Meeting of the Board
17 – 20 February 2025
Songdo, Incheon, Republic of Korea
Provisional agenda item 11

GCF/B.41/02/Add.09/Rev.01

18 February 2025

Consideration of funding proposals – Addendum IX

Funding proposal package for FP261

Summary

This addendum contains the following seven parts:

a) A funding proposal titled "Improving Climate Resilience by Increasing Water Security in the Amazon Basin";
b) No-objection letter issued by the national designated authority(ies) or focal point(s);
c) Environmental and social report(s) disclosure;
d) Secretariat's assessment;
e) Independent Technical Advisory Panel's assessment;
f) Response from the accredited entity to the independent Technical Advisory Panel's assessment; and
g) Gender documentation.

Table of Content

Funding Proposal

Programme title:	*Improving Climate Resilience by Increasing Water Security in the Amazon Basin.*
Countries:	*Bolivia, Brazil, Colombia, Ecuador, Peru and Suriname*
Accredited Entity:	*Inter-American Development Bank (IDB).*
Date of first submission:	*[2024/04/12]*
Date of current submission	*[2024/11/13]*
Version number	*[V.4]*

GREEN CLIMATE FUND

Contents

Note to Accredited Entities on the use of the funding proposal template

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that the annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time.
- The recommended font is Arial, size 11.
- Under the GCF Information Disclosure Policy, project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4.

Please submit the completed proposal to:

fundingproposal@gcfund.org

Please use the following name convention for the file name:

"FP-[Accredited Entity Short Name]-[Country/Region]-[YYYY/MM/DD]"

A. PROJECT/PROGRAMME SUMMARY

A.1. Project or programme	Programme	**A.2. Public or private sector**	Public
A.3. Request for Proposals (RFP)	Not applicable		

A.4. Result area(s)		**GCF contribution**	**Co-financers' contribution[1]**
	Mitigation total	**0 %**	**0 %**
	☐ Energy generation and access	0 %	0 %
	☐ Low-emission transport	0 %	0 %
	☐ Buildings, cities, industries and appliances	0 %	0 %
	☐ Forestry and land use	0 %	0 %
	Adaptation total	**100 %**	**100 %**
	☒ Most vulnerable people and communities	20%	15%
	☒ Health and well-being, and food and water security	25%	11 %
	☒ Infrastructure and built environment	25%	72%
	☒ Ecosystems and ecosystem services	30%	2%

A.5. Expected mitigation outcome. *(Core indicator 1: GHG emissions reduced, avoided or removed / sequestered)*		**A.6. Expected adaptation outcome** *(Core indicator 2: direct and indirect beneficiaries reached)*	**Direct beneficiaries: 1,522,249** inhabitants 763,677 women **Indirect beneficiaries: 4,156,701** inhabitants 2,108,778 women 3% of direct beneficiaries of the 54,133,373 inhabitants of the Amazon basin (2023)
A.7. Total financing (GCF + co-finance[2])	391.43 million USD	**A.9. Project size**	Large (Over USD 250 million)
A.8. Total GCF funding requested	162.15 million USD		

A.10. Financial instrument(s) requested for the GCF funding	☒ Grant 75.28 million USD ☒ Loan 86.88, million USD ☐ Guarantee Enter number	☐ Equity Enter number ☐ Results-based payment Enter number

A.11. Implementation period	7 years	**A.12. Total lifespan**	20 years

[1] Co-financer's contribution means the financial resources required, whether Public Finance or Private Finance, in addition to the GCF contribution (i.e. GCF financial resources requested by the Accredited Entity) to implement the project or programme described in the funding proposal.
[2] Refer to the Policy of Co-financing of the GCF.

A.13. Expected date of AE internal approval	IDB approval of the programme will follow GCF board approval. *2/2/2025*	**A.14. ESS category**	B
A.15. Has this FP been submitted as a CN before?	Yes ☒ No ☐	**A.16. Has Readiness or PPF support been used to prepare this FP?**	Yes ☐ No ☒
A.17. Is this FP included in the entity work programme?	Yes ☒ No ☐	**A.18. Is this FP included in the country programme?**	Yes ☐ No ☒
A.19. Complementarity and coherence	Yes ☒ No ☐		
A.20. Executing Entity information	Components 1, 2 and 3 will be implemented through a set of sub-projects approved by the Inter-American Development Bank (IDB) in accordance with its internal policies and procedures and aligned with the Programme's eligibility criteria. Each sub-project may consist of a single Activity or a set of Activities under the respective Components. Activities would be implemented either by third-party Executing Entities (EEs) or the IDB, according to its nature and scope. Executing Entities will be defined during Programme implementation depending on the given activities and according to the criteria presented in the FAA. IDB will assess their technical, financial and institutional capacity to fulfil the role prior to entering into any Subsidiary Agreement, according to IDB's policies and procedures. Implementation arrangements and a list of tentative EEs can be found in Section B4 and Annex 20. Therefore, it is expected that in **Component 1**, EEs would be ministries, water agencies, Hydro-Met national services/offices or other similar public or governmental institutions involved in water resources management and planning and hydro-climate monitoring and forecasting. On the other hand, EEs for **Component 2** could include ministries of housing, water and sanitation, development and planning, as well as national development banks, or other subnational institutions responsible for the administration and provision of water, sanitation and solid waste management services, depending on the institutional context and governance of the given country; as in the case of Brazil, where state-level agencies ("Secretarias") or municipalities/utilities are often responsible for the execution of IDB loan resources. Lastly, for **Component 3,** which focuses on strengthening transboundary cooperation at regional level, it is envisaged that the Amazon Cooperation Treaty Organization (ACTO) will play a key role as one of the EEs, according to their mandate to promote transboundary water cooperation within the Basin under the signed Amazon Cooperation Treaty; and building up on their experience for the coordination of the riparian countries for the formulation and development of the Basin's Strategic Action Plan (SAP), funded by the GEF and now in implementation phase. In addition to ACTO and other EEs, some activities within this Component could be IDB executed given its competitive advantages for the execution of technically complex products, the capacity of coordinating activities within riparian countries via its decentralized Country Offices, or the more agile procurement procedure for international competitive bidding processes. ACTO and IDB will not jointly implement sub-projects.		
A.21. Executive summary (max. 750 words, approximately 1.5 pages)			

1. **Climate change problem**. The Amazon region is highly exposed, vulnerable, and strongly impacted by climate change. It has been impacted by extreme events such as warming temperatures and dryness, sea level rise, coastal erosion and ocean and lake acidification. The severity of droughts in some regions, with a concomitant decrease in water supply, thus, impacting agricultural production, traditional fishing, food security, and human health (IPCC, 2022). The Amazon basin is home to the world's largest tropical humid forest with vast biodiversity, making it a global center of biological diversity (ACTO, 2024). It functions as a giant carbon sink and stores it in leaves, trunks, roots and soil (Carvalho et al., 2020). Likewise, it is the largest hydrographic basin in the world (6% of the planet's surface). The volume of drainage water in the Basin is greater than 6,500 km^3/year, representing 70% of the freshwater discharge in South America and nearly 20% of the global discharge of all the freshwater that reaches the oceans (ACTO, 2018 and 2024). In addition, the basin produces a unique hydrological mechanism known as 'flying rivers', which consists of part of the rainwater that falls in the region returning to the atmosphere and being moved by wind currents that distribute moisture towards the American continent. Flying rivers transport around 20 billion tons of water vapor daily (FAO, 2024) from the Amazon rainforest to regions as far south as Northern Argentina.
2. In 2018, the ACTO conducted the Regional Transboundary Diagnostic Analysis of the Amazon Basin. The analysis identified nine priority problems in the region, with water pollution ranking first, followed by deforestation, loss of biodiversity, extreme hydroclimatic events, erosion, sediment transport, sedimentation, land use change, glacier loss, major infrastructure works, and insufficient integrated water resources management.

3. Climate change significantly intensifies these issues, leading to severe and frequent occurrences with profound impacts on ecosystems, human health and well-being, and global economies. It is worth acknowledging that since mid-2023 the Amazon River basin has been in a state of exceptional drought, driven by low rainfall and consistently high temperatures throughout the entire basin throughout 2023 (Clarke et al., 2024).
4. Despite establishing regional and participatory planning, and institutional and public policies, degraded areas in the Amazon Region continue to spread, while the effects of climate change slow and rapid onset events are already manifesting in the territory. This creates health problems for the population, affecting the flow and maintenance of ecosystem services. In addition to socioeconomic vulnerabilities such as inequality and poverty, national economies and local livelihoods are highly dependent on natural resources for commodities production.
5. Therefore, it is necessary to take action to improve water security conditions in the Amazon Region. This could be carried out by implementing specific actions to support water, sanitation, and waste (WSW) investments to enhance the climate resilience of the Amazon population in the basin, while integrating the maintenance and conservation of key ecosystem goods, and services for the provision of fit-for-purpose water, food and energy. Those actions contribute to GCF's main goal, establishing adaptation measures in a globally important region, meanwhile benefiting approximately 1.6 million people at the end of the lifespan. This is aligned with the long-term vision of the GCF in supporting developing countries in the implementation of the Paris Agreement, their Nationally Determined Contributions (NDC), National Adaptation Plans (NAP) and Long-Term Strategies (LTS) (GCF, 2022).
6. **Proposed intervention.** The proposed Programme aims to enhance the resilience of vulnerable communities, including Indigenous Peoples, and key ecosystems in the Amazon basin to the anticipated impacts of climate change on water security and ecosystem services. This will be achieved through an adaptation-focused and integrated water management approach that considers the current and projected changes in the distribution of water, the variability of supplies and demand, and the promotion or restoration of the ecosystems' capacity to provide essential hydrological services.
7. **Climate adaptation benefits.** The primary benefits of this Programme are: (i) the adverse physical and socio-economic impacts of climate hazards such as droughts and floods will be reduced through enhancing the adaptive capacity of the population, infrastructure, and ecosystems to climate extremes, with a particular focus on reducing vulnerabilities in the most at-risk groups (Components 1 and 2) ; (ii) institutional and regulatory frameworks will be enhanced to support climate-sensitive planning and development. Hence fostering a more robust response to climate change impacts (Components 1 and 3);(iii) By enhancing access to and the application of climate data, the Programme supports climate-informed decision-making at all levels (Components 1 and 3) and (iv) Climate risks will be reduced by implementing Ecosystem-based Adaptation (EbA), advanced technologies, and Early Warning Systems (EWS). A focus will also be on knowledge transfer and empowerment of high-risk communities to enhance local resilience (Components 1, 2, and 3).
8. Additionally, this Programme contributes to increasing climate resilience and improving water security conditions in the Amazon basin. It supports the achievement of the GCF's fund-level adaptation objective of increased climate-resilient sustainable development through activities focused on Climate Resilient Water Supply, Sanitation, and Hygiene (CR-WASH), integrated drought management (IDM), and integrated flood management (IFM) works. About the planned results of GCF-2 for 2024-2027, the programme contributes to CIEWS: Protect the host countries from the adverse effects of climate change through new or improved early warning systems and, moreover, promote a regional EWS. This will assist six countries out of the target of 50 to 60 developing countries (Component 1).
9. Furthermore, advances will be measured in four GCF Results Areas for adaptation: ARA1 Most vulnerable people and Communities, including Indigenous People, ARA2 Health, well-being, food, and water security, ARA3 Infrastructure and built environment, and ARA4 Ecosystem and ecosystem services.

B. PROJECT/PROGRAMME INFORMATION

B.1. Climate context (max. 1000 words, approximately 2 pages)

10. The Amazon Basin is characterized by high annual precipitation of 2,200 mm per year (the western region receives more rain than the southeastern region). The Amazon River generates 210,000 to 220,000 m^3 per second of river discharge, that is, 15-20% of the freshwater contribution to the oceans (Marengo and Espinoza, 2016; Nobre et al., 2016) and 70% of the freshwater discharge from Latin America (ACTO, 2018). In addition, the trees of the Amazon basin absorb water and pump out thousands of millions of tons of water vapor per day, forming enormous "flying rivers." This atmospheric humidity is a fundamental part of the South American monsoon and, therefore, essential for precipitation in large areas of the continent and the planet. Its forests cover around 5.3 million km^2, 40% of the global tropical forest area (Weng et al., 2018). Moreover, Amazonian ecosystems host between 10% and 15% of terrestrial biodiversity (Hubbell et al., 2008) and store approximately 150-200 billion tons of carbon (Saatchi et al., 2011). Regarding ecosystem services (ES), the Amazon Basin plays a fundamental role in global biogeochemical and water cycles, making it an important buffer against climate change. It is considered that regulatory ES, such as carbon sequestration, constitutes 60% of the basin's ES. While those related to the water cycle represent 40% (Brouwer et al., 2022). Moreover, Amazon forests in the basin, recycle moisture and contribute to atmospheric circulation, energy, and carbon cycles.
11. The most common hydroclimatic events in the Amazon River Basin include amplified seasonal cycles, changes in precipitation, and an increased probability of droughts and floods (Liang et al., 2020). Historical records and recent studies have also highlighted the increased frequency of extreme floods and severe droughts in the Amazon River Basin in recent decades, with significant hazards in rural communities in the Brazilian Amazon, affecting agriculture and local populations (Chaudhari et al., 2019; Almudí and Sinclair, 2022; Granato-Souza and Stahle, 2023). Currently, the Amazon River exhibits interannual and long-term climate variability due to variations in precipitation, which translates into large alterations in downstream discharge (Sampaio et al., 2018). Climate change will aggravate this climate variability, potentially negatively impacting the Basin and the environmental services it provides.
12. The Amazon region is at great risk due to climate variability and change, not only due to this phenomenon but also through synergistic interactions with other dangers such as overexploitation and change in land use and forest fragmentation. Furthermore, the increased risk of wildfires represents an additional driver of change in the region, causing systematic losses of wildlife, crops, infrastructure, and livelihoods (Marengo et al., 2018; Castellanos, 2022). Additionally, it is essential to underscore that climate change disproportionately impacts women and diverse population groups, including indigenous populations. Likewise, Amazonian tropical forests have been disappearing rapidly in the last 50 years due to deforestation, which represents high risks for the region's ecosystems and human populations. Climate change is expected to lead to increased drought conditions, more frequent extreme weather events, and decreased biodiversity (Wunderling et al., 2022). Climate change is expected to generate less rain during the dry season in the east and more rain during the rainy season in the west, as well as an increase in water temperature (Pabón-Caicedo et al., 2018; Wunderling et al., 2022).
13. Figure 1 shows the temperature anomaly (◦C) in the Amazon region for November 2023, when important anomalies of temperatures and precipitation were observed, especially in Central Brazil, one of the most important areas in the agriculture sector (Meteoblue, 2023).

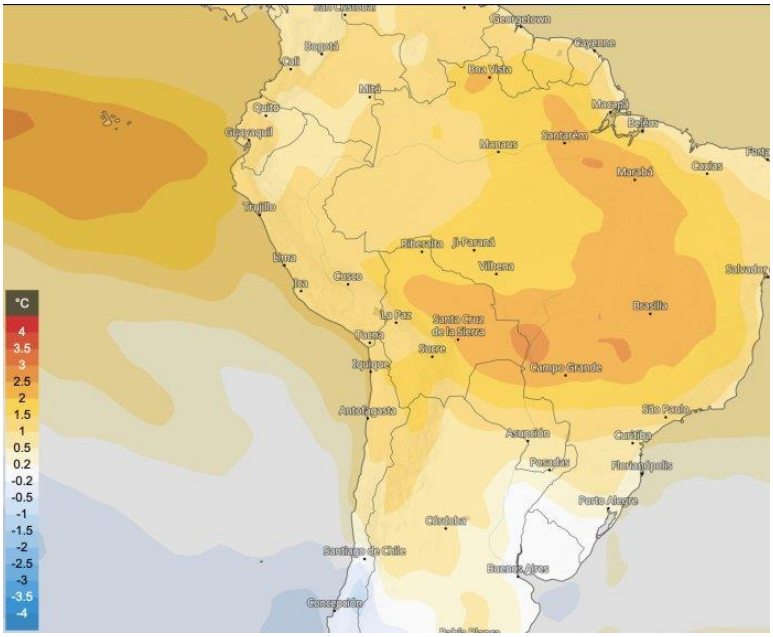

Figure 1. Temperature anomalies (◦C) in the Amazon basin for November 2023. Source: Meteoblue

Furthermore, by 2050, temperatures in the Amazon Region are expected to increase by 2 to 3 °C (Paca et al., 2020), and a decrease in precipitation during dry months is expected to lead to widespread drought. This drought trend is associated with El Niño-Southern Oscillation (ENSO) and deforestation, influencing climate variability in Latin America (Paca et al., 2020).

14. For instance, in a less optimistic short-term scenario, the temperature will increase by up to 37°C, with the State of Amazonas being the most affected area. Conversely, precipitation levels are expected to decline by up to 58% across the region, with the eastern area, encompassing the State of Pará, experiencing the most significant reduction (see Annex 2, section Climate change projections).
15. On water issues, as showed by an IDB ongoing research in the Amazon basin, under different climate change scenarios, the overall trend is to expect a reduction in the total water availability by 2050 compared to the baseline (2020); with extensive areas within the system experiencing significant drier conditions under future climate scenarios. Some of the Amazon subregions are currently experiencing increasingly severe droughts, such as the central and Southern-East Amazon.
16. An important point is that climate change could mean that between 30% and 60% of the Amazon rainforest could become a dry savanna, therefore, the Amazon region could become a source of carbon dioxide rather than a sink (De Faria et al., 2021; Marengo et al., 2018). The Amazon rainforest is approaching a tipping point that would have devastating consequences for the global climate system. According to new research (Flores, B.M., Montoya, E., Sakschewski, B. et al., 2024; Parry et al., 2022). These concerns are based in part on an early simulation of the climate-carbon cycle that produced unusually strong drought and warming in the Amazon basin. Results from five of seven sixth-generation models (Phase 6 of the Coupled Model Intercomparison Project, CMIP6) suggest abrupt reductions in vegetation carbon, indicating localized dieback events. The Northern South America (NSA), which contains most rainforests, appears especially vulnerable in the models (Parry, I. M., et al., 2022). Climate variability impacts water security, sanitation, and availability (see Figure 2 and Annex 2, section Climate risk/impact on water, sanitation and waste). Water resilience is a high priority for adaptation in developing countries, with widespread and significant cross-sector impact for developing countries, especially water-scarce and drought-prone regions, such as the Amazon Basin. As mentioned in the previous section, since mid-2023 the Amazon River basin has been in a state of exceptional drought, driven by low rainfall and constantly high temperatures throughout the basin throughout 2023 (Clarke et al., 2024).
17. Regarding the identification of risks under a pessimistic case, the areas with the greatest risk due to increased temperatures are in the central area of the basin in Porto Velho in Brazil, in the north of Bolivia in the department of Beni, and the central area of Peru corresponding to the department of Loreto. In the case of precipitation, the areas with the greatest risk due to the decrease in precipitation are the areas in the south of the basin in Peru, corresponding to the boundaries of the departments of Loreto, Ucayali, and Madre de Dios. In Bolivia, the districts of Santa Cruz, Beni, Pando and La Paz, and in Brazil, the borders of the basin corresponding to the states of Maranhão, Tocantins and the south of Mato Grosso (see Annex 2, section “Climate context, risk and vulnerability in the Amazon Basin” for more details).

