

# Readiness Proposal

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**with Corporación Andina de Fomento (CAF) for the Argentine Republic**

20 April 2022



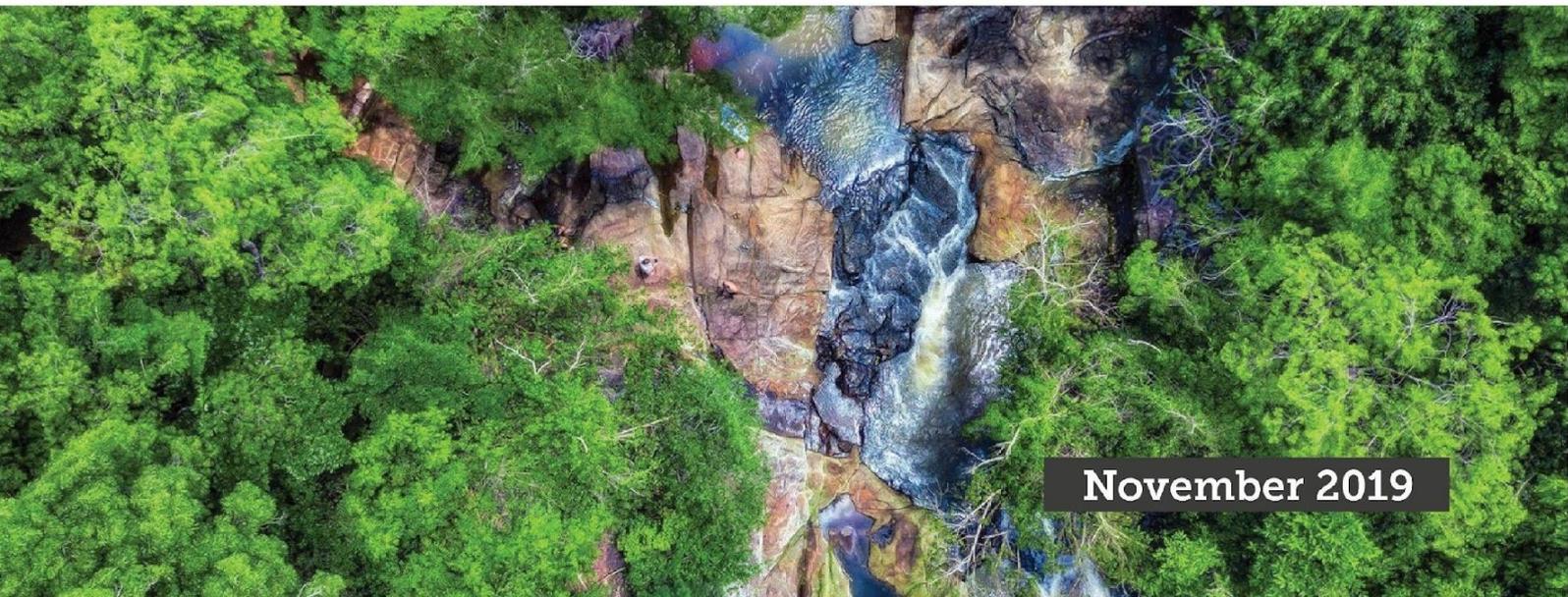
**GREEN  
CLIMATE  
FUND**

# READINESS & PREPARATORY SUPPORT

## PROPOSAL TEMPLATE



<b>Proposal title:</b>	Innovation for climate resilience of Patagonian grasslands of Argentina: minimizing climate vulnerability of rural inhabitants, increasing capacities for range and soil regeneration, and conserving biodiversity
<b>Country:</b>	Argentina
<b>National designated authority:</b>	National Director of Financing with International Credit Organizations; Under-Secretariat of International Financial Relations for Development, Secretariat of Strategic Affairs of the Presidency of the Nation
<b>Implementing Institution:</b>	Corporación Andina de Fomento - CAF
<b>Date of first submission:</b>	29 June 2021
<b>Date of current submission / version number</b>	26 February 2022 V.4



November 2019

## Before completing this proposal template, **please read the guidebook** and learn how to access funding under the GCF Readiness & Preparatory Support Programme.

Download the guidebook:  
<https://g.cf/xxxxx>



### How to complete this document?

This document should be completed by National Designated Authorities (NDA) or focal points with support from their Delivery Partners where relevant. Once completed, this document should be submitted to the GCF by the NDA or focal point via the **online submission system**, accessible through the Country Portal of the GCF website.

Please be concise. If you need to include any additional information, please attach it to the proposal.

If the Delivery Partner implementing the Readiness support is not a GCF Accredited Entity for project Funding Proposals, please complete the Financial Management Capacity Assessment (FMCA) questionnaire and submit it prior to or with this Readiness proposal. The FMCA is available for download at the [Library](#) page of the GCF website.

### Where to get support?

If you are not sure how to complete this document, or require support, please send an e-mail to [countries@gcfund.org](mailto:countries@gcfund.org).

You can also complete as much of this document as you can and then send it to [countries@gcfund.org](mailto:countries@gcfund.org), copying both the Readiness Delivery Partner and the relevant GCF Regional Desks. Please refer to the [Country Profiles](#) page of the GCF website to identify the relevant GCF Country Dialogue Specialist and Regional Advisor.

We will get back to you within five (5) working days to acknowledge receipt of your submission and discuss the way forward.

### Note: Environmental and Social Safeguards and Gender

Throughout this document, when answering questions and providing details, please make sure to pay special attention to environmental, social and gender issues, particularly to the situation of vulnerable populations, including women and men. Please be specific about proposed actions to address these issues. Consult Annex IV of the Readiness Guidebook for more information.

## Please visit the Country Portal on the GCF website to submit this proposal via the **online system**.

When submitting the proposal, please name the file:  
GCF Readiness -[Country]-[yyymmdd]

## 1. SUMMARY

### 1.1 Country submitting the proposal

Country name: Argentina

Name of institution representing NDA or Focal Point: Under-Secretariat of International Financial Relations and Development, Secretariat of Strategic Affairs of the Presidency of the Nation

Name of contact person: Mr. Leandro Gorgal

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### 1.2 Date of initial submission

29 June 2021

### 1.3 Last date of resubmission

26 February 2022

**Version number** V.4

### 1.4 Which institution will implement the Readiness and Preparatory Support project?

- National designated authority
- Accredited entity
- Delivery partner

Please provide contact information if the implementing partner is not the NDA/focal point

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<p><b>1.5 Title of the Readiness support proposal</b></p>	<p>Innovation for climate resilience of Patagonian grasslands of Argentina: minimizing climate vulnerability of rural inhabitants, increasing capacities for range and soil regeneration, and conserving biodiversity</p>
<p><b>1.6 Type of Readiness support sought</b></p>	<p>Please select the relevant GCF Readiness objective(s) below (click on the box – please refer to Annex I and II in the Guidebook):</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> I. Capacity building</li> <li><input checked="" type="checkbox"/> II. Strategic frameworks</li> <li><input type="checkbox"/> III. Adaptation planning</li> <li><input checked="" type="checkbox"/> IV. Pipeline development</li> <li><input checked="" type="checkbox"/> V. Knowledge sharing and learning</li> </ul>
<p><b>1.7 Brief summary of the request</b></p>	<p>The Patagonian grasslands of Argentina, in the southern extreme of South America, cover a quarter of the country's territory and support the livelihoods of 200,000 rural inhabitants. Increasing aridity is projected for most of the region in the coming decades due to climate change (increasing temperatures and declining precipitation, and a higher frequency of extreme events). Extensive livestock production, mainly of sheep but also goats and cattle, is the main economic activity of rural inhabitants. Most livestock operations are family-owned, with small herds and subsistence level operations that face increasing difficulties due to declining prices of products and inappropriate management, which has led to severe desertification and erosion of a significant proportion of land and that is expected to be exacerbated by climate change. Healthy grasslands, primarily through secure storage of carbon in soils, contribute to climate change mitigation and adaptation. Degraded grasslands, conversely, can become a greenhouse gas (GHG) source and the livelihoods and biodiversity they support can lose their abilities to adapt. Argentina has advanced in the implementation of many climate change mitigation and adaptation policies, but natural grasslands and the livelihoods they support have not been fully addressed in these advances.</p> <p>Based on above, a <b>problem statement</b> has been formulated to reflect the way in which the project will contribute to the overall resilience of the Patagonian grasslands: <i>if the capacities of vulnerable rural groups for planning and implementing ecosystem-based practices are increased, national and provincial climate policy frameworks are fully aligned, and best regenerative practices and knowledge sharing are enhanced, <u>then</u> the overall resilience of the Patagonian region will be increased, <u>because</u> the Argentina's government and the rural people of Patagonia, including women and other vulnerable communities, will be able to design and implement a technically sound mitigation and adaptation strategy for resilient and low-emission management of Patagonia's grasslands that will conserve Patagonia's biodiversity and sustain the livelihoods of its inhabitants in a climate resilient manner.</i> Nonetheless, to achieve this and to promote a more resilient and low-carbon development, the following barriers need to be addressed.</p> <ul style="list-style-type: none"> <li>• Lack of national alignment of NDCs and other components of climate strategies regarding adaptation and mitigation of Patagonian grasslands and shrubland and their dominant land uses and conservation challenges.</li> <li>• Insufficient consultation and engagement of small- and medium-scale rural producers, Mapuche and Tehuelche organizations, and representatives of other vulnerable groups such as women-led rural households in climate strategy decision-making.</li> <li>• Limited access to information on climate risks and on climate change mitigation and adaptation options by vulnerable rural groups in Patagonian grasslands.</li> <li>• Limited resources and technical capacity among vulnerable rural groups in Patagonia to gather, share, and utilize climate-relevant information affecting rural livelihoods and production systems and their vulnerabilities and risks and</li> </ul>

scale up ecosystem-based adaptation and mitigation practices and tools that are applicable at local levels and benefit from appropriate fiscal and market incentives.

- Lack of access to climate financing to deploy comprehensive adaptation and mitigation actions in the Patagonian grasslands.

Based on the previous barriers and to contribute to the problem statement, the **main goal of this Readiness and support grant** is to develop a strategy for community- and ecosystem-based mitigation and adaptation to climate change of the grasslands of Patagonia that improves the livelihoods and minimizes climate vulnerabilities of rural inhabitants, conserves and increases the resilience of the natural systems they depend upon and helps fulfill Argentina's commitment on climate change mitigation and adaptation. Moreover, through this readiness and grant support a more solid understanding of the vulnerability of the Patagonia region will be built to identify and promote adaptation and mitigation measures that respond to context-specific needs and support the transformation required to lower emissions, regenerate the landscape, and increase the resilience of the most-at risk communities. Additionally, this Readiness and support grant will perform a socio-economic study to map the conditions of ten vulnerable communities from different sub-regions of the Patagonia to gain a better comprehension of the livelihood conditions and provide recommendations to include non-traditional actors into existing market-based value chains. Furthermore, and using inputs from the previous analysis a strategy for low emission and resilient production of livestock, wildlife, and other products will be generated so that Argentina's government and the rural people of Patagonia, including women, indigenous groups, and small-scale livestock producers are able to design and implement a technically sound mitigation and adaptation strategy that fosters a management of Patagonia's grasslands that conserves biodiversity and sustains the livelihoods of their Inhabitants in a climate resilient manner. Finally, a technically sound concept note will be submitted to the GCF to scale up the results of this Readiness and support grant activities, access climate financing and deploy the necessary actions to address the barriers identified. It is important to note that the concept note will be elaborated using inputs from the project activities and will build upon the project results.

To achieve the above, this project proposal has been structured through the following outcomes:

Outcome 1.3: Relevant country stakeholders (which will include executing agencies, civil society organizations, and private sector) have established adequate capacity, systems, and networks to support the planning, programming, and implementation of GCF-funded activities.

Outcome 2.2: GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling environments for GCF programming in low-emission investment.

Outcome 4.1: An increase in the number of quality project concept notes developed and submitted.

Outcome 5.1: Best practices with respect to institutional capacity building and coordination, direct access, and pipeline development are developed and disseminated to strengthen engagement by NDAs, DAEs, and delivery partners with the GCF.

In addition, this readiness proposal will: i) increase the capacities of vulnerable rural groups for planning and implementing ecosystem-based practices (like integrated production of livestock and wildlife management that regenerates grasslands and increases carbon sequestration), ii) support the alignment of national and provincial climate policy frameworks, and iii) enhance best regenerative practices and knowledge sharing, through the implementation of the outcomes above.

The number of direct beneficiaries in this Readiness and support grant is expected to reach in the short term 8,000-10,000 people of 10 vulnerable rural producer groups to be selected across the region. Vulnerable rural people in Patagonian grasslands, including women-led households, indigenous groups, and subsistence-level producers represent approximately 60% of the rural population (~120,000 people). Therefore, in the medium to long term, the implementation of the community- and ecosystem-based mitigation and adaptation to climate change strategy framed in this Readiness support is expected to benefit most of the 120,000 vulnerable rural inhabitants of Patagonia plus thousands of urban inhabitants of Patagonian cities whose livelihoods and economies depend on a more climate-resilient production scheme in the Patagonian grasslands.

In regard to the implementation, CAF-Latin American Development Bank- has been selected as the delivery partner for this Readiness and support grant based on its broad experience and knowledge in the: i) implementation of ecosystem-based adaptation projects in Latin America and ii) mainstreaming of climate change considerations into national, subnational and sectoral policies:

**Implementation of ecosystem-based adaptation projects in Latin America:**

CAF has a broad experience in the formulation and implementation of projects with ecosystem-based adaptation approaches. These projects, which have been mostly funded by the Global Environment Facility (GEF) and the Adaptation Fund (AF), have focused in areas such as: watershed management, sustainable livestock, land-use transformation, climate-smart agriculture and coastal management, amongst others to increase the resilience the socio-ecological systems in highly vulnerable regions. One of the most relevant experiences is the project "Increasing adaptive capacity of local communities, ecosystems and hydroelectric systems in the Rio Blanco upper watershed (Toachi-Pilatón watershed) with a focus on ecosystem and ecosystem based adaptation" which is aimed at reducing the impact of climate change on the hydrological cycle under integrated watershed management and to promote sustainable agricultural practices adapted to the new conditions of climate change and efficient technology in production processes supported by credit. This project which is currently being implemented in Ecuador and funded by the AF (2.4M) has three main components which share similarities with this Readiness and Support grant given its objective to promote active sustainable forest management and conservation technologies and farming practices to new climate change conditions. Additionally, the project is aimed at fostering an enabling environment to promote local financing and market based conditions that allow the deployment of smart-agricultural practices which is relevant to transform the current development pathway of the Patagonia region. Finally, the project seeks to strengthen local capacity and share lessons to ensure the sustainability of its results and promote a large-scale transformation in the watershed. A summarized list of project whose scope is relevant for this project are listed below:

GEF-funded projects:

1. <https://www.thegef.org/project/andes-adaptation-impact-climate-change-water-resources-project-aicca>
2. <https://www.thegef.org/project/ecosystem-based-biodiversity-friendly-cattle-production-framework-darien-region-panama>
3. <https://www.thegef.org/project/amazon-sustainable-landscape-approach-plurinational-system-protected-areas-and-strategic>
4. <https://www.thegef.org/project/development-enabling-environment-sustainable-businesses-based-native-biodiversity-ecuador>
5. <https://www.thegef.org/project/effective-conservation-protected-areas-galapagos-through-strengthening-control-and>
6. <https://www.thegef.org/project/safeguarding-biodiversity-isla-del-coco-national-park-enhancing-biosecurity>
7. <https://www.thegef.org/project/preparing-ground-implementation-la-plata-basin-strategic-action-program>

**AF-Funded projects:**

1. [AYNINACUY: Strengthening the livelihoods of vulnerable highland communities in the provinces of Arequipa, Caylloma, Condesuyos, Castilla and La Union in the Region of Arequipa, Peru – Adaptation Fund \(adaptation-fund.org\)](#)
2. [Increasing adaptive capacity of local communities, ecosystems and hydroelectric systems in the Río Blanco upper watershed \(Toachi-Pilatón watershed\) with a focus on Ecosystem and Community Based Adaptation and Integrated Adaptive Watershed Management – Adaptation Fund \(adaptation-fund.org\)](#)
3. [Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River \(Argentina, Uruguay\) – Adaptation Fund \(adaptation-fund.org\)](#)

**Mainstreaming of climate change considerations into national, subnational and sectoral policies:**

One of CAF's mandate in terms of climate change planning is to promote the integration of climate change considerations into policy-making processes to accelerate changes that support the implementation of the Paris Agreement. This includes integrating mitigation and adaptation criteria into regulatory and planning frameworks at the national and subnational level. Recently, CAF completed the implementation of a GCF-Readiness funded project in Chile "Support for strengthening public private planning processes at the subnational level for the development of local country programs", which included: i) the development of four Climate Change Vulnerability assessments and Regional Climate Action Plans for the Atacama, O'Higgins, Los Rios and los Lagos Regions and ii) a methodology to replicate the development of Regional Action Plans on climate change in other regions of the country. It is important to note that this methodology is expected to be used by the government of Chile to replicate the results achieved in the framework of this Readiness and Support grant project. Additionally, the Climate Change Vulnerability assessments and Regional Climate Action Plans were delivered to the Government of Chile, represented by the Ministry of Finance and the Ministry of Environment, and Institutionalized as official planning instruments before the Regional Committees on Climate Change (CORECC) to mainstream climate change planning in other policy and planning instruments.

Furthermore, it is important to mention that CAF and the NDA recognizes the fact that other local and regional organizations have advocated for a more sustainable and resilient management of the Patagonian grasslands and therefore these stakeholders will be mapped, and a capacity needs assessment will be performed to identify the main barriers and gaps that have limit a transformational change in the area. Additionally, at the concept note elaboration stage these stakeholders will be engaged to ensure that the proposed interventions are aligned with current efforts and initiatives and to identify potential partners for the preparation and implementation of a subsequent funding proposal. Finally, it is important to mention that through the different stock taking activities and the procurement of the three specialized professional firms, this project will attempt at bringing local knowledge from organizations and stakeholders to enrich the results and provide technical inputs from different sources.

In addition and considering the importance of ensuring country ownership over the results of this Readiness and support grant, the Ministry of Science, Technology, and Innovation (MinCyT) will be asked by CAF and the NDA to support the development of all project deliverables by providing technical inputs given its expertise and experience in the Patagonian region. This will not only ensure appropriate participation of national actors and stakeholders but also an effective use of resources. Moreover, the MinCyT will participate in the monitoring process by helping CAF assess progress using indicators and updating the log-frame on a quarterly basis. Nonetheless, it is paramount to mention that the MinCyT will not receive funds or implement Readiness support.

**1.8 Total requested amount and currency**

USD 399,901

**1.9 Implementation period**

24 months

**1.10 Is this request a multiple-year strategic Readiness implementation request?**

- Yes  
 No

For more information on how a country may be eligible to access Readiness support through this modality, please refer to **Annex IV of the Readiness Guidebook**.

**1.11 Complementarity and coherence of existing readiness support**

- Yes  
 No

- **Advancing a regional approach to e-mobility in Latin America** (Readiness 2019), GCF & UN-Environment, Active. Objective: Supporting fourteen Latin-American countries to identify and address the main barriers for electric mobility by providing the necessary assessments, capacities and financing alternatives. This readiness does not have any activity related to this Readiness proposal.

- **NDA strengthening and development of a country programme**, GCF & FAO, Active. Objective: Strengthening the National Designated Authority (NDA) in Argentina and other relevant stakeholders' capacity in order to enable them to fulfill their roles, responsibilities, and functions and to establish a proper engagement with GCF. Activities related to this Readiness proposal:

- The No-Objection Procedure defined by the NDA's Readiness will be an input for the development of a Concept Note.
- Activity 2.1.2.c (assessment of both national and international possible climate financiers, such as GCF, the Inter-American Development Bank (IDB) and the World Bank (WB)) will be a key input for the development of a Concept Note under this proposal.

- **Readiness for the National Adaptation Plan Process**, GCF & UNDP, Active. Objective: Facilitating the assessment and reduction of vulnerability to the adverse effects of climate change by integrating climate change adaptation into the country's comprehensive and resilient development strategies. Activities related to this Readiness Proposal:

- The National Climate Change Cabinet-NCCC defined adaptation policies for the short and medium term that are an input for this Readiness proposal.
- The Sectoral and National Adaptation Plan (NAP) will be an input when analyzing national and subnational priorities regarding climate change.
- The normative and legal framework for climate change adaptation (outcome 1.1 of UNDP's Readiness activities) will be an input to be considered for workshops, technical documents and activities of this Readiness proposal.
- Outcome 3 of UNDP's Readiness activities (baseline definition; formulation of NAPs; implementation, monitoring and reviewing) will be a key input for this Readiness proposal.

