

CONFIDENTIAL
INTERNAL USE
PUBLIC UPON APPROVAL

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK
MULTILATERAL INVESTMENT FUND

URUGUAY

**INNOVATING FOR THE TRANSITION
TO REGENERATIVE SHEEP PRODUCTION SYSTEMS**

(UR-T1306)

DONORS MEMORANDUM

This document was prepared by the project team consisting of: Ana Castillo Leska (DIS/CUR); Estrella Peinado-Vara (LAB/DIS); Ma. Sofía Larralde (CSC/CUR); Cristina Parilli Lozada (DSP/DVF); Yuri Soares (LAB/SKI); Paolo Carmine de Salvo (RND/CAR); Marieke Gottsch (CTI/CUR); Federico Brusa (CSD/CUR); Sofia Polcaro (CSD/CUR); Matías Veiga (INO/SMC); Albi Rodríguez (LAB/LAB); and Christian Diaz (GCL/FML).

This document contains confidential information relating to one or more of the ten exceptions of the Access to Information Policy and will be initially treated as confidential and made available only to Bank employees. The document will be disclosed and made available to the public upon approval.

CONTENTS

PROJECT SUMMARY EXECUTIVE SUMMARY

I.	THE PROBLEM	1
	A. Description	1
II.	THE INNOVATION PROPOSAL	9
	A. Project description	9
	B. Project results, metrics, monitoring, and evaluation	13
III.	ALIGNMENT WITH THE IDB GROUP, SCALABILITY, AND RISKS	14
	A. Alignment with the IDB Group	14
	B. Scalability	15
	C. Project and institutional risks	16
IV.	INSTRUMENT AND BUDGET PROPOSAL	17
V.	EXECUTING AGENCY AND IMPLEMENTATION STRUCTURE	17
	A. Description of the executing agency	17
	B. Structure and implementation mechanism	18
VI.	FULFILLMENT OF MILESTONES AND SPECIAL FIDUCIARY ARRANGEMENTS	19
VII.	ACCESS TO INFORMATION AND INTELLECTUAL PROPERTY	19

PROJECT SUMMARY

URUGUAY INNOVATING FOR THE TRANSITION TO REGENERATIVE SHEEP PRODUCTION SYSTEMS (UR-T1306)

Uruguay is the world's sixth largest exporter of wool tops. Regenerative ranching is an opportunity for the sheep sector, and for wool and fiber production in particular, due to the textile industry's growing interest and need to reduce greenhouse gas emissions as it works to decarbonize its supply chains, support achievement of Paris Agreement targets, and offer end clients differentiated products.¹ Nevertheless, few farmers have adopted regenerative ranching practices, due to: (i) a lack of local knowledge and evidence that demonstrates the advantages of regenerative ranching; (ii) a lack of innovative financing arrangements that encourage farmers to adopt such practices; and (iii) insufficient adoption of Industry 4.0 technologies that help scale up implementation and monitoring of such practices, which are currently implemented in a practically artisanal manner.

This project aims to develop a pilot initiative to help sheep farmers transition in a scalable manner to regenerative ranching systems that increase biodiversity on the land, make it possible to maintain soil carbon stocks, and improve conditions for international market access.

In order to accelerate the adoption of regenerative ranching practices by more sheep farmers: (i) additional knowledge and evidence needs to be generated; (ii) technical advisors need to be trained to work as advocates for such practices; (iii) protocols that are certifiable and can give buyers a seal of approval need to be developed; (iv) technical assistance needs to be provided to farmers; (v) new financial incentives that support the transition to regenerative systems need to be developed; (vi) the opportunities offered by the world of Industry 4.0 technologies in terms of scaling up the implementation of regenerative systems need to be explored; and (vii) the experience needs to be standardized, documented, and disseminated so that it can be scaled up.

A series of workshops for women farmers will also be held to help them build social capital and improve their technical knowledge and soft skills.

The project's main innovation is the rollout of regenerative practices for sheep farming for wool production in Uruguay, where 90% of wool is currently produced using traditional methods. Maintaining and even increasing soil carbon stocks is an innovative objective in Uruguay, since this will entail a major change in land and livestock management. Lastly, the incorporation of Industry 4.0 technologies into the transition to regenerative production systems and the evaluation thereof is innovative, as is the generation of knowledge on potential financial innovations to support this transition.

The expected project outcomes are: (i) 100 sheep farmers from the basalt region will have started to transition to regenerative production practices;² (ii) the average carbon stock will be held constant at 82.7 tons of carbon per hectare; (iii) the Ecosystem Integrity Index

¹ [Fashion on Climate \(McKinsey, 2020\)](#).

² These farmers will have baselines and will have adopted, at a minimum, the following practices: (i) extended pasture resting periods; (ii) protection of watercourses and riparian areas; (iii) shades featuring native plant species; and (iv) minimal use of agrochemicals, or, where agrochemicals are used, use of active substances that do not harm soil quality.

score will have increased by 20%;³ (iv) 12 buyers will have signed agreements to purchase wool produced by systems that are transitioning to regenerative practices; (v) 60 farmers will be selling to brands that pay a premium for regenerative ranching products; and (vi) 60,000 hectares will have been certified under the NATIVA Regen protocol.

Chargeurs Luxury Fibers (Nuovalane S.A.)—as an anchor company and the executing agency of this nonreimbursable technical cooperation operation—is in an excellent position to become a catalyst in advancing this new model of regenerative ranching, as it can contribute its knowledge of the industry and the production sector, tap its networks of contacts, and play the role of facilitator between parties to accelerate the model.

The total project amount will be US\$1,186,000, with an IDB Lab contribution of US\$574,760 (48% of the total project amount).

The project can be scaled up by increasing the number of farmers who adopt regenerative ranching practices in Uruguay and in Argentina, where Chargeurs also operates and expects to expand in this area. In addition, the partnership established with the National Agricultural Research Institute of Uruguay (INIA), farmers, and Gucci can be replicated with other brands, which will require an expansion of the supply of “regenerative wool.”

Knowledge generated under the project will be treated as a public good. Accordingly, the project includes measures to ensure that the knowledge and methods developed can be transferred to more farmers and extension officers through partnerships with public and private organizations. The transition to regenerative systems is also a topic of interest for the Bank’s Environment, Rural Development, and Risk Management Division (RND), Competitiveness, Technology, and Innovation Division (CTI), and Climate Change Division (CCS), and for IDB Invest’s Agribusiness team.

The project is aligned with the IDB Group’s Country Strategy with Uruguay 2021-2025, the IDB’s **Agriculture Sector Framework Document** (document GN-2709-10) and its **Environment and Biodiversity Sector Framework Document** (document GN-2827-5), and the priorities established for IDB Lab’s Agriculture and Natural Capital vertical.

³ This index looks at four components: soil, vegetation structure, plant species, and the state of watercourses and riparian areas. Its application involves a qualitative and quantitative evaluation at the paddock level using a scale from 0 to 5, where a score of 5 means that the ecosystem is in an optimal condition in relation to the standard established for the ecoregion subject to evaluation. The index provides a score for each paddock and an overall score for the ranch (Blumetto et al., INIA, 2017).