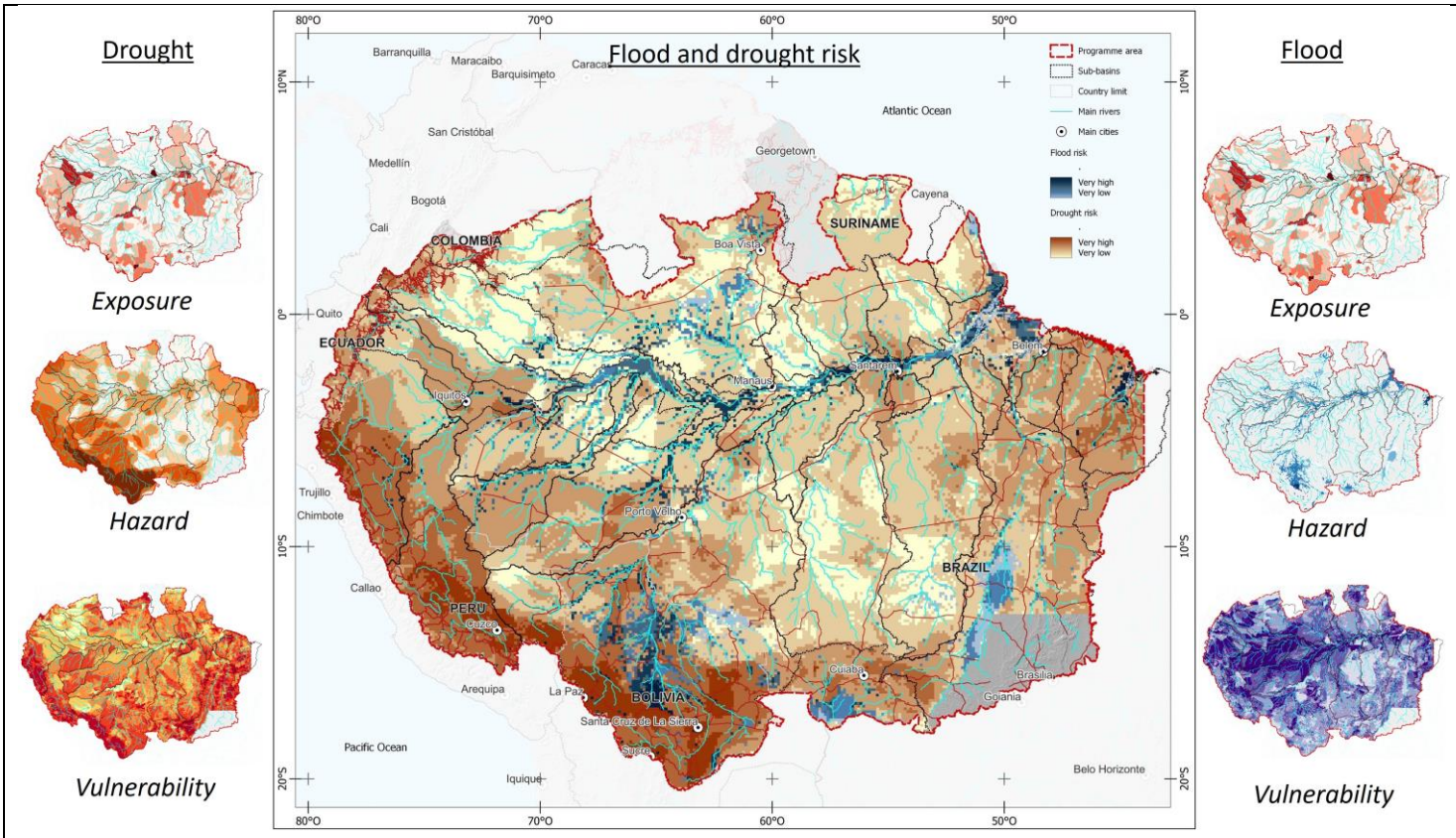

Figure 2. Risk maps for flood and drought. IDOM, 2024 with information available from ACTO.

18. Regarding social well-being, climate change exacerbates economic, ethnic, and social inequalities. High levels of widespread poverty, weak water governance, unequal access to drinking water and sanitation services, and lack of infrastructure and financing reduce adaptive capacity. Thus increasing as well as creating new vulnerabilities in the population (Castellanos et al., 2022; IPCC, 2022). This phenomenon has implications for the entire economy. No economic sector is spared from the impacts, which have not yet been fully understood or quantified, especially about ecosystems, water security, and the potential for adaptation measures at the sectoral level (see section Social, environmental, and economic context in Annex 2).

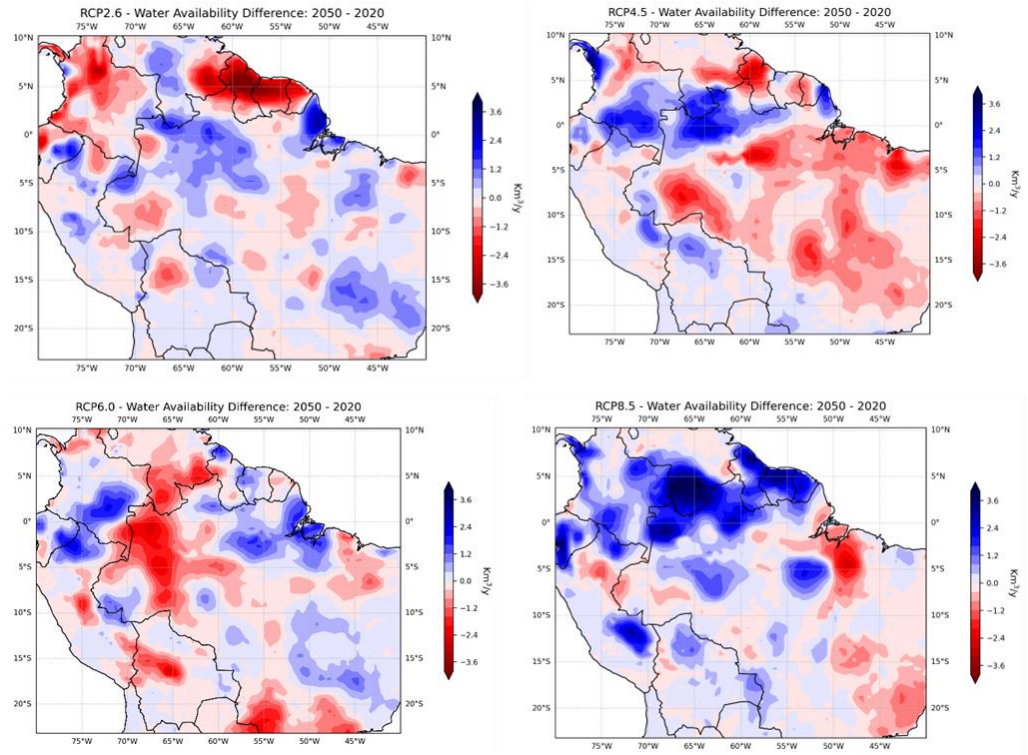

Figure 2. Changes in total water availability (surface and groundwater) in Km3/ 2020-205 0 in the Amazon Region under climate change scenarios RCP2.6, RCP4.5, RCP6.0 and RCP8.5 (Source: TNC and IDB., 2024- ongoing).

19. More resources are needed to provide opportunities for the inhabitants of the Amazon. Targeted at areas of high vulnerability and limited access to basic services, to reduce disparities and to improve poor water and sanitation services. Support is needed to enhance forecasts and early warnings, drought strategies, sustainable water management practices, and investments in infrastructure to cope with future changes in climate patterns. Furthermore, collaboration between countries and stakeholders, including farmers, women, other vulnerable and diverse groups in the region, including Indigenous People, is necessary to develop effective adaptation strategies. This has been made clear in the Leticia Pact signed by the member countries of the Amazon Basin.
20. In summary, climate change's effects are already tangible in the Amazon Basin, which confirms that adaptation and risk reduction are tasks that cannot be postponed. This is why greater efforts and innovative strategies are required. The current climate crisis in the Amazon River basin, particularly droughts and floods, opens an opportunity to make a decisive turn towards sustainable development and avoid what scientists call tipping points, in which the basin and its ecosystems will no longer be able to sustain themselves.
21. Therefore, a new sustainable development paradigm is needed to address these challenges and guarantee the long-term health of the Amazon basin (Castellanos et al., 2022).
22. One of the Amazon basin's greatest comparative advantages is its ability to achieve not only mitigation through the reduction or avoidance of emissions but also adaptation, along with a wide range of co-benefits. More information on the climatic context of the Amazon Basin can be found in Section 3, Annex 2.

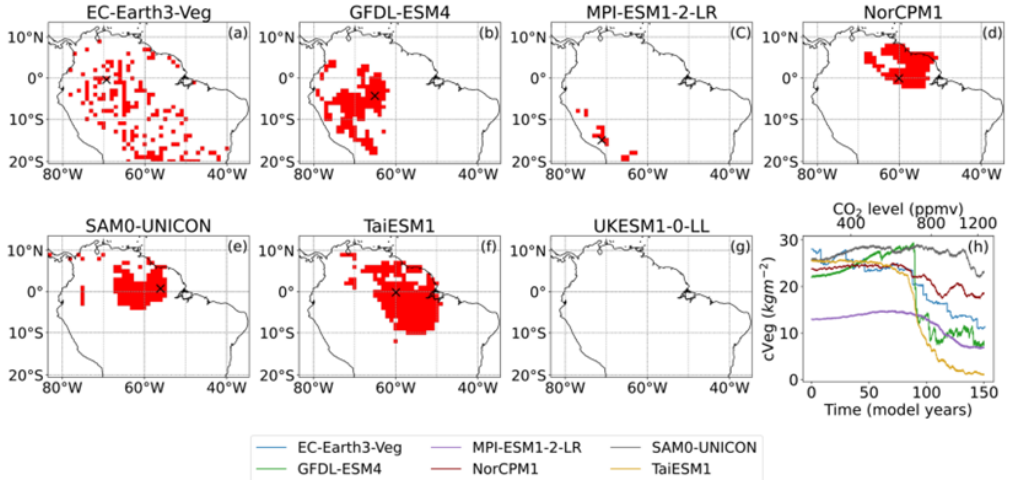

Figure 3. Abrupt shifts detected in the Amazon and example time series for dieback shift (Parry et al., 2022).

B.2 (a). Theory of change narrative and diagram (max. 1500 words, approximately 3 pages plus diagram)

23. **Problem statement**. The Amazon region plays a crucial role in the global and regional hydrological cycles, affecting climate, precipitation patterns, and agricultural productivity across South America. Furthermore, it is well-known for being a major global carbon sink, absorbing approximately 2 billion tons of CO_2 annually. However, climate change poses significant threats to the Amazon basin, with anticipated impacts that could drastically alter its environment and the lives of those who depend on it. Projected regional impacts of climate change include an expected increase in the intensity, frequency, and duration of extreme weather events, such as floods and droughts, which are already evident across the region. These changes are anticipated to adversely impact not only water security, food security, and ecosystem services but also the infrastructure, economic stability, and human health and safety of communities in riparian and forested areas.
24. Currently, the Amazon is experiencing a significant reduction in annual precipitation and more frequent dry spells and heat waves, contributing to rising temperatures and extended drought periods. These changes affect agriculture by reducing soil moisture and altering growing seasons, which compromises food security for millions. They also cause irreparable damage to ecosystems, raise the risk of extensive wildfires, and lead to increased CO_2 emissions, which threaten the Amazon's role as a carbon sink (WMO, 2019). Flood-prone areas include central Amazonia, the delta region, and the border between Pará and Mato Grosso in Brazil, as well as northern Bolivia, where communities face periodic inundations, infrastructure damage, and heightened risks to health and safety. In contrast, drought-vulnerable areas in Piura, Lambayeque, Lima, Ayacucho, Apurímac, Arequipa, Cusco, and Puno in Peru, as well as Oruro, Potosí, Santa Cruz, Chuquisaca, and Tarija in Bolivia, experience severe water shortages, crop failures, and community displacement To mitigate these risks, it is essential to develop robust flood early warning systems, upgrade resilient infrastructure, improve access to safe drinking water, and strengthen water and sanitation systems to withstand extreme events. Equally important is improving and restoring ecosystem services in source catchments, which are vital for maintaining water quality, ensuring water availability, and enhancing natural water storage, among other services.
25. The overall resilience, health, and well-being of the population and ecosystems will benefit from integrated approaches that incorporate climate adaptation strategies into policies and investments across critical sectors such as agriculture, food security, infrastructure, water, sanitation, and social protection. Such approaches must foster effective collaboration and coordination at all levels of governance to achieve long-term sustainability and adaptability (IPCC, 2022).
26. **Programme objective.** This Programme aims to enhance climate resilience in water resources management, across the Amazon Basin, by improving preparedness and response extreme climate events. Through its successful implementation, the provision of hydroclimatic information and early warning systems will be improved, aiming to boost adaptation at basin level. This Programme seeks to improve the resilience of socioecological systems and livelihoods, while strengthening governance and enabling the environment to foster climate resilience and low-carbon development in the Amazon Basin.
27. **Theory of Change (ToC).**
28. The goal of the Programme is to enhance climate resilience and promote sustainable water management across the Amazon Basin. The underlying assumption is that **IF** targeted activities such as deploying improved climate information and early warning systems, implementing low-carbon and climate-resilient water investments, and building the capacity of national and regional actors to catalyze transboundary cooperation are implemented, **THEN** these activities will lead to specific, measurable outputs that contribute to climate resilience, **BECAUSE** the implementation of these activities will lead to better decision-making, improved water management, and stronger ecosystem services, these outcomes will contribute to long-term climate resilience by reducing vulnerabilities to climate extremes, fostering sustainable livelihoods, and protecting critical ecosystems in the Amazon Basin.
29. By linking activities directly to these measurable outputs, outcomes, and co-benefits, the Programme ensures that each step contributes to the larger impact of building climate resilience, protecting the Amazon Basin's vital ecosystems and communities, and generating broader environmental, social, and gender-related benefits.
30. For example, Activity 1.1.1 (Regional hot-spot analysis of the western region of the Amazon sedimentary aquifer system) will help produce Output 1.1 (Amazon basin-level water resources mapping and knowledge integration with climate modelling improved), which will directly contribute to more informed decision-making and improved water resource management. Activity 1.2.1 (Advance priority monitoring stations for an integrated flood and drought management system) will result in Output 1.2 (Output 1.2. Climate Information and Early Warning Systems (CIEWS) enhanced), helping communities better anticipate and respond to floods and droughts.

31. These outputs, in turn, will lead to outcomes such as improved resilience of water systems and communities, reduction of climate-induced economic losses, and increased adaptation capacity for vulnerable populations, including Indigenous Peoples. As these outputs materialize, they contribute to achieving the long-term impact of enhancing climate resilience across the Amazon Basin, protecting both ecosystems and communities.
32. The Programme will generate a range of co-benefits that further enhance its impact. These include:
    - **Environmental Co-benefits**: Improved water resource management will also enhance biodiversity by preserving ecosystems that support species in the Amazon Basin. The implementation of low-carbon water investments will contribute to carbon sequestration, improving carbon stocks and helping mitigate climate change.
    - **Socio-economic Co-benefits**: By increasing resilience to climate-related hazards such as floods and droughts, the Programme will reduce economic losses for communities, safeguarding livelihoods. Enhanced water security will directly benefit the health and well-being of vulnerable populations, including Indigenous peoples, especially in rural areas, where improved access to water and sanitation services can lead to better living conditions.
    - **Gender Co-benefits**: Targeted capacity-building initiatives will include a gender-sensitive approach, empowering women who are disproportionately affected by water-related challenges. By improving water access and management, the Programme can reduce the burden on women, who are often responsible for water collection in many communities and create opportunities for their greater participation in decision-making processes. Additionally, it would reduce school dropout rates among girls and adolescents of menstruating age by enabling them to manage their menstrual hygiene effectively at home and at school.