- The NAP Readiness will raise awareness on adaptation potential and needs at national, sub-national and local levels, as well as disseminate adaptation initiatives being carried out in the country and its respective impacts.
- **Promoting Financing for Climate Change in the Financial Sector of LAC (regional), GCF & ALIDE, Active.** Objective: Increasing climate finance in financial institutions of six Latin-American countries to increase the number of institutions accredited by GCF. This readiness does not have any activity related to this Readiness proposal.
- **Increasing the health sector's capacities and strengthening coordination on climate action in Argentina at national and subnational levels, GCF & WHO, Active.** Objective: Strengthening institutional capacities, governance, and intersectoral coordination on climate change and health at the national and subnational levels. Activities related to this Readiness proposal:
  - The WHO supported activities will build long-term capacities for vector-borne disease monitoring and control, which will have a direct impact on the inhabitants of rural communities.
  - Outcome 1.3 of this proposal will help establish provincial climate change committees and action plans through whole-of-society consultations. One of the three participating regions will be Patagonia, for which findings of needs, vulnerabilities and capacities of the health system in the region will emerge and be addressed.
  - Outcome 5.1. will promote nation-wide (including Patagonia region) understanding about the health impacts of climate change while also developing and implementing plans and strategies to increase long-term capacities of multiple audiences.
- **Argentina REDD-plus Results Based Program for results period 2014-2016<sup>1</sup>. GCF & FAO.** Objective: Established processes and mechanisms for results-based incentives for management of livestock production in forest biomes of Argentina through REDD+. The FAO initiative will establish indicators and mechanisms to compensate livestock producers for mitigation results in forests that can be applied to producers in Patagonian grasslands engaged with the Readiness proposal.
- **National Action Plan for Forests and Climate Change, PNUD & FAO, Active.** Objective: Reducing emissions from deforestation and forest degradation, and conservation and sustainable management of forests in the enhancement of forest carbon stocks. This readiness will establish compensation mechanisms for landowners and producers who conserve and restore forests in Argentina and these mechanisms can be applied to regeneration of Patagonian grassland targeted in the present Readiness proposal.

<sup>1</sup>[https://www.greenclimate.fund/sites/default/files/document/fp142-fao-argentina\\_0.pdf](https://www.greenclimate.fund/sites/default/files/document/fp142-fao-argentina_0.pdf)

- **Regenerative Fund for Nature for Patagonian Grasslands**<sup>2</sup>, Kering company, Conservation International, Wildlife Conservation Society, and Wildlife Friendly Enterprise Network. Active. Objective: promote regenerative grazing, climate resilience, and wildlife conservation in Patagonian grasslands. This project will establish baselines of grassland and soil health and provide certification and marketing incentives to help producers, including three vulnerable groups, regenerate grasslands and innovate with new products including wildlife products and tourism. Thus the project will complement and provide baseline information and testing of tools and incentives that can inform the Concept Note to be generated by this Readiness project.
- **Grassland Meats Program**<sup>3</sup>, Birdlife International. Active. Objective: promote grassland and wildlife conservation in all major grasslands of Argentina by providing incentives to producers through certification and value-added marketing of livestock products. The market incentives generated by this program can inform the development of incentives for livestock producers in Patagonian grasslands, particularly involving regenerative and low-emission meat production and marketing.

## 2. SITUATION ANALYSIS

### *Climate change context*

The Patagonia region of Argentina is located in the southernmost extreme of South America and consists of the provinces of Neuquén, Chubut, Santa Cruz, Rio Negro, and Tierra del Fuego. This region is one of the few continental areas around the world where climate models agree in projecting a declining trend in precipitation for the coming decades.<sup>4</sup> Within Argentina, the vulnerability of the human population and biodiversity to climate change is particularly high in Patagonia, where the recent warming trend is clear, with an average temperature increase of 0.5 to 1 degree Celsius in the last 50 years.<sup>5</sup> Average temperatures in Patagonia will continue to increase during the rest of this century (between 2.5 and 3 degrees more, depending on the model used)<sup>6</sup>, and rainfall and snowfall will decline between 10% and 20% in most of the region, resulting in increasing aridity.<sup>7</sup> These projections of temperature increase and precipitation reduction due to climate change will exacerbate water stress, degradation of meadows (locally called *mallines*) and retraction of bodies of water, which have already been observed in the Patagonian steppe and scrub.<sup>8</sup> Moreover, due to its geographical position and variety of ecosystems, Argentina is particularly vulnerable to the negative effects of climate change. Figures 1 and 2 map the main impacts associated with climate change across different regions in the country and the most vulnerable areas. On one hand, according to figure 1, the main impacts expected to exacerbate in the country during the following decades due to rising temperatures and declining temperature are: i) Water stress, ii) High frequency of extreme precipitation and flooding, iii) Potential water crisis, iv) Setback of average

<sup>2</sup><https://www.kering.com/en/sustainability/safeguarding-the-planet/regenerative-fund-for-nature/regenerative-fund-for-nature-selected-projects-for-2021/>

<sup>3</sup> <https://www.avesargentinas.org.ar/carne-del-pastizal>.

<sup>4</sup> Secretaría de Ambiente y Desarrollo Sustentable de la Nación, *Tercera Comunicación Nacional Sobre Cambio Climático* (Ciudad Autónoma de Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación, 2015).

<sup>5</sup> Centro de Investigaciones del Mar y la Atmósfera, "Cambio climático en Argentina; tendencias y proyecciones" in *Tercera Comunicación Nacional Sobre Cambio Climático* (Ciudad Autónoma de Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación, 2015), p. 284.

<sup>6</sup> Ibid, p. 309.

<sup>7</sup> Ibid, p. 322.

<sup>8</sup> Natalia Pessacq, Silvia Flaherty, Silvina Solman, and Miguel Pascual, "Climate Change in Northern Patagonia: Critical Decrease in Water Resources," *Theoretical and Applied Climatology* 140 (2020), p. 817.

flows in rivers of the La Plata Basin and v) Rising sea levels<sup>9</sup>. For example, glacier retreat along the Andes mountains in the Patagonia region and in central-western Argentina is causing significant changes in river flows and affecting the biodiversity and human activities that depend upon them. On the other hand, figure 2 shows the most vulnerable areas of the country in which the impacts of climate change are expected to exacerbate given their environmental and geographical conditions. For example, Patagonia is particularly vulnerable to water stress, flooding and rising sea levels given the presence of areas with fragile mountainous ecosystems, arid and semiarid areas, areas exposed to drought or deforestation and low-lying coastal areas. In terms of temperature, Argentina is expected to experience an average temperature increase throughout the country under two temporal horizons: *near future* (2015-2039; RCP 4.5) and *distant future* (2075-2099; RCP 8.5)<sup>10</sup>. This increase in the average temperature in the distant future is expected to accelerate desertification processes and soil degradation, particularly in areas such as Patagonia which is currently exposed to non-sustainable practices including extensive livestock and husbandry.

In terms of precipitation, according to both the *near future* (2015-2039; RCP 4.5) and *distant future* (2075-2099; RCP 8.5) scenarios, there are projected changes between -10% and 10% in most of the country which is not significant given the error margin of the models used; however, for the Patagonia region precipitation is expected to decline up to 20%<sup>11</sup>. This variation coupled with an increase of an average temperature will likely intensify the impacts mapped in figure 1 and cause significant disruption in ecosystem functions and socioeconomic activities, especially in most arid and semiarid regions of western Argentina. As shown in figure 3 in Patagonia, ca. 90% of the departments-except for the extreme northeast and southwest of the region- will be exposed to increasing temperatures and declining precipitation, with extreme water shortages projected for the northwest. This is expected to result in higher levels of water stress due to an increased aridity especially in the north, center, and west of the region.<sup>12,13</sup> Furthermore, a recent analysis conducted by the National Agricultural Technology Institute projects that by 2060 increased aridity will result in plant cover reductions ranging from 10 to 50% for most northern and central Patagonian grasslands (J. Gaitan et al. unpublished data) resulting in an accelerated desertification process.

The global potential contribution of grasslands to climate change mitigation and adaptation has only recently been recognized. Globally, soil organic carbon represents the largest terrestrial carbon pool (about 1,500 GtC)<sup>14</sup> and grasslands store roughly 90% of their carbon as soil organic carbon.<sup>15,16</sup> Given that the soil layer is less susceptible to threats like fires, which are expected to become more frequent and extensive as the climate warms, grassland carbon can be a more secure deposit than forests.<sup>17</sup> In South America, grasslands contain a carbon stock of about 26 GtC, which is roughly 15% of all terrestrial soil organic carbon stock in the continent.<sup>18</sup> The grasslands and shrublands of Patagonia cover a quarter of Argentina's territory, or 750,000 km<sup>2</sup>, and directly support the livelihoods of approximately 200,000 rural inhabitants from the island of Tierra del Fuego, on the southern end of the continent, to the central part of the country.<sup>19</sup>

<sup>9</sup> Ministry of Environment and Sustainable Development of Argentina (2020), Second Nationally Determined Contribution of the Argentine Republic. Section 7 Second Adaptation Communication.

<https://www.argentina.gob.ar/ambiente/cambio-climatico/adaptacion>.

<sup>10</sup> Ministry of Environment and Sustainable Development of Argentina (2015), Third National Communication. Available at: <https://unfccc.int/resource/docs/natc/argnc3s.pdf>

<sup>11</sup> *Idem*

<sup>12</sup> *Ibid.*

<sup>13</sup> Secretaria de Ambiente. *op. cit.*

<sup>14</sup> Jörn P.W. Scharlemann, Edmund V.J. Tanner, Roland Hiederer, and Valerie Kapos, "Global Soil Carbon: Understanding and Managing the Largest Terrestrial Carbon Pool," *Carbon Management* 5 (2014), pp. 81–91.

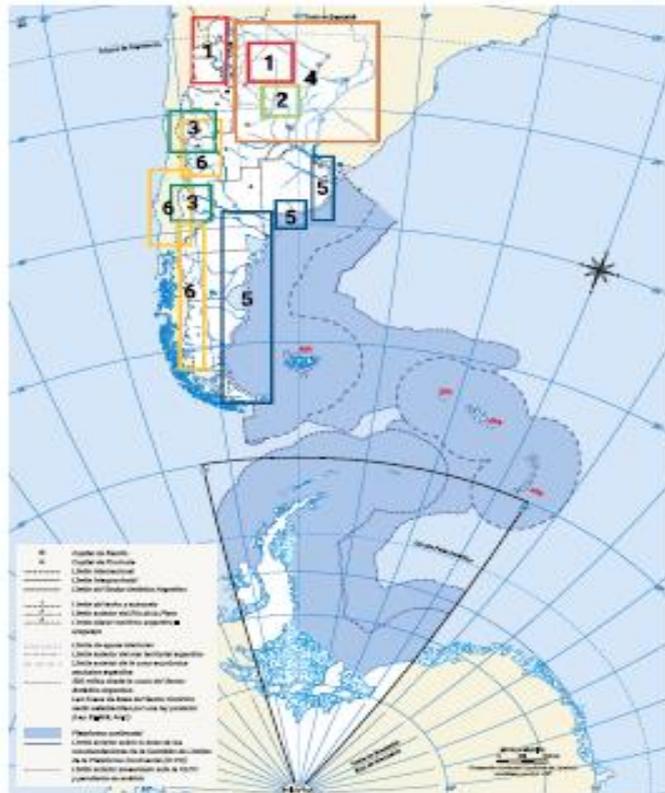
<sup>15</sup> Samuel Eze, Sheila M. Palmer, and Pippa J. Chapman, "Soil Organic Carbon Stock in Grasslands: Effects of Inorganic Fertilizers, Liming and Grazing in Different Climate Settings," *Journal of Environmental Management* 223 (2018), pp. 74–84.

<sup>16</sup> D. A. Bossio, S. C. Cook-Patton, P. W. Ellis, J. Fargione, J. Sanderman, P. Smith, S. Wood, R. J. Zomer, M. von Unger, I. M. Emmer, and B. W. Griscom, "The Role of Soil Carbon in Natural Climate Solutions," *Nature Sustainability* 3 (2020), pp. 391-398.

<sup>17</sup> Pawlok Dass Benjamin Z. Houlton, Yingping Wang, and David Warland, "Grasslands May Be More Reliable Carbon Sinks Than Forests in California," *Environmental Research Letters* 13 (2018), p. 1.

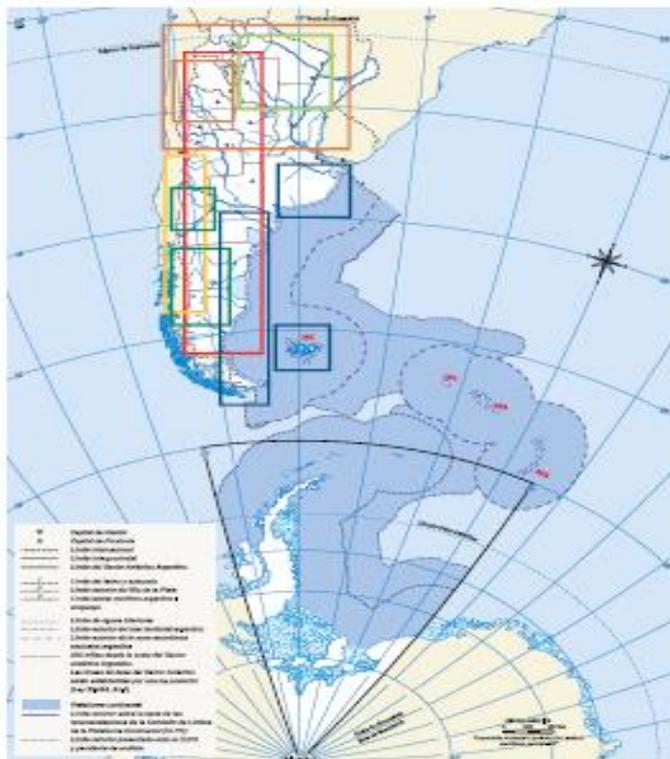
<sup>18</sup> Monica Petri, Caterina Batello, Ricardo Villani, and Freddy Nachtergaele, "Carbon status and carbon sequestration potential in the world's grasslands," in *Grassland Carbon Sequestration: Management, Policy, and Economics* (Rome: Food and Agriculture Organization of the United Nations, 2009), pp. 19-31.

<sup>19</sup> Instituto Nacional de Estadística y Censos, República Argentina, *Censo Nacional de Población, Hogares y Viviendas 2010: Censo del Bicentenario* (Ciudad Autónoma de Buenos Aires: Instituto Nacional de Estadística y Censos, 2015).



- 1) Water stress due to increased temperature.
- 2) High frequency of extreme precipitation and flooding.
- 3) Potential water crisis.
- 4) Setback of average flows in rivers of the La Plata Basin.
- 5) Rising sea levels.
- 6) Glacier retreat.

Figure 1: Map of the main impacts associated with climate change in the Republic of Argentina.



- Areas with forest cover or exposed to forest
- Areas with fragile ecosystems
- Areas with fragile mountainous ecosystems
- Arid and semiarid areas
- Areas exposed to drought or deforestation
- Low-lying coastal areas

Figure 2: Map of the most vulnerable areas in Argentina in which the impacts of climate change are expected to exacerbate given their environmental and geographical conditions.



Figure 3. Departments with projected precipitation reduction and temperature increase in an RCP 8.5 emissions scenario by 2030.<sup>20</sup>

While healthy natural grasslands can be important GHG reservoirs, degraded grasslands can rapidly lose their ability to contribute to climate change mitigation through poor grazing management, which also limits options for adaptation.<sup>21,22</sup> Grazing studies in the region have shown that constant and high livestock stocking rates have led to the loss of cover and diversity of plant species and to the reduction of soil organic carbon and water infiltration and retention.<sup>23</sup> Additionally, fixed and high stocking rates leave less fodder residue, reducing the contribution of organic matter to the soil in favorable years and increasing the vulnerability of plant production during periods of drought that will be more frequent.<sup>24,25,26</sup> However, there are sustainable management alternatives for natural grasslands that can reverse these processes, greatly overcompensate for emissions associated with rural production, and store carbon in highly stable compounds in the soil.<sup>27,28</sup> More broadly, such sustainable management can contribute globally to mitigation and adaptation to climate change.<sup>29,30</sup>

In the last century, overgrazing associated with extensive livestock production, the main livelihood of the rural population, has led to the degradation of natural grasslands and soils in much of Patagonia, with 30% in a severe state of desertification.<sup>31</sup> *Mallines* are key wetlands interspersed throughout the Patagonian steppe that cover only about 5% of the steppe area, support much of the biodiversity and productive activities and face severe degradation processes due to overgrazing and trampling of livestock due to inadequate management practices.<sup>32</sup>

<sup>20</sup> Sistema de Mapas de Riesgo del Cambio Climático (SIMARCC), "Mapa de Riesgo: Reducción de Precipitación y Aumento de Temperatura," SIMARCC, 2020. <https://simarcc.ambiente.gob.ar/mapa-riesgo>

<sup>21</sup> Eze et. al., "Soil Organic Carbon Stock in Grasslands."

<sup>22</sup> Richard T. Conant, Carlos E. P. Cerri, Brooke B. Osborne, and Keith Paustian, "Grassland Management Impacts on Soil Carbon Stocks: A New Synthesis," *Ecological Applications* 27 (2017), pp. 662–668.

<sup>23</sup> Pablo L. Peri, Yamina M. Rosas, Brenton Ladd, Santiago Toledo, Romina G. Lasagno, Guillermo Martínez Pastur, "Modelling Soil Carbon Content in South Patagonia and Evaluating Changes According to Climate, Vegetation, Desertification and Grazing," *Sustainability* 10 no. 2 (2018), pp. 1-14.

<sup>24</sup> Gabriel Oliva, Juan Gaitan and Daniela Ferrante, "Humans Cause Deserts: Evidence of Irreversible Changes in Argentinian Patagonia Rangelands" in *The End of Desertification?* (Berlin: Springer-Verlag, 2016).

<sup>25</sup> *Tercera Comunicación Nacional Sobre Cambio Climático.*

<sup>26</sup> "Cambio climático en Argentina; tendencias y proyecciones."

<sup>27</sup> Peri et al., "Modelling Soil Carbon Content in South Patagonia."

<sup>28</sup> Vincent Chaplot, Pshesheya Dlamini, and Pauline Chivenge, "Potential of Grassland Rehabilitation Through High Density-Short Duration Grazing to Sequester Atmospheric Carbon," *Geoderma* 271 (2016), pp. 10-17.

<sup>29</sup> Bossio et al., "Soil Carbon in Natural Climate Solutions."

<sup>30</sup> Petri et al., "Carbon Sequestration Potential in the World's Grasslands."

<sup>31</sup> Elizabeth Mazzonia and Mirian Vazquez, "Desertification in Patagonia," in *Natural Hazards and Human-Exacerbated Disasters in Latin America*, ed. Edgardo M. Latrubesse (Amsterdam: Elsevier, 2010), pp. 360-361.

<sup>32</sup> Laura Benzaquén, Daniel Blanco, Roberto Bo, Patricia Kandus, Guillermo Lingua, Priscilla Minotti, and Rubén Quintana, *Regiones de Humedales de la Argentina* (Ciudad Autónoma de Buenos Aires: Fundación para la Conservación y el Uso Sustentable de los Humedales, 2017).

The combined effects of desertification, changing markets for livestock products, and ongoing climate changes effects described above will increase the vulnerability of the ecosystems and the rural inhabitants of Patagonia, particularly the rural inhabitants who have preexisting disadvantages, like people who hold small parcels of land, indigenous Mapuche and Tehuelche people, and women-led households.

### **Socioeconomic context of the Patagonian grasslands rural area**

Most of the 200,000 rural inhabitants of Patagonian grasslands, approximately, are particularly vulnerable to the effects of climate change, either because they belong to one or more disadvantaged groups or due to their land tenure situation. For example, the Mapuche people are the largest indigenous group in Argentina today, representing about 20% of the rural population of Patagonia.<sup>33,34</sup> In the case of northwestern Patagonia, namely Neuquén, Río Negro and Chubut provinces, 17%, 9%, and 15% of small farms are run by Mapuche families, respectively. This group has faced additional difficulties due to historic land losses, land tenure challenges, and social and economic discrimination.<sup>35,36</sup> The second largest group of people in Patagonia that identify themselves as indigenous original people is the Tehuelche, who live primarily in Santa Cruz and Chubut provinces.<sup>37</sup> Moreover, rural women in Patagonia, as in the rest of the country, face additional difficulties to men, for example in the development and marketing of products and in their connectivity and access to credit and land tenure<sup>38</sup>. In Patagonia, more rural women are poor than in urban centers<sup>33</sup>.