ABBREVIATIONS

FAO	Food and Agriculture Organization of the United Nations
INIA	National Agricultural Research Institute of Uruguay
LEAP	Livestock Environmental Assessment and Performance Partnership
MGAP	Ministry of Livestock, Agriculture, and Fisheries
NRTC	Nonreimbursable technical-cooperation operation
SDGs	Sustainable Development Goals

EXECUTIVE SUMMARY

URUGUAY INNOVATING FOR THE TRANSITION TO REGENERATIVE SHEEP PRODUCTION SYSTEMS (UR-T1306)

Country and geographic location:	Uruguay. Paysandú, Tacuarembó, Salto, and Artigas		
Executing agency:	Nuovalane S.A.		
Focus area:	Climate-smart agriculture		
Coordination with other donors/Bank operations:	This operation is coordinated with technical cooperation operation UR-T1277, "Adoption of Agroecological Practices and Carbon Footprint in the Uruguayan Agricultural Sector."		
Project beneficiaries:	100 sheep farmers from the basalt region of northern Uruguay, who will begin to transition to regenerative production practices; 30 women farmers, who will receive specialized training; 26 extension officers, who will be trained in regenerative ranching practices; and at least 10 public and private-sector organizations, which will provide support to scale up such practices afterward.		
Financing:	Technical cooperation funding:	US\$574,760	48%
	Total IDB Lab funding:	US\$574,760	
	Counterpart contribution:	US\$611,432	52%
	Cofinancing:	-	
	Total project budget:	US\$1,186,192	100%
Execution and disbursement periods:	Execution period: 48 months Disbursement period: 54 months		
Special contractual conditions:	The following will be conditions precedent to the first disbursement: (i) submission, to the Bank's satisfaction, of the subexecution agreement between Nuovalane S.A. and Lanás Trinidad S.A.; (ii) submission of a procurement policy for the project; and (iii) appointment of the supervisor who will be responsible for ensuring that the transaction's environmental and social risks are managed in accordance with the IDB's Performance Standards.		
Environmental and social impact review:	On 10 July 2023, the project was reviewed and classified in accordance with the IDB's Environmental and Social Policy Framework (document GN-2965-21). Because the risks and impacts are moderate, the project's proposed classification is Category "B."		
Unit responsible for disbursements:	Country Office in Uruguay (CSC/CUR)		

I. THE PROBLEM

A. Description

- 1.1 **The challenges of agricultural systems and regenerative agriculture.** Worldwide, there is a growing awareness of the need to implement changes in agricultural production systems with a view to halting and reversing biodiversity loss, protecting soil and water resources, and ensuring that global warming does not exceed 1.5°C. Achieving this will require methods of production that avoid deforestation, preserve biodiversity, scale up good management practices, improve soil and water management, and introduce new technologies that assure food and nutrition security, economic development, and achievement of environmental, health, and animal welfare goals.
- 1.2 Some farmers, and more and more corporate stakeholders, are beginning to take the initiative to implement changes, including the concept of **regenerative agriculture**. Regenerative agriculture seeks to develop soil fertility and biology, thereby supporting natural cycles. Healthy soil is essential not only because it is the base of plant growth, but also because it promotes biodiversity (above ground and within the soil), supplies water, and, since it stores carbon, has the potential to be an effective approach to tackling the challenges of climate change.
- 1.3 Regenerative agriculture aims to conserve and/or rehabilitate food and agricultural systems with a view to achieving sustainable production. It emphasizes improving soil health and vitality, increasing biodiversity, improving the water cycle, and boosting communities' social and economic wellbeing (Colorado State University, 2023;⁴ Teague et al., 2016;⁵ Newton et al., 2020;⁶ and Schreel et al., 2020⁷), thereby supporting food security.
- 1.4 A regenerative approach can be used to build resilience to climate change and extreme weather events, promoting sustainability and the vitality of rural communities at the same time.
- 1.5 According to [The Nature Conservancy Latin America](#), implementing regenerative practices in agricultural production brings major environmental and socioeconomic benefits, as discussed in Table 1.





⁴ [New Research Shows Practices from the Past Will Be Key to Future Soil Carbon Solutions \(colostate.edu\)](#).

⁵ [Teague, W.R., S. Apfelbaum, R. Lal, U.P. Kreuter, J. Rowntree, C.A. Davies, R. Conser, M. DeLonge, M. Rasmussen, J. Hatfield, T. Wang, F. Wang, and P. Byck. The Role of Ruminants in Reducing Agriculture's Carbon Footprint in North America. The Journal of Soil and Water Conservation \(forthcoming\).](#)

⁶ [What Is Regenerative Agriculture? A Review of Scholar and Practitioner Definitions Based on Processes and Outcomes \(amazonaws.com\)](#).

⁷ [Regenerative Agriculture: The Soil Is the Base \(ScienceDirect\)](#).

Table 1. The environmental and socioeconomic benefits of implementing regenerative practices in agriculture and ranching⁸

			
Benefits of regenerative practices in agriculture and ranching			
Biodiversity	Water	Soil	Social and economic benefits
Regenerative ranching practices help create microclimates, reducing heat stress on herds	Less use of water to irrigate crops	Higher amount of organic material, which makes the soil more fertile so use of agricultural inputs and fertilizers can be scaled back	Greater agricultural output, thereby increasing revenues. Greater resilience to market fluctuations
Higher levels of biodiversity and better conservation thereof, with more wildlife moving through green corridors	Less pollution from agrochemicals infiltrating the soil	Regenerative practices improve soil structure, minimize soil degradation, and improve water retention, thereby reducing the use of water for irrigation	Less dependency on inputs, thereby lowering production costs over the long term
Plant variability, introduction of native species, more wildlife	More resources available for consumption by livestock, improving herd health	Higher levels of carbon sequestration, which helps mitigate greenhouse gas emissions	More incentives to implement best practices and uphold environmental commitments and greater recognition for doing so
Ecosystems that are more resilient to the extreme impacts of climate change	Conservation of water sources, reducing sediment recharge	Increased vegetation cover, which better protects soil from erosion by external agents	Greater market integration and involvement in domestic and international markets
Expanded seed dispersal and pollination, organic pest and disease control for livestock and crops	Drainage basin protection and enhancement	Less agricultural sprawl (lands used for crops or livestock), thereby expanding space for protected and natural areas	
Greater biodiversity of lifeforms in the soil, which improves soil regeneration, composition, fertility, and structure	More efficient resource use, leading to fewer conflicts over water use		

⁸ Table taken from *Prácticas agrícolas y ganaderas regenerativas*, a report prepared by The Nature Conservancy Latin America. https://www.nature.org/content/dam/tnc/nature/en/documents/latin-america/agriculturaregenerativa_resumen.pdf.