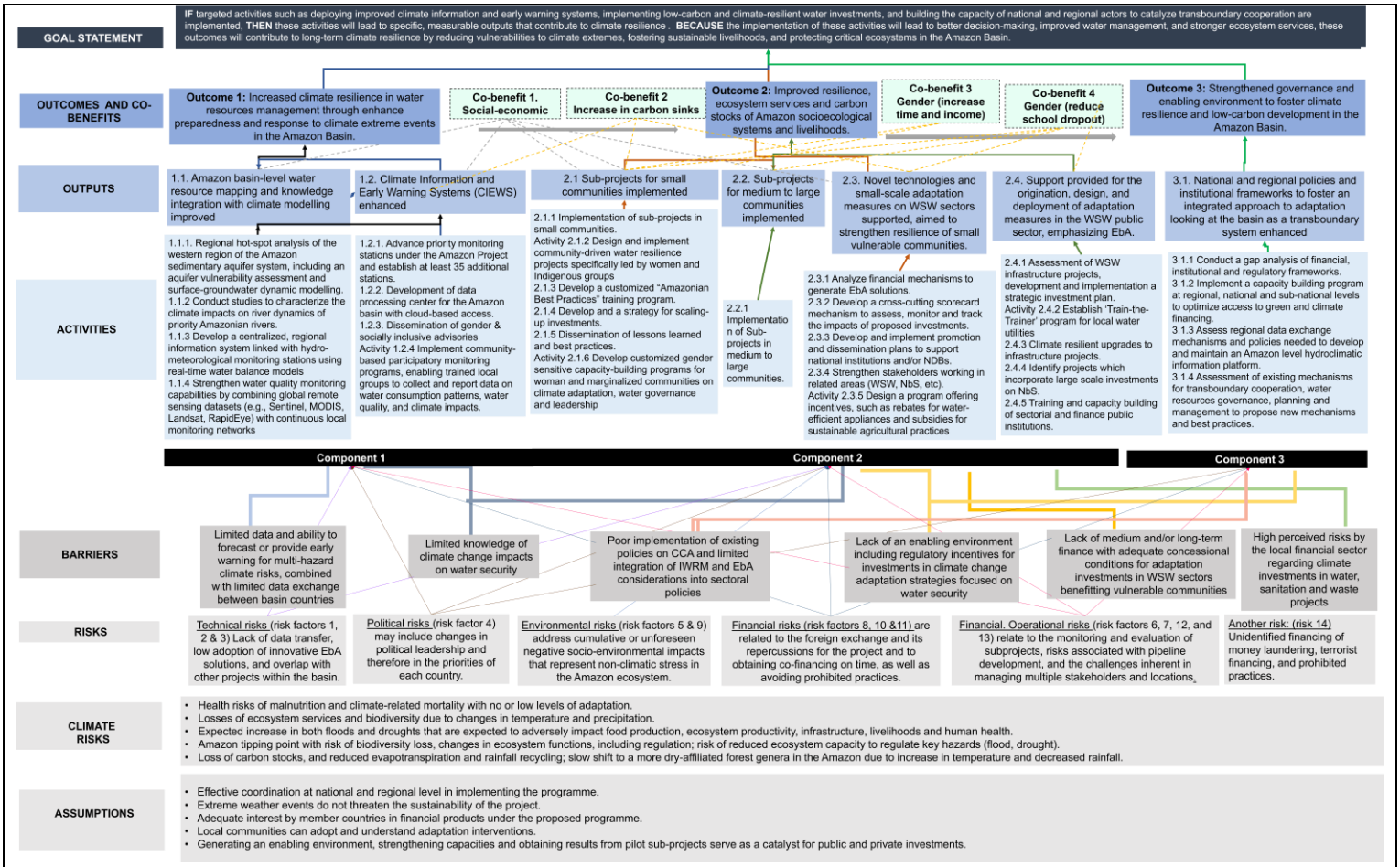

Figure 4. Theory of Change Diagram

33. To achieve the objective of the Programme several barriers have been identified: (i) limited data and ability to forecast or provide early warning or multi-hazard climate risks, combined with limited data exchange between basin countries, (ii) limited knowledge of climate change impacts on water security, (iii) poor implementation of existing policies on climate change adaptation for the water sector and limited integration of IWRM and EbA considerations into sectoral water policies, (iv) lack of an enabling environment including regulatory incentives for investing in climate change adaptation strategies focused on water security, (v) lack of medium and/or long-term finance with adequate concessional conditions for adaptation investments in WSW sectors benefitting vulnerable communities, including indigenous peoples; and, (vi) high perceived risks by the local financial sector regarding climate investments in water, sanitation and waste projects. In the design of this Programme, different types of risks could affect it: **Technical risks** (risk factors 1, 2 & 3) include obstacles to climate data exchange, low adoption of innovative Ecosystem based Adaptation (EbA) solutions and overlap with other projects within the basin. **Political risks** (risk factor 4) may include changes in political leadership and, therefore, in the priorities of each country. **Environmental risks** (risk factors 5 and 10) address cumulative or unforeseen negative socio-environmental impacts that represent non-climatic stress in the Amazon ecosystem around the basin. Also, those related to the impact of extreme climate events in the basin. The **financial risks** (risk factor 13) related to the foreign exchange rates and their repercussions for the project. **Operational risks** (risk factors 6, 7, 8, 9, 11, and 12) relate to the monitoring and evaluating subprojects, risks associated with pipeline development, and the challenges inherent in managing multiple stakeholders and locations. Other risks were also evaluated, such as risk 14 related to money laundering, terrorist financing, and prohibited practices.
34. Climate change adaptation actions promoted by the water sector have a high potential to generate co-benefits that impact the population's well-being. There are four main co-benefits identified: 1) social (improvements in children's health conditions), 2) environmental (GHG reduction, avoidance, and sequestration through increased carbon sinks) and 3 and 4) gender and diversity (improved access to resources and opportunities for women and diverse population groups). Additionally, there will be positive impacts on gender issues, as women and girls are the most vulnerable to the impacts of climate change, particularly extreme events like droughts and floods,

including indigenous peoples. They often face greater risks of abuse and typically bear the responsibility for providing water and sanitation supplies, which can be significantly disrupted by water insecurity. This disruption can impede their ability to study, work, and live with dignity. (UN-Water, 2021). See Annex 2 for information on co-benefits.

B.2 (b). Outcome mapping to GCF results areas and co-benefit categorization

Outcome number	GCF Mitigation Results Area (MRA 1-4)				GCF Adaptation Results Area (ARA 1-4)			
	MRA 1 Energy generation and access	**MRA 2** Low-emission transport	**MRA 3** Building, cities, industries, appliances	**MRA 4** Forestry and land use	**ARA 1** Most vulnerable people and communities	**ARA 2** Health, well-being, food and water security	**ARA 3** Infrastructure and built environment	**ARA 4** Ecosystems and ecosystem services
Outcome 1	☐	☐	☐	☐		☒	☒	☐
Outcome 2	☐	☐	☐	☐		☒	☒	☒
Outcome 3	☐	☐	☐	☐	☐	☒	☒	☐

Co-benefit number	Co-benefit					
	Environmental	**Social**	**Economic**	**Gender**	**Adaptation**	**Mitigation**
Co-benefit 1	☐	☒	☐	☐	☐	☐
Co-benefit 2	☒	☐	☐	☐	☐	☒
Co-benefit 3	☐	☐	☐	☒	☐	☐
Co-benefit 4	☐	☐	☐	☒	☐	☐

B.3. Project/programme description (max. 2500 words, approximately 5 pages)

The Programme has three outcomes that will be achieved through three components, resulting in seven outputs that are structured as follows:

35. ***Component 1: Strengthening the knowledge base and information systems on climate change impacts and water security to enhance preparedness and response to extreme climate and slow-onset events***. This component aims to build a comprehensive knowledge base and adaptive information systems to improve water security and climate resilience across the Amazon Basin. By utilizing advanced technologies such as real-time monitoring and dynamic decision-making tools, the component enhances access to critical climate data. These tools will support the preparedness and response to both extreme and slow-onset climate events, addressing both immediate and long-term climate adaptation needs.

36. In direct response to Barriers 1 and 2 this component will bolster data management and develop decision-support systems to address climatic extremes and inform medium- and long-term adaptation planning. It will establish regional, transboundary protocols for shared hydro-meteorological and water-security data management, aligning with global initiatives like the World Meteorological Organization's (WMO) HydroHub and supporting a collaborative transboundary water management framework to facilitate cross-border water governance, information sharing, and resource management across the Amazon Basin. These transformative activities will complement Integrated Water Resources Management (IWRM) actions, addressing the exacerbated effects of climate change across the Amazon basin. By enhancing existing water governance frameworks, this component aims to reduce community vulnerability, mitigate maladaptation risks, and lay the groundwork for an Integrated Water Multi-sector (Nexus) Management scheme that aligns water, land, and ecosystem management across basin boundaries.

37. Building on the component's emphasis on data-sharing and governance, a transboundary water management strategy will further enhance resilience by establishing consistent data-sharing protocols, monitoring agreements, and cooperative frameworks for resource sharing among Amazon Basin countries. Collaborative platforms will be developed in partnership with regional entities such as the Amazon Cooperation Treaty

Organization (ACTO), ensuring that water governance supports equitable resource distribution, pollution management, and ecosystem conservation across borders. Furthermore, this component will assist countries with national budget plans for the sector, enabling more efficient decision-making in the context of EWS.

38. This component will deliver two main outputs, each advancing the Basin's capacity for climate resilience and adaptive water security:

39. **Output 1.1. Amazon basin-level water resources mapping and knowledge integration with climate modelling improved.** Under this output, the Programme will implement comprehensive water resources mapping to enhance climate resilience across the Amazon Basin. To improve understanding of basin and inter-basin hydrology, this output will incorporate advanced hydrological models and data collection systems to monitor water flows, precipitation patterns, and groundwater levels. Real-time data integration from remote sensing and IoT-enabled sensors will provide a comprehensive view of hydrological dynamics, informing water resource planning and adaptive management. This will involve integrating advanced digital technologies, including remote sensing, artificial intelligence (AI) analytics, and the Internet of Things (IoT), to enable real-time monitoring of water resources. These resources will support the development of regional transboundary protocols that enable data sharing across Amazon Basin countries, fostering enhanced preparedness and coordinated response to climate extreme events.

40. A "smart water management" framework will guide adaptation efforts by providing dynamic decision-making tools and visualization interfaces tailored to address climate resilience challenges.

41. Additionally, the Programme will place emphasis on valuing water-related ecosystem services and conducting integrated studies that consider water-land use-forest planning and management. This approach aligns with the Integrated Water Multi-sector (Nexus) Management scheme, promoting cooperation across sectors to optimize water use and improve resilience. These studies aim to buffer the impacts of extreme climate events, such as intense flooding, by restoring eco-hydrological functions, enhancing aquifer recharge, and mitigating the frequency and intensity of droughts and floods. This holistic approach will protect groundwater systems while providing a sustainable and adaptive response to climate impacts on water resources across the Amazon Basin.

42. The specific activities include:

- Activity 1.1.1. Regional hot-spot analysis of the western region of the Amazon sedimentary aquifer system, including an aquifer vulnerability assessment to climate change and contamination from anthropogenic (Mercury) and non-anthropogenic (Arsenic); surface-groundwater dynamic modeling for a better understanding of aquifer recharge natural patterns and functionality in at least three (3) priority areas. This activity will inform the development of regional transboundary protocols for shared access to aquifer vulnerability data, supporting climate-resilient water management across borders. This activity will have synergies with GEF proposal "Towards a better understanding of the Amazon Aquifer Systems for its protection and sustainable management" (implemented by IDB and UNEP). This activity will be financed by GCF grant.
- Activity 1.1.2. Conduct studies to characterize the climate impacts on river dynamics (including surface and groundwater interactions by combining hydrological and hydrodynamic modeling) of priority Amazonian rivers (priority rivers would be identified during the project proposal stage). These studies will contribute to the Integrated Water Multi-sector Nexus Management scheme by providing insights on water, land, and ecosystem dynamics, enhancing cross-sector collaboration in managing climate impacts. Studies will include gender and diversity perspectives on the use and management of water resources. Gender perspectives will be incorporated into these studies, ensuring that water use and management are inclusive and support adaptation for all. This activity will be financed by GCF grant.
- Activity 1.1.3. Develop a centralized, regional information system linked with hydro-meteorological monitoring stations using real-time water balance models. This system will improve river flow forecasting accuracy and incorporate climate change scenarios, allowing for informed water demand management. The system will also serve as a platform for regional transboundary protocols, enabling data sharing across Amazon Basin countries and fostering collaborative preparedness for climate extreme events. The information platform will include groundwater data where possible, creating a comprehensive view of the basin's water resources for both local and regional stakeholders. This activity will be financed by IDB grant.
- Activity 1.1.4. Strengthen water quality monitoring capabilities by combining global remote sensing datasets

(e.g., Sentinel, MODIS, Landsat, RapidEye) with continuous local monitoring networks. This AI-enabled system will provide detailed tracking of water quality changes, enabling swift responses to emerging pollution risks, thus supporting adaptive, climate-resilient water management. This system will also contribute to the Integrated Water Multi-sector (Nexus) Management scheme by integrating water quality data with broader environmental and climate data, facilitating sectoral collaboration This activity will be financed by IDB grant.

43. **Output 1.2. Climate Information and Early Warning Systems (CIEWS) enhanced.** The Programme seeks to improve the basin-level hydro-meteorological network and make an Impact Based Multi-Hazard Early Warning System (IB-MHEWS) available to facilitate forecast-based action and respond on time to extreme climate events, such as floods and droughts[3]**.** This will include integrating a new Amazon early warning center into the current Amazon Regional Observatory (hosted by ACTO with integrated hydro-climate datasets provided by the countries' hydro-meteorological offices). It will rely on remote sensing data and weather forecasting to predict flash flooding events. It will include riverine routing capabilities to model hydrological connectivity among Amazon's subsystems, watersheds, floods and droughts-specific modeling modules. As an initial proposal, the system can be built upon the hydroBID (hydro-climate modeling platform, in some riparian countries as a modeling tool for water resource management, such as ANA in Perú or the MMAyA in Bolivia). The Programme will build on previous experiences of applying remote sensing monitoring where possible, such as Gravity Recovery and Climate Experiment Satellites (GRACE) (Tourian et al, 2018). The weather forecast will be linked to key ground hydromet monitoring stations.

44. Output 1.2 will contribute to the understanding disaster risk through continued weather data registration, improving water resources management and the development of studies for integrated water-land use-forest planning and management of Output 1.1. Interventions will align with Paradigm Shifting Pathways 1 and 2 of the GCF CIEWS Sectoral Guide, mainly making robust climate services widely available through modernization of hydro-meteorological services, the establishment of regional programs for data sharing and by making IB-MHEWS available to facilitate forecast-based action. Through an enhanced CIEWS, this output will support well- informed, science-based decision making, helping to reduce loss of lives and damages to physical assets, aligned with the Sendai Framework for Disaster Risk Reduction (UNDRR, 2015). Activities under this Output include:

Activity 1.2.1. Advance priority monitoring stations for an integrated flood and drought management system, including the establishment of at least 35 additional stations and 4 Doppler radar units. This will be prioritized by countries from a cross-border perspective. GCF funding will advance the Hydrological Monitoring Network and Water Quality Monitoring Network (Activity 1.1.3) of the Amazon region, ensuring sufficient density to incorporate climate and hydro-meteorological modeling for flood and drought forecasting at a regional and sub-systems level. This activity will also include the implementation of monitoring protocols for flood and drought risk assessment, incorporating parameters and methodologies validated by WMO for data exchange between countries. To ensure the long-term sustainability of these newly installed stations and radar, a plan for maintenance and operation will be developed. The Programme will implement a phased capacity-building initiative targeting national hydrological and meteorological agencies within Amazon Basin countries. This initiative will provide technical training to ensure that these systems are maintained and operated effectively post-Programme completion. Additionally, a regional management entity, such as the Amazon Cooperation Treaty Organization (ACTO), will oversee data coordination and processing. To sustain ongoing operations, a financial mechanism promoted by the programme and funded by national governments and regional organizations will support the operational costs of the data processing center, ensuring continuity beyond the Programme's lifespan. This activity will be financed by GCF grant.

- Activity 1.2.2. Development of data processing center for the Amazon basin, integrated to ORA, with cloud-based access, including promoting basin level models such as Flash Flood Guidance System (FFGS) or NASA's GEOGLOWS. There will be also the development of national information and visualization centers with links to early warning service provision for each of the countries. This includes developing information and visualization control rooms where needed. The visualization centers with linkages to early warning service provision for each country will have a gender and diversity perspective. The information will be translated to indigenous languages,

[3] Creating a comprehensive hydrometeorological monitoring network, and developing systems for forecasting extreme hydroclimatic events (EWS) were highlighted as strategic actions for the Amazon (ACTO, 2018)

adapted for Persons with Disabilities, and have gender considerations. This activity will be financed by GCF grant.

- Activity 1.2.3. Dissemination of gender & socially inclusive advisories that contemplate most vulnerable populations, including indigenous peoples to improve forecasting functionality. That will include socio-demographically characterization of the population, with disaggregation by gender and diverse groups (people with disabilities, Indigenous people, afro descendants, and LGBTQ+ people); identification of the different languages spoken in the areas of influence to use them in the dissemination of alerts and when applicable; consideration of communicative accessibility (especially visual, auditory, and tactile concepts). This activity will be financed by a GCF grant.
- Activity 1.2.4. Implement community-based participatory monitoring programs, enabling trained local groups to collect and report data on water consumption patterns, water quality, and climate impacts. This data will feed into the central M&E system, ensuring that local perspectives contribute to decision-making processes and enhance the overall effectiveness of the forecast and early warning systems. This activity will be financed by a GCF grant.

Because of these activities and outputs, Component 1 will generate the following outcome: Increased climate resilience in water resources management through enhance preparedness and response to climate extreme events in the Amazon Basin (Outcome 1).

45. ***Component 2: Catalyze climate investments for climate-resilient and low carbon water supply, sanitation, and waste (WSW) technologies and infrastructure***. Component 2 will primarily address barriers 2, 4, 5, and 6 to deliver national projects that showcase innovative climate-resilient Integrated Water Resources Management (IWRM) technologies, including Ecosystem-based Adaptation (EbA) interventions. This component aims to reduce the vulnerability of the water sector by enhancing water conservation, improving water efficiency and reuse, and strengthening protection from water-related disasters. Interventions will align with Pathways 1 and 2 of the GCF Water Security Sectoral Guide, which focuses on preserving water resources and enhancing resilient water supply and sanitation services. This approach directly supports the adaptation benefits identified in the list of interventions (See Annex 2), ensuring that communities are better prepared for the impacts of climate change.

46. As part of enhancing water resilience, the Programme will incorporate demand-side water conservation measures to optimize sustainable water use across all sectors. Key initiatives include water-saving technologies to reduce water loss and support real-time tracking in urban and rural settings, public education campaigns to foster behavioral shifts in households, agriculture, and industry, promoting long-term water conservation, financial incentives and subsidies for water-efficient practices across sectors (households, agriculture), and data-driven support, including a monitoring framework to measure water savings over time. Additionally, EbA strategies will be integrated to enhance the climate resilience of natural water resources, including wetland restoration, riparian buffer creation, and reforestation aimed at natural flood control, sediment capture, and water quality improvement and protection and regeneration of aquifer recharge zones to ensure sustainable groundwater resources for communities and agriculture. This combination of demand-side, ecosystem-based and technological approaches will support Component 2's objectives to long-term water security for vulnerable communities and urban centers.

    This component has four main outputs that are strategically designed to ensure that the Programme can be adapted and adequately respond to specific needs of diverse populations, from small rural communities (Output 2.1) to larger and more complex cities (Output 2.2.). Both Output 2.1 and 2.2 will introduce demand-side water conservation initiatives to foster sustainable water use while focusing on ecosystem-based adaptation strategies, ensuring that each project includes a balanced mix of natural and built solutions to enhance resilience. By reducing overall consumption, optimizing water allocation, and fostering lasting behavioral change, it will enhance water resilience and support adaptive water management in vulnerable communities. Output 2.4 focuses on establishing new financial mechanisms and funds designed to cover operational expenses, support disaster remediation efforts, and promote international collaboration for replication, ensuring the long-term sustainability of interventions. This output will create a financial foundation that underpins ongoing and future climate resilience activities, fostering a robust framework for adaptive management and scalable solutions. In parallel, Output 2.3 aims to implement state-of-the-art technologies that minimize climate vulnerability and promote a comprehensive approach to subproject-level interventions. This output ensures that each project includes innovative tools and systems to enhance resilience.

Output 2.1. Sub-projects focused on community and ecosystem-based adaptation for small communities implemented. This output will target the most vulnerable small communities, including indigenous peoples, across the Amazon Basin, prioritizing those that lack adequate technical and financial capacities and have limited WASH (Water, Sanitation, and Hygiene) infrastructure to cope with the intensification of climate change impacts, such as droughts (leading to drinking water shortages) and floods (resulting in expanded flood zones, health risks, and safety issues). Climate change worsens the frequency and intensity of droughts, and therefore the availability of traditional water resources, either because they are reduced or depleted, or because the capacity for dilution is lost, making it essential to treat the water to make it potable. The proper disposal of excreta and its treatment before returning to the environment is necessary to avoid further contamination of water sources, whether for the community itself or for downstream communities along the river. The quantity and quality of water are highly intertwined in communities that historically had sufficient flow to dilute contaminants. Today, this is no longer the case. Doing nothing will result in greater eutrophication and a chain reaction of problems, including a decline in fishing productivity—the main source of protein in their diet—as well as diseases that affect development, such as acute diarrheal diseases (ADD) or amebiasis. A public education campaign on sustainable water use will be integrated into these projects to promote behavior change and increase community resilience, especially in high-risk areas. The proportional distribution of sub-projects across target countries will be guided by a needs-based approach, considering national assessments of WASH infrastructure gaps and climate vulnerabilities. Larger, more complex cities will also be considered in proportion to their infrastructure needs and climate risks. A budget allocation model will be developed based on these criteria, with assumptions rooted in the baseline WASH context of each country and how climate change is exacerbating these challenges. Incentives for adopting water-efficient practices and technologies will further support sustainable water use, addressing long-term water scarcity and economic pressures on communities. Without intervention, these issues are expected to worsen, increasing health risks, water scarcity, and economic pressures on communities. Priority will be given to sub-projects that promote sustainable sanitation technologies, climate-sensitive waste management for pollution abatement and GHG emission reduction, community-based water retention schemes, managed aquifer recharge (MAR) methods, demand-side water conservation technologies such as smart meters and automated leak detection and solar groundwater extraction. Moreover, activities under this Output will include the implementation of demand-side water conservation initiatives to promote sustainable water use.