Except for relatively small land areas along the main rivers, where irrigation and agriculture production are possible, the almost exclusive means of subsistence of rural inhabitants of Patagonian grasslands is extensive livestock production based on rain- and snow-fed forage and, in the case of many *mallines*, on groundwater. Little supplemented feeding of livestock is used. The main type of livestock raised are sheep (currently around 6 million heads), followed by cattle (1 million) and goats (0.6 million).<sup>39</sup> Sheep and goats are raised primarily for fiber and meat production. While most meat goes to internal markets, most fiber is exported.<sup>40,41</sup>

There are approximately 14,000 livestock operations in Patagonia.<sup>42,43</sup> The vast majority (ca. 94%) are family-owned, with 60% of these raising small herds (<1,000 sheep or goats) and considered subsistence operations. Small- and medium-sized operations alike face severe and increasing economic difficulties due to declining wool prices, inappropriate management, and increasing aridity due to climate change. This situation has led to widespread degradation of ranges and soils and people leaving small- and medium-sized Patagonian farms in most provinces in recent decades.<sup>44</sup> This decline includes abandonment of small farms, reduction in the number of family members who work on farms, and migration of young people to urban centers<sup>33</sup> Due to the pattern of land tenure and dependence upon natural productivity of the range throughout this arid region, most of the rural population in Patagonia is highly vulnerable to the ongoing and projected trends in climate change and the vulnerabilities and risks associated with these trends (Figures 1 and 2). In addition, both small- and medium-sized farms predominantly occupy the drier areas with lower range productivity and smaller and sparser *mallines* throughout the region given the historic pattern of occupation of the land.<sup>45</sup> Based on the sizes of the vulnerable groups mentioned above, at least 120,000 rural people, considering women, members of indigenous

<sup>33</sup> Instituto Nacional de Estadística y Censos, República Argentina, "Pueblos Originarios: Región Patagonia" in *Censo Nacional de Población, Hogares y Viviendas 2010: Censo del Bicentenario* (Ciudad Autónoma de Buenos Aires: Instituto Nacional de Estadística y Censos, 2015).

<sup>34</sup> In Argentina the Mapuche and most other indigenous groups, including the Tehuelche, use and prefer the Spanish term "pueblo originario" and usually reject Spanish translations of the term "indigenous".

<sup>35</sup> Yanina Zarate, Lorena Mendicino, and Yanet Huinca, "Región Patagónica," in *Regiones productivas de la Argentina* (La Plata: Universidad Nacional de la Plata, 2014), pp. 48-49.

<sup>36</sup> Food and Agriculture Organization Argentina, *Sujetos Sociales: Productores Agropecuarios, Población Rural y Pueblos Originarios de la Provincia de Río Negro* (Organización de las Naciones Unidas para la Alimentación y la Agricultura, 2015), p. 42.

<sup>37</sup> Instituto Nacional de Asuntos Indígenas, "Mapa de Pueblos Originarios," Secretaría de Derechos Humanos, Argentina, accessed June 16, 2021. <https://www.argentina.gob.ar/derechoshumanos/inai/mapa>.

<sup>38</sup> Ministerio del Interior y Transporte (2012). Documento País sobre Riesgo de Desastres en la Argentina.

<sup>39</sup> Instituto Nacional de Estadística y Censos, República Argentina, *Censo Nacional Agropecuario 2018: Resultados Definitivos* (Ciudad Autónoma de Buenos Aires: Instituto Nacional de Estadística y Censos, 2021), pp. 605-606.

<sup>40</sup> Zarate et al., "Región Patagónica," p. 46.

<sup>41</sup> Andrés F. Cibils and Pablo R. Borrelli, "Chapter 4: Grasslands of Patagonia," in *Grasslands of the World* (Rome: Food and Agriculture Organization of the United Nations, 2005), n.p.

<sup>42</sup> David L. Anderson, Griselda L. Bonvissuto, Miguel A. Brizuela, Guillermo Chiossone, Andrés F. Cibils, M. Silvia Cid, Israel Feldman, Roberto C. Fernández Grecco, Carlos Kunst, Martín Oesterheld, Gabriel E. Oliva, José M. Paruelo, H. Raúl Peinetti, and E. Sebastián Villagra, "Perspectives on Rangeland Management Education and Research in Argentina," *Society for Range Management* 33 (2011), p. 9.

<sup>43</sup> H. Méndez Casariego, *Sistema de soporte de decisiones para la producción ganadera y forestal de la Provincia del Neuquén*, (Bariloche: INTA), Comunicación Técnica No. DR 179.

<sup>44</sup> Mazzonia et al., "Desertification in Patagonia."

<sup>45</sup> Cibils et al., "Grasslands of Patagonia."

communities, and subsistence-level producers are particularly susceptible to physical and socioeconomic threats associated with climate change.

Additionally, there are growing business challenges for Patagonian grasslands associated with climate change. For example, dominant livestock products from Patagonia, especially sheep meat and wool, are currently under scrutiny for their carbon footprint. Sheep production in southern Patagonia has been estimated to have a carbon footprint of between 8 and 19 kg CO<sub>2</sub>-eq/kg of wool and 11 and 41 kg CO<sub>2</sub>-eq/kg of lamb meat, including energy inputs from processing and marketing, but predominantly due to on-farm primary production.<sup>46</sup> This could result in short-term barriers to commercialization. Therefore, a more sustainable, climate-sensitive approach is needed to transform business as usual practices that can contribute to lowering GHG emissions and increase the adaptive capacity of rural communities.

### ***Policy and institutional context***

This section presents information on the institutions involved in developing the climate change mitigation and adaptation strategy in Argentina and promoting financial mechanisms for mitigation and adaptation. In the last few years, Argentina has advanced significantly in planning and implementing measures for climate change adaptation and mitigation. One of the greatest advances is the creation of Law No. 27,520 for Minimum Budgets for Global Climate Change Adaptation and Mitigation, which was approved on December 20, 2019, and its Reglamentary Decree No. 1030 on December 17, 2020. This law reaffirms and internally regulates the international commitments assumed by Argentina and strengthens the national climate policy and subnational planning. The Ministry of Environment and Sustainable Development (MayDS) is the national enforcement authority of the aforementioned law.

Through the previously mentioned law, the National Cabinet for Climate Change (NCCC) was ratified as the national governing body that defines national climate policy. This coordination and participation workspace for the different stakeholders was created in 2016 by decree (891/16). The technical administrative coordination of the cabinet is carried out by the Secretariat of Climate Change, Sustainable Development and Innovation with the technical support of the National Directorate of Climate Change, created in 2015. This structure is intended to ensure the mainstreaming of climate change in long-term national policies.

Since its creation in 2016, the NCCC has become a space for consensus at the highest political level in terms of climate policies. It has opened a space for synergies among the sectors, which has resulted in enhanced understanding and a more active participation in climate action. As a result, Argentina's National Determined Contributions (NDCs) were updated and revised through a participatory and high-level political validation process to agree on its measures.

Currently, the NCCC is chaired by the Chief of the Cabinet of Ministers, who coordinates between the different areas of government of the National Public Administration the implementation of the National Plan for Adaptation and Mitigation of Climate Change. The Cabinet is made up of the highest authorities from the following government areas: Strategic Affairs, Environment, Energy, Mining, Production, Agriculture and Livestock, Industry, Transport, Social Development, Foreign Relations, Education, Sports, Health, Science and Technology, Interior, Public Works, Housing, Labour, Economy and Finance, and Security and Defence.

The work of the Cabinet is based on different levels of government and with participatory instances where the annual work plan is discussed, and priorities are established. In December 2019, after the new government took office, the NCCC added the participation of the new Ministry of Women, Gender and Diversity, which works for the rights of women and minorities against all forms of inequality and violence to build a fairer society. With the addition of this new Ministry, the climate change agenda in Argentina will ensure that policies include an institutionalized and transversal perspective on gender and equality. By prioritizing the inclusion of rural women and specifically of women-led rural households in Patagonian grasslands among its target stakeholder groups, this Readiness proposal will contribute to expanding gender equity in climate relevant policies and actions.

The NCCC is a key stakeholder in Climate Change actions as it has the following functions:

1. Articulate participatory processes and synergies between the different areas of the national government, as well as between the national government and the provinces and the Autonomous City of Buenos Aires; and integrate mitigation and adaptation to climate change into the planning of the different sectors and/or systems.
2. Propose a National Plan for Response to Climate Change as an input for the discussion of a broader national strategy.mitigation and adaptation, in accordance with national objectives and considering the impacts of climate change in vulnerable sectors.

<sup>46</sup> Pablo Luis Peri, Yamina Micaela Rosas, Brenton Ladd, Ricardo Diaz-Delgado, "Carbon Footprint of Lamb and Wool Production at Farm Gate and the Regional Scale in Southern Patagonia," *Sustainability* 12, no. 8 (2020), p. 3077.

3. Address the issues of existing and additional financing needed to develop the public policies that arise from the National Plan for Adaptation to Climate Change and Law No. 27,520 of Minimum Budget for Climate Change.

The technical work of the NCCC is organized around sectoral working groups that cover twelve major sectors: (i) transport, (ii) energy, (iii) mining, (iv) production, (v) infrastructure, territorial development, and habitat (vi) health, (vii) education & culture, (viii) labor and equitable transition, (ix) climate finance, (x) agriculture, ranching, fishing, & forests, (xi) natural resources and ecosystems conservation, and (xii) circular economy. Cross-cutting issues, such as (a) risk and emergency management, (b) science & technology, (c) gender, (d) foreign affairs, and (e) socio environmental integrity are addressed in separate groups. Additionally, the work done at the NCCC is validated at multiple instances that include a general public consultation, sectoral ministerial focal points, and consultation with provincial governments through the Federal Environmental Council (COFEMA) climate change group.

In the case of climate finance, the Climate Finance Roundtable is responsible for the development of the financing strategy to achieve the objectives of Law No. 27,520 and to fund climate change-related projects. It is its responsibility to strategically define the funding scheme for projects and policies that are developed within the NCCC. Since 2017, this roundtable has been coordinated by the National Director of Financing with International Credit Organizations, Under-Secretariat of International Financial Relations for Development, Secretariat of Strategic Affairs of the Presidency of the Nation, which acts as the National Designated Authority (NDA) to the GCF.

Law No. 27,520 establishes minimum environmental protection budgets to ensure appropriate actions, instruments, and strategies for adaptation and mitigation of climate change in Argentina under article 41 of the National Constitution. All data and documentation related to and generated under its application is considered as environmental public information and is included in a National Climate Change Information System. This law calls for federal and provincial governments to promote processes of participation between and among stakeholders that lead to the definition of the best actions to adapt to and mitigate climate change.

Having this legal framework in Argentina is a fundamental step forward in developing, coordinating, and implementing climate change policies in the country in a consensual and transparent manner. Moreover, among the principles that guide the implementation, the law establishes the importance of mainstreaming climate change considerations in all actions and state policies, prioritizing social sectors particularly vulnerable to climate change, and taking actions that complement adaptation and mitigation.

Within this context, this Readiness proposal will contribute to generate policies and mechanisms for climate resilient and low-emission production in rural areas of Patagonian grasslands, which encompass a large proportion of the land area of the country and support some of the most vulnerable rural communities. Specifically, the proposal will contribute to establish goals, needs, and indicators for mitigation and adaptation planning and implementation for Patagonian grasslands that can be incorporated in future National Determined Contributions (NDCs) from Argentina. Additionally, this proposal will contribute to various sectoral action plans that are prioritized by the NCCC, including rural production, ranching and agriculture, ecosystem conservation, and climate finance.

#### ***Existing climate change planning instruments and nationally led initiatives***

The second NDC, approved in December 2020, states that the Argentine Republic is committed to an absolute, economy wide and unconditional goal of not exceeding a net emission of 359 million tons of carbon dioxide equivalent (MtCO<sub>2</sub>e) in 2030 (MayDS, 2020). In response to the call for greater climate ambition, Argentina has defined a 2030 target that will limit greenhouse gas emissions to a level 26% below the Nationally Determined Contribution (NDC) previously committed in 2016. In addition, this new Contribution includes the Adaptation Communication reinforcing the importance of this issue for Argentina. The Argentine Republic is also committed to a long-term low-emission development strategy, aiming to achieve carbon neutral development by 2050 (MayDS, 2020).

Agricultural and agro-industrial production provide one of the most important contributions to the national gross domestic product, as a source of employment and exports. Regarding native forests, Argentina is committed to adding capacity for their sustainable management and preservation with an emphasis on social inclusion, incorporating more effective tools for monitoring and planning, and promoting sustainable forest utilization adding competitiveness in value chains involving wood and non-timber products. Argentina is committed to strengthening implementation of Law N° 26.331 of Minimum Standards for Native Forest Protection, significantly reducing the rates of deforestation, and implementing the national Management Plan of Forest Management Integrated with

Livestock Production and the Early Warning System for Deforestation (GCF, 2020<sup>47</sup>). There are currently no national goals or commitments established for low emission production and conservation of grasslands, which highlights the importance of the present Readiness proposal.

Furthermore, the National Climate Change Adaptation and Mitigation Plan (PAMCC as per its Spanish acronym) was approved in 2019 by Resolution 447/19 and responds to the need of the country to address the challenges of climate change in a coordinated and efficient manner. The PAMCC is a public policy instrument that guides the actions to be developed in the field of climate change in the medium and long term. The development of the PAMCC lays the conceptual and methodological bases for different sectors and localities to identify their risks and vulnerabilities, prioritize actions, and formulate their own sectorial or local adaptation plans. To this end, the coherent integration of adaptation to climate change is promoted for new and existing policies, programs, and activities in all sectors and levels, as appropriate. The formulation and implementation of sectorial and local plans is addressed by each sector and jurisdiction with the support of the NCCC.

Currently, the United Nations Development Programme (UNDP) in alliance with the Argentinian Government is implementing the GCF-supported Readiness proposal for the National Adaptation Plan Process. This Readiness grant is intended to establish a national process to coordinate adaptation planning at all relevant scales and with a medium and long-term perspective. Additionally, it is planned to identify capacity gaps and strengthen capacities for adaptation planning and implementation and to promote integration of adaptation to climate change into national, provincial and municipal development planning processes. This support also includes designing a communication strategy on adaptation to climate change, focusing on the most vulnerable populations, and improving climate information services, among other goals. Furthermore, the project includes the elaboration of the National Adaptation Plan (NAP), which is an instrument that establishes the strategic lines for the process of adaptation to climate change. This plan will aim to reduce climate risks through the generation of tools to assess vulnerability and identify the impacts of climate change, prioritize measures and actions, and guide sectoral, territorial, and social planning, taking into account the determining factors and climate projections. At the same time, the NAP will seek to promote decentralized processes through each of its phases and allow sectors and territories to have at their disposal the necessary tools to advance in their adaptation strategies or plans.

The preparation of the NAP is taking place within the framework of the NCCC, where several sectoral initiatives have been identified that are directly or indirectly related to climate change adaptation, as well as other information and capacity needs. Within this framework, an urgent need has been identified to generate and implement recommendations for climate change adaptation of small-scale livestock producers and public policy tools for policy makers, emphasizing regional economies (see outcome of section 1.1 of the UNDP's Readiness proposal listed in the table of relevant Readiness support in the previous section). Therefore, it was decided to advance in the proposed Readiness support, considering its importance for the definition and systematization of good practices in strengthening the adaptive capacity of livestock production and other human activities and of the conservation of biodiversity of Patagonian grasslands. Moreover, the proposed Readiness support increases its relevance if we consider the opportunity to implement innovative adaptation processes and practices based on ecosystems and communities, particularly given the scarcity of previous climate-relevant interventions in the country regarding grasslands and other ecosystems in general. Thus, the present Readiness proposal will contribute a comprehensive portfolio of adaptation and mitigation actions for Patagonian grasslands that will strengthen the NAP with region-specific strategies. Finally, as mentioned above in this section and the previous one, given the increasingly recognized contribution of grassland soils to climate change mitigation, the proposed Readiness support can help inform mitigation processes and practices, including providing additional information for future updates of the country's NDCs and helping generate new policy and financial incentives for mitigation.

In Argentina, the Ministry of Science and Technology (MinCyT) and the Ministry of Agriculture and Livestock have research centers that conduct research and work with rural people and local government agricultural extensionists throughout Patagonia to develop tools for climate change mitigation and adaptation and to make recommendations for policy innovations. The Ministry of Science has major research centers based in Ushuaia, Esquel, Puerto Madryn, Bariloche, and Buenos Aires, among other places, where climate-relevant research is conducted including on soil nutrient, range, and grazing dynamics of Patagonian grasslands, social and economic challenges of small-scale criollo and indigenous herders, development of livestock-wildlife coexistence tools, management of invasive species, and diversification of rural production through regenerative practices and alternative products. Researchers from the Puerto Madryn-based center, for example, are combining climate modeling with large-scale interventions in an experimental project to mitigate sediment runoff and increase water retention on degraded slopes, hoping to increase resilience of both terrestrial and aquatic environments in the Chubut River valley. Building on its breadth of experience on these and other innovative solutions in the region, the Ministry of Science is well positioned to participate in the execution of this Readiness and preparatory support proposal, operating as its technical focal point and providing complementary inputs to activities.

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<sup>47</sup> [https://www.greenclimate.fund/sites/default/files/document/fp142-fao-argentina\\_0.pdf](https://www.greenclimate.fund/sites/default/files/document/fp142-fao-argentina_0.pdf)

The Ministry of Agriculture and Livestock, on the other hand, through the National Agricultural Technology Institute (INTA), has a network of research and extension centers throughout the region that complements those of the Science Ministry and focuses on supporting productive systems. Thus, INTA will also be an essential partner for the execution of this Readiness proposal. INTA recently established a state-of-the-art, long-term monitoring system at 380 sites throughout Patagonia where soil, range, biodiversity, and livestock indicators are assessed, combining remote and ground-level data.<sup>48</sup> Information from this system, as well as INTA's research and extension projects, supports rural producers throughout Patagonian grasslands, for example by providing recommendations on livestock stocking rates that can be supported sustainably based on projected levels and variability of range productivity. Furthermore, INTA recently participated in a Latin-American programme to develop tools for climate change mitigation and adaptation of livestock production systems in natural grasslands of different countries.<sup>49</sup> This program was implemented by the IDB and financed by the United Nations Environment Programme (UNEP). It proposed tools to reduce GHG emissions and climate vulnerability, but in Argentina it was focused on cattle production in the humid Pampas of eastern Argentina, an area where increasing precipitation is projected for the coming decades. The lessons learned from the UNEP project, however, will be useful for INTA's engagement in the present Readiness proposal.

Finally, this proposal will also help fulfil national- and regional-level policy gaps for climate change mitigation and adaptation regarding livestock production. The Argentine Ministry of Agriculture and Livestock and Ministry of the Environment and Sustainable Development, for example, recently developed a national plan that calls for climate-relevant rural production "National Plan for Rural Production and Climate Change" that promotes new practices regarding low-emission livestock production and regeneration of grasslands to enhance GHG sequestration.<sup>50</sup> This plan explicitly recognizes that climate-relevant practices will also be essential to reverse erosion and desertification trends and enhance food security<sup>51</sup>. These two ministries recently established processes and mechanisms for results-based incentives for management of livestock production in forest biomes of Argentina through REDD+<sup>52</sup>. Regionally, the livestock production plan for Chubut province in central Patagonia, for example, hopes to expand the use of monitoring tools for frequent forage assessment to help producers adjust livestock grazing systems to the high temporal variability of Patagonia's grasslands.<sup>53</sup> The livestock production plan for Neuquén province in northern Patagonia, for example, calls for 50% of producers implementing regenerative practices that include meadow restoration by 2030.<sup>54</sup> Thus, the present Readiness proposal will contribute production strategies and policy and financial incentives for livestock and other rural products of the Patagonia grasslands that deliver priority needs recently determined at national and local levels and contribute to climate change mitigation and adaptation.

### **Scope of the proposed Readiness and Preparatory support and project description**

Based on the above, a need has been identified to implement a Patagonia-wide regional approach to address climate vulnerabilities of Patagonian grasslands and support community- and ecosystem-based climate change solutions given that the primary driver of range and soil degradation is widespread, continuous, and high-intensity livestock grazing, which must be addressed at regional and local levels and with innovative tools to promote rangeland regeneration and economic diversification. The analyses to be conducted during this Readiness and preparatory support will be key to i) address the gaps in the NAP regarding site-specific interventions for adaptation and mitigation in Patagonian grasslands and shrublands, ii) engage and help minimize vulnerabilities of rural inhabitants including subsistence herders, women and indigenous peoples, and iii) develop a concept note to be submitted to the GCF to access climate finance in the medium term. Furthermore, the analyses generated will help identify community and ecosystem-based practices that are applicable for particularly vulnerable communities, like integrated sustainable management of livestock and wildlife, *mallines* grazing

<sup>48</sup> Gabriel Oliva, Eder dos Santos, Osiris Sofía, Fernando Umaña, Virginia Massara, Guillermo García Martínez, Cecilia Caruso, German Cariac, Daniela Echevarría, Anabella Fantozzi, Lucas Butti, Donaldo Bran, Juan Gaitán, Daniela Ferrante, Paula Paredes, Erwin Domínguez, and Fernando T. Maestre, "The MARAS Dataset, Vegetation and Soil Characteristics of Dryland Rangelands Across Patagonia," *Scientific Data* 7, no. 327 (2020).

<sup>49</sup> Marta A. Alfaro, Luis Inostraza, Laura Finster, Alejandro Costantini, Ana G. Perez, Christina Chinchilla, Pablo Mamani, and Juan Vallejos, *Bases para la generación de una estrategia integrada de adaptación para sistemas ganaderos de Latinoamérica*. (Washington, D.C.: Banco Interamericano de Desarrollo, 2019), pp. 2-12.

<sup>50</sup> Secretaría de Ambiente y Desarrollo Sustentable, *Plan Nacional de Agro y Cambio Climático* (Presidencia de la Nación Argentina, 2019).

<sup>51</sup> *Ibid.*, p. 73.