- 1.6 In many places, moving to regenerative systems likely represents the most difficult pathway for transformation. Strategies to achieve regenerative systems must be restorative and retributive in nature, designed to address and compensate for past social and ecological harms while also devoting sufficient resources to restore local biodiversity and social capital (Ikerd, 2021).
- 1.7 **Regenerative ranching in Uruguay.** Regenerative ranching as a production-related activity has its roots in the concept of regenerative agriculture (Cusworth et al., 2022).⁹
- 1.8 Evidence generated by international research indicates that one advantage of regenerative ranching is the fact that effective pasture management allows organic matter to accumulate faster than in other agricultural systems, and carbon is also stored deeper in the soil. Research by Machmuller et al. (2021)¹⁰ shows that the adoption of regenerative grazing practices can regenerate soil and ground cover within three years. They found that some of the ranches studied reported: (i) a 95% increase in cation exchange capacity (nutrient availability); (ii) a 34% increase in water holding capacity; and (iii) 29,360 kg of CO₂ sequestered per hectare per year. This is an enormous amount of carbon dioxide being taken out of the air by photosynthesis and converted into organic matter to feed the soil microbiome.
- 1.9 To achieve these objectives, the following practices are needed to support biogeochemical cycles (Newton et al., 2020)¹¹: keeping the soil covered with live roots year-round; reducing or eliminating tillage or disruption of the soil and increasing crop biodiversity; reducing the use of synthetic fertilizers and pesticides; restoring native soil communities; promoting agroforestry; and integrating livestock into the system.
- 1.10 While the integration of livestock and forestry into the system may be an aspirational goal in many parts of the world, this is already a very common practice in most of Uruguay,¹² where ranching, as a primary activity, is closely tied to crop farming and forestry.
- 1.11 Regenerative ranching comes into play in contexts where livestock production is the predominant activity. The original regenerative ranching approach was to adopt a strategy to improve soil health through pasture management. The concept has continued to evolve, however, and the approach is now more holistic, encompassing a broader view inward, where soil health is still an important consideration but not the sole focus, combined with an off-farm focus, which considers system externalities (Spratt, et al., 2021).¹³

⁹ [Green Rebranding: Regenerative Agriculture, Future-pasts, and the Naturalisation of Livestock \(wiley.com\)](https://www.wiley.com).

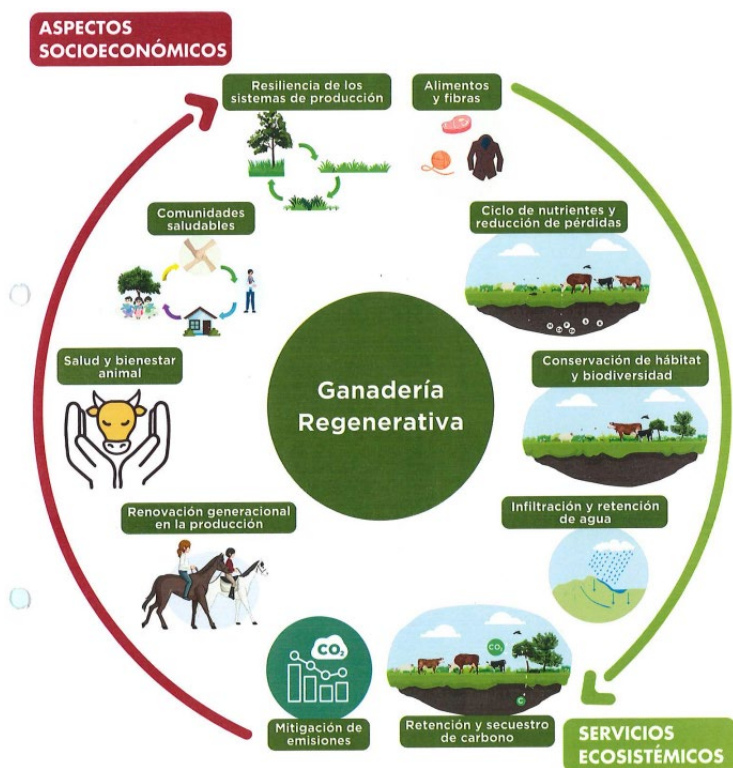
¹⁰ [Regenerative Grazing: Increased Production, Biodiversity Resilience, Profits, and a Climate Change Solution.” Regeneration International.](#)

¹¹ [Frontiers. What Is Regenerative Agriculture? A Review of Scholar and Practitioner Definitions Based on Processes and Outcomes \(frontiersin.org\)](https://www.frontiersin.org).

¹² Blumetto, O; I. de Barbieri; W. Baethgen, et al. *Ganadería Regenerativa en Uruguay*. INIA. 2023.

¹³ [Accelerating Regenerative Grazing to Tackle Farm, Environmental, and Societal Challenges in the Upper Midwest \(jswconline.org\)](https://www.jswconline.org).

- 1.12 In *Ganadería Regenerativa en Uruguay* (INIA, 2023),¹⁴ Blumetto et al. adopt the holistic, multidimensional approach depicted in Figure 1, which is based on unlocking knowledge gained to ensure that ranching is an economically viable, environmentally responsible, and socially sustainable activity.



- 1.13 **Sheep production in Uruguay.** Uruguay is a key player in sheep production. Sheep husbandry is the second most important activity in the Uruguayan ranching sector. As of June 2022, there were some 6.3 million heads of sheep in Uruguay. According to the most recent Agricultural Census (2011), there were around 20,000 farms engaged in sheep production, which covered 10.6 million hectares of land.
- 1.14 According to 2016 estimates from the Office of Agricultural Policy and Programming at the Ministry of Livestock, Agriculture, and Fisheries (MGAP), some 46,000 people work in the field performing tasks related to sheep production, and the sector is one of the largest employers of the family and seasonal/harvest workforce. Mutton is also an important source of nutrition for many rural households in Uruguay. Exports of wool tops¹⁵ and wool products amounted to

¹⁴ Blumetto, O; I. de Barbieri; W. Baethgen, et al. *Ganadería Regenerativa en Uruguay*. INIA, 2023.

¹⁵ Wool tops are a semi-processed product made from raw wool. The process requires that the wool be scoured, combed, and sorted. The longer fibers resulting from the process are called tops and are in a form ready for spinning.

- US\$165 million in 2021, and Uruguay is the world's sixth leading exporter of wool tops.
- 1.15 **The new demands of the international wool market.** The fine and superfine wool production sector has evolved quickly in recent years in terms of better quality wool, combining genetic flock enhancements with a customized package of technologies to produce these fibers.
 - 1.16 In the textile industry, the relatively new concept of “regenerative economy” has emerged onto the scene, becoming increasingly visible and increasingly important in the last few years. For example: The North Face¹⁶ and Patagonia¹⁷ launched new product lines in 2021 featuring regeneratively grown cotton; the New Zealand Merino Company, Allbirds, Icebreaker, and Smartwool joined together to create a [regenerative wool platform](#); and the Kering Group (Gucci, Saint Laurent, and other brands) launched the [Regenerative Fund for Nature](#), with the aim of investing in the transition of 1 million hectares of land to regenerative agriculture practices over the next five years.
 - 1.17 The Uruguayan wool industry has recently caught the attention of high-value markets for wool that not only has high intrinsic value but also is sourced from regenerative ranching systems. Many international buyers in the wool sector now offer differentiated prices for wool with high intrinsic value produced by regenerative ranching systems.
 - 1.18 Wool is seen as a fiber that has the potential to be produced in an environmentally sustainable manner with regenerative practices. At the same time, it is 100% natural, renewable, and biodegradable.¹⁸ Regenerative wool production can enhance biodiversity, soil health, and carbon sequestration.
 - 1.19 It is reasonable to assume that this price differential will not last over time. Nevertheless, the production sector increasingly has to prove that it is reducing greenhouse gas emissions to comply with the environmental requirements that clients have established to meet the commitments undertaken in their corporate strategies and address the urgency of climate change impacts.
 - 1.20 **First initiative to implement regenerative ranching practices in the sheep sector in Uruguay.** In 2021, a partnership between the industry, INIA, and some farmers launched a pilot to help sheep farmers transition to regenerative ranching practices, using validated environmental indicators as a baseline. The initiative enlisted exporters, international certification companies, international textile industry organizations, international brands with demand for the product, and farmers.
 - 1.21 This pilot initiative produced the following results: (i) baseline indicators for INIA were developed based on the guidelines of the Livestock Environmental