The main outcome is the improvement of water resilience, the associated ecosystem services and improvement in the socio-ecological systems and livelihoods of the Amazon. Progress will be tracked using measurable indicators such as the number of upgraded WSW systems, the volume of financial resources mobilized, and the successful integration of nature-based solutions into public infrastructure projects.

Activities under this Output include:

- Activity 2.1.1: Implementation of Sub-Projects in Small Communities. Implementation of Sub-Projects in Small Communities. Projects will be selected based on a participative and inclusive approach. The selection process will ensure that eligibility criteria incorporate a strong focus on gender and diversity, taking into account factors such as the percentage of households headed by women, households with people with disabilities, and poverty levels. Beyond eligibility, it will be a requirement that gender and diversity considerations are embedded into all decision-making processes throughout the project lifecycle. Specifically, a mandatory percentage of leadership positions within local water governance groups will be reserved for women and marginalized communities, including Indigenous groups. This approach will promote equitable representation and ensure that the perspectives and needs of vulnerable populations are integrated into water resilience efforts. Sub-projects in small communities will include i) the introduction of smart water meters and automated leak detections systems to monitor and minimize water loss; ii) monitoring water consumption patterns to assess impact of demand-side strategies over time for further improvement in water conservation efforts; iii) built solutions for water and sanitation. This activity will be co-financed by GCF grant and loan, and IDB loan.
- Activity 2.1.2. Design and implement community-driven water resilience projects specifically led by women and Indigenous groups. These projects will focus on critical water resilience efforts such as rainwater harvesting, wetland restoration, and small-scale water recycling systems. By empowering marginalized communities, particularly women and Indigenous populations, to take leadership roles in these projects, this

activity will foster local ownership and ensure that adaptation measures are tailored to the specific needs and knowledge of these groups. This activity will be financed by a GCF loan.

- Activity 2.1.3: Development of a Customized "Amazonian Best Practices" Training Program. This programme will be developed by regional experts and conveyed to local community leaders and officials. It will focus on best practices for climate resilience and adaptation, tailored to the needs of small communities, particularly those supported by Activity 2.1.1., with the aim of improving local capacity to manage WASH systems under changing climate conditions. In these small communities, it will be advisable to strengthen the technical work with workshops led by mother facilitators, who will carry out the daily dissemination of good practices to ensure the proper use of sanitation facilities. This activity will be co-financed by GCF loan, and IDB loan.
- Activity 2.1.4: Development of a Strategy for Scaling-Up Investments This strategy will provide pathways for expanding successful interventions, leveraging additional funding, and ensuring long-term sustainability of WASH infrastructure improvements. It will include guidance on securing public and private financing to enhance resilience-building efforts in both small communities and larger cities. This activity will be co-financed by GCF loan, and IDB loan.
- Activity 2.1.5: Dissemination of Lessons Learned and Best Practices. Develop and distribute comprehensive documentation sharing insights and best practices from implemented sub-projects to inform future initiatives and promote knowledge exchange. This dissemination will include a focus on gender-sensitive water management practices, highlighting the roles and contributions of women and marginalized groups in fostering water resilience and climate adaptation. Case studies will be developed to showcase these contributions, ensuring that lessons learned reflect diverse perspectives and approaches to sustainable water management. . These will include conducting community-focused educational campaigns to encourage water conservation, including tailored messages for different sectors including households and agriculture. This activity will be co-financed by GCF loan, and IDB loan.
- Activity 2.1.6: Develop customized gender-sensitive capacity-building programs for women and marginalized communities on climate adaptation, water governance, and leadership. This will include providing resources for women's cooperatives focused on sustainable water use. This activity will be financed by an IDB loan.

47. **Output 2.2. Sub-projects focused on community and ecosystem-based adaptation for medium to large communities implemented.** This output aims to catalyze public sector investments in water and sanitation and solid waste services for larger communities, addressing barriers 5 and 6. Project will focus on strengthening climate resilience in existing or planned national and municipal water, sanitation and waste infrastructure. Waste infrastructure will generate adaptation benefits by reducing flood risks through improved waste management systems, preventing blockages in drainage, and enhancing water quality. Activities will include climate-resilient sanitation systems and waste management solutions, such as CO_2 sequestration and flood mitigation. The main activity foreseen is:
    - Activity 2.2.1. Implementation of sub-projects in medium to large communities, including project selection using eligibility criteria and stakeholder consultations. Sub-projects in medium to large communities will include i) the introduction of smart water meters and automated leak detections systems to monitor and minimize water loss; ii) monitoring water consumption patterns to assess impact of demand-side strategies over time for further improvement in water conservation efforts; iii) built solutions for water, sanitation and waste; iv) implementing rainwater harvesting systems in public spaces to reduce reliance on traditional water sources. This activity will be co-financed by GCF grant and loan, and IDB loan.
48. **Output 2.3. Novel technologies and small-scale adaptation measures on WSW sectors supported, aimed to strengthen resilience of small vulnerable communities.** This Output includes the following activities:
    - Activity 2.3.1. Analyze innovative financial mechanisms to generate EbA solutions, including identification, design and proposal of specific technical and financial mechanisms to promote private-public participation for financing implementation of EbA (Thematic Bonds, Water Funds, Parametric Insurances, PBCs, Guarantees). This activity provides technical assistance, please note that the identified mechanisms will not be financed by this Programme. This activity will be financed by IDB loan.
    - Activity 2.3.2. Develop a cross-cutting scorecard mechanism to assess, monitor and track the impacts of proposed investments towards achieving climate resilience, GHG reduction, gender and social inclusion and strengthened environmental health. This will include an environmental and social safeguards framework to manage potential environmental and social risks of proposed interventions. This activity will be financed by GCF loan.

- Activity 2.3.3. Develop and implement promotion and dissemination plans to support national institutions and/or NDBs to coordinate activities with other entities for direct investment in climate adaptation interventions and to educate society on the economic value, along with its importance. This activity will be financed by GCF loan.
- Activity 2.3.4. Strengthen stakeholders working in related areas WSW sectors, NBSs, etc. through actions aimed at: (i) optimizing financial resources allocation decisions, (ii) correctly assessing risk and opportunities associated with investments in businesses leveraged by ecosystem services and natural capital, and (iii) measuring and monitoring environmental and social impacts of funded ventures by using the scorecard mechanism. This activity will be financed by IDB loan.
- Activity 2.3.5. Design a program offering incentives, such as rebates for water-efficient appliances and subsidies for sustainable agricultural practices. These incentives will prioritize economically vulnerable communities, where adoption of water-saving technology is limited, to foster greater accessibility and uptake. This activity will be financed by IDB loan.

Output 2.4. Support provided for the origination, design, and deployment of adaptation measures in the WSW public sector, emphasizing EbA. This Output emphasizes allocating funds for the origination, design, and implementation of climate-resilient water projects that integrates natural ecosystems into water management infrastructure, leveraging the protective and regenerative qualities of wetlands, forests, and riparian buffer zones. EbA strategies will enhance flood control, improve water quality, and support biodiversity conservation while providing additional ecosystem services to surrounding communities. By increasing the concessional level of the finance required through a weighted average interest rate, it will facilitate the deployment of investments, making them financially viable for the public sector, and attractive for private investments in weighted average interest rate with private sector by providing incentives and derisking investment in some cases by covering the financial gap needed to make an investment feasible for private investors. The infrastructure projects, when possible, will consider universal design for persons with disabilities and ethno-engineering (cultural adaptation) for indigenous and Afro-descendant people. Measurable results will include the number of climate-resilient WSW sub-projects implemented, the volume of public financing mobilized, and the scale of nature-based solutions incorporated. Progress will be monitored using these indicators through regular performance reporting and tracking of sub-project specific outcomes. The activities under this Output include:

- Activity 2.4.1. Carrying out an assessment of WSW infrastructure projects in the region to develop and implement a strategic investment plan aiming to i) upgrade existing water, sanitation and solid waste infrastructure, ii) prioritize activities that enhance climate resilience in ongoing infrastructure projects, and iii) identify opportunities and develop a strategic financing plan for future climate-sensitive drinking water and sanitation investments in the Amazon Basin, and iv) identify cultural adaptation needs for diverse population groups, and v) conduct skills gap assessments to identify areas where local workers and institutions need more training. This activity will be co-financed by GCF and IDB loan.
- Activity 2.4.2. Establish 'Train-the-Trainer' program for local water utilities to operate and maintain these systems, ensuring a sustainable foundation for long-term maintenance of new systems. This activity will be financed by GCF loan.
- Activity 2.4.3. Climate resilient upgrades to infrastructure projects and projects involving incremental financing of climate resilient infrastructure in planned projects in the WSW public sector. This activity will be financed by IDB loan.
- Activity 2.4.4. Identify projects which incorporate large scale investments on natural-based solutions (including for example the ecosystem-based approach to adaptation), in the priority areas for drought management, flood control and aquifer recharge, and secure funding for their implementation through a strategic financial plan for public investment. This activity will provide the opportunity to pilot some of the innovative financial mechanisms referred in Activity 2.3.1., allowing the possibility of leveraging resources from private investors in demonstrative projects by cofinancing some of the activities (for instance, for the design and operation of a water fund, by contributing to the seed capital and/or investing in conservation activities). The nature-based solutions will include: i) wetland restoration for flood control and water filtration; ii) reforestation and riparian buffer zone creation; iii) protection and regeneration of aquifers through reforestation. All interventions under this Activity will collect and analyze scientific data and case studies to monitor the effectiveness and support adaptative management practices, ensuring continuous refinement and enhancement of EbA strategies for long-term resilience. This activity will be co-financed by GCF grant and loan, and IDB loan.

- Activity 2.4.5. Conducting training and capacity building of sectorial and finance public institutions of the riparian countries on climate finance mechanisms for climate adaptation projects. This includes training in innovative project finance, project structuring and public-private participation, aimed at enhancing the capacity of public institutions to attract and manage both public and private financing. The training sessions will integrate a gender equality and diversity inclusion approach for development projects. By improving the understanding of climate finance mechanisms, this activity is expected to increase both private and public financing for climate-resilient infrastructure. This activity will build on the success of the ACTO Regional Action Plan for Drinking Water, Basic Sanitation and Solid Waste Management. This activity will be financed by GCF loan.

49. ***Component 3: Promote capacity and develop an enabling environment for climate change planning and investment, regional exchange of data and information and transboundary cooperation mechanisms for water security***. This component will provide technical assistance directed to guide the development and adequate implementation of adaptation activities for WSW sectors, addressing Barriers 3 and 4. This component deploys technical cooperation aiming to assist in the improvement of the enabling environment for coordination among Amazon countries, including transboundary cooperation for water security, as follows:

- **Output 3.1. National and regional policies and institutional frameworks to foster an integrated approach to adaptation looking at the basin as a transboundary system enhanced**. Under this output, technical assistance will be provided to enhance national and regional policies and institutional frameworks to promote the development of investments in climate adaptation in WSW sector at regional, sub-regional and local levels, This enhancement will be defined through the adoption or revision of policies, regulations, and institutional frameworks that support climate resilience and low-carbon development, with a specific focus on water security, flood control, and drought resilience. The enhancement will be achievable and traceable through the following measurable changes:
    - Number of new or revised policies and frameworks that are enacted and promote climate resilience in the WSW sector.
    - Formal transboundary cooperation legal agreements and mechanisms established between Amazon Basin countries, with protocols for data exchange, monitoring systems and resource management.
    - Development of watershed transboundary master planning along with coordinated environmental and resource planning for enabling cross-border investments (i.e. Strategic Environmental Impact Assessment, stakeholder engagement and consultation frameworks or land use planning, among others.
    - Creation of financial mechanisms that support long-term investments in climate adaptation, including leveraging local and international green finance for ecosystem-based adaptation EbA and NbS.
    - Capacity-building efforts resulting in increased numbers of trained stakeholders (disaggregated by gender) who can access and manage climate finance.

  The conditions for achieving enhanced policies and frameworks include the formal adoption of policy reforms and cooperation agreements, the establishment of sustainable financing mechanisms, and the successful training of stakeholders across multiple levels of governance. These changes are 100% under the control of the AE and will be measurable through specific indicators, ensuring their traceability and success. Measurable Indicators:

  1. Number of new or revised policies and frameworks adopted at the national, regional, and local levels.
  2. Number of agreements and cooperation protocols established for transboundary water management between Amazon Basin countries.
  3. Amount of green and climate finance mobilized for adaptation projects as a result of new financial mechanisms.
  4. Number of stakeholders (disaggregated by gender) trained in accessing and managing climate finance.

- The baseline for this output will be established through a gap analysis (Activity 3.1.1), which will assess the current state of national and regional policies, financial mechanisms, and cooperation frameworks in the Amazon Basin. This analysis will identify existing gaps in transboundary cooperation, climate adaptation policies, and financing, providing a clear starting point for measuring progress. Activities under this Output include:

  Activity 3.1.1. Conduct a gap analysis of financial, institutional, and regulatory frameworks in each of the countries benefiting from the Programme to assess ways for more effective leveraging of local and international green financing for EbA projects in the WSW sector. The analysis will focus on identifying existing barriers and opportunities in each country's policies and institutional frameworks to facilitate

investments in climate adaptation projects. Based on the results of this analysis, policy reform recommendations will be developed to enhance investments in climate adaptation interventions. The recommendations will include a focus on strengthening water resilience and increasing the adaptive capacities of vulnerable communities facing high risks of droughts and floods, including indigenous peoples. The analysis will also integrate a gender-sensitive approach, ensuring that policy reforms promote gender equality in climate adaptation efforts. This activity will be financed by IDB grant.

Activity 3.1.2. Implement a capacity building programme at regional, national, and sub-national levels to optimize access to green and climate financing for WSW projects. The programme will be designed to build the financial and technical capacity of local and national stakeholders to plan, implement and mobilize financial resources for climate action with a focus on EbA and NbS. The capacity-building programme will incorporate a gender-sensitive approach to ensure that women and marginalized groups are included in the planning and decision-making processes for climate-resilient projects. In addition, the Programme will establish a regional platform or panel to track progress, facilitate knowledge exchange, and share best practices on climate-resilient and low-emissions investments in the WASH sector. This activity will be financed by GCF loan.

Activity 3.1.3. Assess regional data exchange mechanisms and protocols necessary to develop and maintain an Amazon hydroclimatic information platform for the access and exchange of hydrological and meteorological data. This platform will support early warning systems and regional planning for climate change adaptation, as envisioned in Component 1. The platform will enable real-time monitoring of weather and water conditions across the Amazon Basin, facilitating more effective management of floods, droughts, and other climate-related hazards. As part of this activity, procedures and data-sharing protocols will be developed to ensure the interoperability of the Amazon Regional Observatory (ARO) with new hydrological and meteorological modules. This will enable efficient data exchange among the basin countries, enhancing regional coordination and resilience-building efforts. This activity will be financed by a GCF grant.

Activity 3.1.4: Assess existing mechanisms for transboundary cooperation to improve resilient water management and reduce community vulnerability to climate change within the context of current institutional frameworks (such as the ACTO) and other bilateral/multilateral agreements. The goal is to identify, design, and propose new mechanisms and best practices for strengthening technical and institutional transboundary cooperation and coordination in the basin. Each proposed sub-project will clearly describe the adaptation benefits it brings, such as improved water security, flood control, or drought resilience, and align these benefits with relevant GCF result areas, including ARA2 (Health, Well-being, Food, and Water Security) and ARA4 (Ecosystems and Ecosystem Services). Projects will be categorized into areas such as NbS, EbA, green infrastructure, and WSW. Measurable GCF indicators, such as the number of beneficiaries, improvements in ecosystem resilience, or enhanced water availability during climate extremes, will be used to track and report progress. This activity will be financed by IDB grant.

This approach directly contributes to Outcome 3: Enhanced governance and a supportive environment for fostering climate resilience and low-carbon development in the Amazon basin.

50. The proposed interventions are organized by adaptation strategy. First, they aim to make water, sanitation, and hygiene systems climate-resilient (CR-WASH) to manage future droughts. Second, they enhance integrated water resources management (IWRM) by adapting to extreme events, restoring natural hydrological processes, and strengthening institutions. Third, they focus on improving flood resilience through integrated flood management (IFM), better monitoring networks, and early warning systems, promoting cross-border collaboration.
51. Programme Eligibility Criteria. The Programme seeks to support sub-projects that meet different eligibility criteria, as described in Annex 2 (Section 5). These criteria include (i) alignment with national-level policies that accelerate climate action and support the implementation of NDCs; (ii) alignment with local policies and institutional frameworks, which facilitates risk management for new technologies and investments in WSW sectors; (iii) contribution to improved transboundary water cooperation and management; and (iv) inclusion of sub-project specific metrics that tracks contribution to water security, climate adaptation and mitigation, paradigm shifts and sustainable development impact for each component related with WSW.
52. The Programme aims to enhance the climate resilience of the Amazon basin's water sector by developing sub-projects centered around five strategic interventions, each targeting specific goals. Goals include enhancing

resilience in surface water systems, reducing sedimentation risks, developing resilient groundwater systems, mitigating pollution risks, establishing robust, strengthening institutional adaptive capacity and climate financing to support these endeavors.

53. These coordinated actions are designed to strengthen the water sector's overall resilience. The sub-projects fall into several categories, such as NbS and EbA using green infrastructure, expanding coverage of WSW services through infrastructure-based adaptation, implementing good practices related to WSW, and enhancing monitoring and preparedness, including EWS. Together, these initiatives aim to create a systemic approach to tackling climate challenges in the region.

