

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

COLOMBIA

**CONSERVATION AND SUSTAINABLE USE OF THE CIÉNAGA GRANDE DE
SANTA MARTA**

(CO-G1014)

INVESTMENT GRANT PROPOSAL

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ABBREVIATIONS

CCGI-CGSM	Committee to Coordinate the Comprehensive Management of the Ciénaga Grande de Santa Marta
CGSM	Ciénaga Grande de Santa Marta [Large Marsh of Santa Marta]
CNA	Coordinador Nacional Agrario [National Agricultural Coordinator]
CORPAMAG	Corporación Autónoma Regional del Magdalena [Magdalena Regional Autonomous Corporation]
DANE	Departamento Administrativo Nacional de Estadística [National Administrative Statistics Department]
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
GEZ	Coordinación de Investigación e Información para la Gestión Marina y Costera [Research and Information for Marine and Coastal Management Coordination Office]
IAvH	Alexander von Humboldt Institute
IBI _M	Index of biological integrity of the mangrove swamp
IDEAM	Instituto de Hidrología, Meteorología y Estudios Ambientales [Institute of Hydrology, Meteorology, and Environmental Studies]
INVEMAR	Instituto de Investigaciones Marinas y Costeras “José Benito Vives de Andréis” [“José Benito Vives de Andréis” Marine and Coastal Research Institute]
METT	Management effectiveness tracking tool
MinAmbiente	Ministry of Environment and Sustainable Development
PAGRICC	Environmental Program for Disaster Risk and Climate Change Management
PNN	Parques Nacionales Naturales [National Natural Parks]
QCBS	Quality- and cost-based selection
SDERM	Sistema Delta Estuarino del Río Magdalena [Magdalena River Estuarine Delta System]
SFF	Santuario de Flora y Fauna [Flora and Fauna Sanctuary]
SINAP	Sistema Nacional de Áreas Protegidas [National System of Protected Areas]
SIRAP Caribe	Sistema Regional de Áreas Protegidas del Caribe Colombiano [Regional System of Protected Areas of the Colombian Caribbean]
SISD	Sistema de Indicadores Sociodemográficos [Sociodemographic Indicators System]
SNSM	Sierra Nevada de Santa Marta mountain range
SSS	Single-source selection
UNESCO	United Nations Educational, Scientific and Cultural Organization
VIPIS	Vía Parque Isla de Salamanca [Salamanca Island Road Park]

PROJECT SUMMARY

COLOMBIA CONSERVATION AND SUSTAINABLE USE OF THE CIÉNAGA GRANDE DE SANTA MARTA (CO-G1014)

Financial Terms and Conditions				
Beneficiary:				
Republic of Colombia				
Executing agency:				
Instituto de Investigaciones Marinas y Costeras “José Benito Vives de Andrés” [“José Benito Vives de Andrés” Marine and Coastal Research Institute] (INVEMAR)				
Source	Amount (US\$)	%		
IDB (GEF):	8,219,178 ^(a)	100	Disbursement period:	5 years
Total:	8,219,178	100	Execution period:	5 years
			Approval currency:	United States dollar
Project at a Glance				
<p>Project objective/description: The project’s general objective is to improve the health of the ecosystem of the Magdalena River delta estuarine system, Ciénaga Grande de Santa Marta [Large Marsh of Santa Marta] (SDERM-CGSM), to foster conservation of its biodiversity and ecosystem services. The specific objectives are to: (i) strengthen the environmental governance of the ecoregion in a participatory manner; (ii) promote adoption of tools for conserving biodiversity and improving the connectivity of the strategic ecosystems and water use efficiency; and (iii) increase the area where sustainable production practices are followed in the Aracataca and Fundación river basins.</p>				
<p>Special contractual conditions precedent to the first disbursement of the financing: The first disbursement of the grant resources will be subject to fulfillment, to the Bank’s satisfaction, of the following conditions: (i) INVEMAR has signed interagency agreements with the Ministry of Environment and Sustainable Development (MinAmbiente), Magdalena Regional Autonomous Corporation (CORPAMAG), Alexander von Humboldt Institute (IAvH), National Natural Parks (PNN), and Institute of Hydrology, Meteorology, and Environmental Studies (IDEAM) that establish each entity’s project execution responsibilities, committing them to providing technical specifications prior to the procurement of goods and/or services that will benefit the participating institutions, assigning the specific staff members of the institutions who will serve on the project steering and technical committees, and ensuring that parallel financing is provided for the project; (ii) the project team has been selected, and its key staff members at INVEMAR have been appointed in accordance with the project Operating Regulations (optional link 6); and (iii) the project Operating Regulations have been approved and entered into effect in the terms previously agreed upon with the Bank, including the environmental and social commitments set forth in Section C of Annex B of the environmental and social management report (paragraph 3.6).</p>				
Exceptions to Bank policies: N/A				
Strategic Alignment				
Challenges: ^(b)		SI <input type="checkbox"/>	PI <input checked="" type="checkbox"/>	EI <input type="checkbox"/>
Crosscutting themes: ^(c)	GE <input checked="" type="checkbox"/> and DI <input checked="" type="checkbox"/>	CC <input checked="" type="checkbox"/> and ES <input checked="" type="checkbox"/>	IC <input checked="" type="checkbox"/>	

^(a) The operation will benefit from US\$41,577,492 in complementary (parallel) financing to be provided by INVEMAR, MinAmbiente, CORPAMAG, IAvH, PNN, IDEAM, etc., which may be in kind, as well as from other international cooperation projects (the Green Climate Fund and the Food and Agriculture Organization of the United Nations).

^(b) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(c) GE (Gender Equality) and DI (Diversity); CC (Climate Change) and ES (Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. PROJECT DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

- 1.1 **Context.** Colombia is starting to recover from the severe economic and social impact of COVID-19, which shrank the economy by 6.8%—the largest drop in gross domestic product in the country’s history—and drove the poverty rate up to 42.5% of the population. In Colombia’s rural areas, the main asset is natural capital, which generates key ecosystem services like food production, water, and biodiversity. These services are fundamental to improving rural communities’ socioeconomic well-being and furthering the economic recovery. Colombia is one of the world’s 12 megadiverse countries and ranks second in terms of endemic zones. With barely 0.7% of the planet’s surface area, it is home to approximately 10% of the world’s flora and fauna and over 50,000 registered species; 51% of its surface area is covered by natural forests.¹ Colombia has a National System of Protected Areas (SINAP) comprising 1,376 areas that cover 31 million hectares (15% of the national territory) (Single Registry of Protected Areas, 2021). Notably, some of the country’s abundant biodiversity is found in its water sources. Colombia contains 60% of the world’s moorland and around 31,702 wetlands ([Bogota Botanical Garden, 2021](#))² covering over 25 million hectares ([MinAmbiente, 2021](#)). Wetlands are ecologically significant strategic ecosystems that provide a variety of goods and services, including drinking water, irrigation water, erosion control, climate regulation, fishery resources, foods, biodiversity, etc.
- 1.2 Colombia acceded to the Convention on Wetlands of International Importance (the Ramsar Convention) through Law 357 of 1997. This international treaty promotes the conservation and wise use of wetlands. A total of 171 countries are parties to this convention, and they commit to: (i) work towards the wise use of all their wetlands; (ii) designate sites for inclusion in the List of Wetlands of International Importance (Ramsar sites) and conserve them; and (iii) cooperate on transboundary wetlands ([Ramsar, 2021](#)). In Colombia, there are 12 designated Ramsar sites. The Magdalena River delta estuarine system Ciénaga Grande de Santa Marta [Large Marsh of Santa Marta] (SDERM-CGSM) Ramsar site was the first wetland included on the Ramsar list (1998).
- 1.3 The SDERM-CGSM covers 528,600 hectares³ and is located in northern Colombia, bordered on the west by the Magdalena River, on the north by the Caribbean Sea, and on the east by the Sierra Nevada de Santa Marta mountain range (SNSM). The Magdalena River, the flood plains that include the Pajara and CGSM lagoon complexes, the Caribbean Sea, and the Fundación, Aracataca, Frio, and Sevilla Rivers, which originate in the SNSM, all converge there. The SDERM-CGSM falls under the jurisdiction of the departments of Magdalena, Atlántico, and Bolívar, and includes 26 of their municipios. However, 98.5% of the Ramsar site is in the department of Magdalena.

¹ Institute of Hydrology, Meteorology, and Environmental Studies (IDEAM). *Monitoreo y Seguimiento al Fenómeno de la Deforestación en Colombia* [Monitoring and Tracking Deforestation in Colombia] 2013.

² References are found in [optional link 1](#).

³ Ministry of the Environment, Housing, and Territorial Development, 2009. Decree 3888 of 2009.

- 1.4 The SDERM-CGSM is one of the Colombian Caribbean's most important wetland complexes due to its size, socioeconomic significance, endemism, biological diversity, and aquatic and land habitats (MinAmbiente, 2020). The system includes two national public protected areas: the Santuario de Flora y Fauna de la Ciénaga Grande de Santa Marta [Large Marsh of Santa Marta Flora and Fauna Sanctuary] (SFF-CGSM) and the Vía Parque Isla de Salamanca [Salamanca Island Road Park] (VIPIS). The SDERM-CGSM is also ecologically connected to the SNSM National Natural Park, and it is known for its diversity, with 242 species of invertebrates, 165 of fish, 276 of birds, 83 of mammals, 66 of reptiles, and 24 of amphibians (MinAmbiente and the Instituto de Investigaciones Marinas y Costeras [Marine and Coastal Research Institute] (INVEMAR), 2019). Furthermore, it includes 35,379 hectares of mangrove swamp (INVEMAR, 2019), which is extremely important to the environment due to its water supply, associated with forest ecosystems, and with the fishery resources and agricultural activities on which the populations settled in the region depend (MinAmbiente, 2012).
- 1.5 The ecosystem services provided by the SDERM-CGSM wetland complex include (Ramsar, 2017):
- a. **Regulation:** (i) protection against natural events; (ii) habitats with biological biodiversity; (iii) water purification; (iv) sediment retention; (v) aquifer recharge; and (vi) climate change mitigation through carbon sequestration.
 - b. **Provisioning:** (i) production of food through fish, crustaceans, and mollusks, and the agricultural production carried out in the various basins; (ii) production of natural products and fibers, salt, etc.; and (iii) production of water.
 - c. **Cultural:** (i) tourist activities; (ii) scientific knowledge; and (iii) broad diversity of indigenous communities and towns built on stilts.
- 1.6 The SDERM-CGSM has been undergoing significant environmental degradation, which has led to major changes in its ecological characteristics. The main problem is the imbalance of fresh and saltwater flows, which has led to hypersalinization of the marsh, threatening the area's biodiversity. For example, 27,000 tons of fish were caught in 1967, while only 1,785 tons were caught in 1987—a 93% reduction in twenty years (Aguilar, 2011). Likewise, mangroves have been dying on a massive scale, with mangrove cover shrinking from 51,150 hectares in 1956 to 17,760 in 1995, a loss of approximately 65% (Vilardy, 2009). The hypersalinity resulting from the water imbalance has destroyed limnophyte vegetation and floodable forest and provoked a massive die-off of freshwater fish (Ramsar, 2017). Because of this, the 2017 Ramsar Convention advisory mission recommended that the site be included on the Montreux Record, indicating that the system's ecological character is threatened as a result of technological developments, pollution, or other human interference ([Ramsar, 2021](#)). The advisory mission calls on the Colombian government to take urgent measures that will make it possible to maintain and recover the SDERM-CGSM's ecological character.