<sup>52</sup> Ministerio de Ambiente y Desarrollo Sustentable, *Resumen de la Propuesta de Financiamiento para el Pago Basado en Resultados de REDD+ de la Argentina* (Presidencia de la Nación Argentina, 2020).  
[https://www.greenclimate.fund/sites/default/files/document/fp142-fao-argentina\\_0.pdf](https://www.greenclimate.fund/sites/default/files/document/fp142-fao-argentina_0.pdf)

<sup>53</sup> Ministerio de la Producción de Chubut, *Plan Ganadero de la Provincia del Chubut* (Chubut: Gobierno de la Provincia del Chubut, 2017).

<sup>54</sup> Ministerio de Producción e Industria de Neuquén, *Plan Ganadero Bovino Provincial 2021-2030* (Neuquén: Gráfica Nuevo Horizonte, 2021).

management to minimize degradation and loss of water and carbon retention, diversification of products to include wildlife, plant, and tourism, and development of fiscal, commercial, and financial instruments for these practices.

Therefore, **the goal of this Readiness and Preparatory support is to develop a strategy for community- and ecosystem-based mitigation and adaptation to climate change of the grasslands of Patagonia that improves the livelihoods and minimizes climate vulnerabilities of rural inhabitants, conserves and increases the resilience of the natural systems they depend upon and helps fulfill Argentina's commitment to climate change mitigation and adaptation. Moreover, a technically sound concept note will be developed and submitted to the GCF, aligned with national GCF project pipelines to scale up the main results of the project and access climate financing in the medium to long term.** if the capacities of vulnerable rural groups for planning and implementing ecosystem-based practices are increased, national and provincial climate policy frameworks are fully aligned, and best regenerative practices and knowledge sharing are enhanced, then the overall resilience of the Patagonian region will be increased, because the Argentina's government and the rural people of Patagonia, including women and other vulnerable communities, will be able to design and implement a technically sound mitigation and adaptation strategy for resilient and low-emission management of Patagonia's grasslands that will conserve Patagonia's biodiversity and sustain the livelihoods of its inhabitants in a climate resilient manner.

In terms of the project description, this Readiness and Preparatory support proposal has been designed to complement the existing climate change planning framework of Argentina. On one hand, this proposal will generate primary information necessary to identify site-specific climate change solutions for the Patagonia region and thus contribute to the goals established in second Argentina's NDC. Furthermore, it will provide important information to update the second NDCs based climate needs identified from the elaboration of a climate-resilient and low-emission production strategy for livestock, wildlife, and local products that can be applicable at subsistence and small-scale production levels. On the other hand, given that the National Climate Change Adaptation and Mitigation Plan does not consider targeted solutions for the Patagonia region, this Readiness support will allow the Government of Argentina to gain a better understanding of the challenges and barriers to promote a more resilient and low-emission development in this region of the country. In terms of climate financing, this Readiness support will be the first step to design a comprehensive funding proposal that fosters financial mechanisms in this part of country which is highly vulnerable to the impacts of climate change and that has a high transformational potential to become more resilient and contribute to the absorption of CO<sub>2</sub> through effective ecosystem management. It is very important to mention that although Argentina does not have a GCF country work programme, this readiness support is fully aligned with the climate priorities established at the country level which include the implementation of climate resilient agricultural and livestock practices as well as the use of ecosystem-based adaptation to regenerate natural landscapes. Similarly, Argentina has established as a priority the establishment of financial mechanisms that promote a more sustainable and equitable development that contribute to the adaptation and mitigation goals defined in the National Climate Change Adaptation and Mitigation Plan.

Based on the above, the Government of Argentina, through its NDA, has prioritized the implementation of this Readiness support and the subsequent preparation of a funding proposal to address the adaptation and mitigation needs and information gaps that currently face the Patagonia region given its high degree of climate vulnerability and its high potential for transformational change through a more climate-sensitive development pathway. Therefore, the project has been structured through the following outcomes:

Outcome 1.3: Relevant country stakeholders (which will include executing agencies, civil society organizations, and private sector) have established adequate capacity, systems, and networks to support the planning, programming, and implementation of GCF-funded activities.

Outcome 2.2: GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling environments for GCF programming in low-emission investment.

Outcome 4.1: An increase in the number of quality project concept notes developed and submitted.

Outcome 5.1: Best practices with respect to institutional capacity building and coordination, direct access, and pipeline development are developed and disseminated to strengthen engagement by NDAs, DAEs, and delivery partners with the GCF.

Specifically, this Readiness and preparatory support proposal will provide support to key stakeholders, especially vulnerable rural inhabitants and livestock producer organizations of Patagonian grasslands and relevant national and local government agencies, to:

1. **Develop quantitative and qualitative analyses to strengthen and expand the NAP and mitigation policies and actions.** Prepare an analysis of regional and national policy frameworks regarding Patagonian grassland management and fiscal, market, and financial incentives for resilient and low-emission production of livestock and other rural products like wildlife, plants, and tourism, that have potential for generating diversification and benefit livelihoods of vulnerable rural inhabitants.
2. **Identify and disseminate information on best practices and case studies to regenerate range and soils and illustrate successful models** for ecosystems-based adaptation (EbA) and ecosystems-based mitigation (EbM) in Patagonian grasslands.
3. **Conduct vulnerability assessment of livestock producer groups** to climate risks and a strategy to engage them in decision making processes and actions to promote resilience as a key part of the EbA and EbM approach, with a focus on subsistence-level producers, Mapuche and Tehuelche people, and women-led households.
4. **Develop social, economic, and ecological analyses and best-practice models** on the resilience of Patagonian grasslands and shrublands and the local communities who depend on them that result in more regenerative-based livelihoods and an increased capacity to contribute to climate change mitigation. For example, this project will generate proposals for climate-relevant value chains and investment by the domestic private sector, including those supporting both adaptation and mitigation practices.
5. **Develop environmental and social assessment and risk screening.** Full engagement of members of vulnerable rural communities, consideration of particularly disadvantaged individuals, and enhancement of their access to development benefits will minimize environmental and social risks associated with the strategy.
6. **Develop a regional strategy for climate resilient and low-emission production of livestock and wildlife in Patagonia grasslands** that compiles the analyses mentioned above, describes the adaptation and mitigation measures and targets, and identifies potential stakeholders for its implementation.
7. **Elaborate a technically sound concept note** that builds on the assessments listed above to access climate finance and implement mitigation and adaptation actions in the Patagonia region in the medium to long term.

Furthermore, during the implementation of this Readiness support, 10 vulnerable rural groups will be selected throughout Patagonian grasslands- maximizing community and ecosystem representation and each comprising approximately 200 families- to actively participate during project execution and the elaboration of the concept note. Thus, this Readiness proposal will directly benefit approximately 2,000 families and 8,000 to 10,000 vulnerable rural people. In the medium to long term, a comprehensive rural production strategy and concept note that generate climate relevant and low emission policies, practices, and investment, is expected to benefit most of the 120,000 vulnerable rural inhabitants of Patagonia as well as thousands of urban inhabitants of Patagonian towns and cities whose livelihoods and economies also are tied to sustainable production and biodiversity of Patagonian grasslands .Additionally, this Readiness support will seek to address a series of technical, institutional, operational and financial barriers that have been identified and that need to overcome to achieve the outcomes of the projects. The main barriers are as follows:

- **Lack of national alignment of NDCs and other components of climate strategies regarding adaptation and mitigation of Patagonian grasslands and shrubland and their dominant land uses and conservation challenges.** The NDC's general recommendations regarding climate mitigation and adaptation, biodiversity conservation, and agricultural ecosystems that guide national strategies do not yet include a regional-scale approach for the Patagonian grasslands and shrublands.
- **Insufficient consultation and engagement of small- and medium-scale rural producers, Mapuche and Tehuelche organizations, and representatives of other vulnerable groups such as women-led rural households in climate strategy decision-making.**
- **Limited access to information on climate risks and on climate change mitigation and adaptation options by vulnerable rural groups in Patagonian grasslands.**
- **Limited resources and technical capacity among vulnerable rural groups in Patagonia to gather, share, and utilize climate-relevant information affecting rural livelihoods and production systems and their vulnerabilities and risks and scale up ecosystem-based adaptation and mitigation practices and tools that are applicable at local levels and benefit from appropriate fiscal and market incentives.**
- **Lack of access to climate financing to deploy comprehensive adaptation and mitigation actions in the Patagonian grasslands.**

The specific way in which these barriers are expected to be overcome has been included under section 4 (Theory of Change).

### 3. LOGICAL FRAMEWORK

Outcomes	Baseline	Targets	Outputs	Activities (brief description)	Deliverables
Outcome 1.3: Relevant country stakeholders (which will include executing agencies, civil society organizations, and private sector) have established adequate capacity, systems and networks to support the planning, programming and implementation of GCF-funded activities.	Socioeconomic conditions of the people of Patagonia are generally understood, nonetheless there are gaps in terms of understanding the current vulnerabilities of many rural-inhabitants in terms of their social and economic conditions. Additionally, although national and local government agencies, livestock producer organizations, science and extension agencies, and civil society groups have been engaged in consultative processes, not all relevant actors	10 vulnerable rural-inhabitants groups from different biozones representative of the main vulnerable ecosystems of the Patagonia are selected and their socioeconomic conditions are analyzed and described to gain a more deep understanding of their current vulnerabilities and needs. Additionally, local and regional stakeholders, including non-traditional actors are mapped and described to have a better sense of current efforts and initiatives in Patagonia. Finally, an “innovation platforms” scheme is established and a continuity plan is elaborated to promote community engagement in	Output 1.3.1: A proposal outlining ecological and socioeconomic criteria for selection of vulnerable rural groups and characteristics of locations and groups selected to be engaged in the current Readiness proposal, representative of diversity of Patagonian grasslands and rural communities is elaborated.	Activity 1.3.1.1: <b>Report on selected groups and corresponding locations.</b> Strategically select 10 vulnerable rural-inhabitant groups and locations throughout Patagonian grasslands- two per each province representing major biozones to maximize community and ecosystem representation- to actively participate during project execution. The groups and corresponding locations will be selected based on socioeconomic and ecological criteria to be established during project inception.	Deliverable 1.3.1.1: Report detailing the selection criteria used and describing the 10 vulnerable rural groups and locations selected.
			Output 1.3.2: Technical and institutional capacities of regional stakeholders (primarily vulnerable rural groups including women, small-scale herders, and indigenous groups) relevant for the management of Patagonian grasslands are identified and socio-economic conditions of the 10 vulnerable groups are assessed, to inform the development of a climate risk and vulnerabilities assessment and the development of a concept note to be submitted to the GCF.	Activity 1.3.2.1: <b>Stakeholder mapping and socioeconomic study.</b> Conduct a regional stakeholder mapping and capacity needs assessment of relevant actors involved in the current management of Patagonian grasslands; and develop a comprehensive socio-economic study of the 10 vulnerable rural inhabitant groups selected to inform the development climate risk and vulnerability assessment (activity 2.2.1.4) and identify potential barriers and opportunities for their engagement in innovative community and ecosystem-based mitigation and adaptation practices (see examples in Deliverable 2.2.1.2) and in the development a concept note to be submitted to the GCF (activity 4.1.1.3).	Deliverable 1.3.2.1: (a) Regional stakeholder map, detailing capacities and needs of different stakeholders associated with the 10 vulnerable groups selected, for implementing low-emission and resilient grassland management and for participating in climate finance mechanisms, to inform development of a GCF concept note.  (b) Socio-economic study of the 10 vulnerable groups selected, with a focus on their sensitivity and adaptive capacity to climate change. This analysis will inform the climate risk and vulnerability assessment (Deliverable 2.2.1.4) and will provide inputs, together with the stakeholder map, for the development of the concept note to be submitted to the GCF.

	<p>have been identified and therefore there is not a clear idea of all the initiatives and efforts that are taking place in Patagonia to promote more sustainable livelihood practices. Finally, there are no structured mechanisms to engage community stakeholders on regular basis to promote training and coordination between governments and livestock producer groups, particularly vulnerable groups.</p>	<p>decision making processes and training.</p>	<p>Output 1.3.3. Relevant stakeholders are continuously engaged, through innovative platforms, to participate in the development of public policies and capacity building processes aimed at promoting climate resilient and low-emission rural production systems in Patagonian grasslands.</p>	<p>Activity 1.3.3.1: <b>Innovation platforms to enhance participation schemes.</b> Conduct at least three pilot innovative platforms<sup>55</sup> in which stakeholders identified in activity 1.3.2.1 (particularly small-scale livestock producers, women-led households, and indigenous groups) can actively participate in: i) the development and update of policies and plans that support resilient and low-emission rural production systems in Patagonian grasslands; ii) the implementation of capacity building processes; and iii) the exchange of lessons learned and best practices. Additionally, elaborate a technical and financial proposal to continue with the implementation of the innovative platforms (after project execution) to continuously engage relevant stakeholders in decision making processes and training. This technical and financial proposal will be presented to the Argentinian government represented by the Ministry of Agriculture, Livestock and Fisheries and the National Institute of Agricultural Technology (INTA) for their consideration given their mandate to promote sustainable livestock and production practices at the national and subnational level.</p>	<p>Deliverable 1.3.3.1:</p> <p>(a) Three comprehensive reports of the innovation platforms conducted.</p> <p>(b) Technical and financial proposal to implement innovative platforms on a regular basis. The proposal should be revised by the relevant organizations to gain support and promote its implementation after project completion.</p>
<p>Outcome 2.2: GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling</p>	<p>Although Argentina has made efforts to promote climate resilient and low emissions practices in Patagonia in the</p>	<p>A climate resilient and low-emission production strategy for livestock, wildlife, and local products is formulated based on the development of: i) an analysis of the</p>	<p>Output 2.2.1: A community- and ecosystem-based, climate resilient and low-emission production strategy for livestock, wildlife, and local products is developed to promote a more climate-oriented</p>	<p>Activity 2.2.1.1: <b>Analysis of the existing policy framework.</b> Review the current national climate policy framework relevant to maintaining or regenerating Patagonian grasslands and assess opportunities for developing policies and incentive programmes to promote ecosystem- and community-based mitigation and adaptation</p>	<p>Deliverable 2.2.1.1: Report outlining options to develop and coordinate policies and incentives at national and provincial levels for vulnerable rural inhabitants of Patagonian grasslands that promote ecosystem- and community-based mitigation and adaptation practices (like regenerative and sustainable livestock,</p>

<sup>55</sup> An innovation platform is a space for learning and exchange in which a group of individuals (who often represent organizations) with different backgrounds and interests: farmers, traders, food processors, researchers, government officials) come together to diagnose problems, identify opportunities, and find ways to achieve their goals. The idea behind it is to give the opportunity to stakeholders to design and implement activities collectively as a platform, or coordinate activities by individual members that promote best practices and transformational changes. (Homann-Kee Tui et al. 2013). Available at: <https://cgspace.cgiar.org/handle/10568/34157>.

<p>environments for GCF programming in low emission investment.</p>	<p>framework of its NDC and its national Adaptation and Mitigation Plan, there is no comprehensive strategy that considers context-specific needs (social, economic and environmental) and vulnerabilities of the rural-inhabitants of Patagonia, including indigenous groups.</p>	<p>existing national policy framework relevant for the Patagonia, ii) an economic analysis on existing value chains to identify potential financial mechanisms and governance structures to promote investments in low emission and resilient management practices and iii) climate vulnerability and risk assessments of the 10 rural-inhabitants groups (selected in outcome 1). Additionally, a database and digitized maps for each of the 10 vulnerable groups showing socioeconomic parameters for vulnerable communities will be developed to describe and visualize land and livelihood condition indicators, and management practices that exacerbate climate vulnerability and risks.</p>	<p>production culture in the Patagonian grasslands. The strategy will be applicable at subsistence and small-scale production levels (i.e., herds smaller than 1,000 sheep or goats) that are typical for vulnerable rural families (including livestock grazing, water and firewood management systems and sustainable use of alternative products including wildlife, plants, and tourism).</p>	<p>strategies that benefit vulnerable rural groups.</p> <p>Activity 2.2.1.2: <b>Database and digitized maps showing socioeconomic parameters for vulnerable communities.</b> Based on the socio-economic study developed in activity 1.3.2.1, conduct an assessment and create a database and digitized map for the 10 vulnerable groups selected to describe and visualize land and livelihood condition indicators, and management practices that exacerbate climate vulnerability and risks. The database will include guidelines for its use and for training of group leaders. Additionally, an online, interactive map with the accompanying narrative will be created to visualize the geo-referenced data. The database will be made available on the project website (Deliverable 5.1.1.2). Furthermore, an online training workshop will be conducted with relevant agency personnel and representatives from the 10 vulnerable groups in the use and maintenance of the database. Following the workshop, a training video will be made available on the project website (Deliverable 5.1.1.2).</p> <p>Activity 2.2.1.3: <b>Economic analysis on existing value chains.</b> Conduct an economic analysis of the existing value chains that involve rural production and livelihoods, particularly those in which the 10 vulnerable groups selected currently participate. The analysis should include a description of financial mechanisms and governance structures, existing fiscal and trade policies, and innovative value chains and incentives that could promote investments in low emission and resilient</p>	<p>range and wildlife management), including fiscal and economic incentives and governance systems, and policy and regulation needs.</p> <p>Deliverable 2.2.1.2:</p> <p>(a) Interactive maps for each of the 10 vulnerable groups with instructions for use, with information and trends on desertification status, ongoing practices for husbandry grazing, economic diversification, and climate risk reduction practices, land tenure, disaggregated by gender, and gaps in regenerative practices and access to resources.</p> <p>(b) Training video on the use and periodic update of the database and interactive maps, for use and periodic update (after project completion). These materials are expected to be used in the iterative innovation platforms described in 1.3.3.1, and as an input for the elaboration of the communication tools described in Deliverables 5.1.1.1 and 5.1.1.2.</p> <p>I One training workshop report on the use of the database.</p> <p>Deliverable 2.2.1.3: Economic analysis on existing value chains involving Patagonian grassland products aimed at promoting an enhanced equitability and participation of vulnerable groups on value chains, governance structures, and development of innovative financial mechanisms that promote low-emission and resilient investments and management of grasslands and the establishment of private sector partnerships.</p>
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				management of grasslands and private sector partnerships. This analysis will be a central input for the development of the strategy outlined in Deliverable 2.2.1.7 and the economic model developed in Deliverable 4.1.1.1	
				Activity 2.2.1.4: <b>Climate vulnerability and risk assessments.</b> Conduct a climate vulnerability and risk assessment of each of the 10 groups selected in activity 1.3.1.1. These analyses will inform the development of innovative ecosystem-based and community-based mitigation and adaptation practices for resilient and low-emission livestock and wildlife production and a concept note to be submitted to the GCF.	Deliverable 2.2.1.4: Climate vulnerability and risk assessment of each of the 10 rural inhabitant groups selected in Patagonian grasslands
				Activity 2.2.1.5: <b>Identification of mitigation measures and carbon accounting tools.</b> Conduct an analytical assessment to identify new land management practices and technologies that can contribute to reducing carbon emissions across the main economic activities of the 10 vulnerables groups and their territories, particularly associated with livestock management and agriculture. Additionally, identify carbon accounting methodologies and tools that enable communities to measure and report its reductions from the implementation of the new approaches identified and that can be linked to existing national and/or subnational reporting mechanisms.	Deliverable 2.2.1.5: A report on the identification of mitigation measures that can be applied at the local level and a set of step-by-step methodologies and tools for carbon accounting that can be linked to national and/or subnational mechanisms.