B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)

54. The Programme will be structured as a Regional Facility, supervised by the IDB as an Accredited Entity before the GCF. Once operational, through this facility, sub-projects that align with the Programme's objectives and eligibility criteria can be financed. At the sub-project level, implementation will be governed by IDB procedures and policies, with flexible schemes depending on the type of project and the financial instrument used. The IDB will annually share with the NDAs the Annual Progress Reports (APRs) that inform about the program's status in each country. Specific institutional arrangements depend on the type of project prioritized in the country, the area of intervention and the type of financial instrument (for example, the ability to contract loans, if necessary).
55. **Host Countries:** The Programme will be implemented in Bolivia, Brazil, Colombia, Ecuador, Peru and Suriname (the “Host Countries”). The Funded Activity will not finance activities or Sub-projects in countries other than these listed Host Countries. Inclusion of a new Host Country to the Funded Activity will require GCF’s approval.
56. **Sub-Projects:** Components 1, 2 and 3 will be implemented through a set of sub-projects approved by the IDB following its internal policies and procedures and in compliance with the Programme’s specific criteria that may consist of a single Activity or a set of Activities under the respective Components (“**Sub-Project**”). A Sub-Project can be financed by single or multiple Financial Instruments, including, in the case of Sovereign Investment Loans, Low Concessional Loans, as well as Investment Grants and Technical Cooperation Grants. There can be more than one Sub-Project in a Host Country.
57. Activities under Components 1, 2 and 3 are based on the terms and conditions set out in the Term Sheet of the Program. As provided in the Accreditation Master Agreement (AMA), the FAA will establish the requirements for the transfer, administration, and use of GCF Proceeds for the financing of the Programme. The IDB will be solely responsible for the management and administration of GCF Proceeds under its policies, procedures, and practices, following the provisions outlined in the FAA. In this context, IDB will provide management, monitoring, and supervisory mechanisms to maintain a transparent and effective administration of the Programme.

    a. The IDB, in its capacity as the AE, will enter into and supervise Subsidiary Agreements with the Borrower and/or Grantees pursuant to the terms and conditions of the FAA, once the relevant Sub-Projects are approved by the IDB (except in some cases of Sub-Projects executed directly by the IDB, as explained below). The Subsidiary Agreement will establish the applicable framework and conditions for executing each Sub-Project.

    b. Selection and approval of Sub-Projects**.** Following a formal request from a specific Host Country to the IDB, a Sub-Project will be prepared, assessed, and approved as an individual IDB project financed with GCF Proceeds and Co-financing under this Programme. Each Sub-Project shall be consistent with the objective, scope and activities of the Programme as established in Section B.3 of this Funding Proposal and aligned with one or more of the expected results, as presented in the Programme performance indicators in Section E.5. All Sub-Projects shall also be included in IDB programming and strategic dialogue with each Host Country, in the context of local government priorities and existing collaboration with the IDB. In order to maximize the use and desired impact of resources under this Programme, the GCF Proceeds could be leveraged with IDB´s ordinary capital funds and/or other donors’ resources combined under single sub-projects.

    c. The IDB will carry out all appropriate due diligence on each Sub-Project, including all checks and assessments on the Borrowers and/or Grantees, and if applicable, EE identified for such Sub-Project, in a manner that it ordinarily would carry out in any project/programme financed by the IDB and in accordance with the FAA. It is the responsibility of the IDB to ensure that EEs monitor and collect the

data required for the proper execution of the Monitoring and Evaluation Plan, in accordance with the corresponding sub-project. This data will then be integrated and reported at the programme level.

1.2 Contractual and Implementation Arrangements

58. Sub-Projects under the Programme will be executed through EEs. For the financing and implementation of the Sub-Projects, if the IDB is not the EE, the IDB will enter into the following Subsidiary Agreements with the relevant borrower ("**Borrower**") and/or grantee ("**Grantee**"), as applicable:

- Sovereign Investment Loan Agreements for Low Concessional Loan, and/or
- Non-reimbursable Technical Cooperation and/or Investment Grant Agreements.

59. **Guarantee Contract.** The Borrower shall be an eligible borrower (either the Host Country or public entities of the Host Countries) under the IDB policy. If the Host Country is not the Borrower of the Sovereign Investment Loan, in accordance with the IDB policy, a Sovereign Guarantee will be provided by the Host Country under a Guarantee Contract under which the Host Country, as the guarantor, agrees to be jointly, severally and unconditionally responsible for the financial obligations contracted by the Borrower in the Sovereign Investment Loan Agreement with respect to the GCF Reimbursable Funds. For example, if the Borrower in a Sovereign Investment Loan is an autarchic public entity (i.e., an autonomous public company) or a subnational government (i.e., a municipality or state) or a national development bank in the Host Country, in addition to the Sovereign Investment Loans between the Borrower and the IDB, the IDB will enter into a Guarantee Contract with the Host Country.[4] It is understood that private sector entities will not be eligible to be a Borrower and/or Grantee.
60. **EEs.** In respect of each Sub-Project, it is expected that the Borrower and/or Grantee will be the EE for the Sub-Project. If the Borrower/Grantee is the Host Country, the Host Country may act through one its sovereign organs or agencies as an EE.
61. There may be circumstances where a Sub-Project needs to be carried out, in whole or in part, by a separate legal entity different to the Borrower/Grantee. In such a case, the IDB and the Borrower/Grantee will jointly determine, and designate in the Subsidiary Agreement, the relevant third-party entity EE that will be responsible for the implementation of the Sub-Project. If the technical execution of the Sub-Project is to be carried out, in whole or in part, by a separate legal entity, the IDB shall establish the following contractual arrangement in the following order of preference:

62. **Option 1.** If permitted under the laws, rules, and regulations applicable to the Borrower and/or Grantee and third-party EE, the third-party EE will also sign the Subsidiary Agreement(s) to confirm its capacity and to agree on its role as EE, and its obligations as such established therein. The IDB will monitor and supervise that EE. This option will not preclude the existence of an additional agreement between the Borrower and/or Grantee and the EE for project execution ("Execution Agreement") on terms and conditions approved by the IDB.

63. **Option 2.** If Option 1 is not feasible, the Subsidiary Agreement(s) set out above will be signed by the Borrower and/or Grantee and the IDB and shall cause the Borrower and/or Grantee to engage the third-party entity through an Execution Agreement. The Execution Agreement will require the third-party EE to execute the Sub-Project by the Subsidiary Agreement. The IDB will be required to approve the Execution Agreement, and no amendments may be made to the Execution Agreement without IDB's prior written consent. Under this arrangement, the IDB will monitor and supervise the EE to perform its functions under the FAA, and the EE will report to the IDB.

64. **Option 3.** If the foregoing Options are not feasible, on a case-by-case basis regarding the relevant Sub-Project the IDB shall seek GCF's instructions on the implementation arrangement for that Sub-Project.

65. In any event, under the terms of the Subsidiary Agreement, the Borrower/Grantee will be accountable for all the actions and activities of the third-party EE. To this effect, the Subsidiary Agreement shall establish that all obligations of the Borrower/Grantee and the third-party EE shall be fulfilled to the satisfaction of the IDB. The Subsidiary Agreement will establish the remedies available to the IDB if the Sub-Project is not executed as required therein.

[4] Pursuant to IDB policy, this does not apply with regard to loans to development banks or agencies that have ample financial capacity to meet the obligations they would assume towards the Bank, provided that their charters include the provision that all the operations they enter into as borrowers are covered by a joint and several or subsidiary guarantee of the nation.

66. Subsidiary Agreements will contain provisions related to the financial terms and conditions, disbursements and use of resources, execution scheme of the Sub-Project, as well as to the supervision, monitoring, and evaluation of the Sub-Project corresponding to the necessary provisions to comply with the associated requirements and/or obligations set forth, as applicable, in the FAA. In addition, Subsidiary Agreements will require compliance with IDB's policies and procedures, as specified in such agreements.

EEs of Approved Sub-Projects

66. Following the effectiveness of the FAA for this Program, GCF Proceeds and Co-financing would be allocated by the IDB in the context of Sub-Projects. The assessment of the institutional and legal capacity and eligibility of EEs will be individually undertaken as part of the preparation process for each Sub-Project conducted by IDB and will follow IDB policies, procedures, and due diligence standards, including compliance with IDB's E&S policies

67. . Only after a Sub-Project has been approved by the IDB, may IDB enter into any Subsidiary Agreement with the relevant EE. IDB will inform the GCF prior to the disbursement by GCF to IDB for a specific Sub-Project, the contractual arrangement and structural options applied to such Sub-Project.

68. EEs must be legally established entities eligible in accordance with IDB policies and procedures. EEs will be responsible for the full execution of the Sub-Projects in accordance with the provisions of the Subsidiary Agreements and Execution Agreements, if applicable. Eligible EEs will be identified jointly with national governments based on the relevance of their public mandate to the Programme activities, experience in finance structuring and fiduciary management, and track record, including with the IDB, among others. EEs will be required to use applicable IDB's procurement policies for their use of GCF Proceeds and Co-financing. According to IDB procedures, a formal diagnosis of the EEs is required to assess legal and institutional capacity, fiduciary management, eventual execution risks and identify and implement mitigation measures.

69. As per IDB policies and procedures, prior to the approval of each specific Sub-Project, IDB's fiduciary team will perform and/or update an institutional capacity assessment on the corresponding EE. This assessment includes overall technical capacity, adequacy of information systems, internal and external controls, and recommendations on any fiduciary risks identified. When applicable, EEs with current or past execution agreements with the IDB for similar sectorial projects/loan operations in the Host Countries or in the Amazon Region could be considered to become EE for Sub-Projects under this Programme and their corresponding institutional capacity assessments may be waived. An indicative list of already identified EEs by country is presented below. Please refer to Annex 20 for detailed information.

Table 1. Indicative EEs.

Country	Indicative EEs
Regional	• Amazon Cooperation Treaty Organization (ACTO)
Bolivia	• Ministry of Environment and Water • Ministry of Development Planning • Ministry of Rural Development and Lands • Productive Development Bank
Brazil	• Ministry of Social Development and Assistance, Family and Fight against Hunger • Ministry of Regional Integration and Development • National Water and Basic Sanitation Agency • Ministry of Agriculture and Livestock • Ministry of Environment and Climate Change • National Bank for Economic and Social Development • Federal Savings Bank of Brazil • Sub-national EEs. Such as Brazilian Municipalities in Amazon territory (Belém, Paraupebas, Manaus, Pará, Parintins, among others).
Colombia	• Ministry of Housing, City and Territory (UPRAS, Unit for Infrastructure and Sanitation Planning) • Ministry of Health and Social Protection • Colombian Association of Aqueduct and Sewerage Companies (ACUANET) • Colombian Association of Sanitary and Environmental Engineering (ACISA)

	• Ministry of Environment and Sustainable Development (IDEAM, Meteorological and Hydrological Institute and Regional Autonomous Environmental Corporations) • Ministry of Agriculture and Rural Development • Development Bank of Colombia / Territorial Development Finance (FINDETER) • Business Development Bank of Colombia (BANCOLDEX) • National Development Finance
Ecuador	• Ministry of Public Health • Ministry of the Environment, Water, and Ecological Transition • National Water Secretariat • Ministry of Agriculture and Livestock • Ministry of Urban Development and Housing • Development Bank of Ecuador
Peru	• Ministry of Housing, Construction, and Sanitation • Ministry of the Environment (SENAMHI) • Ministry of Agriculture and Irrigation (National Water Authority) • Ministry of Health • Development Finance Corporation • Ministry of Economy and Finance (MEF) • Public-Private Investment Promotion Agency (Proinversión)
Suriname	• Department of Water Supply (DWV) • Suriname Water Supply Company (SWM) • Ministry of Natural Resources • Ministry of Public Works (MPW) • Ministry of Public Health • Ministry of Agriculture • Ministry of Territorial Policy and Forest Management • Suriname National Development Bank • Ministry of finance and Planning (PPP Unit)

70. IDB execution. The IDB may execute Technical Cooperation activities under Component 3 depending, for example, on the local context or high technical complexity of the activities. The determination of the IDB as an EE will depend on the specific Host Country context, preferences and capacity, among others. The execution by the IDB could enhance the quality control of the studies to be developed and would improve the efficiency and velocity in the design and execution at the Sub-Project level. When acting EEs, the IDB will apply its own policies and procedures, including its policies and procedures for the hiring of individual consultants and/or procurement of consulting and other services, ensuring the fulfilment of applicable FAA requirements.

B.5. Justification for GCF funding request (max. 1000 words, approximately 2 pages)

71. Public sector financing to build climate change resilience for water, sanitation, and waste services in the Amazon Basin is not readily available despite growing concern about the impacts of climate change on service delivery. In most cases, the responsibility for promoting safe water and waste management solutions lies with municipalities—institutions with little capacity to analyze the added risks caused by climate change, yet in territories much more vulnerable to the effects of droughts and floods, including indigenous peoples. Many climate adaptation interventions, although financially viable through service fees, impose an additional burden on beneficiaries who cannot afford them. Furthermore, projects with significant economic benefits but lacking financial viability struggle to obtain support from public or private institutions.

72. From a systemic perspective, efforts to promote water resilience in the Amazon Basin have been limited to small or medium-sized grants and technical cooperation projects. This support understanding socioeconomic, hydroclimatic, and ecological dynamics or large-scale planning but fails to catalyze investments or drive effective impact at the local or sub-basin scale. The systemic nature of the climate risks affecting the Amazon Basin requires a comprehensive intervention approach with actions that cover the entire system; this Programme was designed for that purpose. The nine Amazonian countries have experienced critical transformations in their water

resources over the past two decades, resulting in a trend of reduced water surface. For Bolivia, Brazil, Colombia, Ecuador, Guyana, French Guiana, Peru, Suriname, and Venezuela, the interval between 2013 and 2021 was identified as the period with the lowest water surface in the historical series analyzed (MapBiomas, 2023). The new challenges brought by climate change worsen the well-being of communities that migrate to urban centers and favor the depredation of forests by illegal activities, systematically depleting the strength of the Amazon rainforest as a global carbon sink, thus strengthening a vicious circle.

73. Development interventions need to consider additional costs to ensure systems are resilient to climate change. Therefore, concessional resources are needed to invest in prioritized “hotspots” with a critical need to improve the water resilience of local communities in the Amazon Basin. These interventions aim to improve the long-term adaptive capacities of riverine communities in the selected countries through more resilient systems with incremental costs that require GCF funds. Without this approach, communities are likely to face severe economic losses due to floods and droughts, increased exposure to the risk of floods and thermal shocks, and the loss of livestock and arable land, leading to forced migrations or ecosystem degradation.
74. Investments in traditional water infrastructure alone are insufficient for achieving climate resilience. The Green Climate Fund is crucial for funding the system's approach to technology, ecosystem-based adaptation, and governance components of the Programme. Without this support, countries cannot establish and operate adequate hydrometeorological services in a regional network necessary for the paradigm shift. The funding gap, particularly for adaptation, is a significant barrier to climate action. Without Green Climate Fund support, only a few financially viable interventions would be implemented in the lowest vulnerability and highest income regions, neglecting marginalized communities within the Amazon.
75. GCF funding grants for Component 1 will support developing and improving knowledge and understanding of the impacts of climate change on water security and raising awareness of extreme events that undermine the lives of vulnerable communities in the basin, including indigenous peoples. Component 2 focuses on the implementation of low carbon and climate-resilient WSW sub-projects and the identification of projects which incorporates investments on NbS.
76. GCF funding will not only target technical assistance and capacity building but also provide low concessional loans to enable investments by de-risking projects, especially in low-income regions. These loans will offer adequate terms and interest rates. First-loss grant resources will cover risks, such as lack of sufficient guarantees, that other actors cannot assume. The Programme also seeks to invest in nature-based solutions and disaster prevention, most of which generate climate benefits without direct financial returns. Without this level of concessionality, the Programme would not be viable.
77. Funding for Component 2, Output 2.2, is crucial to maximize the effectiveness of public funds in delivering key water, sanitation, and waste services, ensuring climate-resilient infrastructure, including financing for Ecosystem-based Adaptation (EbA). Cost recovery in the water cycle is very low in rural and peri-urban areas of the Amazon due to community poverty, making it nearly impossible to bear the additional cost of adaptation to increased resource scarcity from droughts or flood risks. This situation underscores the need for new financing formulas to reinforce existing mechanisms. The Financing Mechanism will catalyze investments in climate change adaptation interventions, providing a vehicle for better adaptation and demonstrating profitability to stimulate access to long-term sustainable financing in the environmental sector. It will highlight the importance of catalytic financing to incorporate climate change resilience into medium and large-scale infrastructure projects. Additionally, the cross-border cooperation of participating countries will raise awareness for more precise decision-making. Component 3 aims to advance awareness of opportunities and cost-effective financing for climate change adaptation interventions and to build an enabling environment for investments, potentially at the regional level. The success of this component can catalyze future investments in water management by scaling up financial resources for water and sanitation projects within the region, achieving a paradigm shift in water management. At this level, ACTO plays a fundamental role in ensuring cooperation and coordination among member countries. This component ensures the sustainability of the activities of Components 1 and 2 and is designed to improve the enabling environment from both policy and financial investment perspectives, providing long-term benefits for the region beyond the Programme's duration.
78. In conclusion, the proposed Programme addresses the urgent need for climate resilience in the Amazon Basin. Leveraging GCF funding, it aims to implement comprehensive, scalable solutions for systemic climate risks. The

multifaceted approach, including technical assistance, capacity building, concessional financing, and nature-based solutions, will enhance water security and climate resilience for vulnerable communities, including indigenous peoples, and create a sustainable, replicable model for climate adaptation. Improved governance, regional cooperation, and investment in climate-resilient infrastructure will ensure lasting impacts, better preparing the Amazon Basin for future climate challenges. GCF funding is crucial for this transformative initiative, promising significant environmental, social, and economic benefits and contributing to global climate resilience efforts.

B.6. Exit strategy (max. 500 words, approximately 1 page)

79. Successful implementation of Programme activities should translate into increased experience with EbA among governments and investors, leading them to further invest in EbA and NbS activities, as well as EWS. It is important to mention that this is a demand-driven Programme which has been requested by the Amazon countries to the IDB via the ACTO as the intergovernmental organization which brings formal governance and institutionality in the Amazon Basin. In its role to lead the implementation of the Amazon Cooperation Treaty signed by the Amazonian countries in 1978, the ACTO works at different levels (political-diplomatic, strategic and technical, coordination with civil society, scientific community, productive sectors and multilateral organizations) allowing an effective multi-scale and cross-border stakeholder engagement for a sustainable Programme preparation and implementation in a complex socio-economic, physical and political area such as the Amazon basin.

80. Moreover, the Programme will develop capacities in ACTO and the Host Countries, at national and subnational level, encouraging sustainability through dissemination of lessons learned, technology transfer, among other practices. Therefore, the Programme will rely on the ACTO and its member countries to maintain the governance and transboundary cooperation. The Programme implementation is expected to enhance sustained long-lasting cross-border water cooperation and improved water security investment planning at systemic and national/subnational levels. The sustainability of this Programme driving forces after its completion relies heavily in the dedicated efforts to strength institutional and technical capacities at regional and national levels for water governance, management, planning and investment.

81. The IDB will maintain its involvement in national sectoral policy dialogues and country offices, and its support provided through its extensive and expanding portfolio of technical cooperation and loan operations offered to the riparian countries of the Amazon basin. In addition, the IDB is the leading financial institution in the current Amazon context with an increasing commitment of financial resources through the IDB's Amazon Initiative and a leadership role in the regional Amazon Policy Dialogue. Both of which will bring synergetic activities that will support the sustainability of the enabling conditions catalyzed through this Programme. The Programme will be implemented under the scope of the Amazonia Forever, a holistic umbrella programme launched by the IDB Group in 2023 that aims at protecting biodiversity and accelerating sustainable development in three lines of action: expanding funding, boosting knowledge exchange, and facilitating regional coordination among the eight Amazonian countries.