1.7 **Causes.** The main factors behind this situation include:

a. Weak governance and difficult territorial planning

- 1.8 A large number of social actors come together in the SDERM-CGSM, including but not limited to fishers, agroindustry business owners, campesinos, communities displaced by violence, ranchers, illegal armed groups, indigenous persons, Afro-descendants, and various national, regional, and local entities. Their diverse interests in the use and management of the natural resources lead to environmental conflicts and a lack of coordination. The Committee to Coordinate the Comprehensive Management of the Ciénaga Grande de Santa Marta (CCGI-CGSM) is the principal mechanism for collective management and coordination, and is recognized by the national government as an integrative mechanism. The Committee has 20 members from national, regional, and local public institutions, ethnic communities, academia, civil society organizations, and the private sector. It was created by Ministry of Environment and Sustainable Development (MinAmbiente) Resolution 1300 of 2016, and its objectives are to strengthen interagency coordination, bolster community participation, and create forums for advisory and technical work, as well as to develop and contribute to formulating and implementing environmental control solutions and recommendations in the CGSM. A technical work board was formed to facilitate the coordination process, with the Magdalena Regional Autonomous Corporation (CORPAMAG), Basic Sanitation and Drinking Water Regulatory Commission, National Natural Parks (PNN), Marine and Coastal Research Institute (INVEMAR), Institute of Hydrology, Meteorology, and Environmental Studies (IDEAM), University of Magdalena, University of Atlántico, departmental governments of Magdalena and Atlántico, Barranquilla Verde, and MinAmbiente. The board has made progress on updating the management plan for the SDERM-CGSM Ramsar site, which is currently out for feedback from the strategic stakeholders. That said, the CCGI-CGSM does not have the financial resources to guarantee implementation of a governance strategy to coordinate the various actors and/or plan long-term actions for the conservation and sustainable use of the SDERM-CGSM.
- 1.9 At present no integrated management plan has been approved or agreed upon by the actors, which makes it difficult to prioritize investments and to establish the parties responsible for implementing actions (Government Accountability Office, 2021). Furthermore, the CCGI-CGSM has not managed to actively link the municipios and private sector or other local nongovernmental actors. In general, many instruments, platforms, and actors overlap in the governance of the CGSM (Ochoa, 2021). Moreover, decision-making for planning and executing investments is not based on scientific information. For example, the hydrosedimentary model of the CGSM has not been fully incorporated into the mechanisms for allocating water, identifying sites for channel maintenance, or evaluating infrastructure projects (Bensted-Smith, 2021). There is also a lack of: (i) mechanisms to facilitate communication among the various parties involved in environmental governance; (ii) community education strategies to disseminate information; (iii) public outreach to foster the communities' active participation in designing and executing the various environmental initiatives; (iv) processes and/or platforms for exchanging and/or analyzing environmental, climate, and socioeconomic information; and (v) conflict-resolution protocols (Ramsar, 2017).

b. Disruption of connectivity and hydrological ecosystem degradation

- 1.10 Construction of the Barranquilla-Santa Marta road from 1956 to 1960 and of other roads reduced the exchange between the lagoon system and the sea (Salzwedel et al., 2016). This disruption was exacerbated by the construction of dikes and embankments to prevent the Magdalena River from overflowing, as well as by the failure to maintain the channels and diversions of the rivers flowing down from the SNSM for irrigation districts (Government Accountability Office, 2021). In addition, the volume of freshwater entering from the rivers has dropped due to the channels getting clogged and blocked as a result of the increase in particulate matter in the rivers, caused by deforestation and dumping of materials in the basins. Likewise, the environmental deterioration of the basins of the rivers flowing out of the SNSM, and the use of water for agriculture and ranching, have led to increased sediment and mean less fresh water reaches the lagoon system. These factors have given rise to the hypersalinization of the mangrove substrates and the aquatic systems, killing the mangroves and hampering their regeneration capacity (Ramsar, 2017).

c. Loss of natural cover

- 1.11 The biodiversity of the SDERM-CGSM is gravely threatened due to forest fragmentation and deforestation. According to IDEAM's Comprehensive Deforestation Control Strategy reports ([2021](#)), the Caribbean region is the area of Colombia with the least amount of forest cover, and in 2016 it had 7.5% of the country's total deforested surface area. In addition, the SNSM has the eighth highest deforestation percentage of the country's SINAP areas (4.3%). Deforestation results in grave ecosystem fragmentation, with direct effects on the destruction of native flora and fauna (Ange, 2021). In particular, 50% of the middle and low zones of the Aracataca and Fundación river basins, which connect the CGSM with the SNSM, are fragmented with isolated patches of forest (CIT and Fundaherencia, 2016; Ange, 2021). The fragmentation issues are worse in the lower basin, where the main cover is pasture and land dedicated to ranching (59%), with large monoculture zones (12%) on amalgamated properties, and few forested patches. The deforestation and forest fragmentation mainly result from the expansion of the agricultural frontier to make room for pastureland and crops (García Romero, 2014). In fact, 57% of the Fundación and Aracataca basins are covered by pastureland (CIT and Fundaherencia, 2016).

d. Poor water management and quality

- 1.12 Another factor contributing to the hydrodynamic changes in the CGSM is the inefficient use of water for agricultural activities. The 2012 CORPAMAG analysis of water demand revealed that of the total 47.2 m³/sec taken from the water sources, 12% was for human consumption, whereas 88% was for agricultural and industrial activities. Notably, a study on African oil palm plantations in the project zone showed that, of 100 liters of water, only 5.8 reach the root zone of the oil palm plants, with around 65% of the water lost in conveyance and 34% in application (Cenipalma, 2007). During the dry season, demand for water for agricultural activities can equal or surpass the amount of water available in the basin (Aguas del Magdalena, 2009), and therefore, the flow may be interrupted in the periods with the most water stress. This is mainly because the allocation of

water concessions is based on outdated studies (IAvH and Fundación Erigaie, 2015; Benjumea, 2018).

- 1.13 Degradation of the water quality primarily results from pollution with organic waste and agrochemicals (nutrients, pesticides) used by agroindustry (CORPAMAG, 2009, in Aguilera, 2011; Salzwedel et al., 2016; Ramsar, 2017). Currently, four of the five CGSM water quality monitoring stations measure dissolved oxygen levels of between 4.5 and 11.0 in surface water, which are higher than the quality standard (>4.0 mg of O_2/L) for the preservation of flora and fauna established by the Ministry of Health (INVEMAR and CORPAMAG, 2017).

e. Inappropriate land use practices

- 1.14 Unsustainable production practices based on the use of agrochemicals have led to soil degradation, water pollution, and algal growth in the rivers, exacerbating the water connectivity issues and, therefore, environmental deterioration. In the department of Magdalena, 72.12% of the total land area is used for agricultural purposes; however, over 70% of the department's land is affected by desertification processes, especially between the municipios of Ciénaga and Santa Marta (MinAmbiente, 2015).⁴
- 1.15 **Response to the problems.** Several national and local initiatives are being implemented to ameliorate the environmental degradation of the CGSM. Maintenance of the hydrological connections (especially with the Magdalena River) is one of CORPAMAG's management priorities, and accordingly, CORPAMAG is implementing dredging works to recover and maintain channels and rivers that feed the CGSM. According to INVEMAR (2020), in the 2017-2020 period, over 6,000 hectares of mangrove swamp were recovered, allowing for a maximum recovery of 39,699 hectares of mangroves; the rehabilitation of channels played a fundamental role in this process. The participatory processes of restoring and maintaining channels, as well as the conservation actions within the VIPIS and SFF-CGSM protected areas, were mainly led by the PNN, which is in charge of control and oversight activities in these areas. Furthermore, INVEMAR has been monitoring the mangrove swamp, environmental quality, and hydrobiological resources since 1994, which entails monitoring fishing, conducting participatory monitoring activities, and evaluating fishing performance variables, among other actions.
- 1.16 With regard to ecological connectivity, the Green Climate Fund (WWF, MinAmbiente) and Mosaico Herencia Colombia [Colombia Heritage Mosaic] projects (European Union-FAO) plan to invest in supporting ecosystem connectivity in the Aracataca and Fundación basins. The Regional System of Protected Areas of the Colombian Caribbean (SIRAP Caribe) is seeking to make progress on defining municipal conservation corridors, based on the ecological structure of the municipios of the department of Magdalena (SIRAP-Caribe, 2021). Likewise, the Development Program with a Territorial Focus being implemented in the municipios most affected by the armed conflict has prioritized ecological restoration measures in the middle basin of the municipios of

⁴ MinAmbiente (2015). Department of Magdalena Comprehensive Territorial Climate Change Management Plan. UT CAEM-E3 (consultant). Bogota, D.C.

Aracataca, Ciénaga, and Fundación. There are also public-private initiatives including the Plataforma de Cooperación y Custodia de las Cuencas Rio Frio y Sevilla [Platform for Cooperation and Stewardship of the Frio and Sevilla River Basins], led by the WWF, and the Acuerdo Cero Deforestación de Palma de Aceite [Oil Palm Zero Deforestation Agreement]. The proposed project will implement actions in coordination with these initiatives, as well as with others that are developed during implementation.