				<p>Activity 2.2.1.6: <b>Engagement meetings to validate the elaboration of a climate resilient and low-emission production strategy.</b> Conduct ten engagement workshops with each of the 10 vulnerable groups, in person or virtual (10 people each approx.) to a) share results of policy and incentives analyses, climate vulnerability and risk assessments, and analyses of grassland management practices and markets, and b) ensure their inclusive participation in the design and implementation of an innovative mitigation and adaptation strategy, and to collect inputs for the elaboration of the concept note (activity 4.1.1.3).</p>	<p>Deliverable 2.2.1.6: Reports on the 10 engagement workshops detailing agreements with vulnerable groups and lessons learned regarding the development of a climate resilient and low emission production strategy for livestock, wildlife, and local products and to collect inputs for the elaboration of the GCF concept note.</p>
				<p>Activity 2.2.1.7: <b>Climate-resilient and low-emission production strategy.</b> Based on the results of the climate vulnerability and risk assessment and the compilation of results from outputs 1.3.1, 1.3.2, 1.3.3 and 2.2.1, identify a portfolio of adaptation and mitigation measures and develop a comprehensive climate resilient and low-emission production strategy for livestock, wildlife and local products aimed at minimizing climate risks and fostering sustainable and equitable livelihoods of vulnerable rural groups inhabiting Patagonian grasslands.</p>	<p>Deliverable 2.2.1.7: A climate-resilient and low-emission production strategy for livestock, wildlife, and local products that can be applicable at subsistence and small-scale production levels.</p>
<p>Outcome 4.1: An increase in the number of quality project concept notes developed and submitted.</p>	<p>The government of Argentina has so far submitted four concept notes to GCF to support the National Adaptation and Mitigation Plan, but none directly</p>	<p>One concept note for Patagonian grasslands to support the implementation of the climate resilient and low-emission production strategy for livestock, wildlife, and local products is</p>	<p>Output 4.1.1: A technically sound concept note for the Patagonian grasslands, to support the climate resilient and low-emission production strategy for livestock, wildlife, and local products is formulated and submitted to GCF.</p>	<p>Activity 4.1.1.1: <b>Economic and financial model.</b> Develop an economic and financial model for resilient and low-emission production of vulnerable rural communities in Patagonian grasslands, to assess and demonstrate its impact potential, cost effectiveness, financial adequacy, and long-term economic and financial viability.</p>	<p>Deliverable 4.1.1.1: An economic and financial model, with key assumptions and potential stressed scenarios, for resilient and low-emission production of vulnerable rural communities and incorporating information from deliverables 2.2.1.1, 2.2.1.2, 2.2.1.3, 2.2.1.4, 2.2.1.6 and 2.2.1.7.</p>

	<p>involving Patagonian grasslands. Two of the four concept notes submitted are currently under implementation, one aimed at reducing deforestation through REDD+ (<a href="https://www.greenclimate.fund/project/fp142">https://www.greenclimate.fund/project/fp142</a>) and one at promoting renewable energy and energy efficiency (<a href="https://www.greenclimate.fund/countries/argentina">https://www.greenclimate.fund/countries/argentina</a>).</p>	<p>formulated and submitted to GCF together with an economic and financial model and environmental and social risk screening.</p>		<p>Activity 4.1.1.2: <b>Environmental and social risk screening.</b> Conduct a complete environmental and social risk screening for the implementation of adaptation and mitigation measures identified in the climate resilient and low-emission production strategy for livestock, wildlife, and local products, considering the implementation of economic and financial model for their financial sustainability in the future. This environmental and social risk screening will also inform the development of the concept note to be submitted to the GCF (activity 4.1.1.3)</p> <p>Activity 4.1.1.3: <b>GCF concept note.</b> From the compilation of outputs 1.3.1, 1.3.2, 1.3.3, 2.2.1 and 4.1.1 develop a comprehensive concept note to support the implementation of the climate-resilient and low-emission production strategy for livestock, wildlife, and local products in the Patagonian grasslands. The concept note will be included in the Argentinian Country Work Programme and submitted to the GCF at the end of project execution.</p> <p>Activity 4.1.1.4: <b>GCF concept note stakeholder validation workshop.</b> Conduct a virtual stakeholder workshop – with one representative from each of the 10 rural groups, representatives from local and national agencies involved in the project and representatives from other organizations involved in projects related to increasing the resilience of socio-ecological landscapes in</p>	<p>Deliverable 4.1.1.2: Report on environmental and social risk screening incorporating information from deliverable 2.2.1.4. to inform concept note.</p> <p>Deliverable 4.1.1.3:</p> <p>(a) One concept note submitted to GCF. The concept note shall include a comprehensive climate rationale supported by the climate vulnerability and risk assessments conducted in activity 2.2.1.4 as well as a diagram of the theory of change in which there is a distinct relation between the project outputs and the expected results. Additionally, the concept shall include a pre-feasibility study considering an analysis of existing information and research needs regarding hydrological processes and potential for GHG emission reduction and capture in Patagonian grasslands, and an evaluation report of this Readiness support.</p> <p>(b) One GCF PPF duly completed.</p> <p>Deliverable 4.1.1.4: Validation workshop report highlighting agreements on concept note.</p>
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				the Patagonia and/or reducing emissions from land-use and economic activities- to validate the final content of the concept note to be submitted to the GCF. Additionally, representatives from potential accredited entities will be consulted.	
Outcome 5.1: Best practices with respect to institutional capacity building and coordination and direct access are developed and disseminated to strengthen engagement by NDAs, DAEs, and delivery partners with the GCF.	There is consensus in Argentina for a National Adaptation and Mitigation Plan and the need to identify and share best practices. However, region-specific best practices for ecosystem- and community-based adaptation and mitigation for natural grasslands have not been drafted for Patagonian grasslands. Some best practices have been identified and shared in national and provincial management plans for livestock production but are not widely shared among vulnerable rural groups and are not integrated in a comprehensive	A best practices and case studies report of ecosystem- and community-based mitigation and adaptation solutions implemented across Patagonia is elaborated to share best practices and lessons learned in the region. Additionally, a regional communication work plan, website and a set of communication products are elaborated and disseminated to foster knowledge exchange regarding the needs of the Patagonian rural-inhabitants as well as efforts and opportunities to transform the current development pathway and achieve more resilient and low-emission livelihoods.	Output 5.1.1: Patagonian grasslands case studies and a package co-created with representatives from vulnerable groups (in design and implementation), outlining best practices for mitigation and adaptation, including products that are freely available online, accessible to vulnerable and isolated herder groups, and disseminated on social media.	<p>Activity 5.1.1.1: <b>Best practices and case studies report.</b> Co-create (including design and implementation) case studies of best-practices for ecosystem- and community-based mitigation and adaptation technical options implemented across Patagonia in collaboration with leaders of the 10 rural groups that demonstrate ways to regenerate range and soils and promote equitable livelihoods and access to resources for vulnerable groups including women and Mapuche and Tehuelche people.</p> <p>Activity 5.1.1.2: <b>Communication products.</b> Develop a regional communications work plan, comprehensive website, graphic identity, and related products for the Patagonian grassland program that reflects identities of small-scale livestock producers, Mapuche and Tehuelche people, the needs of women and other vulnerable communities, national priorities, and climate change in the region.</p>	<p>Deliverable 5.1.1.1: Report articulating best practices for the case studies with the 10 vulnerable groups selected outlining options for mitigation and adaptation, including techniques for regenerative livestock, range, and wildlife management, soil carbon and water retention, erosion control, expansion of wildlife and native plant product harvest and marketing, and tourism, monitoring methods for environmental and socio-economic indicators, and access to new markets and climate-relevant incentives (as outlined in Deliverables 2.2.1.2, 2.2.1.4, and 2.2.1.7 and 4.1.1.1).</p> <p>Deliverable 5.1.1.2:</p> <p>(a) Patagonia region and national communications plan, products, and videos produced for each of the 10 vulnerable groups, linked to participation platforms described in Deliverable 1.3.3.1, interactive maps described in Deliverable 2.2.1.2, and strategy in Deliverable 2.2.1.6.</p> <p>(b) website developed, including all project reports and deliverables.</p>

	strategy for resilient and low-emission production in Patagonian grasslands.				
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## 4. THEORY OF CHANGE

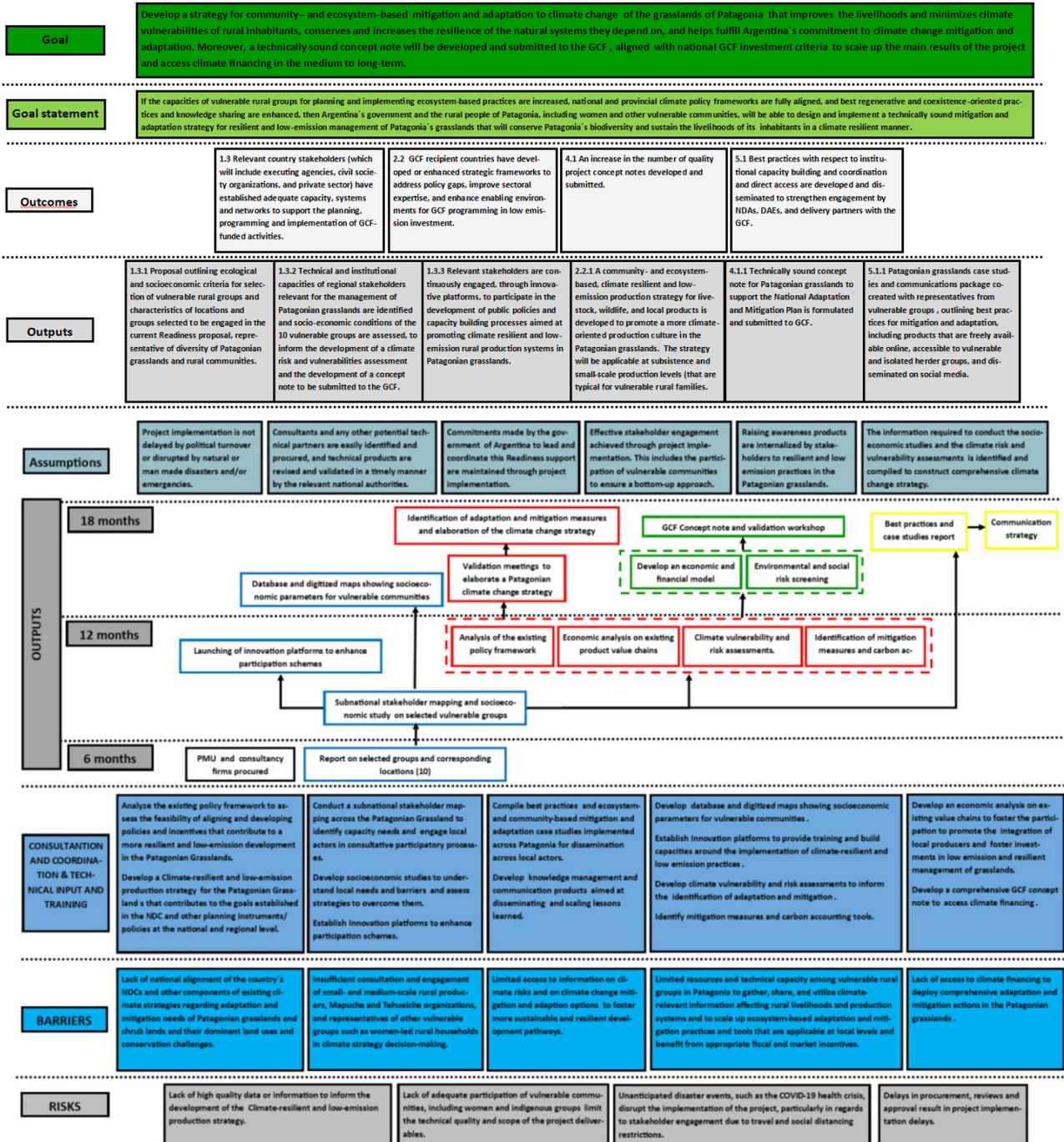


Figure 1. Theory of change Diagram.

The Theory of change diagram can be found in the following MS Publisher document:



The theory of change was constructed to reflect the temporality and the relations between the different project inputs/deliverables as well as to consider the different risks and assumptions made to achieve the project results (outputs). Additionally, the diagram shows the chain of results expected to be produced by this Readiness support whose main goal is to promote a more resilient and low-emission development pathway in the Patagonia grasslands through the development of a scientific evidence-based climate-resilient and low-emission production strategy and the elaboration of a GCF concept note to access climate finance in the medium to long term. The color partner in the output section shows the relation between the different deliverables: i) deliverables outlined in blue refer to outputs related to stakeholder engagement, ii) deliverables outlined in red refer to outputs related to the development of technical inputs aimed at developing the climate-resilient and low-emission production strategy, iii) deliverables outlined in green refer to outputs related to the development of the GCF concept note and iv) deliverables outlined in yellow refer to outputs related to the development of knowledge management and communication products. Furthermore, the diagram illustrates the barriers the Readiness support will seek to overcome by gathering baseline information and data, producing technical inputs, engaging different stakeholders, and generating knowledge through the process.

*Theory of change narrative:*

This Readiness and support grant includes **6 outputs** which seek to: i) strengthen the enabling environment for the deployment of cross-sectoral adaptation and mitigation measures across the Patagonian grassland, ii) identify environmental, social and economic conditions for the elaboration of a community- and ecosystem-based, climate resilient and low emission production strategy for livestock, wildlife, and local products to promote a more climate-oriented development pathway in Patagonia and iii) elaborate a technically sound concept note for Patagonian grasslands to unlock climate financing and support the future implementation of the climate resilient and low emission production strategy for livestock, wildlife, and local products. Nonetheless, to achieve the above the project faces a set of **generalized risks** and **output-specific barriers** that need to be taken into consideration. The **main risks** include: **a)** lack of high quality data or information to inform the development of the Climate-resilient and low-emission production strategy, **b)** lack of adequate participation of vulnerable communities, including women and indigenous groups limit the technical quality and scope of the project deliverables, **c)** unanticipated disaster events, such as the COVID-19 health crisis, disrupt the implementation of the project, particularly in regards to stakeholder engagement due to travel and social distancing restrictions and **d)** delays in procurement, reviews and approval result in project implementation delays. Furthermore, for the project to thrive and achieve the main goal a series of **assumptions** are being considered, these include: **1)** Project implementation is not delayed by political turnover or disrupted by natural or manmade disasters and/or emergencies, **2)** Consultants and any other potential technical partners are easily identified and procured, and technical products are revised and validated in a timely manner by the relevant national authorities, **3)** Commitments made by the government of Argentina to lead and coordinate this Readiness support are maintained through project implementation, **4)** Effective stakeholder engagement processes will be achieved through project implementation, particularly, with vulnerable communities which are the main beneficiaries of this Readiness and support programme, **5)** Raising awareness products are internalized by stakeholders to resilient and low emission practices in the Patagonian grasslands and **6)** The information required to conduct the socioeconomic studies and the climate risk and vulnerability assessments is identified and compiled to construct comprehensive climate change strategy. The way in which the different project outputs will contribute to the main outcomes and therefore the goal by overcoming existing operational, technical, financial, and institutional barriers is explained as followed:

The first three outputs: **1)** A proposal outlining ecological and socioeconomic criteria for selection of vulnerable rural groups and characteristics of locations and groups selected to be engaged in the current Readiness proposal, representative of diversity of Patagonian grasslands and rural communities is elaborated (**Output 1.3.1**); **2)** Technical and institutional capacities of regional stakeholders (primarily vulnerable rural groups including women, small-scale herders, and indigenous groups) relevant for the management of Patagonian grasslands are identified and socioeconomic conditions of the 10 vulnerable groups are addressed to inform the development of a climate risk and vulnerabilities assessment and the development of a concept note to be submitted to the GCF (**Output 1.3.2**) and **3)** Relevant stakeholders are continuously engaged, through innovative platforms, to participate in the development of public policies and capacity-building processes aimed at promoting climate-resilient and low emission rural production systems in Patagonian grasslands (**Output 1.3.3**); are aimed at fostering, bolstering and establishing capacities, systems and networks in different stakeholders to support the planning, programming and implementation of GCF-funded activities (i.e., community- and ecosystem-based, climate resilient and low emission production strategy for livestock, wildlife, and local products) in the short, medium and long term and to create enabling conditions for the implementation of climate-sensitive measure that enable a more climate-resilient development pathway. (**Outcome 1.3**). However, to achieve outcome 1.3, outputs 1.3.1, 1.3.2 and 1.3.3, will seek to overcome **barriers** associated to: **i)** insufficient consultation and engagement processes of small- and medium-scale rural producers, Mapuche and Tehuelche organizations, and representatives of other vulnerable groups such as women-led rural households in climate strategy decision-making and **ii)** limited resources and technical capacity among vulnerable rural groups in Patagonia to gather,

share, and utilize climate-relevant information affecting rural livelihoods and production systems and to scale up ecosystem-based adaptation and mitigation practices and tools that are applicable at local levels and benefit from appropriate fiscal and market incentives. These barriers will be mainly overcome through a) the selection of focal groups and corresponding locations to gather baseline data and inputs for the elaboration of the community- and ecosystem-based, climate resilient and low emission production strategy for livestock, wildlife, and local products (**A. 1.3.1.1**), b) the mapping of subnational stakeholder and the elaboration of a socioeconomic study on selected vulnerable groups (**A. 1.3.2.1**), c) the launching of innovation platforms to enhance participation schemes of traditional and nontraditional actors relevant for the sustainable management of the Patagonian grasslands (**A. 1.3.3.1**) and finally the implementation of a database and digitized maps showing socioeconomic parameters for vulnerable communities (**A. 2.2.1.2**); as shown in the chain results outlined in blue in the theory of change Diagram.

The second output: A community- and ecosystem-based, climate resilient and low emission production strategy for livestock, wildlife, and local products is developed to promote a more climate-oriented production culture in the Patagonian grasslands. The strategy will be applicable at subsistence and small-scale production levels (i.e., herds smaller than 1,000 sheep or goats) that are typical for vulnerable rural families (including livestock grazing, water and firewood management systems, and sustainable use of alternative products including wildlife, plants, and tourism) (**Output 2.2.1**); is aimed at enhancing strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling environments for GCF programming in low emission investment (**Outcome 2.2**). However, to achieve outcome 2.2, output 2.2.1 will seek to overcome **barriers** associated to: i) lack of national alignment of the country's NDCs and other components of existing climate strategies regarding adaptation and mitigation needs of Patagonian grasslands and shrub lands and their dominant land uses and conservation challenges and ii) Limited resources and technical capacity among vulnerable rural groups in Patagonia to gather, share, and utilize climate-relevant information affecting rural livelihoods and production systems and to scale up ecosystem-based adaptation and mitigation practices and tools that are applicable at local levels and benefit from appropriate fiscal and market incentives (same as outputs 1.3.1, 1.3.2 and 1.3.3). These barriers will be mainly overcome through the elaboration of a comprehensive community- and ecosystem-based, climate resilient and low emission production strategy for livestock, wildlife, and local products (**A. 2.2.1.7**) which will be elaborated based on: a) an analysis of the existing policy framework (**A. 2.2.1.1**), b) an economic analysis of existing product value chains (**A. 2.2.1.3**), c) context-specific climate vulnerability and risk assessments to identify adaptation measures (**A. 2.2.1.4**) and d) the identification of mitigation measures and carbon accounting tools (**A. 2.2.1.5**). It is important to mention that the analyses mentioned above will be validated through a meeting (**A. 2.2.1.6**) to ensure that the information and data produced are context based and accurate to produce the community- and ecosystem-based, climate resilient and low emission production strategy for livestock, wildlife, and local products expected to steer down a more climate responsive pathway in the Patagonia; as shown in the chain results outlined in red in the theory of change Diagram.

The third output: A technically sound concept note for Patagonian grasslands to support the National Adaptation and Mitigation Plan is designed and submitted to GCF (**output 4.1.1**); is aimed at increasing the number of quality project concept notes developed and submitted (**outcome 4.1**) and unlocking climate financing for the deployment of the community- and ecosystem-based, climate resilient and low emission production strategy for livestock, wildlife, and local products to foster a paradigm shift in the current production systems of the Patagonian grasslands. However, to achieve outcome 4.1, output 4.1.1 will seek to overcome a **barrier** associated to a lack of access to climate financing to deploy comprehensive adaptation and mitigation actions in the Patagonian grasslands. This barrier will be mainly overcome through the elaboration of a comprehensive GCF concept note (**A. 4.1.1.3**) that compiles the results of outputs 1.3.1, 1.3.2 and 1.3.3 and the implementation of a stakeholder validation workshop (**A. 4.1.1.4**). Moreover, to elaborate the concept note an economic and financial model will be developed (**A. 4.1.1.1**) and an environmental and social screening developed (**A. 4.1.1.2**) will be conducted as part of the pre-feasibility studies needed to scale the concept note to a funding level proposal in the medium term through the GCF Project Preparation Facility (PPF); as shown in the chain results outlined in green in the theory of change Diagram.

Finally, the fourth output: Patagonian grasslands case studies and communications package co-created with representatives from vulnerable groups (in design and implementation), outlining best practices for mitigation and adaptation, including products that are freely available online, accessible to vulnerable and isolated herder groups, and disseminated on social media (**output 5.1.1**); is aimed at developing and disseminating best practices with respect to institutional capacity building and coordination and direct access to strengthen engagement by NDAs, DAEs, and delivery partners with the GCF (**outcome 5.1**) and to foster additional capacities across the Patagonian grassland through the dissemination of context-specific knowledge and lessons learned to promote the scaling up of best practices across the territory. However, to achieve outcome 5.1, output 5.1.1 will seek to overcome a **barrier** associated to limited access to information on climate risks and on climate change mitigation and adaptation options to foster more sustainable and resilient development pathways. These barriers will be mainly overcome through the compilation of best practices and case studies to elaborate a comprehensive report that can be shared and disseminated in different formats (**A. 5.1.1.1**) and the elaboration of

communication products targeted to different audiences (**A. 5.1.1.2**); as shown in the chain results outlined in yellow in the theory of change Diagram.

The confluence of the four outcomes describe above will ultimately lead to project’s main goal which is to develop: 1) a strategy for community– and ecosystem-based mitigation and adaptation to climate change of the grasslands of Patagonia that improves the livelihoods and minimizes climate vulnerabilities of rural inhabitants, conserves and increases the resilience of the natural systems they depend on, and helps fulfill Argentina’s commitment to climate change mitigation and adaptation, 2) a technically sound concept note will be developed and submitted to the GCF, aligned with national GCF investment criteria to scale up the main results of the project and access climate financing in the medium to long-term. Therefore, if the capacities of vulnerable rural groups for planning and implementing ecosystem-based practices are increased, national and provincial climate policy frameworks are fully aligned, and best regenerative practices and knowledge sharing are enhanced, then the overall resilience of the Patagonian region will be increased, because the Argentina’s government and the rural people of Patagonia, including women and other vulnerable communities, will be able to design and implement a technically sound mitigation and adaptation strategy for resilient and low-emission management of Patagonia’s grasslands that will conserve Patagonia’s biodiversity and sustain the livelihoods of its inhabitants in a climate resilient manner.