82. To conclude, this Programme already considers several mitigation measures for its long-term sustainability, among others; (i) the strengthening of technical and institutional capacities of both the ACTO and national counterparts (technical and diplomatic bodies), with specific focus in the development and implementation of transboundary cooperation mechanisms (legal arrangements, management frameworks, planning tools, knowledge/data exchange), and developing and/or strengthening the capacity of Accredited Agencies in the Amazonian countries; (ii) leveraging synergies and resources with other ongoing IDB led programs in the region, as those within IDB's Amazonia Forever Program, including the GCF funded Amazon Bioeconomy Programme (FP173) (iii) built capacity over existing and upcoming technical-institutional efforts supported by IDB's water sector technical cooperations and loans specifically in the Amazon Region; (iv) explore synergies with ongoing activities led by the IDB's private branch (IDB Invest), other IDB related initiatives and instruments (IDB LAB or IDB Natural Capital Lab) for private sector engagement and the piloting of innovative financial mechanisms within the Programme, or other funds created by countries (i.e., Nature Smart Climate Solutions Fund or Americas Partnership Fund for Nature); (v) the collaborative work with NDBs to strength existing collaborations with public sector institutions and private investors to expand financial resource mobilization for water investments in the beneficiary countries; (vi) link the preparation and implementation of the Programme with

IDB's projects and initiatives to support Amazon countries to ensure mainstreaming of climate change into their cross-sector polices and planning within their respective commitments under the Paris Agreement.

C. FINANCING INFORMATION

C.1. Total financing

(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)	Total amount		Currency	
	162.15		million USD ($)	
GCF financial instrument	**Amount**	**Tenor**	**Grace period**	**Pricing**
(i) Senior loans	86.88	20 years	5 years	0.75 %
(ii) Subordinated loans	Enter amount			
(iii) Equity	Enter amount			
(iv) Guarantees	Enter amount			
(v) Reimbursable grants	Enter amount			
(vi) Grants	75.28			
(vii) Results-based payments	Enter amount			

(b) Financing information	Total amount	Currency
	229.28	million USD ($)

Name of institution	Financial instrument	Amount	Currency	Tenor & grace	Pricing	Seniority
IDB[5]	Grant	12.29	million USD ($)			Options
IDB	Senior Loans	216.99	million USD ($)	Up to 25 years[6]	SOFR based[7]	Options

(c) Total financing (c) = (a)+(b)	Amount	Currency
	391.43	million USD ($)

(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)

83. As it is a Regional Facility, there are no pre-allocated amounts for each country. Budget execution will depend on the subprojects effectively prioritized by each beneficiary country and the programme will be adapted to demand. In any case, it is important to highlight those conditions that will be established that favor equity in the allocation of the budget between countries, avoiding the concentration of resources in a single country and harmonizing the availability of resources.

84. For the reimbursable portion of the resources requested, participant countries will provide a sovereign guarantee, which covers the EE financial obligations under the loan (including repayment of principal, payment of interest and other financial charges).

85. Also, the Programme will leverage in-kind contributions from the operational and administrative working hours of staff involved in the development and

[5] IDB financing may include IDB's own resources or other funds administered by IDB (different from GCF resources). IDB loans financed with its own resources have flexible terms. Financial terms subject to agreements with each borrower and updated IDB terms. The estimated total amounts of IDB and other co-financiers are subject to the approval of allocation of such funds for each individual Sub-Project on a case-by-case basis and is contingent on such approvals being obtained and subject to the terms of the corresponding legal agreement(s).

[6] Under IDB FFF Investment Loans standard financial terms, the grace period is flexible as long as the Original Weighted Average Life (WAL) and Maturity Date does not exceed the limitations approved by the Bank; Maximum Tenor; 25 years, Maximum Wal:15.25 years.

[7] SOFR-Based interest rate comprised of: SOFR + IDB Funding Margin + Variable OC Margin. The IDB's Lending Rate is composed of 3 components, 1. SOFR rate applicable to the specific billing period, 2. IDB's funding Margin, average bank's cost to issue its debt (computed on a quarterly basis), which is expressed as a spread over SOFR and 3. IDB's Lending Margin. IDB publishes its Lending rate once a quarter, with the transition to SOFR, the periodicity of the calculation remains the same.

implementation of sub-projects funded by the Programme from both IDB and the EEs. These will be determined on a case-by-case basis, depending on various factors such as the type of intervention (i.e., the specific structure of components), the size of the loan or non-reimbursable allocation and the timeframe for implementation of each operation.

86. The Programme will complement existing initiatives, platforms, and actions by the IDB focused on the Amazon basin region and Ecosystem based Adaptation. Moreover, the IDB will map collaboration and partnership opportunities with government, private and civil society actors, working in the same or complementary areas of actions proposed, both at the country and regional levels.

C.2. Financing by component

Component	Output	Indicative cost million USD ($)	GCF financing		Co-financing		
			Amount million USD ($)	Financial Instrument	Amount million USD ($)	Financial Instrument	Name of Institutions
Component 1. Strengthening the knowledge base and information systems on climate change impacts and water security to enhance preparedness and response to extreme climate and slow-onset events.	Output 1.1. Amazon basin-level water resources mapping and knowledge integration with climate modelling improved	11.96	6.00	Grants	5.96	Grants	IDB
	Output 1.2. Climate Information and Early Warning Systems (CIEWS) enhanced	17.33	17.33	Grants	0	Grants	IDB
Component 2. Catalyze climate investments for climate-resilient and low carbon water supply, sanitation, and waste (WSW) technologies and infrastructure	Output 2.1. Sub-projects focused on community and ecosystem-based adaptation for small communities implemented	74.21	8.34	Grants	61.22	Senior loans	IDB
			4.64	Senior loans			
	Output 2.2. Sub-projects focused on community and ecosystem-based adaptation for medium to large communities implemented	143.55	0.51	Senior loans	131.08	Senior loans	IDB
			11.96	Grants			
	Output 2.3. Novel technologies and small-scale adaptation measures on WSW sectors supported, aimed to strengthen resilience of small vulnerable communities	11.90	5.50	Senior loans	6.40	Senior loans	IDB

	Output 2.4. Support provided for the origination, design, and deployment of adaptation measures in the WSW public sector, emphasizing EbA	104.06	12.55	Grants	18.29	Senior Loans	IDB
			73.22	Senior Loans			
Component 3. Promote capacity and develop an enabling environment for climate change planning and investment, regional exchange of data and information and transboundary cooperation mechanisms for water security	Output 3.1. National and regional policies and institutional frameworks to foster an integrated approach to adaptation looking at the basin as a transboundary system enhanced	8.98	1.50	Grants	4.48	Grants	IDB
			3.00	Senior loans			
Technical transversal cooperation		10.60	10.60	Grants	-	-	-
Project management		2.50	1.00	Grants	1.50	Grants	IDB
Monitoring & Evaluation		6.35	6.00	Grant	0.35	Grant	IDB
Indicative total cost (USD)		391.43	162.15		229.28		

C.3 Capacity building and technology development/transfer (max. 250 words, approximately 0.5 page)

C.3.1 Does GCF funding finance capacity building activities?	Yes ☒ No ☐
C.3.2. Does GCF funding finance technology development/transfer?	Yes ☒ No ☐

87. The introduction of innovative financing mechanisms and incentives in newly developed schemes underscores the need for specialized technical cooperation support to enhance capacity building. Capacity building, knowledge exchange and learning activities on green and climate funding access, at the national and international levels, will be developed within sectorial and public financial institutions. Moreover, capacity building for direct access entities and national designated authorities is crucial to foster climate action.
88. Awareness raising and continuous dialogue will be an important transversal element of the Programme to maximize the potential for dissemination and replication, targeting key audiences within national (including NDBs) and subnational institutions but also other public and private entities involved directly in climate action interventions. This will be important to demonstrate to society the economic value and importance of investments in coping with climate change too.
89. Knowledge transfer is considered essential to ensure that results are achieved, sustained and can be built-on over time. Particularly, EWS and regional data exchange mechanisms and protocols that are needed to develop and maintain Amazon Hydroclimatic information platforms, depend mainly on transboundary cooperation. As a standard practice, to enable further replication and upscaling of the approach, IDB is also committed to making knowledge and lessons learned available to national and subnational levels, including financial and development institutions. The Programme includes knowledge transference by observation and face-to-face meetings through publication of documents, workshops, webinars, and social consultations.

90. Moreover, the Programme is an opportunity for implementing clean technology in the WSW sectors. Each component presents a technical challenge that will stimulate sectoral innovation. For instance, major and minor water treatment and purification systems, improvement of the hydrometeorological monitoring network (P, Q), improvement of forecasting systems, landslide containment, stabilization of waste dumps and historical environmental liabilities, artificial recharge systems, new groundwater collections, natural water purification through ecosystem services, selective decontamination processes, among others.

D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section refers to the performance of the project/programme against the investment criteria as set out in the GCF's Initial Investment Framework.

D.1. Impact potential (max. 500 words, approximately 1 page)

91. The main impact of the programme is the increase in climate resilience and water security in urban and rural communities in the Amazon basin. The programme is based on a system vision that incorporates several intrinsically related components to address complex water security issues and the water sector's adaptive capacities. It will favorably impact the proportion of technical, social, positive, and significant environmental influences on the participating communities' quality of life and health. It is estimated that the programme will increase resilience to the negative impacts of climate change and improve the lives of the most vulnerable people.
92. This program's interventions benefit approximately 1.52 million inhabitants of the Amazon basin, of which around half are female. Of them, approximately 0.177 million people directly benefited from the interventions in the WSW sectors established in Component 2; and 1.16 million people directly benefited from establishing a cross-border EWS. For more details see Annex 22b.
93. The programme will contribute to the adaptation of the GCF to achieve a more resilient sustainable climate that can easily revert to higher altitudes in EbA and incorporate water-efficient technologies in all Amazon basins. The program's adaptation outcomes contribute to three GCF outcome areas: ARA2 Health, Safety, Food and Water Security and ARA3 Infrastructure and Built Environment and ARA4 Ecosystems and Ecological Services. For more details see Annex 2.

D.2. Paradigm shift potential (max. 500 words, approximately 1 page)

94. **Baseline situation and shift in the development pathway.** Climate resilient and low-carbon development pathways consistent with national climate change strategies and plans, will be achieved by enhancing technical capacities to support the development of projects and policies that promote climate resilience and water security in the Amazon Basin. By integrating hydro-climatic and ecological data, models, and projections into a transboundary information system, the programme will achieve the following improvements: (i) Enhanced capabilities for monitoring and mapping water resources will provide a comprehensive understanding of hydrological dynamics in the Amazon Basin; (ii) Identification and prioritization of sites for deploying early warning systems will be improved, enhancing preparedness and response to climate-related disasters; (iii) Improved analysis of the exposure and vulnerability of socio-ecological systems along with both current and planned infrastructure will inform better risk management and adaptation strategies; and (iv) The design and implementation of EbA solutions that enhance natural responses to extreme climate events will improve water cycle processes and increase community resilience. The paradigm shift will be carried out through actions that will focus on three strategic objectives: (i) improve the climate-resilient water supply, sanitation and hygiene including integrated drought management, (ii) Integrated Water Resources Management by enhancing the hydrological response of the catchments and (iii) integrated and transboundary flood management to reduce the vulnerability of the communities most affected by intensification of extreme rainfall.
95. **Sustainability of the programme outcomes.** The long-term sustainability of the programme considers measures related mainly to strengthening the technical and institutional capacities of both ACTO and host countries, disseminating lessons learned, and achieving a successful knowledge transfer. See sections B6 and C3 for further information.
96. **Potential of scalability and replication.** The proposed Programme is expected to have significant replication and scaling-up potential throughout the Amazon region by developing a fit-for-purpose finance facility with weighted average interest rate to channel investments in climate resilience into water and sanitation. This potential to shift the trajectory of future investment in water, sanitation and waste management is expected to be realized along four tracks: (i) Integration of climate risk management in regional policy combined with knowledge materials will promote dissemination and adoption of appropriate management strategies and standards; (ii) Development of climate-conscious management

tools (such as climate change risk modeling for water resources at a basin and localized level; early warning forecasting of extreme events); (iii) Demonstrating cost-effective and climate-resilient infrastructure, along with a portfolio of "best practices in the Amazon Basin" will provide the public sector with investments models to maximize climate adaptation and mitigation; and (iv) Build capacities for potential new Accredited Entities to the GCF in the Host Countries so that they can access financial resources directly.

97. **Contribution to knowledge and learning:** This Programme will address knowledge sharing and learning in three key areas: Component 1 advances the understanding of climate impacts on the hydrological system and its impacts on local communities (flooding, drought, water quality, etc.); Component 2 not only advances technical knowledge and understanding around new technologies and the use of EbA interventions to address climate issues, but also on knowledge around how to sustainably fund climate interventions; and, Component 3 builds awareness and knowledge at the political, financial, and community levels around the regulatory environment to further enable investments**.**
98. **Contribution to the enabling environment:** By providing technical assistance to enhance national and regional policies/guidelines and institutional frameworks, Component 3 has the potential to significantly advance enabling environments for investments in climate adaptation interventions at the community and national levels. These arrangements provide long-term continuation of the Programme beyond the completion of the intervention.

D.3. Sustainable development (max. 500 words, approximately 1 page)

99. The Programme will contribute to achieving seven of the 17 UN Sustainable Development Goals (SDGs). The main contributions will be SDG 13 – Climate Action; SDG 6 – Clean Water and Sanitation; SDG 11 – Sustainable Cities and Communities; and SDG 10 – Reduced Inequalities. In addition, the Programme will contribute to: SDG 1 – Poverty reduction; SDG 5 – Gender equality; and SDG 15 – Life on land. The expected positive environmental, economic, and social and gender of the Programme are outlined below.

100. **Social and economic co-benefits.** Improvements in children's health (Decrease in mortality rate due to infectious and parasitic diseases in children under 5 years of age). In LAC, acute diarrheal diseases are one of the main causes of childhood morbidity among low-income groups. Malnourished or immunocompromised children are at increased risk of life-threatening diarrheal diseases. The basic provision of safe water and sanitation in homes and workplaces improves access to hygiene and, therefore, health. Economic co-benefit is also related to improving children's health because of the savings in public health.

101. **Environmental and GHG mitigation co-benefits.** There will also be a mitigation impact over the lifetime of this program, estimated at a total of 7.97 million tCO_2e of which 7.75 million tCO_2e are derived from NbS activities within Component 2 that preserve and restore forest cover (For more details see Annex 22a Assessment of GHG emissions reductions). Moreover, conservation and restoration of forest lands improve other ecosystem services such as air purification, soil creation and pollination, among others.[8]

102. **Gender Co-benefits**: Targeted capacity-building initiatives will include a gender-sensitive approach, empowering women who are disproportionately affected by water-related challenges. By improving water access and management, the Programme can reduce the burden on women, who are often responsible for water collection in many communities and create opportunities for their greater participation in decision-making processes. Additionally, it would reduce school dropout rates among girls and adolescents of menstruating age by enabling them to manage their menstrual hygiene effectively at home and at school.

[8] The benefits of reducing gender inequalities are reflected as a co-benefit in this programme but at the same time they are a transversal element in the project. It is important to highlight that women in the Amazon region predominantly address health issues (including waterborne diseases), sanitation, water supply, and waste management at the household level. As WSW services are increasingly affected by climate change, women and girls are more vulnerable to abuse, attacks and poor health, affecting their ability to study, work and live with dignity (UN-Water, 2021). The Programme will help alleviate the growing adverse impact of climate change by providing these essential services for WSWs at home, school, work and in public places, supporting gender equality and considering the cultural and social particularities of local populations, especially Indigenous people, concerning their relationship with natural resources, to promote and facilitate innovative and flexible solutions from an inclusive point of view.

D.4. Needs of recipient (max. 500 words, approximately 1 page)

103. The Amazon Basin faces significant impacts due to increasing droughts, floods, and heat waves, all driven by climate change. These effects generate substantial costs to ensure safety from flooding and necessitate larger and more robust infrastructures for water, sanitation, and waste (WSW) services than previously planned and built.

104. Despite the diverse socioeconomic conditions across the countries in this Programme, all share vulnerabilities in the WSW sector. Water-intensive or water-dependent activities such as agriculture, livestock, and fishing, which are crucial for the livelihoods of many Amazonian inhabitants, are highly sensitive to temperature and precipitation patterns. This sensitivity underscores the region's vulnerability to climate variability.

105. The collective nature of the problem necessitates funding from public sources. However, current public budgets are inadequate because new hydrological conditions are surpassing the design parameters for existing infrastructures. Public sector financing to build climate resilience for Amazon's WSW services is insufficient to meet the increased demand. Adaptation to the adverse impacts of climate change is challenging to fund through private sector investments unless direct benefits, such as aquifer recharge for buffering climate impacts, are evident. This difficulty is particularly pronounced when funding natural infrastructure, ecosystem services, or stimulating private sector investments. GCF funding will focus on integrating climate resilience into ongoing activities and investments, demonstrating new sustainable technologies for WSW services for scaling up across the basin, and catalyzing policies and guidelines for long-term water security through climate risk management.

106. The strategic collaboration between GCF and IDB financing presents a unique opportunity to create synergistic effects and establish a precedent for blending interest rate to finance approaches to inclusively address climate change and sustainable development. This partnership will leverage GCF's resources to enhance the climate resilience of WSW services in the Amazon Basin, ensuring that these essential services can withstand and adapt to the evolving climate challenges.

107. The Programme will significantly advance seven of the 17 UN Sustainable Development Goals (SDGs), with primary contributions to SDG 13 – Climate Action, SDG 6 – Clean Water and Sanitation, SDG 11 – Sustainable Cities and Communities, and SDG 10 – Reduced Inequalities. Additional benefits include SDG 1 – No Poverty, SDG 5 – Gender Equality, and SDG 15 – Life on Land. Through these targeted contributions, the Programme will create substantial environmental, economic, social, and gender co-benefits, strengthening climate resilience in the Amazon Basin.

108. SDG 13: Climate Action. The Programme prioritizes climate adaptation, directly addressing the Amazon Basin's vulnerability to climate impacts. Through integrated water resource management, ecosystem restoration, and early warning systems, the Programme will reduce climate hazards, including floods and droughts, safeguarding critical ecosystems and livelihoods. These actions contribute to GCF's broader goal of enhancing climate resilience in developing regions, aligning with international commitments under the Paris Agreement.

109. SDG 6: Clean Water and Sanitation. By implementing water security measures, the Programme aims to provide safe, sustainable water resources to communities across the Basin. Initiatives include improving sanitation infrastructure, enhancing water conservation practices, and supporting water quality monitoring. These efforts will reduce waterborne illnesses, improve community health outcomes, and directly impact low-income, underserved populations. Access to reliable water and sanitation also alleviates the time burden on women and children, contributing to gender equity (SDG 5) and better education and health outcomes.