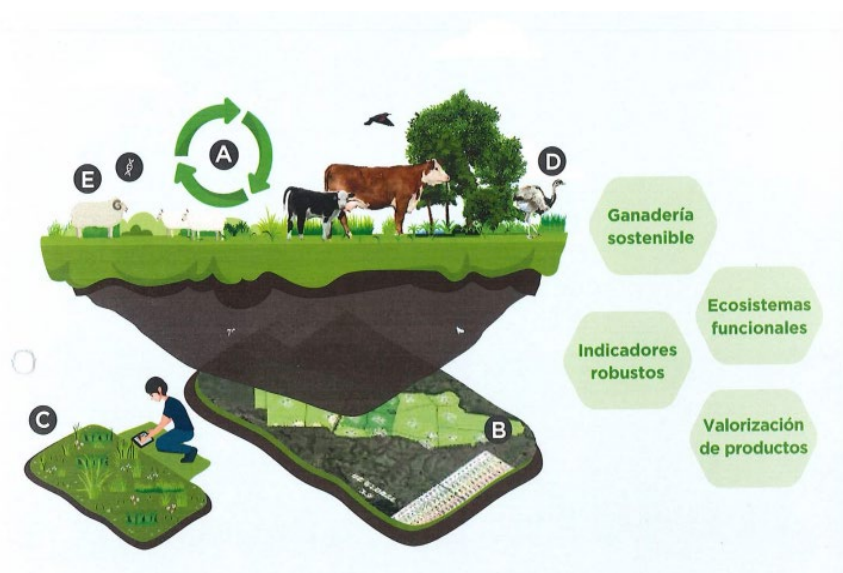
¹⁶ <https://www.thenorthface.com/en-us/sustainability/materials>, <https://www.just-style.com/interviews/the-north-face-sees-regenerative-cotton-as-biggest-opportunity/>.

¹⁷ <https://www.patagonia.com/regenerative-organic/>, <https://www.patagonia.com/our-footprint/regenerative-organic-certification.html>.

¹⁸ [International Wool Textile Organization, Wool Is Biodegradable.](#)

- Assessment and Performance Partnership (LEAP);¹⁹ (ii) field measures of those indicators were taken; and (iii) 19 livestock companies joined the initiative. Of those, 10 companies (two of which are women-owned) are already serving high value markets as producers that are transitioning to regenerative ranching practices. Nine others have established baselines and thus have the opportunity to sell their wool as wool produced by systems transitioning to regenerative practices.
- 1.22 According to Blumetto et al. (Sustainability, 2022),²⁰ the LEAP/FAO biodiversity assessment guidelines can be useful for characterizing the state of ecosystems under pastoral use and some specific components of their biodiversity, as well as for assessing the interaction of production systems with the environment and management plans.
- 1.23 The baseline, which has already been applied to the 19 producers participating in the pilot, is a snapshot of five dimensions of a ranch:²¹ (A) a life cycle assessment (LCA) to measure emissions; (B) the Ecosystem Integrity Index; (C) soil carbon stocks; (D) the associated wildlife biodiversity; and (E) the genetic, productive, and environmental quality of the sheep. Figure 2 depicts the proposal's conceptual framework.

Figure 2



¹⁹ The indicators are based on LEAP's guidelines for the assessment of the environmental performance of livestock supply chains. LEAP is a multi-stakeholder initiative that seeks to improve the environmental sustainability of the livestock sector through harmonized methods, metrics, and data. LEAP leads a coordinated global initiative to accelerate the sustainable development of the livestock supply chain and to support coherent climate actions, while contributing to the achievement of the 2030 Agenda for Sustainable Development and the Paris Agreement.

²⁰ From Theory to Practice: Can LEAP/FAO Biodiversity Assessment Guidelines Be a Useful Tool for Knowing the Environmental Status of Livestock Systems? Blumetto, O., V. Valtierra, et al. (Sustainability, 2022).

²¹ Blumetto et al. *Ganadería Regenerativa en Uruguay*. INIA, 2023.

1.24 **Why isn't adoption of regenerative ranching practices more widespread?**

Adoption of regenerative ranching practices among sheep farmers continues to be uncommon and/or limited. What is keeping farmers from adopting these new regenerative ranching practices? Drivers of the low rates of adoption of such technologies among small and medium-scale producers include:

- (i) A lack of local knowledge and evidence that demonstrates the advantages of regenerative ranching. Nearly 90% of wool is produced using traditional methods.²² This can be attributed to a lack of knowledge among farmers and technical advisers regarding regenerative production systems. The scant evidence that does exist is being developed by the agricultural research system, which has not yet made an effort to disseminate evidence on the advantages offered by regenerative practices over traditional ones or information regarding the practices that should be implemented to adopt a regenerative ranching approach.
- (ii) A lack of innovative financing arrangements that encourage farmers to adopt regenerative practices. The transition to regenerative production practices requires capital and long lead times. In the [United Kingdom](#), the [European Union](#), [Australia](#), and even [Costa Rica](#), public transfers have supported farmers during the transition process. In Uruguay, and in most countries in Latin America and the Caribbean, the parties funding the investments required for such a transition are the very farmers who are trailblazers in the area. Farmers also are not familiar with financial innovations, like results-based payments and/or potential incentives from voluntary carbon markets.
- (iii) Insufficient adoption of Industry 4.0 technologies in the monitoring and implementation phase, which could be used to easily scale up implementation of regenerative production systems. For one thing, regenerative ranching and agriculture practices are carried out in a practically artisanal manner: data and information are collected and measured manually, and few farmers have adopted digital solutions that would be highly useful for scaling up these production models. For another, it is not possible to demonstrate the transition to regenerative systems in the abstract. So far, there has been talk of regenerative practices, but without any integration of the tools and technologies required to measure quality. Measuring the transition to regenerative production requires the use of multipurpose, digital, and production-related tools and bioindicators, since elements that affect agricultural systems, such as the content of the organic matter in the soil, need to be measured. At present, the measurements taken are not systems-based, have not been automated, are not comprehensively analyzed, and, in many cases, do not meet the necessary quality standards.

²² Blumetto et al. *Ganadería Regenerativa en Uruguay*. INIA, 2023.