- 1.17 **Climate change.** In the department of Magdalena, the average temperature is expected to increase by 2.4°C by the end of the century (IDEAM, Third National Communication on Climate Change). With regard to precipitation, the scenarios suggest a trend towards less rainfall by 2100, and in the department, rainfall is expected to decrease by an average of up to 23%. The agriculture and ranching sectors will be most affected, due to the potential for droughts given the higher temperatures and marked drop in precipitation (IDEAM, 2015; [MinAmbiente, 2016](#)). Notably, the region has already experienced such critical flood and drought scenarios. For example, during La Niña (2010-2011) and El Niño (2014-2016), 28 and 26 of the 29 municipios in the department, respectively, declared public disasters on account of water shortage ([MinAmbiente, 2016](#)). Rising sea levels are another threat associated with climate change, as they can exacerbate flooding, saltwater intrusion, and coastal erosion (INVEMAR-IDEAM, 2017). Accordingly, activities through which local communities foster climate change adaptation must be made a priority.
- 1.18 **International evidence.** The proposed operation has been designed based on a broad range of empirical evidence:
- a. **Governance and ecological restoration.** The empirical evidence shows that effective management, conservation, and restoration of strategic ecosystems requires implementing a holistic approach that promotes participatory governance, control/mitigation of the factors driving ecosystem loss, and rehabilitation of ecological conditions ([Miller, 2005](#), [Zaradic et al., 2009](#); [International Union for Conservation of Nature, 2018](#); [International Union for Conservation of Nature, 2016](#)). In general, ecological restoration activities in conservation and production mosaics improve biodiversity and levels of supporting and regulating ecosystem services by an average of 73% ([Barral, Paula et al., 2015](#)). Likewise, when this ecological restoration is associated with recovery of the riparian forest, it has been found to be at least 50% effective at preserving the various functions associated with the bodies of water ([Broadmeadow, S., Nisbet, T.R., 2004](#)).
 - b. **Agroecological practices.** The project promotes adoption of agroecological technologies and practices that aim to: (i) improve water use efficiency; (ii) conserve biodiversity and protect water sources; and (iii) reduce the use of agrochemicals. These systems seek to enhance climate resilience, improve land management, and reduce dependency on agrochemicals (High Level Panel of Experts on Food Security and Nutrition, 2019). The scientific evidence demonstrates that these agroecological practices: (i) increase biodiversity; (ii) enhance agricultural productivity; (iii) improve production climate resilience; (iv) mitigate climate change through carbon sequestration in biomass and soil; (v) strengthen crop resilience to pests and diseases; and

(vi) provide various ecosystem services (Dainese et al., 2019; Leippert et al., 2020; Nicholls et al., 2017; Snapp et al., 2021; Tamburini et al., 2020). Evidence from similar Bank-financed programs shows that the adoption of agroforestry and/or silvopasture systems boosts agricultural production, forest cover, and water collection. See the Environmental Program for Disaster Risk and Climate Change Management ([PAGRICC](#)) (loan 2415/BL-NI) (González and Le Pommellec, 2019) and the Socioenvironmental and Forestry Development Program II ([POSAF II](#)) (loan 1084/SF-NI) (De Los Santos-Montero and Bravo-Ureta, 2017). Likewise, the GEF project Biodiversity Conservation in Palm Growing Areas (operation ATN/FM-13216-CO), which was implemented in Colombia to foster sustainable agricultural practices in oil palm production systems, found that the beneficiary producers increased their production per hectare (36%), natural cover (18%), use of environmental management plans (19%), registration of agrochemicals (27%), and environmental certifications (18%). Very similar spillover effects were also observed in nonbeneficiary producers (Salazar, Avila, Fahsbender, 2018). The effectiveness of vouchers on promoting the adoption of technologies is also supported by empirical evidence based on programs implemented by the Bank in the region (Aramburu et al., 2019 and [Salazar et al., 2015](#)).

- 1.19 **Lessons learned.** The operation takes into account the experiences of other similar projects implemented in the region, and of GEF projects implemented in Colombia and in other countries. The following table summarizes the lessons learned.

Table 1. Lessons learned

Lesson learned	Reflection in the program design
<p>1. Governance</p> <p>The effectiveness of projects with environmental benefits depends on governance that fosters participatory processes for the communities, generates mechanisms for the exchange of information, identifies strategies for communication and coordination among actors, and provides forums for decision-making.</p>	<p>The project includes a component to strengthen the environmental governance of the CGSM. Furthermore, it incorporates a mechanism for promoting the active participation of national, regional, and local entities (operation GRT/FM-11865-CO).</p>
<p>2. Ecological connectivity</p> <p>The restoration, conservation, and sustainable land use activities must incorporate a landscape approach to reestablish ecological connectivity.</p>	<p>The conservation and restoration activities and adoption of agroecological practices will be implemented on properties within the ecological corridor prioritized in Component II, taking all types of production into account to foster ecological connectivity and avoid “patchy” intervention (operation ATN/FM-13216-CO).</p>
<p>3. Gender- and culturally relevant technical assistance</p> <p>Technology adoption requires physical assets and technical assistance. The latter is fundamental and must be offered periodically at appropriate times during the crop cycle, in a gender-sensitive and culturally relevant way.</p>	<p>The operation includes the provision of agroecological inputs and/or technologies, as well as individual and group technical assistance. The technical assistance will be offered through demonstration farms, will be culturally relevant for indigenous and Afro-descendent communities, and will include a gender perspective that allows for women’s participation (loan 2055/BL-NI).</p>

Lesson learned	Reflection in the program design
<p>4. Liquidity restrictions</p> <p>Liquidity restrictions limit adoption of environmentally beneficial practices with high initial costs and slow economic returns.</p>	<p>The operation will provide nonreimbursable financial support through vouchers redeemable for technologies that will make it possible to agroecologically restructure farms and will drive ecological connectivity. Furthermore, the operation will identify complementary financing strategies to cover other producers who are not voucher beneficiaries (loans 3536/BL-BO; 2223/BL-BO; and 2443/OC-DR).</p>

- 1.20 **Complementarity.** The project will be executed according to the guidelines established by the environmental management plan for the SDERM-CGSM Ramsar site and in coordination with other interventions in the project target area, including: the Master Plan for Comprehensive Management and Sustainable Use of the Magdalena River Basin (operation ATN/OC-18322-CO) and the Adding Value to Mangroves Conservation in Coastal-City Systems project (operations GRT/BB-18615-CO, GRT/BB-18616-CO). Synergies will also be sought with the following programs: Improving the Quality of Public Services (loan 1759/OC-CO) and Coordination and Implementation of the Joint Declaration of Intent (operation ATN/CM-17268-CO), which will develop methodologies and knowledge applicable to this operation. It will also be complemented by the following operations financed by the Global Environment Facility (GEF) in Colombia: Consolidation of the National System of Protected Areas at the National and Regional Levels (operation ATN/FM-15980-CO) and Sustainable Management and Conservation of Biodiversity on the Magdalena River Basin (operation ATN/FM-15981-CO), which will produce key inputs for improving management effectiveness in protected areas and the hydrological modeling of basins. Lastly, the operation will closely coordinate with the Herencia Colombia initiatives “Territorial governance in a sustainable, productive, and resilient landscape” and “Maximizing the contribution of the sustainable landscapes managed in Colombia to achieve climate objectives,” which address issues of governance, sustainable production, and the conservation and restoration of the strategic ecosystem in the CGSM and SNSM. The project design stage identified recent initiatives in the target area with which the operation will coordinate, including the Herencia Colombia project financed by the European Union and to be executed by the FAO, “Territorial governance in a sustainable, productive, and resilient landscape.”
- 1.21 **Alignment with national priorities.** The proposal is aligned with Colombia's National Development Plan (2018-2022) “Pact for sustainability: production through conservation and conservation through production,” which places sustainable development at the center of the agenda and mentions restoration of the CGSM hydrodynamics as a priority action for the Caribbean region. The project is also consistent with several national policies, including the: (i) SINAP Policy (2020-2030), which considers the project target area to be a national conservation priority; (ii) National Policy for the Integrated Management of Biodiversity and Ecosystem Services (2014); (iii) National Policy for the Comprehensive Management of Water Resources (2010); and (iv) National Policy on Climate Change 2017.

- 1.22 **Strategic alignment.** The project is consistent with the second Update to the Institutional Strategy 2020-2023 (document AB-3190-2) and contributes to the Corporate Results Framework 2020-2023 (document GN-2727-12) through the development challenge of productivity and innovation, by fostering innovative mechanisms for sustainable production through agroecological practices. It is aligned with the crosscutting issues of: (i) gender equality and diversity, by promoting the participation of women and indigenous peoples through differentiated interventions and specific indicators; (ii) climate change and environmental sustainability, by including mitigation actions such as forest conservation and restoration activities that sequester carbon dioxide, and by promoting climate change adaptation strategies through agroecological practices for resilient production; and (iii) institutional capacity and the rule of law, by supporting the improved institutional management of the CGSM and building the capacities of the institutions that take part in the environmental governance thereof (paragraph 1.25). The operation will contribute to the following IDB Group Corporate Results Framework outcomes: 2.11 “farmers with improved access to agricultural services and investments;” 2.16 “women beneficiaries of economic empowerment initiatives;” 2.20 “beneficiaries of enhanced disaster and climate change resilience;” and 2.21 “habitat that is sustainably managed using ecosystem-based approaches (hectares).” The project is aligned with the IDB Group Country Strategy with Colombia 2019-2022 (document GN-2972), by contributing to the strategic objective “preserve natural capital” and associated expected outcome “reduce deforestation,” under the crosscutting area of climate change. Furthermore, the operation is included in the 2021 Operational Program Report (document GN-3034).
- 1.23 The project aligns with the following sector framework documents: Agriculture (document GN-2709-10), by promoting practices that reduce agriculture’s environmental impact; Environment and Biodiversity (document GN-2827-8), by strengthening environmental governance and promoting actions that conserve biodiversity; and Climate Change (document GN-2835-8), by promoting climate change adaptation and mitigation actions. The project also contributes to the following lines of the Gender Action Plan for Operations 2020-2021 (document GN-2531-19): 3.7(ii) “improving the capabilities of women and men to contribute to climate change adaptation and resilience, through the transfer of knowledge and technology;” and 3.7(v) “promoting equitable access of women farmers to extension services, climate smart technologies, and land rights.” In line with the [multilateral development banks’ joint methodology for tracking climate finance](#), the operation is estimated to contain 100% climate financing due to its support for improving the health of the ecosystem of the SDERM-CGSM.
- 1.24 **Gender and diversity.** An estimated 21 Afro-descendent groups and three indigenous chapters, of the Kogui-Malayo-Arhuaco, Kankuamo, and Arhuaco ethnicities of the Sierra Nevada, have a presence in the project zone. Accordingly, they will be considered organizations that can reach out and hold participatory activities with the indigenous and Afro-descendent communities, especially to further conservation, restoration, and governance actions, and to promote sustainable production through agroecological practices. Mechanisms that respect the communities’ cultures, forms of organization, and decision-making processes will be implemented for such activities. With regard to women,

according to the [National Administrative Statistics Department \(DANE\) \(2020\)](#), the labor market in rural areas is disadvantageous for women, for whom the employment rate is lower (34.6%) than for men (71.9%). This situation has been exacerbated by the pandemic, which in Colombia has disproportionately affected women's participation in the workforce. In rural areas, working women are mainly employed in agriculture, ranching, and fishing (36%). It is therefore fundamental to encourage women's participation in economic activities that will boost their incomes and economic empowerment. To foster the participation of women, Afro-descendants, and indigenous peoples, the project will include the following: (i) communications and outreach strategy to publicize the project actions in these population groups; (ii) culturally relevant technical assistance with a gender approach; (iii) agencies that foster the active participation of women, Afro-descendants, and indigenous peoples in making decisions on the ecoregion through the governance structure; and (iv) specific quotas for women's participation in the farm plans, economic incentives, and technical assistance activities.