110. SDG 11: Sustainable Cities and Communities. Focused on resilience-building, the Programme will enhance urban and rural infrastructure in vulnerable communities. Climate-resilient infrastructure—such as nature-based flood defenses and sustainable urban drainage systems—will reduce the social and economic costs of climate impacts, promoting sustainable, inclusive development. These actions will benefit over 1.5 million people directly and create indirect benefits for millions more, including the protection of essential ecosystem services that sustain local economies and urban areas.

111. SDG 10: Reduced Inequalities. The Programme will reduce inequalities by prioritizing support for vulnerable communities, particularly Indigenous populations and women who are disproportionately impacted by climate change. Access to climate-resilient infrastructure and resources will empower marginalized groups, enhancing social inclusion and equitable access to water and sanitation services.

These actions support the GCF's aim to foster inclusive adaptation measures across all population groups, particularly in underserved regions.

112. Social and Economic Co-benefits. The Programme is expected to deliver substantial health improvements, notably in reducing mortality from infectious diseases among children under five—a significant issue in low-income communities due to inadequate water and sanitation. Safe water access, coupled with health improvements, is expected to reduce public healthcare costs. This economic benefit will allow resources to be redirected to other critical development areas, creating long-term social benefits, and enhancing community resilience.

113. Environmental and GHG Mitigation Co-benefits. The Programme will achieve a mitigation impact over its lifetime of 7.97 million tCO_2e, with 7.75 million tCO_2e attributed to nature-based solutions (NbS) that preserve and restore forest cover. Conservation efforts will not only sequester carbon but also improve ecosystem services such as air purification, soil formation, and pollination, supporting biodiversity and local agriculture. These environmental benefits reinforce the Programme's commitment to long-term climate resilience and sustainability, directly contributing to SDG 15 – Life on Land.

114. In sum, this Programme represents a holistic approach to sustainable development, enhancing environmental, social, and economic resilience across the Amazon Basin while supporting the achievement of critical global climate and development goals.

D.5. Country ownership (max. 500 words, approximately 1 page)

115. Ownership at the country level is crucial to ensure long-term results. Therefore, from the origin phase of the proposed Programme, alignment with national policies and priorities regarding adaptation and mitigation to climate change has been a priority. Since the creation of the Programme's concept note, the appropriation of the Programme has been promoted with all beneficiary countries and will continue during the implementation period. Brazil is the sole beneficiary country with a Country Programme for GCF, and it enhances our proposal through the involvement of processes and engagement with pertinent national stakeholders. Below is a summary table that lists the governing national instruments regarding climate change in the countries of this Programme.

Table 2. National decision-making policy instruments on climate change

Country	National decision-making policy instruments on climate change
Brazil	• National Adaptation Plan to Climate Change, May 2016[9] Adaptation objectives include: *Incorporate adaptation measures into the actions of the National Water Agency; *Develop hydroclimatic models and evaluate their impact on the management of water resources; * Identify/propose "no regrets" adaptation measures, targeted at enhancing capacity to respond of the National Water Resources Management System and at reducing vulnerabilities of the main water-user sectors, populations, and ecosystems to foreseen adverse effects. Brazil Country Programme for the Green Climate Fund – GCF, March 2018 (see point 2.2 about Country Programme development process and engagement of relevant national stakeholders). • Brazil presented its NDC to the UNFCCC on 03/11/2023 (4th update). • It has sectoral plans for adaptation to climate change defined by the National Policy on Climate Change (Law No. 12187/09) and its regulatory decree (Decree No. 7390). It must include an analysis of vulnerability and definition of mitigation measures. adaptation in its next updates.
Bolivia	• Law No. 300 (2012) regulated by Supreme Decree 1696 of August 14, 2013, regulates various aspects of climate change and environmental protection, including adaptation to climate change. Bolivia presented its NDC to the UNFCCC on 15/04/2022 (2nd update). Adaptation objectives include *Integrated management of water resources. Contribute to the population's adaptation by increasing water availability for human consumption through better coverage and supply. *Integrated Watershed Management. Increase the availability of water in quantity and quality, and the reestablishment of the environmental and water functions of the basins, through the implementation of protection actions, harvesting and planting of water, recovery of water bodies and ecosystems, and sustainable management of the territory as

9 https://unfccc.int/sites/default/files/resource/Brazil-NAP-English.pdf

	climate adaptation measures. * Formulation of the "Integrated and Sustainable Water Management Index -IGISA" to measure the development of resilience actions to ensure efficient use and access to surface and groundwater (aquifers) towards water security, based on the development of practices. of conservation.
Colombia	• National Plan for Adaptation to Climate Change: Lines of Priority Actions, February 2018 • Law 1931 of 2018 • Colombia presented its NDC to the UNFCCC on 30/12/2020 (2nd update). Its adaptation objectives include the preparation of 135 River Basin Management Plans formulated and/or adjusted with considerations of variability and climate change. With the aim of having basin planning and management instruments that contribute to reducing the risk and socioeconomic and ecosystem impacts associated with climate variability and change. • National Climate Change System (SISCLIMA)
Ecuador	• National Plan for Adaptation to Climate Change of Ecuador (2023-2027), March 2023 • The priority in terms of adaptation in the water sector is to manage the water heritage with a comprehensive and integrated approach by hydrographic unit to ensure the availability, sustainable use, and quality of the water resource for the various human and natural uses in the face of impacts. of climate change • Ecuador presented its NDC to the UNFCCC on 29/09/2019 Adaptation objectives include: *Implementation of a national information system for the water sector as a support tool for the management, monitoring and evaluation of the effects of climate change; * Generation and implementation of mechanisms for the economic and social assessment of the impacts of climate change in the water sector; * Incorporation of climate change criteria into national and sectoral strategies and plans for the water sector; * Inclusion of climate change variables in technical feasibility and the regulation and control of water resources. *Generation and establishment of mechanisms for the conservation of water sources and implementation of their management plans to ensure the quantity and quality of water in the future. Design and implementation of actions that contribute to increasing the adaptive capacity of water infrastructure (existing and new) for multiple uses
Peru	• Peru's National Climate Change Adaptation Plan: an input for updating the National Climate Change Strategy, July 2021 • Perú presented its NDC to the UNFCCC on 18/12/2020 (2nd update). The National Disaster Risk Management System is implemented, which establishes a cyclical model composed of four phases: i) risk analysis for the effects of climate change; ii) the formulation and systematization of the adaptation measures adopted; iii) the development of a strategy for the implementation of adaptation measures; and iv) monitoring and evaluation to measure progress in the implementation of adaptation measures.
Surinam	• Suriname National Adaptation Plan, June 2020 • Suriname presented its NDC to the UNFCCC on 9/12/2019 (2nd update)

Source: CEPAL 2015; UNFCC, 2023

D.6. Efficiency and effectiveness (max. 500 words, approximately 1 page)

116. The GCF funding will be partnered with IDB funding to catalyze investment in climate change resilient initiatives at both the small, and medium to large community levels. This financial structure is adequate and reasonable to achieve the Programme's objectives, as the national-level Trust Funds will facilitate pooling and blending capital from different sources with varying risk appetite and tolerance to offer a flexible and affordable range of financial products to eligible enterprises. This structure is expected to provide low concessionally to ensure the project is viable without crowding out other public investments. Also, the novel technologies showcased will be implemented in conjunction with both public and private enterprises to help develop expertise in the private sector helping to stimulate investment for both public and private sector financing, which will promote replication in other parts of the Amazon basin.

117. The economic analysis of similar investments as those intended under this Programme (BR-L1553 PROSAMIN, BR-L1508 – PROSAP, and BR-L1492) provide an Internal Rate of Return (IRR) of 32 to 39 percent for micro and macro drainage systems, canals and road systems, 16 to 66 percent for sanitary systems (household connection and collection network, and treatment) and 15 to 57 percent for water supply systems. The following cases demonstrate that through concessional loans we will be

able to achieve projects in all recipient countries. And all projects have financial rationale in at least one country.

Table 3. Indicative financial and economic profitability of interventions

Country	Area	Intervention type	Economic IRR	Financial IRR	DSCR
Bolivia	Urban	Water	32.47%	17.30%	1.91
*Bolivia	Urban	Sanitation	23.26%	4.67%	1.20
Brazil	Urban	Water	41.76%	26.48%	2.78
*Brazil	Urban	Sanitation	28.61%	11.14%	1.42
Colombia	Rural	Water	21.45%	11.04%	1.28
**Colombia	Rural	Sanitation	2.68%	-6.62%	0.28
*Colombia	Both	Green drainag	32.77%	3.82%	1.20
*Multiple	Both	EWS	99.53%	NA	NA
Ecuador	Urban	SWM	33.27%	8.40%	1.38
**Suriname	Urban	SWM	26.63%	-9.85%	0.85

IRR: Internal Rate of Return. DSCR: Debt Service Coverage Ratio. N/A: Not Applicable
*Requires concessional finance to achieve viability
*Requires additional concessional finance to achieve viability

Source: IDOM (2024)

118. These ten sub-projects (*Table 3*) are provided as an example to explain our concessional finance allocation. Projects marked with an * are funded through various structures of concessional finance that combine GCF Grants, GCF loans with low concesionality (1.25% Interest rate); and IDB loans (at 6.6% Interest rate). Eight out of ten projects achieve a DSCR above 1.2; Colombia Rural Sanitation and Suriname SWM cover operative expenses but require additional grant to achieve the desired threshold of DSCR above 1.2. The financial analysis considers that the DSCR should be above 1.2 to ensure repayment of debt in each case. For details see Annex 3 and Annex 3b.

E. LOGICAL FRAMEWORK

E.1. Project/Programme Focus

☐ Reduced emissions (mitigation)
☒ Increased resilience (adaptation)

E.2. GCF Impact level: Paradigm shift potential (max 600 words, approximately 1-2 pages)

Assessment Dimension	Current state (baseline)		Potential target scenario (Description)	How the project/programme will contribute (Description)
	Description	Rating		
Scale	Public sector financing for climate resilience in water, sanitation, and waste services across the Amazon basin is insufficient to meet growing infrastructure demands. Large-scale adaptation funding remains limited, particularly when scaling efforts basin wide. Financing natural infrastructure solutions is challenging due to the lack of short-term economic returns, while private sector investments are hindered by unclear profitability pathways. GCF funding will establish a finance facility, its interest rate will be weighted averaged with other funds, to mainstream climate resilience in water and sanitation investments by showcasing sustainable, innovative technologies with both climate and economic benefits, creating scalable models, particularly in high-need sub-basins, stimulating private sector investment by demonstrating profitability and integrating climate risk management into wastewater policies.	Low	Water, sanitation, and waste management services are now climate-resilient, reducing vulnerability to droughts, floods, and other climate crises. These improvements enhance water security, access to drinking water, and sanitation, benefiting vulnerable communities by improving health, livelihoods, and resilience. The Programme integrates adaptation and mitigation technologies from Latin America, accelerating learning and scaling across the Amazon Basin. Decision-makers recognize the combined benefits of EbA and grey infrastructure, reducing costs while supporting flood control and wastewater management. Latin American experiences are shared, guiding policymakers and local users, leading to climate-resilient policies. The Programme's finance facility supports scaling by showcasing investment models that attract private sector funding, creating sustainable pathways for long-term resilience across the Amazon	The Programme aims to achieve significant scale and replication potential across the Amazon by establishing a fit-for-purpose finance facility to channel investments into climate resilient water, sanitation and waste management. This long-term shift in investment will be achieved through three key tracks: i. Integrating climate risk management into regional policies, ensuring climate resilience is embedded in water and sanitation infrastructure planning. Knowledge materials and policy frameworks will be disseminated across the region to promote the adoption of standardized management strategies and best practices. ii. Developing climate-conscious management tools including climate change risk modelling for water resources and early warning systems for extreme weather events, to support informed decision-making at basin and local level. iii. Demonstrating cost effective and climate, climate-resilient infrastructure, supported by a portfolio of best practices from the Amazon Basin, will provide public sector models for maximizing climate adaptation and mitigation.

Replicability	Currently, there is limited knowledge of the potential impacts of climate change on water security, limiting awareness and decision-making support at different scales to incorporate planning for adaptation measures in urban and rural communities, including indigenous and traditional populations of the Amazon basin. Institutions at both the national and subnational levels have limited knowledge and/or technical capacity to effectively enhance the implementation of climate policies to specific sectoral investments or interventions, such as in water and sanitation or waste management. This, among other factors such as the lack of evidence of the effectiveness of adaptation actions, reduces the potential for replicability of this type of action in the WSW sector.	Low	ACTO member countries, with support from GCF, will strengthen national and regional capacities to adopt adaptation interventions. Institutions at both the national and subnational levels have knowledge and strong technical capacity to effectively reduce the implementation of climate policies to specific sectoral investments and interventions, such as in water, sanitation and waste management. The evidence of the benefits of actions that incorporate a combined approach of EbA with resilient infrastructure is concrete, clear and shows that they are a viable solution for adaptation to climate change. Therefore, these lessons, data and scientific information are exchanged at all levels and the conditions are met so that the actions framed within this programme are replicated in the region and beyond. The Programme will also utilize lessons learned from Latin American climate resilience projects (such as those highlighted in the IDB's Water Funds Program), transferring best practices into the Amazon Basin to accelerate replication.	The monitoring systems, early warning and decision-making tools that will be developed under Component 1 will improve knowledge of the impacts of climate change on vulnerable communities, including indigenous peoples, and key ecosystems and will remain as part of the national services of beneficiary countries. In this regard, efforts are being made to utilize 'cloud-based' solutions and build long-term capacities to assist with technical skills for programme replicability. The implementation of novel and EbA-based interventions under Component 2 (Output 2.1), supported by the finance facility, seeks to contribute towards financial viability, ensuring the long-term sustainability of the interventions and enabling continued replication across the region once concessional finance is phased out. Component 3 is designed to improve the enabling environment, both from a policy and financial investment perspective; and raise awareness and promote the success of Components 1 and 2. Component 3 will provide critical frameworks for the regional dissemination of these successful tools, ensuring scalability beyond the initial implementation sites. The improved enabling environment developed under this component is expected to benefit countries and the region long after the closure of this proposed program. The success of this component is key to the replicability of the project, not only within the Amazon Basin but also in other regions facing similar climate resilience challenges in the water and sanitation sector.
Sustainability	In its role of leading the implementation of the Amazon Cooperation Treaty signed by the Amazon countries in 1978, ACTO facilitates the effective participation of stakeholders across multiple scales and promotes cross-border cooperation for the sustainable implementation of the	Medium	There is sustained and robust cross-border water cooperation and improved planning processes for investments in water security at national/subnational levels. The sustainability of the driving forces of the Programme once completed is based on efforts to strengthen institutional and	The programme strategy and its financing vehicles have been designed to ensure commercial sustainability by creating investment models that scale up the availability of capital for climate resilience investments. The Programme avoids creating permanent dependency on external resources. It seeks to attract and scale up the availability of capital

	Programme. This participation is critical for addressing the complex socioeconomic, physical, and political challenges such as the Amazon basin. To further strengthen regional alliances, sustained dialogue, and shared climate scientific information, are necessary to ensure the long-term sustainability of these efforts and to protect the Amazon's natural resources and the well-being of its population.		technical capacities at the regional and national levels for water governance, management, planning and investment and the continued commitment of the IDB within the national water sector from a systematic approach.	over the long-term by creating successful business cases and addressing market gaps. The implementation of novel and EbA based interventions under Component 2 (Output 2.1) seeks to contribute towards financial viability and thereby ensuring long-term sustainability and continued replication, once concessional finance is phased out. Component 3 will strengthen water governance across the basin, creating frameworks to promote new financial and sustainable mechanisms to ensure the results of the Programme will last beyond the Programme implementation. Component 3's efforts in capacity building and knowledge-sharing will also ensure that these investments can be sustained long after GCF funding ends, with local institutions continuing to manage and scale adaptation interventions.

E.3. GCF Outcome level: Reduced emissions and increased resilience (IRMF core indicators 1-4, quantitative indicators)

GCF Result Area	IRMF Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions / Note
				Mid-term	Final[10]	
Total Programme Beneficiaries	Core 2: Direct and indirect beneficiaries reached	The MoV of each indicator is described in each of the ARA1-ARA4 Household surveys (baseline, mid-term, end-of-project), disaggregated	0	Direct: 0.24 million beneficiaries (approximately 50% female) Indirect: 0.50 million beneficiaries (approximately 50% female)	Direct: 1.52 million beneficiaries (approximately 50% female) Indirect: 4.15 million beneficiaries (approximately 50% female).	This indicator is the sum of all the beneficiaries reported in the different adaptation result areas (ARA1, ARA2, ARA3, and ARA4)

[10] The final target means the target at the end of project/programme implementation period. However, for core indicator 1 (GHG emission reduction), please also provide the target value at the end of the total lifespan period which is defined as the maximum number of years over which the impacts of the investment are expected to be effective.

		by gender and socio-economic status. GIS mapping for geographic coverage and indirect beneficiary identification (ARA1 and ARA4). Monitoring reports from Executing Entities (EEs) tracking direct beneficiaries (ARA1-ARA2). Community-based monitoring through focus groups and workshops (ARA1 and ARA2). Administrative data from local governments and implementing partners (ARA2-ARA3). Mobile-based reporting platform for real-time beneficiary tracking (ARA4).				

		Independent verification by third-party auditors at mid-term and project completion (all ARAs).				
ARA1 Most vulnerable people and communities	Core 2: Direct and indirect beneficiaries reached	Household surveys (baseline, mid-term, and end-of-project), disaggregated by gender, age, and socio-economic status. GIS mapping for geographic coverage to identify direct and indirect beneficiaries in vulnerable areas. Monitoring reports from Executing Entities (EEs) tracking progress and beneficiary reach. Focus groups and community consultations for qualitative data	0	Direct: 0.24 million beneficiaries (approximately 50% female) Indirect: 0.50 million beneficiaries (approximately 50% female)	Direct: 1.52 million beneficiaries (approximately 50% female) Indirect: 4.15 million beneficiaries (approximately 50% female)	The areas with the highest risks for floods and droughts have been identified (please see section 3.2.1 of Annex 2). The areas with the highest risk of flooding and droughts were identified using a Geographic Information System. The most vulnerable population lives in these areas. There are 9,682,296 inhabitants at risk for floods and droughts. All programme beneficiaries are vulnerable in terms of climate change (e.g., water insecurity, damages from climate change, poor sanitation, etc.) then, the final target of Core 2 under ARA 1 is the same 1.52 million for direct beneficiaries and 4.15 million for indirect beneficiaries of total programme beneficiaries.

		on vulnerable populations, including indigenous peoples.				
ARA2 Health, well-being, food and water security	Core 2: Direct and indirect beneficiaries reached	Health and sanitation reports from local and national health agencies, disaggregated by gender and age. Surveys and focus groups to assess improvements in access to clean water, sanitation, and food security. GIS data for mapping areas impacted by water and sanitation interventions. Monitoring reports from EEs capturing direct and indirect beneficiary data, with a focus on gender and vulnerable	0	Direct: 0.50 million beneficiaries (approximately 50% female) Countries: Bolivia 0.30 million Brazil 0.068 million Colombia 0.022 million Ecuador 0.013 million Peru 0.078 million Suriname 0.013 million Indirect: 1.00 million beneficiaries (approximately 50% female) Countries: Bolivia 0.073 million Brazil 0.91 million Colombia 0.001 million Ecuador 0 Peru 0.009 million	Direct : 1.52 million beneficiaries (approximately 50% female) Countries: Bolivia 1.00 million Brazil 0.22 million Colombia 0.07 million Ecuador 0.04 million Peru 0.25 million Suriname 0.04 million Indirect beneficiaries: 4.15 million inhabitants 2.1 million women Countries: Bolivia 0.30 million Brazil 3.80 million Colombia 0.005 million Ecuador 0 Peru 0.038 million Suriname 0	This indicator is the sum of all the beneficiaries from the different components. All programme beneficiaries are vulnerable in terms of climate change (e.g., water insecurity, damages from climate change, poor sanitation, etc.) then, the final target of Core 2 under ARA 2 is the same 1.52 million for direct beneficiaries and 4.15 million for indirect beneficiaries of total programme beneficiaries.