To further explain how the identified barriers will be addressed, the following table has been included:

Barriers identified	Readiness activities	Deliverables
Lack of national alignment of NDCs and other components of climate strategies regarding adaptation and mitigation of Patagonian grasslands and shrubland and their dominant land uses and conservation challenges.	2.2.1.1 2.2.1.7	<p>The project will address this barrier through the review of the current climate policy framework relevant to the management of the Patagonian grasslands and the identification of potential opportunities to align the adaptation and mitigation needs of this region with the policies, programmes and initiatives established at the national and subnational level. Additionally, the project will identify potential gaps in the existing policy to promote: i) the establishment and/or adjustment of policies, incentives and fiscal and commercial conditions that enable the implementation at larger scale of more resilient and low-emission practices, and ii) the participation of vulnerable groups or underrepresented communities in existing governance mechanisms. Additionally, the project will develop a science-based evidence climate resilient and low-emission strategy in which adaptation and mitigation goals will be identified for the Patagonian region. This will enable policymakers to update the policies and planning instruments, such as the NDC, based on the specific needs of the Patagonia. Specifically, the project will contribute to the above through the following deliverables:</p> <ul style="list-style-type: none"> <li>• Report outlining options to develop and coordinate policies and incentives at national and provincial levels for vulnerable rural inhabitants of Patagonian grasslands that promote ecosystem- and community-based mitigation and adaptation practices (like regenerative and sustainable livestock, range and wildlife management), including fiscal and economic incentives and governance systems, and policy and regulation needs.</li> <li>• A climate-resilient and low-emission production strategy for livestock, wildlife, and local products that can be applicable at subsistence and small-scale production levels and is aligned.</li> </ul>
Insufficient consultation and engagement of small- and medium-scale rural producers,	1.3.1.1 1.3.2.1 1.3.3.1	The project will address this barrier through the implementation of a coordinated approach in which representatives of vulnerable communities will be

<p>Mapuche and Tehuelche organizations, and representatives of other vulnerable groups such as women-led rural households in climate strategy decision-making.</p>	<p>2.1.1.6 4.1.1.4</p>	<p>engaged to develop socioeconomic studies and climate risk assessments and identify mitigation and adaptation actions that contribute to a more climate-sensitive development. Additionally, the project will pilot participatory schemes (innovation platforms) to engage communities periodically and discuss issues related to climate-responsive management practices in the Patagonian grasslands. Finally, the project will implement community-based consultation workshops to validate the technical inputs developed through the project aimed drafting the climate-resilient and low-emission production strategy and the GCF concept note. Specifically, the project will contribute to the above through the following deliverables:</p> <ul style="list-style-type: none"> <li>● Report detailing the selection criteria used and describing the 10 vulnerable rural groups and locations selected.</li> <li>● Regional stakeholder map, detailing capacities and needs of different stakeholders associated with the 10 vulnerable groups selected, for implementing low-emission and resilient grassland management and for participating in climate finance mechanisms, to inform development of a GCF concept note.</li> <li>● Socio-economic study of the 10 vulnerable groups selected, with a focus on their sensitivity and adaptive capacity to climate change. This analysis will inform the climate risk and vulnerability assessment (Deliverable 2.2.1.4) and will provide inputs, together with the stakeholder map, for the development of the concept note to be submitted to the GCF.</li> <li>● Three comprehensive reports of the innovation platforms conducted.</li> <li>● Technical and financial proposal to implement innovative platforms on a regular basis. The proposal should be revised by the relevant organizations to gain support and promote its implementation after project completion.</li> <li>● Reports on the 10 engagement workshops detailing agreements with vulnerable groups and lessons learned regarding the development of a climate resilient and low emission production strategy for livestock, wildlife, and local products and to collect inputs for the elaboration of the GCF concept note.</li> <li>● Validation workshop report highlighting agreements on concept note.</li> </ul>
<p>Limited access to information on climate risks and on climate change mitigation and adaptation options by vulnerable rural groups in Patagonian grasslands.</p>	<p>1.3.3.1 5.1.1.1 5.1.1.2</p>	<p>The project will address this barrier through the development and dissemination of communication products tailored for different audiences in the Patagonian grasslands. This includes the collection of best practices and lesson learned through the region to systematize and document successful practices that are contributing to a more climate-responsive development. Additionally, through the implementation of the innovation platforms, the government of Argentina will be able to share information on climate risks and adaptation and mitigation practices to promote their adoption at a larger scale. Specifically, the project will contribute to the above through the following deliverables:</p>

		<ul style="list-style-type: none"> <li>• Three comprehensive reports of the innovation platforms conducted.</li> <li>• Report articulating best practices for the case studies with the 10 vulnerable groups selected outlining options for mitigation and adaptation, including techniques for regenerative livestock, range, and wildlife management, soil carbon and water retention, erosion control, expansion of wildlife and native plant product harvest and marketing, and tourism, monitoring methods for environmental and socio-economic indicators, and access to new markets and climate-relevant incentives.</li> <li>• Patagonia region and national communications plan, products, and videos produced for each of the 10 vulnerable groups, linked to participation platform described in Deliverable 1.3.3.1, interactive maps described in Deliverable 2.2.1.2, and strategy in Deliverable 2.2.1.7 .</li> <li>• Website developed, including all project reports and deliverables.</li> </ul>
<p>Limited resources and technical capacity among vulnerable rural groups in Patagonia to gather, share, and utilize climate-relevant information affecting rural livelihoods and production systems and their vulnerabilities and risks and scale up ecosystem-based adaptation and mitigation practices and tools that are applicable at local levels and benefit from appropriate fiscal and market incentives.</p>	<p>1.3.3.1 2.2.1.2 2.2.1.4 2.2.1.5 2.2.1.7</p>	<p>The project will address this barrier by identifying and mapping the main climate risks and vulnerabilities the region is facing and the socioeconomic and environmental conditions that might be exacerbating them. Additionally, the project will systematize and promote a portfolio of context-based adaptation and mitigation measures that will contribute to the resilience of the communities in Patagonia to the negative impacts of climate change. Furthermore, through the piloting of the innovative platforms, the project is expected to build capacities around adaptation and mitigation to climate change so that vulnerable communities can replicate lessons learned and good practices. Specifically, the project will contribute to the above through the following deliverables:</p> <ul style="list-style-type: none"> <li>• Three comprehensive reports of the innovation platforms conducted.</li> <li>• Interactive maps for each of the 10 vulnerable groups with instructions for use, with information and trends on desertification status, ongoing practices for husbandry grazing, economic diversification, and climate risk reduction practices, land tenure, disaggregated by gender, and gaps in regenerative practices and access to resources.</li> <li>• Training video on the use and periodic update of the database and interactive maps, for use and periodic update (after project completion).</li> <li>• Climate vulnerability and risk assessment of each of the 10 rural inhabitant groups selected in Patagonian grasslands.</li> <li>• A report on the identification of mitigation measures that can be applied at the local level and a set of step-by-step methodologies and tools for carbon accounting that can be linked to national and/or subnational mechanisms.</li> <li>• A climate-resilient and low-emission production strategy for livestock, wildlife, and local products</li> </ul>

		that can be applicable at subsistence and small-scale production levels.
Lack of access to climate financing to deploy comprehensive adaptation and mitigation actions in the Patagonian grasslands.	2.2.1.3 4.1.1.1 4.1.1.2	<p>The project will address this barrier by conducting an economic analysis on the existing productive chains in Patagonia to promote the participation of vulnerable groups and increase their participation in local markets. Additionally, this analysis will assess the opportunity to establish financial instruments that may leverage additional funding to address climate change needs. Furthermore, the project will develop a GFC concept note to access financing in the medium to long and support the implementation of the climate-resilient and low-emission production strategy. Specifically, the project will contribute to the above through the following deliverables:</p> <ul style="list-style-type: none"> <li>● Economic analysis on existing value chains involving Patagonian grassland products aimed at promoting an enhanced equitability and participation of vulnerable groups on value chains, governance structures, and development of innovative financial mechanisms that promote low-emission and resilient investments and management.</li> <li>● An economic and financial model with key assumptions and potential stressed scenarios, for resilient and low-emission production of vulnerable rural communities.</li> <li>● Report on environmental and social risk screening.</li> <li>● One concept note submitted to GCF. The concept note shall include a comprehensive climate rationale supported by the climate vulnerability and risk assessments conducted in activity 2.2.1.4 as well as a diagram of the theory of change in which there is a distinct relation between the project outputs and the expected results. Additionally, the concept shall include a pre-feasibility study and an evaluation report of this Readiness support.</li> <li>● One GCF PPF duly completed.</li> </ul>

## 5. BUDGET, PROCUREMENT, IMPLEMENTATION AND DISBURSEMENT PLAN

### 5.1 Budget plan

Please complete the Budget Plan in Excel using the template available in the [Library](#) page of the GCF website.

### 5.2 Procurement plan

Please complete the Procurement Plan in Excel using the template available in the [Library](#) page of the GCF website. For goods, services, and consultancies to be procured, please list the items, descriptions in relation to the activities in section 2, estimated cost, procurement method, relevant threshold, and the estimated dates. Please include the procurement plan for at least the first tranche of disbursement requested below and provide a full procurement plan for the entire duration of the implementation period if available at this stage.

### 5.3 Implementation Plan

Please complete the Implementation Plan in Excel using the template available in the [Library](#) page of the GCF website.

### 5.4 Disbursement schedule

Please specify the proposed schedule for requesting disbursements from the GCF. For periodicity, specify whether it's quarterly, bi-annually or annually only.

**Readiness Proposal that falls within a Framework Agreement with the GCF, hereby known as “The framework agreement”.**

Disbursements will be made in accordance with clause 4 “*Disbursement of Grants*” and clause 5 “*Use of Grant Proceeds by the Delivery Partner*” of the Framework Readiness and Preparatory Support Grant Agreement entered into between GCF and Corporación Andina de Fomento (CAF) on 20 September 2017.

## 6. IMPLEMENTATION ARRANGEMENTS AND OTHER INFORMATION

### 6.1 Implementation arrangements

Please describe how implementation arrangements will be made and how funds will be managed by the NDA and/or the Delivery Partner.

**Latin-American Development Bank (CAF).** As the delivery partner for this Readiness and Preparatory support grant, CAF — through its Climate Change Coordination — will be responsible for overall coordination, oversight of the implementation of activities and evaluation of the readiness and preparatory support activities, which will be done in coordination with the Project Steering Committee (PSC) and the national Project Manager (PM).

Additionally, CAF will be responsible for the: i) implementation of the activities under this readiness and preparatory support proposal, ii) fiduciary and financial management of the funds provided by the GCF, iii) the procurement of any goods and services under the proposal following CAF's Manual on Good and Services Procurement, as reviewed by the GCF during CAF's Accreditation process, and iv) report on the implementation progress in accordance with the Framework Agreement signed between CAF and the GCF on 9 September 2017. CAF will ensure the transparent execution of resources, assuring that it be in accord with the budget previously presented to the GCF and that the contracting, purchases, and disbursements in general be carried out under its manuals, procedures, and regulatory guidelines.

Furthermore, CAF, with the support of MinCyT and other relevant stakeholders, will follow up the development of the approved project deliverables through the monitoring of the technical products developed by subcontractors, guaranteeing that they be in agreement with the clauses established in the contracts (professional services contracts, service orders or other), ensuring quality control, and providing technical inputs in the whole process of the project implementation. Regular consultations will be held between CAF, the MinCyT and other relevant stakeholders to ensure that project activities adhere to the results framework in the project document. CAF will submit Interim Progress report (IPRs) to the GCF in accordance with the terms of the Framework between the GCF and CAF. To avoid any possible conflicts of interest deriving from the delivery partner's role as an accredited entity, the prioritization of investments and projects in the context of this readiness grant, will be made through a broad consultation process with relevant stakeholders, including other potential implementing entities. The final validation of these priorities will be carried out through the countries' own relevant coordination mechanism and institutional arrangements, with the participation of other government agencies, as well as representatives from civil society and private sector as the NDA deems relevant, to ensure chosen priorities are fully aligned with national plans and strategies and adequately includes inputs from consulted stakeholders.

A CAF Executive from the Climate Change Coordination, in close coordination with CAF's GCF Focal Point, will be responsible for project oversight and supervision, and to ensure consistency with GCF and CAF policies and procedures. The functions of the Executive will include, but will not be limited to, the following:

- I. Co-chairing PSC meetings.
- II. Undertaking the technical review of project deliverables.
- III. Preparing requests for disbursements and any other requests related to the implementation of the project.
- IV. Clearing the IPRs and Project Completion Report and delivering them to the GCF.

Finally, this proposal will be managed at portfolio level by CAF, in accordance with the Framework Agreement signed between CAF and the GCF. The disbursements of the grant resources from GCF to the CAF shall thus follow the disbursement schedule described in the Framework Agreement.

**Ministry of Science, Technology, and Innovation (MinCyT).** The MinCyT will be asked by CAF and the NDA to support in the development of all national-level activities; nonetheless, it is paramount to mention that the MinCyT will not receive funds or implement Readiness support. The MINCYT, through its permanent engagement with the National Climate Change Cabinet, will ensure appropriate participation of national actors and stakeholders, effective use of resources and ensure country ownership over the different outputs to be delivered under this project. Additionally, given the experience of the MinCyT in the Patagonia, the MinCyT will be expected to provide technical inputs to develop the deliverables included in the project proposal in a timely manner. The Ministry will participate in the monitoring process, helping CAF assess progress using indicators and updating the log-frame on a quarterly basis.

The functions of the MinCyT will include, but will not be limited to, the following:

- I. Cochair PSC meetings.
- II. Provide technical inputs to the consultancy firms and/or individual consultants hired to ensure that deliverables respond to country's needs.
- III. Undertake the technical review of project deliverables.
- IV. Provide inputs to IPRs and Project Completion Report.

**Project Steering Committee (PSC)**

To avoid duplication of efforts at the country level, increase the effectiveness of the project, maintain complementarity with the project baseline and ensure coherence with national priorities, a PSC will be established. The PSC will be co-chaired by a representative of CAF as well as representatives of the MinCyT and the Under-Secretariat of International Financial Relations for Development of the Secretariat of Strategic Affairs of the Presidency of the Nation as NDA before the GCF. Other institutions relevant for the implementation of this Readiness support grant may be invited to participate in the PSC if deemed necessary. The PSC will primarily serve to provide project oversight and advisory support, including: i) overseeing project implementation; and ii) reviewing annual work plans. The PSC will meet every six months — with ad hoc meetings held as and when necessary — to discuss the project's main performance indicators and provide strategic guidance.

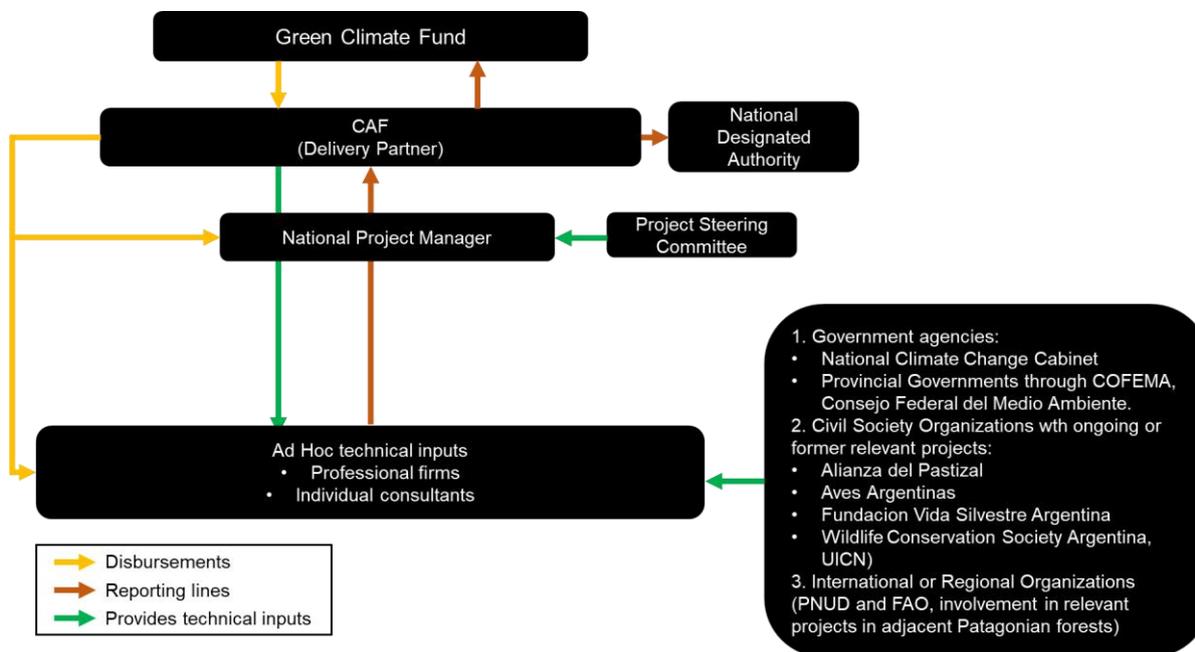
### Project Management Team (PMT)

To enhance country ownership, a national Project Manager (PM) will be recruited by CAF. The PM will report directly to CAF and the designated focal point in the MinCyT. The cost of the PM will be partially covered by Project Management Costs (PMC), as envisaged in the project budget. The PM will spend about 60% of their time on technical issues related to conducting activities and about 40% of their time on national level project management work. The PM will coordinate national level activities between CAF, the technical teams hired to support the execution of the technical activities (professional firms and individual consultant) and any potential partners to support the implementation of the project's activities and reports and to oversight an adaptive management of the project's targets, activities, and timelines.

The PM will in particular be tasked with:

- I. Preparation and revision of the annual project work plans and budgets, including analysis and reporting.
- II. Tracking and monitoring of project costs and deliverables to plan.
- III. Maintenance of a knowledge and records management system.
- IV. Preparation of progress reports and financial management reports.

The implementation map in 1 describes the implementation arrangements for the project, including flow of funds, reporting lines and provision of technical inputs:



It is paramount to mention that no individual or entity that is listed on any UN Security Council sanctions list, including the UN Consolidated Sanctions list will be involved in any manner with the project or its activities, either as a counterparty, implementer, or beneficiary. To guarantee the above, CAF will perform a screening of any potential partners to ensure that these are not sanctioned in any way that may prejudice project implementation.

## 6.2 Implementation and execution roles and responsibilities

Please briefly describe how the activities will be implemented and outputs delivered by project staff and consultants.

This Readiness and Preparatory Support grant is planned to be executed through at least one individual consultancy and three professional firms as followed:

1. Firstly, a **project manager** will be hired to support the overall coordination of the project, including the coordination between the main stakeholders (CAF, NDA, MinCyT, INTA, team of consultants) to identify potential issues and ensure an adequate compliance of the implementation plan. Additionally, the project manager will be responsible for the continuous engagement of other relevant stakeholders such as the ten rural groups selected in activity **1.3.1.1** and those identified in activity **1.3.2.1** to guarantee a proper level of participation and engagement with the MinCyT, INTA, and the teams of consultants. The project manager will also be responsible for supporting CAF and MinCyT in the drafting of the terms of reference for the procurement of three professional firms which will support the execution of the technical products. Additionally, the project manager is expected to provide inputs for the elaboration of IPRs and to report to CAF and MinCyT on any potential issues related to the execution of the project. Furthermore, the project manager will support the technical execution of activities **1.3.1.1, 1.3.3.1, 2.2.1.1, 4.1.1.3** and **5.1.1.1**, and will be expected to provide technical inputs for the rest of the outcomes and steer down the delivery of the corresponding products with the support from MinCyT, INTA and CAF.

Considering the above CAF will hire a project manager with the following qualifications and skills:

Academic:

- Master's degree in natural resource management, conservation, environment, economy, development or a closely related field.

Professional:

- At least five (5) years of experience in the analysis of sectoral policies related to livestock and/or grassland management and/or agriculture related fields. More than five (5) years of work experience is considered an asset.
- Demonstrated knowledge of climate change planning and implementation at the community and landscape level.
- Demonstrated analytical capacity to contribute to technical products related to the identification of mitigation and adaptation measures in areas related to landscape management and restoration, livestock and agriculture. Analytical capacity to conduct risk assessments and/or promote carbon accounting tools and mechanisms is considered an asset.
- Demonstrated knowledge in the establishment and/or functioning of market-based instruments to bolster production chains or to establish financial instruments that involve the use of nature-based solutions or new technologies aimed at reducing emissions from production systems.
- Demonstrated experience in stakeholder engagement processes, facilitation and writing of technical reports.
- Previous experience working with rural and/or indigenous communities in Patagonia and sound understanding of the region is highly preferable.
- Relevant expertise in project design and formulation for local, regional and/or national investment funds. Previous experience in the formulation of GCF concept notes and/or projects is considered an asset.
- Relevant expertise in integrating gender considerations into policy processes or project formulation, planning and implementation is an asset. This includes the design of gender sensitive methodologies to collect and assess baseline data, evaluate outputs, and monitor project outcomes where applicable.