- 1.25 In this context, Chargeurs Luxury Fibers (Nuovalane S.A.)—as an anchor company in wool production and a key stakeholder in the pilot implemented previously in Uruguay—is in an excellent position to become a catalyst in advancing this new model of regenerative ranching, as it can contribute its knowledge of the industry and the production sector, tap its networks of contacts, and play the role of facilitator between parties to accelerate the model. A regenerative approach can offer farmers new economic models that are profitable and environmentally friendly. At the same time, it offers policy-makers an alternative way of thinking about sustainability. The regenerative ranching approach seeks to minimize the adverse impact of livestock raising, and it takes the form of small actions and changes that have the potential to be replicated at a large scale.
- 1.26 **Target population.** In Uruguay, there are approximately 20,000 sheep farmers,²³ 66% of whom are considered family farmers (up to 400 heads).²⁴ All told, 60% of sheep are raised on ranches that cover fewer than 1,000 hectares of surface soils (basalt) that cannot be used for crop production.
- 1.27 Whereas production in other agricultural sectors has become concentrated in the hands of large-scale farms, the opposite has occurred in the sheep sector, where smaller ranches that have access to more family workers account for the most heads of sheep per hectare. In Uruguay, sheep farming is a secondary activity to cattle raising.
- 1.28 The sector is a major generator of employment. Estimates indicate that the production chain employs 25,000 people, with 10,000 permanent jobs. An additional 6,000 jobs are created during the shearing season, mostly in the country's rural areas.²⁵
- 1.29 The project will target 110 farmers out of a universe of 250 sheep farmers who have already been certified by [NATIVA™](#) and who are integrated in the Chargeurs Luxury Fibers and Lanac Trinidad supply chain. The targeted farmers are located across the basalt region in northern Uruguay (departments of Salto, Artigas, Tacuarembó, and Paysandú). In all, 44 of the 250 ranches are managed by women or co-managed by a woman and her spouse.
- 1.30 The NATIVA™ protocol calls for a series of actions to protect the environment, animal welfare, and communities. Farmers who implement the protocol are recognized through a third-party certification process (Control Union), and blockchain (Ethereum) is used to ensure that the wool is fully traceable, from the field to the end consumer. Farmers who have already obtained this certification will be selected for the project because they are already in a position to begin to implement regenerative practices as they are more likely to have already gone through a process to certify sustainable practices.

²³ Agricultural Census, MGAP (2011).

²⁴ [Registry of Family Farmers \(www.gub.uy\)](http://www.gub.uy).

²⁵ Office of Agricultural Policy and Programming, MGAP (2016).

- 1.31 As a signatory of the United Nations Global Compact, Chargeurs Luxury Materials is committed to respecting, defending, and applying principles on human rights, quality jobs, environment, and anti-corruption, at both the farm and industry levels.

II. THE INNOVATION PROPOSAL

A. Project description

- 2.1 This project aims to develop a pilot initiative to help sheep farmers transition to regenerative ranching systems, thereby increasing biodiversity on their properties, helping to maintain soil carbon stocks, and improving conditions for international market access.
- 2.2 Regenerative ranching is an opportunity for the sheep sector, and for wool and fiber production in particular, due to the textile industry's growing interest and need to reduce greenhouse gas emissions as it works to decarbonize its supply chains, support achievement of emissions targets, and offer end clients differentiated products (McKinsey, 2020).²⁶
- 2.3 In order to meet the goals set out in the Paris Agreement, greenhouse gas emissions need to be reduced at all links of the supply chain, and producers need to shift from intensive (and extractive) systems of input use to practices that are circular and regenerative by design. In the case of agriculture and ranching, producers should adopt practices that reduce greenhouse gas emissions by rebuilding organic matter in the soil and restoring biodiversity, which will lead to fewer emissions and a better water cycle.
- 2.4 Biodiversity loss is a global concern, and agriculture, in a broad sense, is one of the sectors that bears the most responsibility for its impact. Regenerative ranching practices seek to increase the functional biodiversity of agricultural systems. To achieve this, a regenerative approach: (i) features prolonged rest periods for pastures, with a view to building forage reserves; (ii) keeps the use of agrochemicals to a minimum, moving toward no use of such chemicals at all, and when they are used, opts for alternatives with active substances that do not adversely affect soil quality or biodiversity; (iii) conserves watercourses and riparian areas, thereby improving water quality and biodiversity; (iv) creates shade areas with native tree species, away from watercourses; and (v) ensures that animals have access to water at drinking troughs to prevent detrimental effects on the quality of watercourses and on the surrounding vegetation.
- 2.5 Conserving²⁷ and increasing biodiversity makes it possible to build more biomass in the medium term, and, by extension, increases or at least maintains the soil carbon stock, provided that the physical state of the soil allows. The positive impacts of implementing regenerative ranching practices only begin to show up after long periods of time (Colorado State University, 2023).²⁸

²⁶ [Fashion on Climate \(McKinsey, 2020\)](#).

²⁷ In systems with practically no human intervention, such as ranching on natural pastures.

²⁸ [New Research Shows Practices from the Past Will Be Key to Future Soil Carbon Solutions \(colostate.edu\)](#).

- 2.6 In order to accelerate the adoption of regenerative ranching practices by more sheep farmers: (i) continued efforts are needed to generate knowledge and evidence on the advantages of such systems, in partnership with researchers and experts from the region and beyond who have technical-agroecological expertise and the capacity to develop it; (ii) technical advisers need to be trained to work as true advocates for such practices; (iii) guidelines to help farmers transition and protocols that are certifiable and can give buyers a seal of approval of the efforts of farmers in transition need to be developed; (iv) awareness-raising activities need to be implemented to inform farmers why adopting regenerative practices is important; (v) technical support needs to be provided to farmers who want to take steps toward implementing these new practices; (vi) new financial incentives need to be developed so that this transition to regenerative practices can take place organically; (vii) the opportunities offered by the world of Industry 4.0 technologies need to be explored so that many processes for evaluating and/or implementing regenerative practices can be scaled up; and (viii) the experience needs to be standardized, documented, and disseminated so it can be scaled up to more farmers in Uruguay and in other countries in the region.
- 2.7 **Innovation:** The solution's key innovation is the introduction of regenerative practices for sheep farming for wool production in Uruguay. Nearly 90% of wool is produced using traditional methods (INIA, 2022)²⁹ that do not take into account soil use, biodiversity management, animal welfare, or social requirements. Maintaining and even increasing soil carbon stocks in soils that have a higher degree of initial intervention is an innovative objective in Uruguay and for academia and other stakeholders because it will entail a major change in land and livestock management.
- 2.8 Embedding technology in the transition to regenerative agriculture systems and in the evaluation thereof is another innovation. Using data to evaluate, document, compare, reformulate, and make decisions is an innovation in the agricultural sector. The processes adopted by farmers in recent decades have not produced consistent data for analysis and decision-making.
- 2.9 Lastly, in Uruguay there are no innovative financing mechanisms that can help accelerate the adoption of regenerative practices, whose results typically cannot be seen in the short term. Another feature that sets this project apart is the opportunity to access first-hand knowledge and analyze potential alternatives in terms of financial innovations.

The project is divided into the following components:

- 2.10 **Component I: Capacity-building for regenerative sheep production.** The objective of this component is to build local capacity so more sheep farmers can adopt regenerative ranching practices. To that end, efforts will be made to: (i) work with an international expert, local technical experts in sheep farming, leading voices in the regenerative agriculture movement, researchers, and farmers to develop a new protocol to certify regenerative practices in sheep production (NATIVA Regen)³⁰ and simplified guidelines for adoption thereof. The individuals

²⁹ Blumetto et al. *Ganadería Regenerativa en Uruguay*. INIA, 2023.

³⁰ This protocol will be aligned with the IDB's environmental and social performance standards.