B. Objectives, components, and cost

- 1.25 **Objective.** The general objective of the project is to improve the health of the SDERM-CGSM ecosystem to promote conservation of biodiversity and ecosystem services. The specific objectives are to: (i) strengthen the environmental governance of the ecoregion in a participatory manner; (ii) promote adoption of tools for conserving biodiversity and improving the connectivity of the strategic ecosystems and water use efficiency; and (iii) increase the area where sustainable production practices are followed in the Aracataca and Fundación river basins. The project beneficiaries will be the indigenous communities, Afro-descendants, campesinos, and fishers who live in the CGSM. To achieve these objectives, the project has been structured into three components.
- 1.26 **Component I. Strengthening the environmental governance of the CGSM (US\$850,000).** This component aims to strengthen the environmental governance of the CGSM in a participatory manner, actively involving all of the CGSM actors, especially women, indigenous communities, the Afro-descendent population, fishers, and small-scale producers. To that end, the following activities will be financed: (i) design and implementation of an environmental governance model in the SDERM-CGSM that will guide coordination among institutions, the private sector, and social actors, consolidate agencies and participation systems, and establish mechanisms for making joint decisions based on scientific information; (ii) design and implementation of a financial strategy to ensure the sustainability of the governance model, to include public-private partnerships (for example, blue carbon in mangrove swamps, participation in carbon markets, ecotourism strategies, etc.); (iii) communications strategy sensitive to gender, youth, ethnicity, and hearing disabilities, to publicize the importance of the SDERM-CGSM's biodiversity and ecosystem services; (iv) formulation of the Artisanal Fishing Co-management Plan, to identify priority actions for the sustainable management of fishing resources, by promoting the signing of agreements between associations representing around 3,000 fishers and the National Aquaculture and Fishing Authority; and (v) a pilot to monitor

fishery resource status indicators, and behavioral incentives to promote responsible fishing practices ([optional link 3](#)).

- 1.27 **Component II. Protected areas, ecological connectivity, and efficient water management (US\$3,049,000).** This component aims to foster mechanisms to conserve biodiversity and improve efficient water management, through conservation and restoration activities that will promote ecological connectivity. To that end, the following activities will be financed: (i) a system that will provide informational support for environmental decision-making in the SDERM-CGSM, to include climate change scenarios, through an interactive platform that will model environmental indicators and foster the exchange of information among the various government and private-sector actors, academics, and civil society; (ii) strengthening of the environmental monitoring program, emphasizing biodiversity and the quality of water resources, through the installation of hydrological stations, the updating and monitoring of bioindicators of the health of the CGSM and the Fundación and Aracataca Rivers, and implementation of a community natural resource monitoring program; (iii) development of a Water Resource Regulation Plan for the Aracataca basin, with the communities' participation; (iv) implementation of a pilot that promotes efficient water management in an Aracataca river basin irrigation district;⁵ (v) strengthening of the prevention, oversight, and control programs in the SFF-CGSM and VIPIS, through the provision of equipment like drones, GPS, boats, etc., and the hiring of staff members to monitor the main drivers of biodiversity loss and to recommend management actions; (vi) formulation of an action plan for cultural, socioecosystemic, and water connectivity for the CGSM, emphasizing areas with an indigenous presence and agricultural production, based on a study to identify and prioritize ecological corridors that will enable cultural, socioecosystemic, and water connectivity, considering the primary ecological structure; and (vii) implementation of activities to conserve or restore the mangrove swamps, riverside forests, and tropical dry forests (22,000 hectares) prioritized for the ecological connectivity of the SDERM-CGSM ([optional link 4](#)).
- 1.28 **Component III. Sustainable land use and forest conservation (US\$3,650,178).** This component is designed to encourage agricultural producers in the Aracataca and Fundación basins to adopt agroecological practices, in pursuit of environmentally sustainable production and the efficient use of water for production, reduced agrochemical usage, and farm-based conservation and restoration activities. The prioritized crops will be those covering most of the agricultural area: African oil palm, banana and plantain, coffee, rice, and cattle. To that end, the following activities will be financed ([optional link 5](#)):
- a. **Farm plans** that support connectivity, biodiversity conservation, the reduction of agrochemicals, and sustainable water management, prepared for farms. These plans will guide the producers' work towards implementing sustainable agroecological systems,⁶ and they will be prepared by specialized agricultural

⁵ All told, 80% of the concessioned volume of the Aracataca river basin goes to the irrigation districts (Medina, 2021).

⁶ Due to their characteristics, these systems are more resilient to climate change, help reduce greenhouse gas emissions, and contribute to conservation and efficient water use management.

technicians to be retained by the project. To that end, the various producers' associations present in the ecoregion and the participating producers will sign participation and commitment agreements. A total of 500 farm plans will be prepared for the following categories: African oil palm (175), banana and plantain (75), rice (25), coffee (125), and cattle (100). In order to obtain the farm plan benefit, the producers must: (i) have properties located on the connectivity corridors prioritized in Component II; (ii) have properties with prioritized production systems; (iii) have signed the commitment agreement for active participation in the project and for the local counterpart contribution of US\$1,000 (through the additional purchase of technologies and/or inputs or in kind for development of the agreed-upon farm plan); (iv) have signed a commitment agreement to identify and maintain areas with high conservation value within their properties; (v) have an identity document; (vi) demonstrate legal ownership of the land (i.e., owner: certificate of title issued no earlier than 30 days prior; or good faith possessor: written proof of peaceful, public possession issued by the competent authority and signed by two neighbor witnesses); and (vii) declare they are not engaged in illegal activities and that there is no legal dispute, litigation, or claim over the farm.

- b. **Partial financing of farm plans through agroecological vouchers offered to the agricultural producers.** These vouchers will be redeemable for agroecological technologies designed to: (i) improve water use efficiency and water resource quality (e.g., water harvesting in reservoirs, livestock watering systems, slide gate irrigation systems, irrigation sensors, biodigesters, channels with aquatic plants to decontaminate wastewater, and/or the ecological benefit of coffee); and/or (ii) conserve biodiversity and protect water sources (e.g., ecological corridors with natural regeneration or native species, multilayer live fences, multipurpose fodder hedges, and/or electric fences powered by solar energy). The vouchers will be given to the 500 agricultural producers who have prepared their farm plans and have signed the counterpart commitment agreement. They will have a maximum value of US\$2,500 and may only be redeemed for inputs and/or technologies stipulated in a preset menu and agreed upon by the producer and technician, based on the farm plan. The beneficiary producers will have: (i) completed their farm plans; (ii) committed to contributing at least US\$1,000 in counterpart financing (in cash or in kind); and (iii) signed a production and conservation agreement for at least five years. The menu of technologies will be revised annually and approved by the project technical committee. It will be a flexible tool in which new technologies may be included provided they meet the objectives of improving water use efficiency and conserving biodiversity. The voucher beneficiaries will make their purchases directly in the store of the input/equipment supplier of their choice. To participate in the project, input/equipment suppliers must: (i) be able to prove their current legal and tax status in the country; (ii) meet the technical and availability requirements for the list of project-authorized inputs and equipment; and (iii) be located in the project target area. For specialized technologies of which there is a small supply, the goods will be purchased directly and delivered to the producers. Vouchers will be issued in the name of the man or woman of the household, with 20% allocated to women heads of household

and 20% to indigenous groups and/or Afro-descendants. Furthermore, 80% will be allocated to small- and medium-scale producers.⁷

- c. **Establishment of demonstration farms for connectivity, biodiversity conservation, and sustainable water management**, where producers, agricultural technicians, and other CGSM actors will be able to learn about agricultural production with agroecological principles, through the transfer of knowledge and technology. These farms are also expected to serve as beacons for disseminating knowledge to other producers who do not receive the agroecological vouchers. The project will finance a network of 20 demonstration farms that will be located on the ecological corridors prioritized for connectivity in Component II. At least 20% of the demonstration farms will be led by women heads of household and 20% will be in indigenous or Afro-descendent communities. The demonstration farms will be established for oil palm (5), coffee (5), banana and plantain (3), rice (2), cattle ranching (4), and buffalo ranching (1). The selection requirements for these farms are listed in [optional link 3](#) and the project Operating Regulations ([optional link 6](#)).
 - d. **Culturally relevant technical assistance with a gender approach** for agricultural technicians and producers and other key actors, on agroecological principles and practices, participatory property planning, and climate change adaptation actions, taking into account gender and ethnic perspectives. For this assistance, a total of 75 targeted workshops will be held for technicians and 200 for producers. Specific technical assistance will also be provided to the farms that receive the agroecological vouchers. The technical assistance will include a gender perspective and will be culturally relevant, accounting for issues of language, scheduling, access to child and elderly care, and other social norms of the indigenous communities.
 - e. **Identification of complementary financing strategies to foster the adoption of sustainable agricultural practices**, to benefit at least 120 farmers who are not voucher recipients. The purpose of this activity will be to identify opportunities, form partnerships, and implement the programs and agreements necessary to effectively expand the complementary financial flows that will support implementation of the agroecological practices (e.g., credit lines, carbon market, etc.).
 - f. **Behavioral economics pilot** to promote adoption of agroecological practices to save water and improve ecosystem connectivity, through an economic experiment based on behavioral incentives (nudges). This pilot will include 500 randomly chosen producers who are not voucher recipients.
- 1.29 **Program monitoring and evaluation (US\$300,000), and administration and auditing (US\$370,000)**. This includes project administration, monitoring, evaluation, and external audit expenses.

⁷ Producers are considered to be small- or medium-scale when they have up to and including: 100 hectares of oil palm, 50 hectares of banana and/or plantain, 10 hectares of coffee, or 10 hectares of rice, and for ranchers, 100 cattle.

C. Key results indicators

- 1.30 The expected impact of the project is the improved health of the CGSM ecosystem. The project impact and outcome indicators reflect improvements in governance, conservation, efficient water use, and the adoption of agroecological practices for sustainable production. The main indicators are shown in Table 2.