Language:

- Excellent written and oral communication skills in Spanish.
- Ability to write and revise technical products in English.

Skills:

- Ability to pick up new terminology and concepts easily and to turn information from various sources into coherent project documents.
- Ability to guide teams and work in multicultural environments.
- Ability to track down project progress and monitor and report results in a coherent and organized manner.

2. Secondly, a **consultancy firm** with expertise in the development of socio-economic studies, climate vulnerability and risk assessments and identification of adaptation and mitigation practices will be procured to support the execution of activities **1.3.1.1, 1.3.2.1** (implementation of the innovative platforms), **2.2.1.1, 2.2.1.2a, 2.2.1.2c, 2.2.1.4, 2.2.1.5, 2.2.1.6 2.2.1.7** and **4.1.1.2**.

Considering the above CAF will hire a professional firm with the following characteristics, qualifications and skills:

Technical background:

- At least seven (7) years of experience in the identification of adaptation and mitigation measures based on context-specific technical studies including socio-economic studies, climate vulnerability and risk assessments, analysis of new land management practices, technologies and carbon accounting methodologies amongst others. More than seven (7) years of experience in the previous fields and tasks is considered an asset.
- At least seven (7) years of experience conducting research and/or analytical work to increase the resilience of the following sectors and reduce emissions from their activities: land management and restoration, watershed management, agriculture and livestock. More than seven (7) years of experience in the previous fields and tasks is considered an asset.
- At least five (5) years of experience conducting community and stakeholder engagement processes. Experience working with rural and indigenous communities is considered an asset.
- Demonstrated experience in the elaboration of technical products and in the formulation of strategies, land management plans and other planning guidelines or instruments is required.
- Relevant experience working and/or conducting analytical work in Patagonia and a sound understanding of its current vulnerabilities and risks is considered an asset.
- Relevant experience working with local governments and organizations is highly preferable.

To achieve the above, the consultancy firm should group a team of consultants with a background on socioeconomic and sociodemographic studies, demography and GIS, adaptation and mitigation planning, impact assessment and gender studies, and grassland ecology and management. All consultants should have at least five (5) years of experience each and preferably a master's degree in the above and/or related fields. Additionally, all consultants will preferably have experience working in Patagonia and with rural and/or indigenous communities and have a sound understanding of the regional environmental and social context. These profiles will enable the project to conduct comprehensive socioeconomic studies and vulnerability and risk assessments, identify adaptation and mitigation measures that respond to context-based needs and analyze their corresponding impact (social and environmental impact risk assessment) based on socioeconomic and environmental data. In the end, in addition to the products mentioned before, the consultancy firm is expected to deliver a comprehensive climate resilient and low emission production strategy under the leadership of the MinCyT and INTA that identifies climate change goals and targets, means of implementation and a proposal for its effective monitoring that consider the existing monitoring frameworks established by INTA.

3. Thirdly, a **consultancy firm** with a strong expertise in financial studies, market analysis and project development will be procured to support the execution of activities **2.2.1.3**, **4.1.1.1**, **4.1.1.3** and **4.1.1.4**.

Considering the above CAF will hire a professional firm with the following characteristics, qualifications and skills:

Technical background:

- At least seven (7) years of experience in the development of financial studies involving rural economic activities, the implementation and/or formulation of market-based instruments to bolster local economies and/or include non-traditional actors into existing chain values. More than seven (7) years of experience in the previous fields and tasks is considered an asset.
- At least five (5) years of experience in the analysis of financial mechanisms and governance structures, existing fiscal and trade policies, and innovative value chains and incentives that could promote investments in low emission and resilient landscape management. More than seven (5) years of experience in the previous fields and tasks is considered an asset.
- At least five (5) years of experience in the development of project documents and project development. Previous experience in the design of project documents and/or concept notes for international investments funds is considered an asset. More than seven (5) years of experience in the previous fields and tasks is considered an asset.
- Relevant expertise in integrating gender considerations into policy processes or project formulation, planning and implementation. This includes the design of gender sensitive methodologies to collect and assess baseline data, evaluate outputs, and monitor project outcomes where applicable.
- Demonstrated experience in the elaboration of technical products and in the formulation of strategies, land management plans and other planning guidelines or instruments is required.
- Demonstrated knowledge of the economic conditions of Patagonia and rural and indigenous groups is an asset.
- Previous experience in the design of nature-based financial mechanisms and/or in the integration of new technologies into financial models is an asset.
- Relevant experience working and/or conducting analytical work in Patagonia and a sound understanding of its current vulnerabilities and risks is considered an asset.

- Relevant experience working with local governments and organizations is highly preferable.

To achieve this, the consultancy firm should group a team of consultants with strong background in economic studies, sectoral market analysis (preferably related to livestock and/or agricultural value chains), financial mechanisms, project design and gender mainstreaming in existing or newly designed value chains. Additionally, the consultancy firm will preferably have a strong background on local market policies and knowledge of existing livestock and wildlife and other rural product value chains in Argentina. All consultants should have at least five (5) years of experience each and preferably a master degree in the above and/or related fields. Additionally, all consultants will preferably have experience working in Patagonia and with rural and/or indigenous communities and have a sound understanding of the regional environmental and social context. This expertise will enable the project to identify potential opportunities for the establishment of financial mechanisms that can add value to existing value chains and bolster the participation of underrepresented communities (vulnerable communities) in existing markets. In the end, the consultancy firm will be expected to integrate these findings together with the results from the climate resilient and low emission production strategy to produce a technically sound concept note to be submitted to the GCF.

4. Fourthly, a **consultancy firm** with a strong expertise in communication and communications products design will be procured to support the execution of activities **2.2.1.2b** (training video for use of interactive maps), **2.2.1.7** (graphic design of the strategy), **5.1.1.1** (design and content creation of the report) and **5.1.1.2**.

Considering the above CAF will hire a professional firm with the following characteristics, qualifications and skills:

Technical background:

- At least seven (7) years of experience in the development of communication products tailored for different audiences, including the development of audiovisual materials, written documents and diagrammed reports. More than seven (7) years of experience in the previous fields and tasks is considered an asset.
- At least seven (7) years of experience in the diagramming of technical products and in the design of creative content to translate high technical information into more reader friendly material. More than seven (7) years of experience in the previous fields and tasks is considered an asset.
- At least five (5) years of experience in the design of communication strategies, the identification of key stakeholders and the dissemination process of communications products. More than seven (5) years of experience in the previous fields and tasks is considered an asset.
- At least five (5) years of experience in the development of publications, policy briefs and/or technical reports. More than seven (5) years of experience in the previous fields and tasks is considered an asset.
- Relevant expertise in integrating gender considerations into communication products and strategies. This includes the design of gender sensitive content and materials.
- Demonstrated knowledge of the economic conditions of Patagonia and rural and indigenous groups is an asset.
- Relevant experience developing communications materiales related to Patagonia is considered an asset.

To achieve this, the consultancy firm should group a team of consultants with a strong expertise in graphic design, programming, and content creation. This will enable the project to produce communication products that are visually appealing and increase the quality of the strategy and the best practices case-study report by adding graphic design. All consultants should have at least five (5) years of experience each and preferably a master degree in the above and/or related fields. Additionally, all consultants will preferably have experience working in Patagonia and with rural and/or indigenous communities and have a sound understanding of the regional environmental and social context. Finally, it is important to mention that all three consultancy firms and the individual technical specialist will be expected to work in coordination to produce high quality products under the leading role of the project manager and the MinCyT, INTA and CAF.

### 6.3 Risks and mitigation measures

Please include a set of identified risks and mitigation actions for each. Please utilize the risk table below that identifies the probability of a given risk occurring and the entity that will manage the risk. Please refer to Part III Section 6.3 of the Readiness Guidebook for further information on how to complete this section.

Risk category	Specific risk(s) / Risk(s) description	Probability of occurrence (low, medium, high)	Impact level (low, medium, high)	Mitigation action(s)	Entity(ies) responsible to manage the risk(s)
Operational	Lack of data or insufficient data quality to inform climate strategy	Low	Medium	For the elaboration of the climate-resilient and low-emission production strategy, climate risk assessments will be conducted. These assessments shall include climate information to foresee the potential risks based on projected climate data including climate scenarios and downscaled local climate projections. In case this information is not available given that climate information has not been properly collected due to lack of technical capacity or of local meteorological stations in the Patagonia region; the project will make use of regional and global climate information to incorporate them into the risk assessments and thus assess the future risks in the region. Additionally, for the elaboration of the risk assessments, a professional firm with experience in these types of analyses will be hired and both CAF and the MinCyT will make sure that other relevant stakeholders with roles in climate information collection and processing are properly engaged.	CAF, MINCYT
Operational	COVID-19 impacts: Limitations on travel and in-person meetings	High	Medium	The project will consider limiting the face-to-face consultations with the communities to a minimal number needed to produce sufficient results. Additionally, the PMU and professional firms to be hired will make use of online engagement platforms when deemed necessary; COVID testing and vaccination available for all project members and rural groups involved.	CAF, MINCYT
Operational	Poor coordination with other ongoing readiness activities in the country	Low	Medium	Given that Argentina has received Readiness support with respect to forests and agriculture and results-based payments for GHG mitigation, including the UN-REDD national program for Argentina and the Forest Carbon Partnership Facility (FCPF) REDD+ Readiness project, amongst others; a Project Steering Committee (PSC) will be established to avoid duplication of efforts at the country level, increase the effectiveness of the	CAF, MINCYT

				<p>project, maintain complementarity with the project baseline and ensure coherence with national priorities. The PSC will be co-chaired by a representative of CAF as well as representatives of the MinCyT and the Under-Secretariat of International Financial Relations for Development of the Secretariat of Strategic Affairs of the Presidency of the Nation as NDA before the GCF. The PSC will meet every six months with ad hoc meetings held as and when necessary and other institutions relevant for the implementation of this Readiness support grant will be invited to participate when deemed necessary.</p> <p>Additionally, during project inception, the Project Management Unit (PMU) will engage related projects to identify specific potential synergies and avoid duplication of efforts. This engagement will be supported by MINCYT as Argentina's technical focal point for this project. Furthermore, activities such <b>activity 1.3.2.1: Stakeholder mapping and socioeconomic study</b> and <b>activity 4.1.1.4: GCF concept note stakeholder validation workshop</b> consider the participation of relevant stakeholders involved in the sustainable management of the Patagonia region to ensure that the project maximizes its results and maps on-going initiatives in which its results can be built upon.</p>	
Operational	Lags in procurement processes and in the review and approval of the project technical products results in delays in the project execution.	Medium	High	To ensure there are no significant delays in procurement processes, the project has considered a three-month inception phase to procure all individual consultants and professional firms following CAF rules and regulation on procurement. This will allow the project to advance without incurring in early project delays. Additionally to monitor the review and approval processes of all technical products, a project manager will be hired. He/she will be accountable for monitoring the advancement of the	CAF

				<p>project and to engage all stakeholders on a regular basis to identify possible bottlenecks and encourage all parties involved in the compliance of their tasks. Furthermore, CAF will hold bi-monthly meetings with the technical team and the MINCYT to evaluate the progress of the different activities.</p> <p>Finally, CAF will have regular communication with the NDA to inform about the status of the project and request any support deemed necessary.</p>	
Operational	Lack of adequate participation of vulnerable communities, including women and indigenous groups	Medium	High	Project will coordinate with local rural group leaders and with provincial social development agencies to ensure adequate processes that meet the highest international human rights standards for engagement are in place and all project staff and partners abide by these processes.	MINCYT, INTA
Operational	Potential risks and vulnerabilities related to prohibited practices, money laundering or terrorist financing.	Low	Medium	<p>The Project will be implemented in accordance with CAF regulations, rules and policies regarding Anti-Fraud and Anti-Corruption. Additionally, the financial management and procurement will be guided by CAF's own Financial Regulations, Rules, and practices which ensure transparent practices in all its operations.</p> <p>The risk of GCF proceeds being utilized for prohibited practices, money laundering or terrorist financing is medium, and will be mitigated through appropriate legal instruments to ensure compliance with the Green Climate Fund Policy on Prohibited Practices.</p> <p>All contracts signed in the framework of this project shall include a contractual obligation to ensure that individual consultants and/or professional firms comply with the Anti-Fraud and Corruption Framework of the UN and GCF Prohibited Practices.</p>	CAF

## 6.4 Monitoring

CAF as the Delivery Partner will agree with the NDA and the MinCyT on a plan to monitor the implementation of the activities using the grant proceeds. The team will create an M&E framework and build capacity to conduct M&E activities. In this sense, the team will establish a mechanism to learn from the process of preparing, developing, and implementing this Readiness and Preparatory support which is expected to contribute to the National Adaptation Plan and NDC processes.

The PSC will play a key role in the monitoring of progress providing oversight and advisory support, including a) overseeing project implementation, and b) reviewing the budget and work plan periodically. The PSC will meet every 6 months with ad hoc meetings held as and when necessary, to deal with emerging issues – to discuss the project's main performance indicators and provide strategic guidance.

CAF will submit semi-annual progress reports to the GCF (Interim progress reports), in accordance with the terms of the Framework Agreement between GCF and CAF.

## 6.5 Other Relevant Information

All reports, products, processes, documents, and other materials generated in the implementation of this project using GCF funding will be shared with the NDA, to be freely available for all stakeholders, and the means to update and manage these products beyond the project's life. Additionally, no individual or entity that is listed on any UN Security Council sanctions list, including the UN Consolidated Sanctions list will be involved in any manner with the project or its activities, either as a counterparty, implementer, or beneficiary. To guarantee the above, CAF will perform a screening of any potential partners to ensure that these are not sanctioned in any way that may prejudice project implementation.

### Sustainability / Exit Plan

The goal of this Readiness proposal is to develop a strategy for community- and ecosystem-based mitigation and adaptation to climate change of the grasslands of Patagonia that improves the livelihoods and minimizes climate vulnerabilities of rural inhabitants, increases the resilience of the natural systems they depend upon, and helps fulfill Argentina's commitment to climate change mitigation and adaptation. A strategy for low-emission and resilient production of livestock, wildlife, and other products will be generated and a technically sound concept note will be developed and submitted to the GCF to scale up the results of the project and access climate financing.

The proposal aims to develop analyses, tools and products that will serve as a basis for decision making and create best practices to build the institutional capacity of Argentina's NDA, national and provincial livestock, natural resource, and science agencies, and rural community organizations in Patagonian grasslands over the long-term. Products created under the project and lessons learned will be utilized to generate funds and commitment from government agencies and the private sector for the regenerative management of and reduced vulnerability to climate impacts in Patagonia's grasslands. Joint implementation of the low-emission and resilient plan for livestock and wildlife production generated in this project by national and provincial governments in collaboration with vulnerable rural communities will invest in and scale up local and community-based regenerative solutions and grassland-based income streams, in addition to sustainably generated livestock products, such as wildlife products and tourism. This will promote local economic stability, decrease migration of young people away from rural areas, while conserving biodiversity and carbon-rich grasslands and meadows. In addition to the concept note development, the following mechanisms will be used to transfer skills and knowledge to the NDA and other relevant stakeholders during and after the conclusion of Readiness activities:

- Multiple levels of consultation and engagement with diverse stakeholders during the 18-month Readiness support.
- Communications work plan, graphic identity, website, and related products reflect identities of rural people of Patagonia, including Indigenous Peoples, the needs of women and other vulnerable communities, national priorities and climate change in the region.
- Multiple technical analyses and derivative products (e.g. maps, graphics, videos, website) describing: vulnerability of vulnerable groups of Patagonian grasslands to climate risks, and actions needed to promote resilience; capacity building plans for key agencies; livestock and wildlife management strategy; updated grassland information to feed national NDC processes; status of threats to grasslands; analysis of livestock, wildlife and other value chains and options to promote regenerative policies and incentive programmes that encourage grassland and soil regeneration, including payments for ecosystem services; and livelihood alternatives to livestock production.

- Report articulating best practices/case studies of sustainable and regenerative management implemented across Patagonian grasslands that demonstrate ways to prevent desertification, reverse grassland degradation, and promote equitable livelihoods for women, indigenous groups, and small-scale livestock producers.

This proposal will extend the integration of adaptation and mitigation practices that are applicable by and benefit vulnerable communities in an equitable manner, with economic diversification and biodiversity conservation to one of the world's most iconic grasslands, an ecosystem that has received relatively little attention in the global climate agenda.

#### **Gender mainstreaming**

CAF and the NDA recognize the importance of considering gender mainstreaming in this project given its highly participative scope and therefore this Readiness support grant has been formulated in a way that traditional underrepresented group of population in Patagonia have an active role in the project activities; this includes ensuring a proper representation of both women and men in all stock taking activities to develop deliverables that include inputs from both genders. To achieve this, the project will follow a gender-sensitive implementation approach so that all activities involving consultations and/or engagement with local communities follow gender-based methodologies to ensure that men and women alike have equal opportunities to contribute to project results; this includes for example ensure meaningful participation of women and men, explore gender integration in existing adaptation and mitigation measures, conduct gender climate change adaptation situation analysis, identify useful communication pathways, include socio-economic scenarios in climate vulnerability and risk assessments, identify gender-responsive criteria in adaptation and mitigation options selection, ensure communications tailored to different stakeholders, design gender-responsive implementation criteria, tap into existing capacity and build skills of women's groups and others focusing on gender, communicate findings on gender and develop visual material and participative methodologies will follow gender-sensitive approaches.

The design of such gender-approach and methodologies will be developed by the professional firms procured by CAF and evaluated through the selection process (technical offers); so that gender mainstreaming is adequately thought and planned from the start. Additionally, as part of the team of consultants for the three professional firms to be engaged during project execution, CAF will request to include at least one gender specialist so that all activities are performed and evaluated through a gender mainstreaming lens. Additionally, given the role of CAF as the implementing partner of this Readiness support, a CAF gender specialist will be involved from the start so that she can support the execution of the project from a gender mainstreaming approach and support the revision of draft deliverables to ensure that they are being developed following gender considerations.

Finally, gender-related deliverables such as the development of socio-economic scenarios and the vulnerability and risk assessments will include strategies to report gender-disaggregated results. This will not only ensure that the deliverables that will use inputs from these activities make use of the results but will also guarantee that the main project deliverables including the Climate-resilient and low-emission production strategy and the GCF concept note stakeholder validation workshop are formulated following a gender approach. It is also paramount to mention that the project includes a knowledge management output (5.1) in which communications products will be developed. These products will also be prepared under a gender-based approach through the integration of gender considerations in the corresponding terms of reference and will serve as a mechanism to disseminate project results, including gender-disaggregated results.

#### **Whistleblower-programme:**

CAF has a Mechanism for the Prevention of Prohibited Practices which will be shared at the start of the project with the project manager and the three professional firms for dissemination during consultation and stakeholder engagement processes (Prevención de Prácticas Prohibidas | CAF). This mechanism can be used to report complaints and allegations of impropriety, wrong-doing or other related issues in the project and its activities and will serve as a channel for CAF to monitor any issues with the project implementation. Additionally, the project manager will set-up a direct email through which any complaints and/or allegations can be reported. This email address will be included in all presentations so that project stakeholders are aware of their existence.

## Annex 1. List of abbreviations

Adaptation Fund (AF)  
Direct Access Entity (DAE)  
Ecosystem based Adaptation (EbA)  
Food and Agriculture Organization (FAO)  
Global Environment Facility (GEF)  
Green Climate Fund (GCF)  
Greenhouse Gases (GHG)  
International Development Bank (IDB)  
Latin American Association of Financial Institutions for Development (ALIDE)  
Ministry of Environment and Sustainable Development (MAyDS)  
Ministry of Science and Technology (MinCyT)  
National Adaptation Plan (NAP)  
National Cabinet on Climate Change (NCCC)  
National Climate Change Adaptation and Mitigation Plan (PAMCC)  
National Designated Authority (NDA)  
National Institute of Agricultural Technology (INTA)  
Nationally determined contributions (NDCs)  
Regional Committees on Climate Change (CORECC)  
United Nations Development Programme (UNDP)  
United Nations Environment Programme (UN Environment)  
World Bank (WB)  
World health Organization (WHO)

## Annex 2. Detailed project description

The main goal of this Readiness and Preparatory support proposal is to develop a strategy for community- and ecosystem-based mitigation and adaptation to climate change of the grasslands of Patagonia that improves the livelihoods and minimizes climate vulnerabilities of rural inhabitants, conserves and increases the resilience of the natural systems they depend upon and helps fulfill Argentina's commitment to climate change mitigation and adaptation. Moreover, a technically sound concept note will be developed and submitted to the GCF, aligned with the national GCF country programme. To achieve this goal this Readiness support has been structured as followed: **Outcome 1.3:**

National and local government agencies, livestock producer organizations, science and extension agencies, and civil society groups have engaged in consultative processes, but a national coordination mechanism does not exist, and significant barriers remain between governments and livestock producer groups, particularly vulnerable groups. Additionally, INTA has developed an important ecosystem monitoring system throughout the region.<sup>56</sup> However, there are still limited capacities to implement climate-resilient practices that respond to the targets identified and to integrate the results into the established monitoring system.