- invited to participate will be selected for their experience and expertise in regenerative agriculture systems and their knowledge of the sheep sector; (ii) develop human capital by training technical officers who already work with sheep farmers in the Chargeurs and Lanas Trinidad supply chain and offering farmers assistance for their transition to regenerative production practices; (iii) establish baseline indicators based on the pilot initiative implemented by INIA and featured in its publication titled *Ganadería Regenerativa en Uruguay*;³¹ (iv) offer technical assistance from INIA with a view to furthering the generation of scientific evidence on the advantages of regenerative ranching; (v) conduct awareness-raising activities for farmers and technicians; (vi) offer specialized training to women farmers (ranch managers or co-managers) in technical topics and business skills; and (vii) certify farmers under the new NATIVA Regen protocol, which will be developed as part of the solution.
- 2.11 Chargeurs and Lanas Trinidad will issue a call for participation to their database of 250 farmers already certified under the NATIVA™ protocol to select the beneficiaries of the technical assistance and training activities.
- 2.12 **Gender.** According to the International Labour Organization (ILO, 2011),³² rural women face discrimination that limits both their economic productivity and their personal development. Women need access to training, technical assistance, and social capital. The project will address gender bias by supporting a group of women farmers with trainings on regenerative ranching practices and soft skills and helping them develop a network that unites them and builds their sense of belonging. The group will be led by [Gabriela Bordabehere](#), who is a trailblazer in regenerative wool production and who won the National Italian Chamber of Fashion's Climate Action Award with Chargeurs. For these activities, Chargeurs and Lanas Trinidad will issue a call for participation to women who have an active role in the 250 ranches already certified by NATIVA™.
- 2.13 The expected component outputs are: (i) a guide for implementing the NATIVA Regen protocol will have been developed; (ii) 26 extension officers will have received training; (iii) 20 events to disseminate the advantages of regenerative ranching will have been held; (iv) 110 farmers will have received technical assistance to help them transition to regenerative practices; (v) 30 women will have participated in training activities on regenerative ranching practices and economic empowerment; and (v) an institutional agreement with INIA will have been signed.
- 2.14 **Component II: Development of financial incentives for the transition to regenerative ranching.** The objective of this component is to develop a state-of-the-art analysis of innovative, sustainable financing mechanisms in place worldwide and available in Latin America and the Caribbean and conduct knowledge-dissemination activities in this area. To achieve that objective: (i) a diagnostic assessment of sustainable financing instruments to help farmers transition to regenerative ranching practices will be commissioned, and alternative

³¹ Blumetto et al. *Ganadería Regenerativa en Uruguay*. INIA, 2023.

³² [I-News: New UN Report Says Rural Women Face Increasing Inequality: Calls for Policies Enabling Women to Drive Rural Economic Growth and Poverty Reduction \(ilo.org\)](#).

- options for generating revenue to implement regenerative practices, such as certifications and the sale of ecosystem services, will be analyzed. The study will be disseminated at a public event involving a large number of local and regional stakeholders (including farmers, financial institutions, impact investors, financial advisors, government representatives, and academics) and at four workshops directed at ranchers who are working to transition to regenerative practices; and (ii) the viability of issuing certificates on the voluntary carbon market will be explored. Specialized advisory services will be engaged when analyzing this option with a view to reducing “reputational risks” for the Bank and the stakeholders involved.
- 2.15 The expected outputs are: (i) a diagnostic assessment study of sustainable financing instruments and alternative revenue-generation options to incentivize the adoption of regenerative grazing practices will have been prepared; (ii) the study will have been disseminated to 200 stakeholders (farmers, technicians, companies, etc.) through the dissemination activities; (iii) four regional meetings will have been held to present information on financial incentives and innovative financing mechanisms to farmers; and (iv) a diagnostic assessment on the viability of selling certificates on the voluntary carbon market will have been performed.
- 2.16 **Component III: Adoption of technological solutions to accelerate the transition to regenerative ranching.** The objective of this component is to promote the adoption of technological solutions that make the adoption of regenerative ranching practices a more sustainable process. To that end: (i) a diagnostic assessment will be performed to identify opportunities/critical points for the adoption of technological solutions to accelerate the implementation and/or evaluation of regenerative ranching practices; (ii) a scouting exercise will be performed to identify potential solutions available on local, regional, and extraregional markets; and (iii) implementation of solutions under market conditions will be piloted.
- 2.17 An institution specialized in innovation and technology will be selected from IDB Lab’s network of contacts to identify opportunities for implementing “naturetech” solutions that seek to help farmers adopt regenerative practices and monitor the benefits of doing so. For example, [Klim](#), a German company, has developed an app that helps farmers set goals and determine the best mix of practices to implement based on factors such as soil type.
- 2.18 After the critical points have been identified, a scouting exercise will be performed to identify problem-solvers that already have a minimum viable product. Those problem-solvers will then be hired to roll out their solutions in market conditions.
- 2.19 The expected component outputs are: (i) a diagnostic assessment of opportunities for incorporating technological solutions into regenerative ranching practices will have been performed; (ii) a scouting report on technological solutions will have been prepared; (iii) 10 solutions from startups and/or innovative companies will have been identified; and (iv) at least two agreements will have been signed with startups and/or innovative companies to pilot those regenerative ranching solutions in market conditions with farmers who are project beneficiaries.
- 2.20 **Component IV: Knowledge generation and dissemination for scaling.** Given the growing interest in regenerative ranching practices, the objective of this

- component is to generate knowledge on regenerative ranching to accelerate the adoption of such practices and disseminate that knowledge among interest groups. To that end: (i) the services of an internationally recognized specialized institution will be engaged to conduct a study documenting the lessons learned from the project; and (ii) at least one dissemination event for strategic audiences will be held.
- 2.21 The expected component outputs are: (i) a case study on regenerative ranching practices for the sheep sector will have been published; and (ii) that case study will have been disseminated to 10 entities (farmers associations, researchers, companies in the sector, the public authorities, etc.) in Uruguay and in other countries of the region.
- B. Project results, metrics, monitoring, and evaluation**
- 2.22 The expected project outcomes are: (i) 100 sheep farmers will have started to transition to regenerative production practices;³³ (ii) the average carbon stock will be held constant at 82.7 tons of carbon per hectare; (iii) the Ecosystem Integrity Index score will have increased by 20%;³⁴ (iv) 10 buyers will have signed agreements to purchase wool produced by systems that are transitioning to regenerative practices; (v) 60 farmers will be engaged in the sale of wool produced using regenerative ranching practices to brands; and (vi) 60,000 hectares will have been certified under the NATIVA Regen protocol.
- 2.23 The targets for the environmental indicators were determined in consultation with the INIA team based on data collected by Ruggia (2021).³⁵
- 2.24 Gains in functional biodiversity and the associated increase in biomass can lead to agricultural systems that capture more carbon, and, by extension, boost climate change adaptation and mitigation.
- 2.25 Farmers who participate in these new production arrangements will find that they have better opportunities to reach more discriminating buyers, which will decrease the number of parties involved in supply chains and make their sales strategies more resilient in the medium term.
- 2.26 The executing agency will be responsible for project monitoring and evaluation activities. To gather baseline data from farmers and monitor the technical indicators, the executing agency will work in conjunction with INIA, which has experience and a record of technical success with farmers, technicians, certifiers,

³³ These farmers will have baselines and will have adopted, at a minimum, the following practices: (i) extended pasture resting periods; (ii) protection of watercourses and riparian areas; (iii) shades featuring native plant species; and (iv) minimal use of agrochemicals, or, where agrochemicals are used, use of active substances that do not harm soil quality.

³⁴ This index looks at four components: soil, vegetation structure, plant species, and the state of watercourses and riparian areas. Its application involves a qualitative and quantitative evaluation at the paddock level using a scale from 0 to 5, where a score of 5 means that the ecosystem is in an optimal condition in relation to the standard established for the ecoregion subject to evaluation. The index provides a score for each paddock and an overall score for the ranch (Blumetto et al., INIA, 2017).