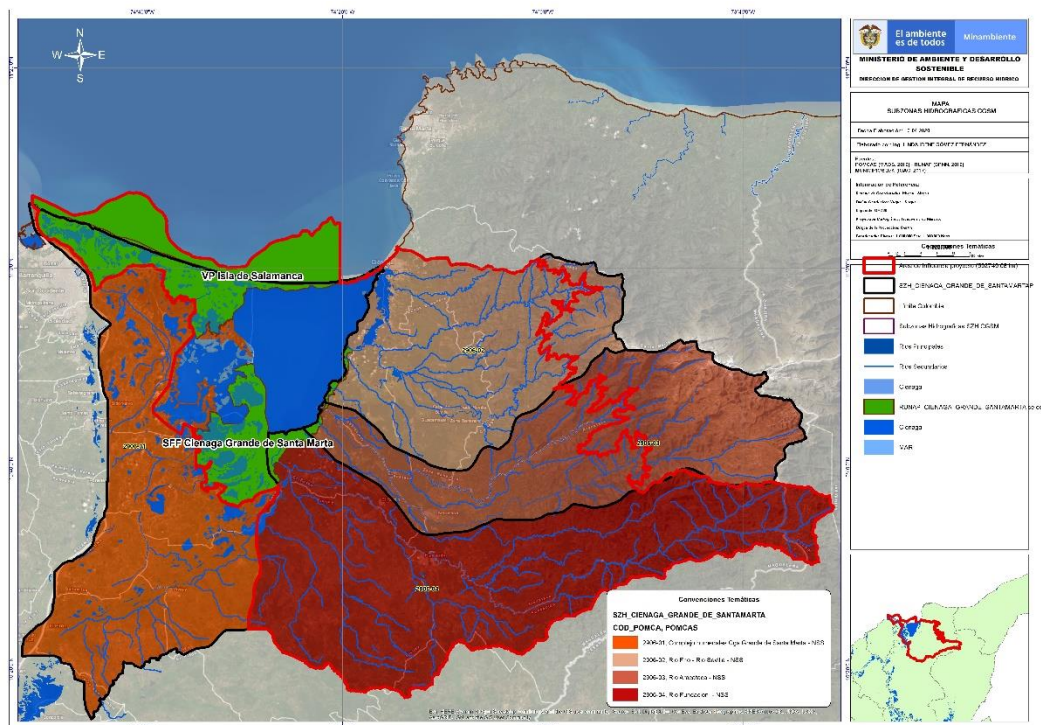
Table 2. Main Results Matrix Indicators

Impact and outcome indicators	Time of measurement	Rationale
Impacts		
1. Index of biological integrity of the mangrove swamp	Years 1 to 5	This indicator reflects the structural, functional, and health characteristics of the wetland, compared to an ideal ecosystem.
2. Additional value of the ecosystem services generated by the project activities		This indicator measures the project's effect on the CGSM ecosystem by calculating the value of the ecosystem services, including: carbon sequestration, biodiversity, increased fishery resources, and increased water supply.
3. Reduced greenhouse gas emissions.		This indicator measures the project's effect on climate change mitigation.
Outcomes		
4. Organizations of ethnic groups, producers, and women participating in the CGSM environmental governance committees	Years 1 to 5	Measures the participation of ethnic groups, vulnerable communities, and women in the governance of the CGSM
5. Area of strategic ecosystems fundamental to biological and water connectivity, being managed and restored for conservation, with community participation	Years 1 to 5	Measures the project's effect on ecological connectivity
6. Area being conserved and restored in beneficiary farms	Years 1, 3, and 5	Measures the project's effect on establishing and restoring high-value conservation zones
7. Producers who adopt new sustainable production practices to promote efficient water usage, climate change adaptation, and biodiversity conservation		Measures the project's effect on sustainable land use through the adoption of agroecological practices that foster sustainable production, efficient water management, climate change adaptation, and biodiversity conservation

- 1.31 **Target areas.** The project's target area covers 470,640 hectares in the CGSM, Colombia's largest coastal lagoon (Map 1), where the Aracataca and Fundación river basins and the SFF-CGSM and VIPIS protected areas converge. The Component III activities will focus on the Fundación and Aracataca basins, which include the municipios of Aracataca, Fundación, El Retén, Puebloviejo, Pueblo Bello, and Pivijay. In these basins, land is mainly used for ranching (304,177 hectares) and agriculture (193,572 hectares), with some forested areas (66,761 hectares). There are 9,574 agricultural farms, with an average surface area of 60 hectares, and 1,191 livestock production farms, with an average surface area

of 54 hectares and 128 heads of cattle each (Coordinador Nacional Agrario [National Agricultural Coordinator] (CNA) 2014, DANE-2016, Federación Colombiana de Ganaderos [Colombian Federation of Ranchers] 2021). The crops grown on the 43,507 farmed hectares are African oil palm (42.65%), tubers (12.80%), banana and plantain (15%), and coffee (7.70%) (Center for Research in Sustainable Agricultural Production Systems (CIPAV), 2021; CNA, 2014).

Map 1. Priority areas



Source: MinAmbiente, 2020.

D. Other key issues

1.32 **Economic analysis.** The ex ante cost/benefit analysis was performed based on a 15-year horizon and 12% discount rate. The costs included the financing investments, as well as additional recurring production and operation and maintenance costs. The quantified differential benefit was the additional value of the ecosystem services generated by the project (e.g., carbon sequestration, water availability, agricultural production, fishing, water regulation, etc.). The results of the analysis, using efficiency prices, confirm that the program is economically viable, with a net present value of US\$5.1 million and an internal rate of return of 29.78% ([optional link 2](#)).

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 The proposed project has been structured as an investment grant, since the activities to be financed will have specific objectives and successful execution thereof will be associated with its indivisibility. The total project cost is US\$49,796,670, of which the Global Environment Facility (GEF) will finance US\$8,219,178. The remaining US\$41,780,822 will come from complementary, parallel financing contributed by the institutions including those listed in paragraph 3.6.⁸ The executing agency will be responsible for managing the counterpart funds contributed by these agencies.

Table 3. Estimated project costs (US\$)

Components	GEF (US\$)	%	Parallel financing	Total
Component I. Strengthening environmental governance of the CGSM	850,000	10.34	13,092,000	13,942,000
Component II. Protected areas, ecological connectivity, and efficient water management	3,049,000	37.1	17,211,750	20,260,750
Component III. Sustainable land use and forest conservation	3,650,178	44.41	7,171,000	10,821,178
Monitoring and evaluation	300,000	3.65	1,280,250	1,580,250
Administration	370,000	4.50	2,822,492	3,192,492
Total	8,219,178	100	41,577,492	49,796,670

- 2.2 The project disbursement period will be five years, based on multiannual planning and the experience of projects with a similar scope in Colombia. Table 4 presents the disbursement schedule for the GEF funds.

⁸ The parallel financing is made up of in-kind resources (staff, equipment, etc.) and resources from partner institutions' other projects that contribute to the sustainable development goals in the SDER-CGSM. The mechanism for registering and reporting these resources will be included in the project Operating Regulations. The sources and types of parallel financing approved by the donor are listed in Table C in [optional link 12](#).

Table 4. Planned program disbursements (US\$ thousands)

Source	Year 1*	Year 2	Year 3	Year 4	Year 5	Year 6*	Total
GEF	80	1,581	3,060	2,006	1,006	486	8,219
Total	80	1,581	3,060	2,006	1,006	486	8,219
(%)	0.97%	19.24%	37.23%	24.41%	12.24%	5.91%	100.00%

*Partial year.

B. Environmental and social risks

- 2.3 In accordance with the Bank Environment and Safeguards Compliance Policy (Operational Policy OP-703), the project has been classified as a Category B operation, since the works planned for Components II and III may have moderate environmental and social impacts, mostly related to effects on critical natural habitats and cultural sites, and the difficult access to the project benefits for indigenous peoples and women. No physical resettlement or displacement impacts are expected. The project's environmental and social analysis ([optional link 8](#)) identifies and evaluates the risks and impacts, and the environmental and social management plan (ESMP) defines measures to manage them through plans including biodiversity, indigenous peoples, gender equality, and health and security. The environmental and social analysis/environmental and social management plan fulfill the requirements of the Bank and GEF safeguard policies. The project's environmental and social risk is substantial, due to the CGSM area's complex sociopolitical and environmental context. Between September and November 2021, meaningful, socioculturally appropriate consultations were held with the various parties interested in the project, including the agricultural and fishing productive sectors, institutions, academia, civil society, and indigenous and Afro-descendent authorities and organizations. Due to the pandemic, a combination of virtual and in-person methodologies were used depending on the context and profile of the interested parties consulted. The environmental and social analysis/environmental and social management plan ([optional link 8](#)) and consultations report ([optional link 9](#)) are available on the Bank's website.

C. Fiduciary and procurement risks

- 2.4 A medium-high fiduciary risk (internal processes) was identified, with respect to the executing agency's fiduciary management (procurement, financial, accounting) capacity, due to its lack of experience applying Bank policies and procedures. To mitigate this risk, a procurement specialist and a financial specialist, with the profiles required by the Bank, will be hired to work full-time on project execution.

D. Other risks

- 2.5 During project preparation, an analysis was performed of the potential risks that could affect project execution and achievement of the objectives. The most significant risks, with their corresponding mitigation measures, by type and level, were found to be: One, a **high social risk** of low participation by key vulnerable groups like community leaders, women, young people, and ethnic groups. To mitigate this risk, the project will implement specific communications and awareness-raising strategies to foster the participation of these population groups, and will provide culturally relevant technical assistance with a gender approach. Two, a **high risk** with regard to **the governance system**, due to the

CGSM governance institutions' lack of commitment to developing systems for collaboration, communication, and information transfer. To mitigate this risk, the program will establish agreements/contracts with all key actors, specifying each party's responsibilities in project implementation and in operation, maintenance, and monitoring investments and processes. Three, a **high sustainability risk**, since the lack of resources for operating and maintaining the project investments over the long term may threaten their sustainability. To mitigate this risk, commitment agreements will be signed under the project. These agreements will identify and scale the responsibilities and costs to be assumed by the institutions in charge of implementing the investments. Furthermore, a financing strategy will also be designed, to ensure implementation of the governance actions over the long term. In addition, a **medium-high institutional risk** was identified, due to the potential changes in the public order and insecurity in the zone that could threaten execution of project activities. To mitigate this risk, the project will consider implementing the strategies used by the PNN to protect park rangers in protected areas, will maintain ongoing communication with the community, and where necessary, will inform the authorities. Further, an anonymous channel for specific complaints will be set up for the project. Lastly, a **medium social risk** was identified, due to the obstacles to the timely execution of certain field activities that could arise as a result of the COVID-19 pandemic. To mitigate this risk, the project will establish biosecurity protocols and all consultants, staff members, and contractors will be trained on them, and the prevalence of COVID-19 will be monitored in the project area.