The project will fully engage livestock producer organizations and vulnerable groups, including women, small-scale herders, and indigenous groups in the decision-making processes in a functional alliance with national and local governments, science agencies, and NGOs, with an understanding of social and economic constraints, market conditions, climate vulnerabilities and risks, and capacity needs to mitigate these vulnerabilities and risks, and possible financial mechanisms for implementing low-emission and resilient management practices in Patagonian grasslands. This will be achieved through the following outputs:

**Output 1.3.1:** Proposal outlining ecological and socioeconomic criteria for selection of vulnerable rural groups and characteristics of locations and groups selected to be engaged in current Readiness and preparatory support activities, representative of diversity of Patagonian grasslands and rural communities.

**Activity 1.3.1.1: Report on selected groups and corresponding locations.** Strategically select 10 vulnerable rural-inhabitant groups and locations throughout Patagonian grasslands—two per each province representing major biozones<sup>57</sup> to maximize community and ecosystem representation—to actively carry out project execution. The groups and corresponding locations will be selected based on socioeconomic and ecological criteria to be established during project inception.

The project will be developed engaging at least five members from each group in participatory activities, but analyses may include data from other members. Selection will focus on subsistence and small-scale livestock producers, women-led households, and Mapuche and Tehuelche indigenous groups. Whenever possible, rural inhabitant associations, cooperatives, and local herder organizations that represent vulnerable groups will be involved in the selection process to maximize socioeconomic representation, like the 350-member Cooperativa Agropecuaria de Pequeños Productores del Centro de Neuquén.<sup>58</sup> For ecological representation, while most groups selected will be from extensive biozones present in arid Patagonia (i.e., Patagonian steppes, Semideserts, and Monte shrub-steppes), one of the groups will be selected from irrigated valleys<sup>59</sup> to represent this contrasting and climate-relevant biozone.

**Deliverable 1.3.1.1:** Report detailing selection criteria used and describing 10 vulnerable rural groups and locations selected. Priority will be given to rural inhabitant groups that face high climate vulnerability, and will consider socioeconomic situation, gender representation, inclusion of indigenous groups, conservation status of grasslands, potential for sustainable use of biodiversity, range and soil regeneration, and representativeness to facilitate replicability to other groups and locations. At least half of the rural inhabitants participating will be women, 10% from indigenous groups (regionally), and all from subsistence and small-scale producer groups.

**Output 1.3.2:** Technical and institutional capacities of regional stakeholders (primarily vulnerable rural groups including women, small-scale herders, and indigenous groups) relevant for the management of Patagonian grasslands are identified and socioeconomic conditions of the 10 vulnerable groups are addressed to inform the

<sup>56</sup> Oliva et al., "The MARAS Dataset."

<sup>57</sup> José M. Paruelo, Esteban G. Jobbágy, and Osvaldo E. Sala, "Biozones of Patagonia (Argentina)," *Ecología Austral* 8 (1998), 145-153.

<sup>58</sup> "Cooperativa agropecuaria de comercialización de pequeños productores de la zona centro de Neuquén Ltda.," RutaCoop, accessed June 13, 2021, <https://rutacoop.com.ar/cooperativas/cooperativa-agropecuaria-de-comercializacia-sup3-n-de-pequea-plusmn-os-productores-de-la-zona-centro-de-neuqua-copy-n-ltda-.html/1268>

<sup>59</sup> Paruelo et al., "Biozones of Patagonia (Argentina)."

development of a climate risk and vulnerabilities assessment and the development of a concept note to be submitted to the GCF.

**Activity 1.3.2.1: Stakeholder mapping and socioeconomic study.** Conduct a regional stakeholder mapping and capacity needs assessment of relevant actors involved in the current management of Patagonian grasslands; develop a comprehensive socioeconomic study of the 10 vulnerable rural inhabitant groups selected to inform the development of climate risk and vulnerability assessment (activity 2.2.1.4); and identify potential barriers and opportunities for their engagement in innovative community and ecosystem-based mitigation and adaptation practices (see examples in Deliverable 2.2.1.2) and in the development of a Concept Note to be submitted to the GCF (activity 4.1.1.3).

Stakeholder groups involved, in addition to vulnerable rural groups, will be livestock producer organizations, herder associations, cooperatives, extension agencies devoted to livestock production and natural resources, science and extension agencies, civil society, and other private sector actors. Stakeholder mapping and analysis will inform: i) planning of innovative ecosystem and community-based mitigation and adaptation practices (Deliverable 2.2.1.7 ) for resilient and low emission production in Patagonian grasslands and ii) the elaboration of a Concept Note that outlines innovative practices and requests financial support for their implementation (activity 4.1.1.3).

**Deliverable 1.3.2a:** Regional stakeholder map, detailing capacities and needs of different stakeholders associated with 10 vulnerable groups selected, for implementing low emission and resilient grassland management and for participating in climate finance mechanisms, to inform development of a Concept Note to the GCF. Map will include governance institutions supporting vulnerable groups (including women-led initiatives, indigenous representation, and small-scale herder cooperatives), other private sector and civil society groups, and local and national government agencies supporting them.

**Deliverable 1.3.2b:** Socioeconomic study of the 10 vulnerable groups selected, with a focus on their sensitivity and adaptive capacity to climate change. This analysis will inform the assessment of climate vulnerabilities and risks (Deliverable 2.2.1.4) and will provide inputs, together with the stakeholder map, to development of the Concept Note to be submitted to the GCF.

**Output 1.3.3:** Relevant stakeholders are continuously engaged, through innovative platforms, to participate in the development of public policies and capacity-building processes aimed at promoting climate-resilient and low emission rural production systems in Patagonian grasslands.

**Activity 1.3.3.1: Innovation platforms to enhance participation schemes.** Conduct at least three pilot innovative platforms<sup>60</sup> in which stakeholders identified in activity 1.3.2.1 (particularly small-scale livestock producers, women-led households, and indigenous groups) can actively participate in: i) the development and update of policies and plans that support resilient and low emission rural production systems in Patagonian grasslands, ii) the implementation of capacity building processes, and iii) the exchange of lessons learned and best practices. Additionally, elaborate a technical and financial proposal to continue with the implementation of the innovative platforms (after project execution) to continuously engage relevant stakeholders in decision-making processes and training.

**Deliverable 1.3.3.1a:** Three comprehensive reports of the innovation platforms conducted.

**Deliverable 1.3.3.1b:** Technical and financial proposal to implement innovative platforms on a regular basis. The proposal should be revised by the relevant organizations to gain support and promote its implementation after project completion.

Innovation platforms for participation of vulnerable rural groups, including subsistence level small-scale livestock producers, Mapuche and Tehuelche indigenous peoples, women, and other vulnerable groups, to engage in resilient and low emission rural production systems, participate in policy development, access monitoring data and extension services, facilitate access to markets and fiscal and financial incentives, and enhance mitigation of climate risks and capacity to engage in future activities to be proposed in Concept Note to GCF.

<sup>60</sup> An innovation platform is a space for learning and exchange in which a group of individuals (who often represent organizations) with different backgrounds and interests: farmers, traders, food processors, researchers, government officials) come together to diagnose problems, identify opportunities, and find ways to achieve their goals. The idea behind it, is to give the opportunity to stakeholders to design and implement activities collectively as a platform, or coordinate activities by individual members that promote best practices and transformational changes. (Homann-Kee Tui et al. 2013). Available at: <https://cgspace.cgiar.org/handle/10568/34157>.

**Outcome 2.2:**

The NDC presented by Argentina in December of 2020 considers community- and ecosystem-based mitigation and adaptation as central to the country's climate policy. Similarly, the NDC presents general recommendations regarding biodiversity conservation and agricultural ecosystems that guide national strategies, but they require a specific approach that is appropriate at the regional and sub-regional scale and that has not yet been developed for the Patagonian grasslands and shrublands.

A high-level update is underway for the National Plan for adaptation and mitigation but does not fully address the potentially significant role of community- and ecosystem-based practices that can promote mitigation and adaptation in natural grasslands, including the extensive Patagonian grasslands.

This project will ensure that enabling conditions are met for a national strategic climate framework that includes community- and ecosystem-based mitigation and adaptation plans that are specific for Patagonian grasslands, help conserve and regenerate them, promote resilient and low-emission activities, and minimize climate vulnerabilities and risks of rural communities. This will be achieved through the following outputs:

**Output 2.2.1.:** A community- and ecosystem-based, climate resilient and low emission production strategy for livestock, wildlife, and local products is developed to promote a more climate-oriented production culture in the Patagonian grasslands. The strategy will be applicable at subsistence and small-scale production levels (i.e., herds smaller than 1,000 sheep or goats) that are typical for vulnerable rural families (including livestock grazing, water and firewood management systems, and sustainable use of alternative products including wildlife, plants, and tourism).

**Activity 2.2.1.1: Analysis of the existing political framework.** Review the current national climate policy framework, including all national and provincial level policies, programmes, and initiatives relevant to maintaining or regenerating Patagonian grasslands and promoting low-emission and resilient management; assess fiscal and commercial conditions affecting or that could promote regenerative practices; determine governance systems that can increase representation of vulnerable rural groups; identify gaps and assess strategies and opportunities for developing policies and incentive programmes and filling key gaps to promote regenerative livestock production and sustainable range and wildlife management systems and other ecosystem- and community-based mitigation and adaptation strategies in Patagonian grasslands.

**Deliverable 2.2.1.1:** Report outlining options to develop and coordinate policies and incentives at national and provincial levels for vulnerable rural inhabitants of Patagonian grasslands that promote ecosystem- and community-based mitigation and adaptation practices (like regenerative and sustainable livestock, range and wildlife management), including fiscal and commercial incentives and governance systems.

**Activity 2.2.1.2: Database and digitized maps showing socioeconomic parameters for vulnerable communities.** Based on the socioeconomic study developed in activity 1.3.2.1, conduct an assessment and create a database and digitized map for the 10 vulnerable groups selected to describe and visualize land and livelihood condition indicators, and management practices that exacerbate climate vulnerability and risks. The database will include guidelines for its use and for training of group leaders. Additionally, the online, interactive map with the accompanying narrative will be created to visualize the geo-referenced data. The database will be made available on the project website (Deliverable 5.1.1.2). Furthermore, an online training workshop will be conducted with relevant agency personnel and representatives from the 10 vulnerable groups in the use and maintenance of the database. Following the workshop, a training video will be made available on the project website (Deliverable 5.1.1.2).

**Deliverable 2.2.1.2:** (a) Interactive maps for each of the 10 vulnerable groups with instructions for use, with information and trends on desertification status, ongoing practices for husbandry grazing, economic diversification, and climate risk reduction practices, land tenure, disaggregated by gender, and gaps in regenerative practices and access to resources. Interactive maps will be integrated with participation platform described in Activity 1.3.3.1 and webpage described in 5.1.1.2, will illustrate examples presented in production strategy in Deliverable 2.2.1.7, and will facilitate continued engagement of rural groups involved, and facilitate reporting and proposals to be outlined in the Concept Note.

(b) Training video on the use and periodic update of the database and interactive maps, including training of women, indigenous peoples, and other vulnerable group leaders, for use and periodic update (after project completion). These materials are expected to be used in the iterative innovation platforms described in 1.3.3.1, and as an input for the elaboration of the communication tools described in Deliverables 5.1.1.1 and 5.1.1.2.

(c) One training workshop report on the use of the database.

Reports on training, connectivity, and participation results and enhanced capacity of training participants and enhanced connectivity and community participation. Interactive maps will be integrated with the participation platform described in Deliverable 1.3.3.1 and webpage described in 5.1.1.2, will facilitate continued engagement of rural groups involved, and facilitate reporting and proposals to be outlined in the Concept Note.

Activity 2.2.1.3: **Economic analysis on existing value chains.** Conduct an economic analysis of the existing value chains that involve rural production and livelihoods, particularly those in which the 10 vulnerable groups selected currently participate. The analysis should include a description of financial mechanisms and governance structures, existing fiscal and trade policies, and innovative value chains and incentives that could promote investment in low emission and resilient management of grasslands. Capacity needs of vulnerable groups, key financial and operational risks, and equity of access for vulnerable groups will also be assessed. This activity will include direct engagement and consultation of rural groups as well as of livestock and wildlife product buyers and other members of value chains. This analysis will be a central input for the development of the strategy outlined in Deliverable 2.2.1.7 and the economic model developed in Deliverable 4.1.1.1.

Deliverable 2.2.1.3. Economic analysis on existing value chains involving Patagonian grassland products (including livestock, wildlife, and others) aimed at promoting an enhanced equitability and participation of vulnerable groups on value chains, governance structures (including cooperatives, local herder associations, indigenous people organizations), and development of innovative financial mechanisms that promote low emission and resilient investment and management. This report will be central input for the production strategy outlined in Deliverable 2.2.1.7 and economic model developed in Deliverable 4.1.1.1.

Activity 2.2.1.4. **Climate vulnerability and risk assessments.** Conduct a climate vulnerability and risk assessment of each of the 10 groups selected in activity 1.3.1.1. These analyses, that will consider as inputs the socioeconomic data produced in Deliverable 1.3.2.1b and environmental and market conditions outlined in Deliverable 2.2.1.3, will inform the development of innovative ecosystem-based and community-based mitigation and adaptation practices for resilient and low emission livestock and wildlife production (to be drafted in Deliverable 2.2.1.6 and best practices manual Activity 5.1.1.1) and a Concept Note to be submitted to the GCF.

Deliverable 2.2.1.4. Climate vulnerability and risk assessment of each of the 10 rural inhabitant groups selected in the Patagonian grasslands.

Activity 2.2.1.5: **Identification of mitigation measures and carbon accounting tools.** Conduct an analytical assessment to identify new land management practices and technologies that can contribute to reducing carbon emissions across the main economic activities of the 10 vulnerables groups and their territories, particularly associated with livestock management and agriculture. Additionally, identify carbon accounting methodologies and tools that enable communities to measure and report its reductions from the implementation of the new approaches identified and that can be linked to existing national and/or subnational reporting mechanisms.

Deliverable 2.2.1.5: A report on the identification of mitigation measures that can be applied at the local level and a set of step-by-step methodologies and tools for carbon accounting that can be linked to national and/or subnational mechanisms.

Activity 2.2.1.6: **Engagement meetings to validate the elaboration of a climate resilient and low emission production strategy.** Conduct engagement workshops with each of the 10 vulnerable groups, in person or virtual (10 people each approximately), to a) share the results of policy and incentives analyses, climate vulnerability and risk assessments, and analysis of grassland management practices and markets, and b) ensure their inclusive participation in the design and implementation of an innovative mitigation and adaptation strategy, and to provide input for and validate development of the Concept Note to the GCF (activity 4.1.1.3). Workshop participants will represent diverse voices from each vulnerable group. In anticipation of the meetings, and to maximize participation, representatives from small-scale herder associations, women-led herder households, and indigenous groups will be supported to undertake and present on the situation in their groups.

Deliverable 2.2.1.6. Reports on the 10 engagement workshops detailing agreements with vulnerable groups and lessons learned regarding the development of a climate resilient and low emission production strategy for livestock, wildlife, and local products and to collect inputs for the elaboration of the Concept Note to the GCF.

Activity 2.2.1.7. **Climate resilient and low emission production strategy.** Based on the results of the climate vulnerability and risk assessment and the compilation of results from outputs 1.3.1, 1.3.2, 1.3.3, and 2.2.1, identify a portfolio of adaptation and mitigation measures and develop a comprehensive climate resilient and low emission production strategy for livestock, wildlife, and local products aimed at minimizing climate risks

and fostering sustainable and equitable livelihoods of vulnerable rural groups inhabiting Patagonian grasslands. This strategy will be developed by integrating results of Deliverables 1.3.2.1 and Deliverables 2.2.1.1, 2.2.1.2, 2.2.1.3, 2.2.1.4, 2.2.1.5, and 2.2.1.6.

Deliverable 2.2.1.7: A climate resilient and low emission production strategy for livestock, wildlife, and local products that can be applicable at subsistence and small-scale production levels.

#### Outcome 4.1:

This project aims to design and submit one concept note for Patagonian grasslands to support the National Adaptation and Mitigation Plan.

**Output 4.1.1:** A technically sound concept note for the Patagonian grasslands, to support the climate resilient and low-emission production strategy for livestock, wildlife, and local products is formulated and submitted to GCF.

Activity 4.1.1.1: **Economic and financial model.** Develop an economic and financial model for resilient and low emission production of vulnerable rural communities in Patagonian grasslands, to assess and demonstrate its impact potential, cost effectiveness, financial adequacy, and long-term economic and financial viability. This will include analysis of a viable investment pathway, engagement of local financial institutions, microfinance institutions, and financial policymakers, as well as quantifying the potential ecosystem services and non-monetary benefits.

Deliverable 4.1.1.1: An economic and financial model for resilient and low emission production of vulnerable rural communities with key assumptions and incorporating information from deliverables 2.2.1.1, 2.2.1.2, 2.2.1.3, 2.2.1.4, 2.2.1.5, 2.2.1.6, and 2.2.1.7. Economic and financial model will inform proposals generated for climate-relevant fiscal, commercial, and financial incentives and concept note.

Activity 4.1.1.2: **Environmental and social screening.** Conduct a complete environmental and social risk screening for the implementation of adaptation and mitigation measures identified in the climate resilient and low emission production strategy for livestock, wildlife, and local products, considering the implementation of economic and financial models for their financial sustainability in the future. This environmental and social risk screening will also inform the development of a concept note to be submitted to the GCF (activity 4.1.1.3).

Deliverable 4.1.1.2: Report on environmental and social risk screening incorporating information from deliverable 2.2.1.4. to inform concept note.

Activity 4.1.1.3: **GCF concept note.** From the compilation of outputs 1.3.1, 1.3.2, 1.3.3, 2.2.1 and 4.1.1 develop a comprehensive concept note to support the implementation of the climate resilient and low emission production strategy for livestock, wildlife, and local products in the Patagonian grasslands. The concept note will be included in the Argentinian Country Work Programme and submitted to the GCF at the end of project execution. Additionally, the concept shall include a pre-feasibility study considering an analysis of existing information and research needs regarding hydrological processes and potential for GHG emission reduction and capture in Patagonian grasslands, and an evaluation report of this Readiness support.

Deliverable 4.1.1.3: One concept note submitted to GCF and one GCF PPF duly completed.

Activity 4.1.1.4: **Virtual stakeholder workshop.** Conduct a virtual stakeholder workshop with one representative from each of the 10 rural groups and representatives from local and national agencies involved in the project to validate final content of the concept note to the GCF.

Deliverable 4.1.1.4: Validation workshop report highlighting agreements on concept note.

#### Outcome 5.1:

There is consensus in Argentina for a National Adaptation and Mitigation Plan and need to identify and share best practices, but region-specific best practices for ecosystem- and community-based adaptation and mitigation for natural grasslands have not been included in previous assessments and planning and have not been drafted for Patagonian grasslands. Some best practices shared in national and provincial management plans for livestock production.

This project will document best practices in technical reports and disseminated in Patagonia, nationally and globally via a comprehensive communications platform including a website, graphic identity, and related products.

**Output 5.1.1:** Patagonian grasslands case studies and communications package co-created with representatives from vulnerable groups (in design and implementation), outlining best practices for mitigation and adaptation, including products that are freely available online, accessible to vulnerable and isolated herder groups, and disseminated on social media.

Activity 5.1.1.1: Co-create (including design and implementation) case studies of best-practices for ecosystem- and community-based mitigation and adaptation technical options implemented across Patagonia in collaboration with leaders of the 10 rural groups that demonstrate ways to regenerate range and soils and promote equitable livelihoods and access to resources for vulnerable groups including women and Mapuche and Tehuelche people.

Deliverable 5.1.1.1: Report articulating best practices for the case studies with the 10 vulnerable groups selected outlining options for mitigation and adaptation, including techniques for regenerative livestock, range, and wildlife management, soil carbon and water retention, erosion control, expansion of wildlife and native plant product harvest and marketing, and tourism, monitoring methods for environmental and socio-economic indicators, and access to new markets and climate-relevant incentives (as outlined in Deliverables 2.2.1.2, 2.2.1.4, and 2.2.1.7 and 4.1.1.1).

Best practices will include culturally appropriate, alternative livelihood opportunities that can substitute for livestock production or substantially reduce herd sizes in areas where Patagonian range and soils are severely degraded, promoting equitable access to resources by women and other vulnerable populations.

Activity 5.1.1.2: Develop a regional communications work plan, comprehensive website, graphic identity, and related products for the Patagonian grassland program that reflects identities of small-scale livestock producers, Mapuche and Tehuelche people, the needs of women and other vulnerable communities, national priorities, and climate change in the region.

Deliverable 5.1.1.2: a) Patagonia region and national communications plan, products, and videos produced for each of the 10 vulnerable groups, linked to participation platform described in Deliverable 1.3.3.1, interactive maps described in Deliverable 2.2.1.2, and strategy in Deliverable 2.2.1.7; and b) website developed, including all project reports and deliverables.