³⁵ Ruggia, A., S. Dogliotti, V. Aguerre, M.M. Albicette, A. Albin, O. Blumetto, G. Cardozo, C. Leoni, G. Quintans, S. Scarlato, P. Tiftonell, and W.A.H. Rossing (2021). The Application of Ecologically Intensive Principles to the Systemic Redesign of Livestock Farms on Native Grasslands: A Case of Co-innovation in Rocha, Uruguay. *Agricultural Systems* 191, 103148, ISSN 0308-521X, <https://doi.org/10.1016/j.agsy.2021.103148>.

and international buyers. The executing agency will work with INIA to determine how frequently the indicators agreed to in the operations results matrix will be measured and reported.

- 2.27 The project indicators will be monitored on a semiannual basis through the project status report.

III. ALIGNMENT WITH THE IDB GROUP, SCALABILITY, AND RISKS

A. Alignment with the IDB Group

- 3.1 This project is aligned with the **IDB Group Country Strategy with Uruguay 2021-2025**, whose objective is to support the plan of the Government of Uruguay to achieve inclusive, sustainable growth. One of the three strategic areas is sustainable productive development, which is to be addressed by incorporating an environmental perspective and considering the use of digital technologies. The project is also consistent with the second Update to the Institutional Strategy, which promotes crosscutting strategies to reduce climate risk and supports the development of product, process, and business model innovations related to natural resource anchor firms and the network of small and medium-sized enterprises that supply them with services.
- 3.2 The **Agriculture Sector Framework Document** (document GN-2709-10) and the **Environment and Biodiversity Sector Framework Document** (document GN-2827-5) indicate that a necessary measure to promote inclusive agricultural development and sustainable natural resource use is to support countries with a highly productive agricultural sector, through which climate risks can be managed and the challenge of competitiveness can be overcome.
- 3.3 This project complements technical cooperation operation UR-T1277, led by the Bank's Environment, Rural Development, and Risk Management Division (RND), which promotes the adoption of agroecological practices and the reduction of the carbon footprint in Uruguay's agricultural sector.
- 3.4 Approximately 100% of the IDB resources for this project are invested in adaptation to climate change activities according to the joint methodology of the multilateral development banks for tracking climate finance. These resources contribute to the IDB Group target of increasing financing for climate-related projects to 30% of approvals by the end of 2020.
- 3.5 **Paris alignment.** This operation is deemed to be aligned with the Paris Agreement's mitigation goals (BB1) due to its direct and indirect benefits in terms of emissions, which are tied to the project commitments of maintaining the average carbon stock (with a significant increase materializing after six years, according to Prairie et al., 2023³⁶) and increasing the Ecosystem Integrity Index (paragraph 2.22). These actions will support Uruguay's climate strategies that aim to keep overall greenhouse gas emissions from the ranching sector stable and reducing the greenhouse gas emissions intensity per kilo of goods by 2030 and by 2050 (National Climate Change Policy, 2016; Long-term Climate Strategy, 2021;

³⁶ https://www.pnas.org/doi/10.1073/pnas.2217481120?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%20pubmed.

and second Nationally Determined Contribution, 2022). In terms of adaptation and resilience goals (BB2), regenerative ranching practices have direct benefits for building the climate resilience of end beneficiaries,³⁷ which means that the promoted activities are transformative in nature. Thus, the project is deemed aligned with the climate adaptation goals.

- 3.6 The project is aligned with the following **Sustainable Development Goals** (SDGs): (i) SDG 9 – Industry, innovation, and infrastructure: Target 9.5. Enhance scientific research to upgrade the technological capabilities of industrial sectors. The project includes objectives related to the generation and application of knowledge related to the agroindustrial sector; and (ii) SDG 13 – Climate action: Target 13.2. Integrate climate change measures into national policies, strategies, and planning. The project integrates and gives priority to technologies designed to measure and reduce greenhouse gas emissions in the atmosphere or implement solutions to adapt to climate change and variability.
- 3.7 This operation fits within IDB Lab's **agriculture and natural capital vertical**, which identifies the following as some of the major challenges facing the region: (i) the need to close gaps and double standards in terms of productivity, innovation, digitalization, and new skills that can provide business continuity to smaller-scale producers; and (ii) challenges stemming from climate change, since agriculture is highly dependent on climate conditions.

B. Scalability

- 3.8 The project will be scaled up by increasing the number of farmers who adopt this new production system. Under the project, 100 farmers are expected to implement regenerative ranching practices. In another four years, that figure could rise to a total of 250 farmers in Uruguay, who are already members of the pool of NATIVA™-certified farmers. This group of farmers is known for producing fine wools, for adhering to environmentally sustainable production standards, for complying with good practices for animal welfare, and for proactively serving their communities.
- 3.9 Knowledge generated under the project can be transferred to Chargeurs operations in Argentina. Though only 50 farmers in Argentina are certified at this time, the company expects to expand its reach in the country and the number of farmers certified there.
- 3.10 Chargeurs currently pays a premium to farmers who are transitioning to regenerative ranching practices in the hopes that buyers will pay a differential price (currently 10%).
- 3.11 The partnership with INIA (to develop applied scientific knowledge), farmers, and international buyers like Gucci is a starting point that can be replicated with other brands. Chargeurs has already begun talks with such brands as LVMH, H&M, and the Kering Group, which have expressed interest in establishing partnerships in the future. To achieve this, supply side efforts will be needed to increase the supply of wool produced by regenerative systems.

³⁷ <https://climateadaptationplatform.com/regenerative-agriculture-crucial-in-climate-change-adaptation-and-mitigation/>.

- 3.12 Knowledge generated under the project will be treated as a public good. Accordingly, the project includes measures to ensure that the knowledge and methods developed can be transferred to more farmers and extension officers through partnerships with public agencies, State-owned enterprises, and farmers associations (such as Plan Agropecuario, Secretariado Uruguayo de la Lana, the MGAP, and FUCREA³⁸). These measures will be vital to ensuring that more and more farmers adopt regenerative ranching practices.
- 3.13 Established incentive mechanisms (results-based payments/voluntary carbon markets) can also help scale up the proposed innovation, offering sheep farmers more incentives.
- 3.14 The transition to regenerative systems is also a topic of interest for the Bank's Environment, Rural Development, and Risk Management Division (RND), Competitiveness, Technology, and Innovation Division (CTI), and Climate Change Division (CCS), and for IDB Invest's Agribusiness and Climate Change Advisory Services teams, which are part of the project team. Those divisions will closely observe the project for lessons learned that can be scaled up in their own operations.
- 3.15 The project team will work in coordination with the Climate Change Advisory Services team to develop a knowledge product that collects data on the impact of regenerative management practices on ecosystem biodiversity and the potential for productivity gains.