- 2.6 **Project sustainability.** The following aspects were taken into account to ensure the project's sustainability over time: (i) implementation of a governance system with local actors and development of a financial sustainability strategy for long-term sustainability; (ii) an environmental information system that will allow SINAP institutions to exchange data, thus ensuring decisions will be made based on scientific knowledge; (iii) the demonstration farms will be designed to provide their services over the long term, to foster producers' adoption of good practices; (iv) the technical assistance provided to the beneficiary producers will make it possible to transfer knowledge to promote the adoption of good practices over time.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 The project executing agency will be the Instituto de Investigaciones Marinas y Costeras "José Benito Vives de Andrés" ["José Benito Vives de Andrés" Marine and Coastal Research Institute] ([INVEMAR](#)). INVEMAR is a nonprofit public civil corporation, governed by private law, in particular, its bylaws. INVEMAR is linked to the Ministry of Environment and Sustainable Development, pursuant to the provisions of Article 18 of Law 99 of 1993 and Regulatory Decree 1276 of 1994. The institute's primary mission is to conduct basic and applied research on the renewable natural resources, the environment, and the marine and oceanic ecosystems in the seas surrounding the national territory, to issue technical opinions, and to provide advisory and scientific support to the Ministry, territorial

entities, and Regional Autonomous Corporations with jurisdiction over the coastal areas.

- 3.2 The institutional capacity analysis concluded that INVEMAR has sufficient institutional capacity to execute the project, as well as the organizational structure to carry out the project activities, using its information systems, procedures, and processes. The weaknesses identified are associated with the current staff's lack of time for conducting project activities, despite their competence in the various execution areas. Accordingly, a project team will be formed to work full-time on implementing the operation. This team will work directly with the Research and Information for Marine and Coastal Management Coordination Office (GEZ) and with the various scientific, administrative, and support liaisons for the technical and fiduciary execution of the project. The project team will consist of the following full-time positions: (i) project director; (ii) planning and monitoring specialist; (iii) procurement specialist; and (iv) financial specialist. These employees will fulfill the profiles defined in the terms of reference agreed upon with the Bank.
- 3.3 The following committees will be formed for project execution: (i) a project steering committee, made up of the legal representatives appointed by INVEMAR, MinAmbiente, CORPAMAG, IAvH, IDEAM, and PNN, plus a representative of a beneficiary association; this steering committee will serve as the primary decision-making body; and (ii) a project technical/scientific committee, made up of representatives of the same institutions; this technical/scientific committee will monitor project execution and will be in charge of validating the technical and operational management. Both of these committees will be formed by equal numbers of women and men.
- 3.4 The steering committee will meet at least twice a year, and its duties will include: (i) establishing strategic guidelines on important project-related aspects, which will make the physical and budgetary execution viable in order to meet the established objectives and targets; (ii) coordinating at the highest interagency and interministry levels to establish the best conditions for project execution; (iii) defining high-level actions and decisions; (iv) ensuring effective implementation of the strategic guidelines to achieve the project objectives; (v) resolving highly complex issues and conflicts; (vi) monitoring compliance with the project timeline; and (vii) monitoring and guaranteeing the parallel financing entries required by the GEF. The steering committee will be made up of high-level staff members with decision-making capacities, from INVEMAR, MinAmbiente, CORPAMAG, IAvH, IDEAM, and PNN.
- 3.5 The technical/scientific committee will meet at least four times a year and its duties will include: (i) confirming and reviewing the terms of reference for hiring specific consulting services and companies, as required in the project Operating Regulations; (ii) providing technical/scientific recommendations to successfully achieve the project outputs; (iii) confirming the technical requirements for the procurement and transfer of goods and services to other project beneficiary institutions; (iv) verifying that the consulting services products delivered comply with the initially requested technical/scientific specifications; (v) analyzing and confirming the Component III menu of technologies annually; and (vi) confirming and reviewing the project annual work plan. This technical/scientific committee

will be made up of technical staff from INVEMAR, MinAmbiente, CORPAMAG, IAvH, IDEAM, and PNN. The technicians from the partner institutions assigned to the technical/scientific committee will abstain from providing recommendations, reviewing products, validating terms of reference, and/or evaluating the performance of activities executed by their respective institutions. The technical/scientific committee may invite the private sector, social actors, and/or universities to provide advisory services as it deems necessary.

- 3.6 The first disbursement of the grant resources will be subject to compliance, to the Bank's satisfaction, with the following conditions: (i) **INVEMAR has signed interagency agreements with MinAmbiente, CORPAMAG, IAvH, PNN, and IDEAM that establish each entity's project execution responsibilities, commit them to providing technical specifications prior to the procurement of goods and/or services that will benefit the participating institutions, assign the specific staff members of the institutions who will participate in the project steering and technical committees, and ensure that parallel financing is provided for the project;** (ii) **the project team has been selected and its key staff members at INVEMAR have been appointed in accordance with the project Operating Regulations (paragraph 3.2); and (iii) the project Operating Regulations have been approved and entered into effect in the terms previously agreed upon with the Bank, including the environmental and social commitments set forth in Section C of Annex B of the environmental and social management report.** Once the conditions precedent of the legal report, authorized signature assignment, and opening of the designated account for receiving grant proceeds have been met, INVEMAR may request and receive a first disbursement of up to US\$250,000 to cover the costs of hiring the key project team staff (paragraph 3.2).
- 3.7 **Project Operating Regulations.** The project Operating Regulations ([optional link 6](#)) spell out all project execution considerations, including but not limited to: (i) the organizational structure, including details of the functions of the steering committee and technical/scientific committee; (ii) technical and operational arrangements for execution of project outputs; (iii) the environmental and social commitments specified in Annex B of the environmental and social management report; (iv) the system for programming, monitoring, and evaluating results; and (v) the financial management guidelines for procurement and audits. The Operating Regulations will define the project team's structure, makeup, areas of responsibility, and powers and duties, as well as the project operating model for interactions with the partner institutions and other agencies that will participate in execution, and the principal regulations and procedures for programming, financial management, accounting, procurement, audits, and program monitoring and evaluation. It will also establish the dynamic for the parties' responsibilities, communications, coordination, etc. Due to the diversity of actors involved in project implementation, the Operating Regulations will also include a mechanism that will define the agreements that must be considered prior to the procurement of goods and/or services that will benefit any of the participating institutions. This mechanism will cover the responsibilities in establishing technical specifications, designing terms of reference, compliance with specific requirements, technical supervision for the receipt of goods and services, control of use and accountability, and maintenance, operation, and/or sustainability plans, and other

key considerations to ensure proper use of the investments. **As a special contractual condition precedent to the first disbursement of the grant proceeds, the project Operating Regulations will have been approved and will have entered into effect in the terms agreed upon with the Bank, to include the environmental and social commitments set forth in Section C of Annex B of the environmental and social management report ([required link 3](#)).**

- 3.8 **Procurement.** Procurement processes will follow the Policies for the Procurement of Goods and Works financed by the IDB (document GN-2349-15), and Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-15). The general management framework for procurement is presented in Annex III. Bank supervision of procurement will be undertaken in accordance with the procurement plan ([required link 4](#)).
- 3.9 **Audit.** The special-purpose annual financial statements will be audited by an independent audit firm acceptable to the Bank, contracted by INVEMAR. The statements will be submitted within 120 days after the close of each fiscal year, during the original disbursement period or extensions thereto. The final audited financial statement will be submitted within 120 days following the date of the final disbursement.

B. Summary of arrangements for monitoring results

- 3.10 The program has a monitoring and evaluation plan ([required link 2](#)) that specifies the indicator measurements, impact assessment methodology for the various components, data requirements (baseline and monitoring survey), responsible parties, and estimated budget for implementation of the activities. The impact assessment will focus on evaluating the effectiveness of several of the Component III activities, using experimental and quasi-experimental methodologies. This impact assessment will be part of the program completion report and will be financed with operation proceeds, for US\$200,000.
- 3.11 **Monitoring.** Within 30 days following the end of each six- calendar-month period during execution, INVEMAR will send a report to the Bank on the progress made on the activities in each of the components. The reports will include information on: (i) fulfillment of the established technical and financial targets, explanation of deviations, and corrective measures; (ii) compliance, by the producers, technology suppliers, associations, beneficiary institutions, and partner agencies, with the terms established in the agreements/contracts signed for the project; and (iii) progress on outcomes. The reports on the second half of the year will include the annual work plan for the upcoming calendar year, with updated disbursement, procurement, and risk management plans.
- 3.12 **Evaluation.** INVEMAR will submit the following to the Bank: (i) a midterm evaluation report, 90 days after the date on which 50% of the grant proceeds have been disbursed or when the execution period is half over, whichever occurs first; and (ii) a final evaluation, 90 days after the date on which 90% of the grant proceeds have been disbursed. The final evaluation report will include the results of the program impact assessment.

Development Effectiveness Matrix		
Summary		CO-G1014
I. Corporate and Country Priorities		
Section 1. IDB Group Strategic Priorities and CRF Indicators		
Development Challenges & Cross-cutting Issues	-Productivity and Innovation -Gender Equality and Diversity -Climate Change -Institutional Capacity and the Rule of Law	
CRF Level 2 Indicators: IDB Group Contributions to Development Results	-Farmers with improved access to agricultural services and investments (#) -Women beneficiaries of economic empowerment initiatives (#) -Beneficiaries of enhanced disaster and climate change resilience (#) -Habitat that is sustainably managed applying ecosystem-based approaches (ha)	
2. Country Development Objectives		
Country Strategy Results Matrix	GN-2972	Reactivate and diversify productive activity
Country Program Results Matrix	GN-3034	The intervention is included in the 2020 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution		9.1
3.1 Program Diagnosis		1.6
3.2 Proposed Interventions or Solutions		3.5
3.3 Results Matrix Quality		4.0
4. Ex ante Economic Analysis		10.0
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		1.5
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		2.5
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
5. Monitoring and Evaluation		9.5
5.1 Monitoring Mechanisms		4.0
5.2 Evaluation Plan		5.5
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		High
Environmental & social risk classification		B
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		

The general objective of the project is to improve the ecosystem health of the Magdalena River Estuarine Delta System, Ciénaga Grande de Santa Marta (SDERM-CGSM in Spanish) to promote the conservation of biodiversity and ecosystem services. The specific objectives are: (i) to strengthen the environmental governance of the ecoregion in a participatory manner; (ii) to promote the adoption of tools for the conservation of biodiversity, improving the connectivity of strategic ecosystems and the efficiency of water use; and (iii) to increase the area under sustainable production practices in the Aracataca and Fundación watersheds.

