Senior Scientist - 5% time	-	-	-	-	41,413.90	41,413.90
Salary and benefits	Global policy and business expert - commercial sector, livestock VCD, rangeland restoration (New Hire) - full-time	337,885.88	168,942.94	-	-	-	506,828.82
	Regional livestock VCD and rangeland restoration experts x 3 b						

Salary and benefits	ased in west ATRICA (I LRI), Alliance Bioversity & CIAT (Latin America) and ICARDA (Middle East and Central Asia) - 20% time	177,794.03	88,897.02	-	-	-	266,691.05
Salary and benefits	Senior scientist managing component 3 - 5%	-	-	-	-	31,521.82	31,521.82
Salary and benefits	Scientist rangeland ecologist/monitoring - 50% time	-	-	133,837.07	-	-	133,837.07
Salary and benefits	M&E officer - 10%	-	-	-	11,548.91	-	11,548.91
Salary and benefits	Project administration officer - 10%	-	-	-	-	16,468.91	16,468.91
Salary and benefits	Project administration assistant - 10%	-	-	-	-	6,995.07	6,995.07
Salary and benefits	Project finance officer - 10%	-	-	-	-	9,064.14	9,064.14
Personnel		515,679.91	257,839.96	133,837.07	11,548.91	105,463.84	1,024,369.69
Trainings, workshops, meetings	Inception workshop and meeting of Project Steering Committee and Project Advisory Committee after which will meet virtually				20,000.00		20,000.00
Trainings, workshops, meetings	Organization of investment round tables between investors, VC actors, rangeland restorers etc.	107,100.00	-	-	-	-	107,100.00
Trainings, workshops, meetings	Capacity building along LVCs for rangeland restoration pilots and bankable projects	156,600.00	-	-	-	-	156,600.00

Trainings, workshops, meetings	Intergovernmental dialogues to strengthen policies on rangeland restoration	-	59,500.00	-	-	-	59,500.00
Trainings, workshops, meetings	Workshops and consultations to develop global standard for livestock products supporting rangeland restoration	59,500.00	-	-	-	-	59,500.00
Consultants	Design of rangeland monitoring system and standards	-	-	23,800.00	-	-	23,800.00
Consultants	Independent Terminal Evaluation				15,000		15,000.00
Operating costs	Communication materials such as films, websites, social media	25,700.00	17,850.00	-	-	-	43,550.00
Operating costs	Establishment of global rangelands data and rangeland restoration opportunities platform		235,858.00	100,022.00	-	-	335,880.00
Supplies and Services		348,900.00	313,208.00	123,822.00	35,000.00	-	820,930.00
Travel	Travel for project M&E				5,000.00	-	5,000.00
Travel	International travel of staff to engage with investors and VC actors in countries/regions of operation	30,700.00	23,800.00	-	-	-	54,500.00
Travel	International and national travel for staff and partners to develop standards for rangeland	-	-	35,700.00	-	-	35,700.00

	eland restoration including fieldwork						
Travel	International travel of staff and partners to engage in regional and global dialogues for development of a global standard for livestock products reflecting sustainable production including investment in rangeland restoration	35,700.00	-	-	-	-	35,700.00
Travel	National and international travel staff and partners including rangelands champions to promote LVCs for rangeland restoration	-	23,800.00	-	-	-	23,800.00
Travel		66,400.00	47,600.010	35,700.00	5,000.00	-	154,700.00
TOTAL		930,979.91	618,647.96	293,359.07	51,548.91	105,463.84	2,000,000

The budget is 100% managed by ILRI except for the Terminal Evaluation (\$15,000) where IUCN will procure the services of an external consultancy firm. ILRI will sub-grant to partner CGIAR Centres for components or activities that they are responsible for.

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agency is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).