C. Project and institutional risks

- 3.16 **Risk:** Climate conditions (drought) could adversely affect the implementation of regenerative practices among farmers. **Mitigating factors:** Scaling back the number of heads of livestock based on water availability and the ranch's ability to produce forage/fodder storage/continued investments in "drinking troughs" to reduce the impact of water stress.
- 3.17 **Risk:** Recessions in certain European countries (the main market for regenerative wool) could continue to adversely affect end consumers in the wake of a protracted Russia-Ukraine war. **Mitigating factors:** Continued efforts to explore the U.S. market as an alternative for selling wool produced using regenerative systems.
- 3.18 **Risk:** International wool prices could keep falling, discouraging farmers from continuing to raise sheep. **Mitigating factors:** Proceeding with the policy of paying a premium to farmers who commit to transitioning to regenerative practices.
- 3.19 **Risk:** The per farmer adoption cost could be too high to replicate the project model. **Mitigating factors:** There are more farmers who meet a minimum standard for practices. The technological solutions and knowledge generated under the project should make knowledge more accessible to help more farmers transition.
- 3.20 The diagnostic assessment of integrity and institutional capacity found a medium level of risk, so an action plan (currently in progress) has been built into the program. The plan calls for the submission of audited financial statements during

³⁸ The Uruguayan Federation of Regional Agricultural Experimentation Centers.

project execution and the development of a procurement manual, which will be a condition precedent to the first disbursement of the IDB Lab contribution.

- 3.21 The environmental and social risk assessment found that the project entails moderate risk (Category “B”). An environmental and social action plan was developed after the environmental and social review and can be found in Annex VI. In addition, the appointment of the individual who will be responsible for supervising the project’s environmental and social risks and ensuring that they are managed in accordance with the IDB Lab performance standards has been included as a condition precedent to the first disbursement of the IDB Lab funds.

IV. INSTRUMENT AND BUDGET PROPOSAL

- 4.1 The project has a total cost of US\$1,186,192, with an IDB Lab contribution of US\$574,760 (48%) and a counterpart contribution of US\$611,432 (52%). The instrument to be used will be a nonreimbursable technical-cooperation operation (NRTC), because commercial-scale regenerative production is at an early stage of development, so there is a high degree of uncertainty surrounding the revenues that farmers can earn from adopting such practices. In addition, the knowledge generated under the project will be treated as a public good.

Project component	IDB Lab	Counterpart contribution	Total
Component I – Capacity-building	323,660	248,000	571,600
Component II – Development of financial incentives	68,720	4,000	72,720
Component III – Adoption of technological solutions	72,400	0	72,400
Component IV – Knowledge generation and dissemination for scaling	25,000	5,000	30,000
Project administration	85,000	350,432	435,432
Audited expense statements		4,000	4,000
Total	574,760	611,432	1,186,432
% of financing	48%	52%	

V. EXECUTING AGENCY AND IMPLEMENTATION STRUCTURE

A. Description of the executing agency

- 5.1 The project executing agency will be Nuovalane S.A., the Uruguayan subsidiary of Chargeurs Luxury Materials. Chargeurs is a global leader in wool tops production and premium wool trading for merino wool products with high value-added. Chargeurs Luxury Materials is the only global trader capable of offering merino wool from every producing region, and the firm deploys an optimized business model with firm contracts for farmers.
- 5.2 The focus of Chargeurs Luxury Materials’ research & development units is high-quality wool, drawing on the group’s sustainable production/distribution cycle model and working to strengthen its long-term integration in local producer communities and regional ecosystems.

- 5.3 Chargeurs Luxury Materials' strategy is aligned with the enduring market demand for wool grades produced in full compliance with animal welfare and environmental standards (including the reduction of greenhouse gas emissions) for the fashion wear and sportswear industry.
- 5.4 Its unique business model rests on four pillars: (i) an operational excellence model; (ii) a robust and disciplined financial culture; (iii) niche products and services; and (iv) engaged management of human capital.
- 5.5 Chargeurs Luxury Materials is a signatory of the United Nations Global Compact.
- 5.6 In Uruguay, Lanás Trinidad S.A. (50% of capital stock held by Chargeurs) is the entity responsible for purchasing wool on the local market and the direct link to farmers. Thus, it is a strategic partner for Nuovalane, whose core business focuses more on international wool sales.

B. Structure and implementation mechanism

- 5.7 Nuovalane S.A. will establish an execution unit and the structure needed to execute project activities and effectively and efficiently manage the project resources. The executing agency will also be responsible for submitting progress reports on project implementation.
- 5.8 The project director will be appointed by Nuovalane and will be supported by a project coordinator, who will be responsible for assisting the project director with planning, procurements, and reporting to the executing agency and the Bank. The Chargeurs sales and management office will provide financial and administrative support, and a technical field coordinator will be hired to support work with the farmers.
- 5.9 For project execution, Nuovalane S.A. will sign an agreement with Lanás Trinidad S.A. to act as the subexecuting agency for certain activities, especially those involving direct contact with farmers. Nuovalane S.A. will be responsible for the use and traceability of project funds and for achievement of the project objectives.
- 5.10 The project will have an advisory board that will meet every six months to provide strategic assistance to the project. The board will consist of, at a minimum, one representative from Chargeurs, one representative from Lanás Trinidad, the lead expert from INIA, one member representing the farmers, the technical field coordinator, and the project coordinator, who will serve as the board secretary. The Bank will participate at these meetings as an observer.

VI. FULFILLMENT OF MILESTONES AND SPECIAL FIDUCIARY ARRANGEMENTS

- 6.1 **Results-based disbursements and fiduciary arrangements.** The executing agency will commit to IDB Lab's standard arrangements regarding results-based disbursements and to the Bank's procurement³⁹ and financial management⁴⁰ policies.
- 6.2 Project **disbursements** will be made based on the project's real liquidity needs as agreed between IDB Lab and the executing agency and will be conditional on verification of fulfillment of the milestones, activities, and costs programmed in the annual planning exercise. Fulfillment of milestones does not exempt the executing agency from the responsibility of achieving the agreed results.
- 6.3 Unless the Bank determines otherwise during execution, the executing agency's **procurement** policies will be used. An annual procurement plan indicating the necessary procurements for project execution and fulfillment of milestones will be submitted annually, together with the annual work plan. IDB Lab will perform an ex ante review of the technical aspects of procurement as it deems necessary, especially for those procurements considered critical.
- 6.4 The executing agency will submit audited **annual financial statements** to the Bank. The Bank may use funds from its contribution to review the financial statements and use of project funds, verifying financial and procurement practices.
- 6.5 Under the executing agency's procurement policies, the National Agricultural Research Institute (INIA) will be directly contracted to establish the baseline and monitor certain environmental indicators (until external capacity is built) with a view to measuring the transition to regenerative ranching systems and continuing the applied research efforts to generate local evidence on the advantages of regenerative ranching practices in the sheep sector. INIA will also conduct a study on the impact of regenerative practices on biodiversity and productivity gains. INIA has generated specific, unparalleled knowledge on the transition to regenerative ranching practices in Uruguay's agroecological conditions, and its work has earned it recognition from the industry, the LEAP committee of the Food and Agriculture Organization of the United Nations (FAO), and international buyers.

VII. ACCESS TO INFORMATION AND INTELLECTUAL PROPERTY

- 7.1 **Access to information.** The information contained in this document is classified as confidential under the Bank's Access to Information Policy.⁴¹
- 7.2 **Intellectual property.** Intellectual property of all project works and results will belong to the Bank, except those pertaining to improvements at startups or innovative companies, in which case the startup or company in question will retain intellectual property as an incentive for future scaling.

³⁹ Link to the [Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank](#).

⁴⁰ Link to the [Financial Management Guidelines for IDB-financed Projects](#).

⁴¹ Link to the [Bank's Access to Information Policy](#).

- 7.3 The Bank will be able to release, reproduce, and publish any information associated with the project and include the executing agency's name and logo in that information.