In general, the diagnosis is adequate, with a well-identified problem and clear determinants. The results matrix exhibits vertical logic with clear specific objectives and SMART results indicators that allow demonstrating compliance. The economic analysis consisted of estimating the benefits of the program through a Cost Benefit Analysis (CBA) for Components 2 and 3, which also includes the costs incurred by the project for Component 1.

The program has a Monitoring and Evaluation Plan that specifies: (i) the methodologies for measuring the indicators; (ii) the impact evaluation methodology; (iii) data requirements; and (iv) those responsible, and the estimated budget. Experimental impact evaluations are proposed to evaluate the behavior of the fishermen who are part of the fishing co-management program and the value of their catch; and to evaluate the effect of certain incentives on the adoption of agroecological practices for farmers. Non-experimental methods will be used to evaluate the effect of the construction and maintenance of canals on the health of mangroves, the effect of technical assistance, vouchers and demonstration farms, in the adoption of agroecological technologies and in agricultural production.

RESULTS MATRIX
([See Extended Matrix](#))

Project objectives	The general objective of the project is to improve the health of the SDERM-CGSM ecosystem to promote conservation of biodiversity and ecosystem services. The specific objectives are to: (i) strengthen the environmental governance of the ecoregion in a participatory manner; (ii) promote adoption of tools for conserving biodiversity and improving the connectivity of the strategic ecosystems and water use efficiency; and (iii) increase the area where sustainable production practices are followed in the Aracataca and Fundación river basins.
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IMPACT

Indicator	Unit of measure	Baseline	Baseline year	Project end	Means of verification	Comments
Impact: Improve the health of the Ciénaga Grande de Santa Marta (CGSM) ecosystem to promote biodiversity conservation						
Index of biological integrity of the mangrove swamp (IBI _M)	Average IBI _M	2.27 (fair condition)	2019	3 (good condition)	IDEAM and INVEMAR technical reports	Baseline source: INVEMAR (2019) (annual average IBI _M at the seven stations) Target: IBI _M =3 (good condition) The IBI _M is measured by IDEAM at its seven sampling stations, and is a status indicator that reflects structural, functional, and health characteristics, by comparison with an ideal ecosystem. The indicator shows the biological integrity of mangrove swamps, with values ranging from 1 (undesirable) to 5 (ideal).
Fish catches in the CGSM	Tons/year	4,226	2017-2019 average	4,648	INVEMAR reports	Baseline: INVEMAR (2019) Target: 10% (economic analysis)

Indicator	Unit of measure	Baseline	Baseline year	Project end	Means of verification	Comments
Value of the mangrove swamp ecosystem services	US\$	Sequestered CO ₂ : 97 million Fishing: 3.4 million	2021	Sequestered CO ₂ : 97.55 million Fishing: 7.4 million	Final evaluation and midterm evaluation reports	15-year target values Target source: Economic analysis (Component II) <u>Carbon sequestration</u> : De la Peña, A., C. A. Rojas, and M. De la Peña. (2010). <i>Carbon sequestration: 96.7 tons per hectare of mangrove swamp</i> <i>Carbon prices (US\$28.5/ton): Reuters (2021)</i> <u>Fishery services</u> : CONTRERAS, A. (2016).
Value of the agricultural production, water savings, and carbon sequestration ecosystem services	US\$	Production: 17.8 million Water savings: 0 Carbon sequestration: 0 17.8 million	2021	Production: 23.14 million Water savings: 1 million Carbon sequestration: 1 million 25.8 million		15-year target values for the adoption of agricultural technologies Target source: Economic analysis (Component III) <u>Agricultural production</u> : Expected increase of 30%, based on impact studies for similar projects: -PAGRICC Nicaragua: 31% (González Flores M & M Le Pommellec, 2019) -GEF Palmero: 45% (Salazar, Avila, and Fahsbender, 2017) <u>Water savings</u> : UNESCO (2021); Fedearroz (2021); Cenicafé (2021) <u>Carbon sequestration</u> : IDEAM (2011) -Carbon prices: Ember-climate and Reuters (2021)

OUTCOMES

Indicator	Unit of measure	Base-line	Base-line year	Year 1* 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6* 2027	Project end	Means of verification	Comments
Outcome 1: Strengthen environmental governance in a participatory manner												
Mechanism for establishing agreements and periodic monitoring in the CGSM governance model framework	Agreements	0	2021	-	-	-	3	-	2	5	- Aide-memoires or minutes	
Number of companies and institutions participating in the CGSM financial sustainability portfolio	Number	0	2021	-	-	-	1	1	-	2	- Portfolio execution reports	
Number of additional communities, organizations of ethnic groups, campesinos, and/or women participating in the project governance committees	Number	0	2021	-	2	2	-	-	-	4	- Minutes of project governance committees - Registry of participants in the governance committees	
Women participating in the project governance committee	Percentage	0	2021	-	30	30	30	30	30%	30%		
Outcome 2: Promote adoption of tools for conserving biodiversity and improving the connectivity of the strategic ecosystems and water use efficiency												
Area undergoing environmental management and/or conservation processes to improve ecosystem connectivity	Hectares	0	2021			169,430	136,486	164,724		470,640	- Review in the integrated management system review: Area under water resource regulation, socioecosystemic connectivity and sustainable production plan (Aracataca basin 83,117 hectares, Fundación basin 237,162 hectares, both not including SNSM PNN); area within the area of study in which the Ramsar	This is the area in which environmental regulation, conservation, and/or restoration processes are being implemented to improve the connectivity of the strategic ecosystems. CRF Flag

Indicator	Unit of measure	Base-line	Base-line year	Year 1* 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6* 2027	Project end	Means of verification	Comments
											environmental management plan is being implemented (CGSM complex, 66,747 hectares); protected areas with environmental management plan activities being implemented for connectivity (VIPIS 56,593 and SFF 27,020)	
Number of irrigation districts that reduce their annual water consumption by at least 10%	Districts	0	2021	-	-	-	1	-	2	3	- Volume measurements and estimates	The Water Resource Regulation Plan will establish the consumption baseline through the inventory of water users.
Effectiveness of the management of the Salamanca Island Road Park and the CGSM Flora and Fauna Sanctuary	Percentage increase in the management effectiveness tracking tool (METT) score	0	2021	-	-	8	-	-	12-15	12-15	- METT effectiveness evaluation process at project start, midterm, and end	Target: 12% for VIPIS, 15% for SFF METT: the methodology used to estimate the effectiveness of the management of the protected area.
Number of agencies and organizations participating in the governance model that regularly use the sociodemographic indicators system (SISD)	Agencies and organizations	0	2021	-	-	4	8	10	12	12	- SISD users report	
Outcome 3: Increase the area where sustainable production practices are followed in the Aracataca and Fundación river basins												
Additional area using sustainable production processes	Hectares	0	2021	-	-	-	-	-	11,862	11,862	-Field monitoring reports of producers	Target: Economic analysis Spillover: Santos-Montero and Bravo-Ureta et al., (2017)
Beneficiary producers who adopt sustainable production practices to conserve biodiversity, improve water use efficiency, and adapt to	Producers	0	2021	-	-	-	100	200	288	288		

Indicator	Unit of measure	Base-line	Base-line year	Year 1* 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6* 2027	Project end	Means of verification	Comments
climate change												
Beneficiary producers who adopt conservation or ecological restoration practices	Producers	0	2021	-	-	-	200	200	432	432		
Producers who adopt agroecological technologies due to spillover effect	Producers	0	2021	-	-	-	-	-	185	185		
Area being conserved and restored in beneficiary farms	Hectares	0	2021	-	-	-	-	-	4,485	4,485		
Farmers with improved access to investments and/or agricultural services	Producers	0	2021	-	50	100	300	500	720	720		CRF Flag
Women beneficiaries of economic empowerment initiatives	Women	0	2021	-	-	-	-	-	100	100		CRF Flag Gender Flag
Beneficiaries of enhanced disaster and climate change resilience	Beneficiaries	0	2021	-	-	-	-	-	500	500		CRF Flag

Country: Colombia **Division:** RND **Operation number:** CO-G101 **Year:** 2022

Fiduciary Agreements and Requirements

Executing agency: Instituto de Investigaciones Marinas y Costeras “José Benito Vives de Andrés” [“José Benito Vives de Andrés” Marine and Coastal Research Institute] (INVEMAR)

Operation name: Conservation and Sustainable Use of the Ciénaga Grande de Santa Marta

I. Fiduciary Context of the Executing Agency

1. Use of country system in the operation¹

<input checked="" type="checkbox"/> Budget	<input type="checkbox"/> Reports	<input checked="" type="checkbox"/> Information system	<input checked="" type="checkbox"/> National competitive bidding
<input checked="" type="checkbox"/> Treasury	<input type="checkbox"/> Internal audit	<input checked="" type="checkbox"/> Shopping	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Accounting	<input type="checkbox"/> External control	<input checked="" type="checkbox"/> Individual consultants	<input type="checkbox"/> Other

2. Fiduciary execution mechanism

<input checked="" type="checkbox"/>	Special features of fiduciary execution	The project executing agency will be INVEMAR. A project team will be established to work full-time on implementing the operation. This team will work directly with the Research and Information for Marine and Coastal Management Coordination Office (GEZ) and with the various scientific, administrative, and support liaisons for the technical and fiduciary execution of the project. The project team will include a procurement specialist and a financial specialist who will match the profiles defined in the terms of reference previously agreed upon with the Bank. INVEMAR will sign interagency agreements with MinAmbiente, CORPAMAG, IAvH, PNN, and IDEAM, to establish each agency's responsibilities in project execution. These agencies will participate in the project's steering and technical committees.
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3. Fiduciary capacity

Fiduciary capacity of the executing agency	The results of the institutional capacity analysis show that INVEMAR has sufficient institutional capacity to execute the project, as well as the organizational structure necessary to carry out the project activities through its information systems, procedures, and processes. A medium-high fiduciary risk (internal processes) was identified with respect to INVEMAR's fiduciary management (procurement, financial, accounting) capacity, due to its lack of experience applying Bank policies and procedures. To mitigate this risk, a procurement specialist and a financial specialist with the profiles required by the Bank will be hired to work full-time on project execution. The Bank will advise the executing agency on the fulfillment and application of the procurement and financial management policies.
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¹ Any system or subsystem approved subsequently could be used for the operation, under the terms of the Bank's validation.

4. Fiduciary risks and risk response

Risk classification	Risk	Risk level	Risk response
Fiduciary	Medium-high	Medium	Hire, with funds from the operation, qualified employees with proven experience to cover the identified deficiencies; ensure effective transfer of knowledge, and the adoption thereof by the relevant functional areas. First quarter of execution. IDB: fiduciary strengthening of the relevant executing agency staff for executing the project.

5. Policies and guidelines applicable to the operation: Contracts for works, goods, and nonconsulting services will be performed according to the policy set forth in document GN-2349-15 or subsequent updates thereto. Bidding processes subject to international competitive bidding and national competitive bidding will be conducted using the standard bidding documents.

Consulting services contracts arising under the project will be performed according to the policy set forth in document GN-2350-15 or subsequent updates thereto, using the standard request for proposals agreed upon with the Bank.

6. Exceptions to policies and guidelines: Not applicable.

II. Considerations for the Special Provisions of the Grant Contract

Exchange rate: For the purposes of the provisions of Article 9 of the General Conditions, the parties agree that the applicable exchange rate will be the rate indicated in section (b)(i) of that Article, that is to say, INVEMAR will submit the expense justifications using the exchange rate of the conversion of the funds disbursed in United States dollars to Colombian pesos.

Type of audit: INVEMAR will submit annually the project financial statements audited by an independent audit firm acceptable to the Bank, which will be selected and contracted under Bank policies, if possible, for multiple years, pursuant to the procedures and terms of reference previously agreed upon with the Bank. The deadline for submitting the audited annual financial statements will be 120 days after the close of each financial year (December 31), starting the year project execution begins. The final audit report will be submitted within 120 days after the end of the original disbursement period or any extension thereof.

III. Agreements and Requirements for Procurement Execution

<input checked="" type="checkbox"/>	Bidding documents	The Bank's standard bidding documents or other documents agreed upon by the executing agency and the Bank for a specific procurement will be used for the procurement of works, goods, and nonconsulting services subject to international competitive bidding, executed in accordance with the procurement policies (document GN-2349-15). Likewise, the selection and contracting of consulting services will be executed according to the Policies for the Selection of Consultants (document GN-2350-15) using the Bank-issued standard request for proposals or the request form agreed upon by the executing agency and the Bank for the specific selection process.
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<input checked="" type="checkbox"/>	Use of country systems	The Colombian Public Procurement and Contracting System will be used for the procurement of goods, works, and consulting services as approved by the Bank's Board of Executive Directors. The procurement plan for the operation will indicate which procurement processes are to be conducted using the country system where approved. If the scope of the Board's approval for the use of the country system is expanded, it will be applicable to this operation.						
<input checked="" type="checkbox"/>	Direct contracting and single-source selection	<p>The following processes have been identified for direct contracting and single-source selection processes:</p> <p>(1) Contracting of a firm to hold workshops, design participatory property planning tools and print pamphlets, develop demonstration farms and the technical guide for disseminating and scaling up technologies for connectivity, biodiversity conservation, and sustainable water management (Company 3.1) Approximate amount: US\$803,572. Rationale. GN-2350-15, paragraph 3.11(d) - Experience of exceptional worth.</p>						
<input checked="" type="checkbox"/>	Procurement supervision	<p>Supervision will be done on an ex ante basis, except where ex post supervision is justified. Procurement processes conducted through the country system will be overseen by the country supervision system. Ex post reviews will be conducted every 12 months pursuant to the project supervision plan. The thresholds for ex post review are:</p> <table border="1"> <tr> <td>Works</td><td>Goods/services</td><td>Consulting services</td></tr> <tr> <td>\$10,000,000</td><td>\$1,000,000</td><td>\$200,000</td></tr> </table>	Works	Goods/services	Consulting services	\$10,000,000	\$1,000,000	\$200,000
Works	Goods/services	Consulting services						
\$10,000,000	\$1,000,000	\$200,000						
<input checked="" type="checkbox"/>	Records and files	The executing agency will retain complete documentation on procurement processes, as applicable, in physical or digital archives as part of the document management system.						

Main procurement items

Description	Method		Date	Amount US\$
Goods				
Procurement of computer equipment and software	Shopping		2023	\$172,800
Company to execute the mangrove swamp restoration measures	Shopping		2024	\$230,000
Firms				
Firm to prepare the investment portfolio for the conservation or restoration of the tropical dry forest and riverside forests	QCBS		2023	\$350,000

Description	Method	Date	Amount US\$
<p>Firm to hold workshops and design property planning tools</p> <p>This key contracting process will engage the Center for Research on Sustainable Agricultural Production Systems (CIPAV), through the single-source selection method justified under document GN-2350-15, paragraph 3.11(d) (experience of exceptional worth). The CIPAV is a nonprofit organization with over 35 years of experience with rural producers in developing sustainable agricultural production systems in Colombia. This organization has specific experiences working with producers in the project target area, which will facilitate its adaptation there. It is the only organization with these characteristics and prior experience in the region. Notably, CIPAV has the specific experience of executing the project Mainstreaming Biodiversity in Sustainable Cattle Ranching financed by the GEF and the World Bank with a budget of US\$7,000,000, from 2010 to 2016. The final evaluation of this project, which was designed to provide tools for the transformation towards sustainable ranching systems in Colombia, was satisfactory.</p>	SSS	2022	\$803,572
Contracting of a firm to develop water resource regulations for the Aracataca basin	QCBS	2023	\$257,000

To access the 18-month procurement plan, [click here](#).

Other relevant information for the operation

IV. Financial Management Agreements and Requirements

<input checked="" type="checkbox"/>	Programming and budget	<p>INVEMAR is not covered by the national budget since it is a nonprofit civil corporation governed by private law. Rather, it falls within the decentralized sector for national services, and the law has granted it administrative areas of responsibility and functions, to exercise a specialized activity, with legal personality, administrative autonomy, and independent equity, for which reason the INVEMAR budget guide applies (document GI-CTA-1). The Institute's board of directors is in charge of approving the annual budget, and monitors it and presents modifications at the regular meetings.</p> <p>The project activities do not need to be included in the national budget, given INVEMAR's status as a civil corporation and the fact that the budget head is the Ministry of Environment and Sustainable Development. No difficulties are anticipated for the project budget management.</p>
<input checked="" type="checkbox"/>	Treasury and disbursement management	<p>INVEMAR will open a special bank account in pesos at a private banking institution overseen by the Financial Superintendency, exclusively for managing operation funds. The Bank will make advance payments in dollars based on the liquidity needs for at most six months. INVEMAR will prepare the disbursement requests and will be accountable as established in the guidelines in the latest version of document OP-273; except for the first advance payment,</p>

		a minimum of 80% of all of the cumulative balances pending justification must be justified. The disbursement mechanism will be manual, and the transaction will be conducted in United States dollars. The exchange rate to be used in the transaction will be the rate in effect on the date of conversion of the approval currency into local currency.
<input checked="" type="checkbox"/>	Accounting, information systems, and generation of reports	INVEMAR is governed by the guidelines of the General Accounting Department as the public accounting regulatory body. INVEMAR records will be kept in the UNO ENTERPRISE system through the budget, accounting, and treasury modules, on an accrual basis; however, the project financial statements required by the IDB (statement of cash received and disbursements made and statement of cumulative investments classified by component pursuant to the agreement) will be prepared and submitted on a cash basis and reconciled monthly with the accounting records in the system. The applicable policies and guides will be supplemented with the program Operating Regulations, with the documented definition of workflows and internal controls.
<input checked="" type="checkbox"/>	Internal control and internal audit	<p>INVEMAR will implement and maintain an internal control system according to the internal control model standard. INVEMAR's internal audit office is the independent assessment agency that will facilitate monitoring of the improvement actions established to implement the project auditors' recommendations. In addition, it will monitor implementation of controls associated with the risks identified and the establishment of preventive alerts to manage internal and/or external events that could affect achievement of project objectives.</p> <p>The internal accounting control follows Colombia's General Accounting Department guidelines. Under this frame of reference, risk management and project control are the responsibilities of the project execution team (technical support units and administrative and operational support units), as the self-control body, under the coordination of the government agency hosting the project (GEZ), responsible for the self-assessment, with the support of the financial specialist.</p> <p>The internal audit department will monitor project execution on an annual basis.</p>
<input checked="" type="checkbox"/>	External control and financial reports	INVEMAR will select and contract external audit services in accordance with the terms of reference previously agreed upon by the executing agency and the Bank. Based on the nature and risk of the operation, special-purpose annual financial statements will be required from an independent firm acceptable to the Bank. The deadline for submitting the audited annual financial statements will be 120 days after the close of each financial period for the agency (December 31), starting the year in which project execution begins. The final audit report will be submitted within 120 days after the end of the original disbursement period or any extension thereof.
<input checked="" type="checkbox"/>	Financial supervision of the operation	The Bank's financial specialist will perform on-site and desk reviews, which will include verification of the financial and accounting agreements used for project management. The auditor will verify that the proceeds are executed in compliance with Bank policies and the conditions stipulated in the program Operating Regulations. Implementation of the auditor's recommendations will be monitored.

CONSERVATION AND SUSTAINABLE USE OF THE CIENAGA GRANDE DE SANTA MARTA

CO-G1014

CERTIFICATION

The Grants and Co-Financing Management Unit (ORP/GCM) certifies that the referenced operation will be financed through:

Funding Source	Code	Currency	Amount Up to
IADB/Global Environment Facility Fund	FMM	USD	8,219,178.00

For operations financed by funds where the Inter-American Development Bank (IDB) does not control liquidity, the availability of resources is contingent upon the request and the receipt of the resources from the donors. Additionally, in case of operations financed by funds that require a post-approval agreement with the donor, the availability of resources is contingent upon the signature of the agreement between the Donor and the IDB. (i.e.: Project Specific Grants (PSG), Financial Intermediary Funds (FIF), and single donor trust funds).

	ORIGINAL SIGNED	06/03/2022
Approved By:	<hr/>	<hr/>
	Maria Fernanda García	Date
	Chief	
	Grants and Co-Financing Management Unit	
	ORP/GCM	

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-____/22

Colombia. GRT/FM-____-CO. Nonreimbursable Investment Financing of the Global Environment Facility (GEF). Conservation and Sustainable Use of the Ciénaga Grande de Santa Marta

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, as Administrator of the Global Environment Facility (GEF) ("Fund"), to enter into such agreement or agreements as may be necessary with the Instituto de Investigaciones Marinas y Costeras (INVEMAR), as executing agency, and with the Republic of Colombia, as beneficiary, for the purpose of granting a nonreimbursable investment financing for a sum of up to US\$8,219,178 chargeable to the resources of the Fund, and to adopt any other measures as may be pertinent for the execution of the project proposal contained in document PR-_____.

(Adopted on ____ 2022)