				Suriname 0		
ARA2 Health, well-being, food and water security	Supplementary 2.3: Beneficiaries (female/male) with more climate-resilient water security	Survey results and focus group discussions to assess improvements in water security, disaggregated by gender. Water security and infrastructure reports from national and local authorities. Monitoring data from EEs, including GIS mapping of areas benefiting from climate-resilient water infrastructure. Quantitative and qualitative data from community-level assessments to measure access to climate-resilient water sources	0	Direct: 0.0183 million beneficiaries improve their access to drinking water (approximately 50% female)	Direct: 0.0915 million beneficiaries improve their access to drinking water. (approximately 50% female)	ACTO estimates that a total of 22.5 million inhabitants do not have access to drinking water in the Amazon Basin, approximately 11.4 million women.[11] The means of verification will include the collection of primary information through focus groups or surveys of the local beneficiary population to collect quantitative and qualitative data. These mechanisms for collecting primary information will be designed to be representative of all beneficiary countries. The idea is to gather groups that combine authorities and direct beneficiaries to have a qualitative opinion on their water security. A survey will also be applied in the communities.

[11] Based on the assumption that 58.9% of the Amazonian population has access to drinking water (https://otca.org/la-declaracion-de-belem-y-la-gestion-de-los-recursos-hidricos-en-la-amazonia/)

ARA2 Health, well-being, food and water security	Supplementary 2.4: Beneficiaries (female/male) covered by new or improved early warning systems	Official reports from relevant ministries or national agencies responsible for hydrological and meteorological monitoring. ACTO reports documenting the progress of Early Warning Systems (EWS) coverage in the Amazon Basin. GIS analysis to map the areas covered by EWS, demonstrating improvements in water security and reduced climate risks. Regular monitoring and evaluation data from EEs to track EWS functionality and community benefits	0	Direct: 0.50 million beneficiaries (approximately 50% female)	Direct: 1.16 million beneficiaries (approximately 50% female)	Direct beneficiaries were calculated from the selection of population living under the 4 doppler radar coverage and the population at high risk of flooding (see Annex 2) up to 500km range from the doppler radar coverage within the corresponding subbasin. See Annex 22b for methodology and assumptions related to beneficiaries. Note: Section 4.1 of Annex 2 provides an analysis of the ministries responsible for conserving natural resources in each country. These will be responsible for providing the information necessary for monitoring this indicator.
ARA3 Infrastructure and built environment.	Core 2: Direct and indirect beneficiaries reached	Ex-ante and ex-post analyses	0	0 (no change, the interventions will not be completed by mid-term)	Direct: 0.177 million beneficiaries (approximately 50% female) Indirect: 0.15 million beneficiaries	Direct beneficiaries: maximum number of beneficiaries from the implementation of WAS and SWM, it could be one or more communities.

					(approximately 50% female)	
ARA3 Infrastructure and built environment	Core 3: Value of physical assets made more resilient to the effects of climate change and/or more able to reduce GHG emissions	IDB's Project Completion reports (PCRs) and Project Monitoring Reports (PMRs)	0	0	200 million USD	This is an initial target based on potential projects pre-identified at this stage. There is no value at midterm because physical assets will be delivered by project completion. Methodology for using the indicator will be developed before the initiation of project's execution. PCRs are normally prepared by IDB within the two years that follow the completion of a project. The PCR will be submitted to GCF within 3 months of project completion to comply with GCF guidelines. Throughout implementation, PMRs will be prepared regularly to monitor and report the value of physical assets made resilient, ensuring progress is tracked continuously.
ARA3 Infrastructure and built environment.	Supplementary 3.1: Change in expected losses of economic assets due to the impact of extreme climate-related disasters in the geographic area of the GCF intervention	Technical studies and reports utilizing qualitative and quantitative analysis	0 USD reduction in economic losses due to extreme impacts, compared to BAU infrastructure scenario.	0 USD reduction in economic losses at mid-term, as infrastructure will be completed by project end, enabling benefits to be measured only at completion.	20 million USD reduction in economic losses due to extreme impacts by project end, based on projected resilience benefits of completed infrastructure, as compared to the BAU scenario	Several studies and technical reports using estimates with quantitative and qualitative data indicate that adaptation actions have benefit-cost ratios ranging from 2:1 to 10:1 and, in some cases, even higher (GCA-WRI-2019; UNEP, 2021)*. However, there are no estimates that involve the type of infrastructure that the project proposes, and it must also be taken into account that these

						measurements will be made at the end of the project (7 years) for which a realistic reduction of 10% is proposed. Limited to the interventions area within the basin.
ARA4. Ecosystem and ecosystem services	Core 2: Direct and indirect beneficiaries reached	Reports from environmental agencies, national forestry services, or ACTO detailing ecosystem restoration and protection efforts. GIS-based assessments of ecosystem services and biodiversity enhancements, mapping the geographic distribution of beneficiaries. Monitoring reports on the ecological status of terrestrial and freshwater ecosystems, demonstrating improvements in ecosystem services. Surveys and assessments of local communities	0	0	Direct: 0.29 million beneficiaries (approximately 50% female) Indirect: 0.51 million beneficiaries (approximately 50% female)	The intermediate target is considered 0 since it is necessary to conduct studies before establishing NbS schemes. According to timeline implementation will not be completed at this point.

		benefiting from restored ecosystem services, disaggregated by gender where possible				
ARA4. Ecosystem and ecosystem services	Supplementary 4.1: Hectares of terrestrial forest, terrestrial non-forest, freshwater and coastal-marine areas brought under restoration and/or improved ecosystems	Satellite imagery and GIS mapping to track and verify the number of hectares of terrestrial forest, non-forest, freshwater, and coastal-marine areas under restoration or improved ecosystems. Reports from environmental agencies, ACTO, and national forestry services documenting restoration efforts and improvements in ecosystem health. Field monitoring reports and ecological surveys assessing the success of restoration projects, including biodiversity and	0	0	29,000 hectares under restoration and/or improved ecosystems	The intermediate goal is considered 0 since it is necessary to conduct studies before establishing NbS schemes. According to timeline implementation will not be completed at this point

		habitat improvements. Remote sensing data and forest inventories to validate changes in land cover and ecosystem conditions				

E.4. GCF Outcome level: Enabling environment (IRMF core indicators 5-8 as applicable)

Core Indicator	Baseline context (description)	Rating for current state (baseline)	Target scenario (description)	How the project will contribute	Coverage
Core Indicator 5: Degree to which GCF investments contribute to strengthening institutional and regulatory frameworks for low emission climate-resilient development pathways in a country-driven manner	Institutional frameworks and policies are not homogeneous among countries with a problematic enabling environment in the Amazon basin. Tables about (Differences and similarities in the legal framework between countries) in section 4.2 of Annex 2 Feasibility Study show which policy instruments are available in each country.	low	Institutional frameworks and policies are promoted which favor the development of investments in climate adaptation in WSW sector at a transboundary level	Component 3 will provide technical assistance directed to guide the development and adequate implementation of adaptation and mitigation activities for WSW sectors, enabling environment for coordination among Amazon countries, including transboundary cooperation for water security.	Multi-countries

Core Indicator 6: Degree to which GCF investments contribute to technology deployment, dissemination, development or transfer and innovation	The adoption of low-emission, climate-resilient technologies and other innovation mechanisms is scarce and is not homogeneous in the basin countries. For example, in terms of technology, the atlas of Amazon Observatory Networks of the Amazon Region shows 244 stations from three main hydrometeorological monitoring networks in five countries (see table 11 of Annex 2. Feasibility Study).	low	The adoption of new technologies and innovative solutions (such as NbS) and resilient infrastructure with an impact on critical areas of the basin are promoted.	Components 1 and 2 of the Programme encourage the adoption of technology and innovation, whether on EWS, WSW infrastructure or in financial innovation. The clear economic and environmental advantages offered by these actions serve to promote their replicability in the region.	Multi-countries
Core indicator 7: Degree to which GCF Investments contribute to market development/transformation at the sectoral, local, or national level	Barriers such as limited infrastructure, lack of financing, and insufficient technical expertise hinder the market development of Water, Sanitation, and Waste (WSW) solutions in the Amazon. The region's remoteness and dispersed population also make it	low	In the target scenario, improved data sharing, strengthened policy implementation, integration of Ecosystem-based Adaptation (EbA), access to concessional financing, and enhanced institutional capacities foster a supportive regulatory environment and cross-border cooperation, attracting private	The Programme will develop markets by improving regulations, enhancing data sharing, providing concessional financing, and attracting private investment in climate-resilient WSW solutions. Strengthened institutions and cross-border cooperation will ensure sustainable growth across the Amazon Basin. By showcasing successful climate-resilient infrastructure projects, the project will attract private investments and stimulate a market shift towards sustainability.	Multi-countries

	challenging to implement and scale sustainable systems. Despite these obstacles, WSW solutions hold significant potential in the Amazon, as they can improve public health, reduce environmental degradation, and enhance community resilience to climate change.		investment and driving sustainable market development for climate-resilient WSW solutions in the Amazon Basin.		
Core indicator 8: Degree to which GCF investments contribute to effective knowledge generation and learning processes, and use of good practices, methodologies and standards	Knowledge and practices are not homogeneous between countries, there are no methodologies or standards applied for the Amazon basin. Although ACTO has made progress in disseminating knowledge, it currently has limited data and capacity to forecast or provide early warnings of multi-hazard climate risks, combined with limited data sharing among basin countries. And there is also	low	Knowledge generation and good practices are shared between Amazonas countries and protocols for regional data exchange are developed	All the components of the Programme contribute to generate knowledge: C1 generating information to support planning and improvement of hydrological models. C2 Includes a “best practices” training program, dissemination of lessons learned from financial mechanisms piloted. C3 includes protocols for regional data exchange mechanisms as well as capacity building to optimize access to green and climate financing	Multi-countries

	limited knowledge of the impacts of climate change on water security.				

*GCA-WRI-2019. ADAPT NOW: a global call for leadership on climate resilience; UNEP, 2021. Adaptation gap report.

E.5. Project/programme specific indicators (project outcomes and outputs)

Project/programme results (outcomes/ outputs)	Project/programme specific Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions / Note
				Mid-term	Final	
Outcome 1. Increased climate resilience in water resources management through enhanced preparedness and response to climate extreme events in the Amazon basin						
Outcome 1. Increased climate resilience in water resources management through enhanced preparedness and response to climate extreme events in the Amazon basin	Created regional transboundary protocols for shared access and management of hydro-meteorological and water-security related data	Signed protocols, agreements, and MoUs between countries	0	3 protocols developed	5 protocols in place	Countries involved in the Amazon Basin have the political will and resources to support transboundary cooperation. Stable and effective regional governance structures (e.g., Amazon Cooperation Treaty Organization) exist to facilitate coordination and data-sharing. Technical capacity and infrastructure are available in each country to collect, manage, and share data. Stakeholders buy-in, including that of Indigenous Peoples and local communities, is secured for data-sharing protocols. Funding and ongoing support are available to maintain data-sharing systems and protocols after implementation.
	Integrated Water Multi-sector (Nexus) Management scheme	Reports from relevant sector agencies, annual reviews	0	Scheme designed	Scheme operational	Sufficient capacity and resources exist within sector agencies to support a multi-sectoral, integrated management scheme. There is a coordinated approach to address water, energy, and food security within the broader environmental and economic policy framework of each country. Local and national policies align with IWRM goals.

						There is stakeholder support from agriculture, energy, and water sectors, as well as from local communities, for the nexus approach. Mechanisms are in place for regular monitoring and review, allowing for adaptive management based on real-time data and annual evaluations.
Output 1.1 Amazon basin-level water resources mapping and knowledge integration with climate modelling improved	Number of improved or new modelling systems in the Amazonas Basin derived from the Programme	Water Resource Management Plans, Flood Delimitation Studies, other specific hydrological studies of basin management institutions in each country	0	New Modeling Systems Developed: 4 (These systems will be developed from scratch, focusing on tools like 1D/2D flood modeling, hydrological balance models, and sediment transport models.) Improved Modeling Systems: 3 (Three existing systems will be enhanced, focusing on expanding geographic coverage, integrating climate change data, and improving decision-making tools for the Amazon Basin.) Total for Mid-Term: 7	New Modeling Systems Developed: 6 (Two additional systems will be developed by the final stage, focusing on advanced hydrogeological models, groundwater quality diffusion, and more comprehensive flood control models.) Improved Modeling Systems: 4 (One additional system will be improved by the final stage, focusing on real-time data integration and basin-wide management tools.) Total for Final Target: 10	Numerical models and analytical tools for water security planning (i.e. hydrological balances, 1D/2D flood modeling, water quality and/or sediment transport/solid flow modeling, hydrogeological models and tools for aquifer management, quality diffusion, etc.). Although we quantify it in number of projects, these will try to add an area that doubles the current one modeled in real time in the medium term and quadruples it at the end of the Programme.
Output 1.2 Climate Information and Early	Number of new hydro-meteorological	Report of field observation visits, the EE will be	0	15 Number of hydro-meteorological /	35 Number of hydro-meteorological /	

Warning Systems (CIEWS) enhanced.	monitoring stations operating in the Amazon basin and reporting to an EWS	responsible for collecting the information and reporting to IDB		water quality monitoring stations in Amazon basin.	water quality monitoring stations in Amazon basin.	
	Number of countries with EWS implemented and operative	Report of the institutions responsible for the hydro-meteorological monitoring network in each country	0	0 (no change, the new regional EWS will not be fully operational at mid-term)	3 countries with EWS implemented and operative	Countries with new radar doppler functioning and associated with ACTO
	Number of variables-product for hydro-meteorological monitoring in all the Amazon basin, elaborated and disseminated in the ORA (ACTO) and National Meteorological and Hydrological Services, or Water Agencies in the specific period of every variable	Reports generated by the new ORA, and National Meteorological and Hydrological Services, or Water Agencies or deployment of functionalities of the web application that they will develop	0	At least 5 georeferenced variables related to measurements of precipitation, potential evaporation, soil moisture, level and river flows, evolution of deforested surface, evolution of mining, evolution of surface affected by fire or risk of landslides.	At least 10 georeferenced variables related to measurements of precipitation, potential evaporation, soil moisture, level and river flows, evolution of deforested surface, evolution of mining, evolution of surface affected by fire or risk of landslides, SPI in different temporal horizons, long term expected precipitation (seasonal), water quality variables, groundwater lever in aquifers, evolution of the sediment load in the water.	All variables at mid-term will be developed at the level of the entire basin and in case of final target value these variables could be developed in areas or sub-basins (km^2).
Outcome 2 Improved resilience, ecosystem services and carbon stocks of Amazon socioecological systems and livelihoods						
Output 2.1 Sub-projects focused on community	Number of small community sub-	Sub-project implementation	0	5 sub-projects implemented in	10 sub-projects fully implemented	Local governments and communities will actively collaborate, and necessary resources (technical

and ecosystem-based adaptation for small communities implemented.	projects implemented focusing on climate-resilient WASH (Water, Sanitation, and Hygiene) infrastructure	reports and field assessments and progress reports from community-level projects.		the most vulnerable small communities	across target countries by the end of the programme	and financial) will be available to support sub-project implementation
	Number of beneficiaries (disaggregated by gender) receiving improved WASH services through sub-project interventions	Beneficiary lists, disaggregated by gender and post-project evaluation surveys assessing access to improved WASH services	0	10,000 beneficiaries reached, with at least 40% women	20,000 beneficiaries reached, with at least 50% women, by the end of the programme	Communities will be receptive to and actively engage in the WASH infrastructure interventions, with attention to gender inclusivity
	Number of sustainable sanitation technologies and climate-sensitive waste management systems introduced in small communities	Project completion reports detailing sanitation and waste management systems and on-site inspections of implemented technologies	0	3 sanitation or waste management systems operational	6 sustainable sanitation or waste management systems in place by the end of the programme	Technical support for deploying sustainable sanitation technologies will be accessible, and communities will accept new systems.
	Number of community-based water retention and managed aquifer recharge (MAR) schemes implemented.	Project progress reports and assessments on water retention and MAR installations and water quality and quantity monitoring data	0	2 community-based water retention or MAR schemes operational	5 community-based water retention or MAR schemes fully implemented by the end of the programme	Communities will participate in water retention and recharge projects, and aquifer conditions will allow successful MAR implementation
	Number of local community members (disaggregated by gender) trained in best practices for WASH management under changing climate conditions	Training programme attendance logs, disaggregated by gender and post-training evaluations and participant feedback	0	500 community members trained, with at least 35% female participants	1,000 community members trained, with at least 40% female participants by the end of the programme	Local communities will be willing to engage in training, and gender inclusivity will be prioritized in capacity-building efforts
	Development of a scalable investment	Published strategy document outlining	0	Investment strategy drafted	Scalable investment	There will be sufficient interest from public and private investors to support scaling up WASH

	strategy for WASH infrastructure improvements in small communities	pathways for investment and reports on public and private financing secured for scaling up WASH interventions.		and presented to stakeholders	strategy fully developed and endorsed by stakeholders, with at least 3 new funding commitments by the end of the programme	improvements, and successful interventions will attract additional funding
	Number of lessons learned, and best practices documents disseminated across the Amazon Basin to inform future climate-resilient WASH initiatives	Published best practices reports and knowledge-sharing platforms and records of dissemination to relevant stakeholders and communities	0	2 lessons learned and best practices documents prepared and shared	5 lessons learned and best practices documents disseminated to all Amazon Basin countries by the end of the programme	There will be effective mechanisms in place for disseminating knowledge and best practices, and stakeholders will be engaged in learning from the sub-projects
	Total value of climate-resilient physical assets (e.g., WASH infrastructure, community-based water retention systems, sustainable sanitation technologies) implemented in small communities.	Sub-project infrastructure budgets and cost estimates, completion reports, and insurance valuations and post-project asset assessments	0	USD 2 million in resilient physical assets across all small community sub-projects	USD 4 million in resilient physical assets by the end of the programme	Local communities and governments will maintain infrastructure investments, and all assets will be fully functional and resilient to climate impacts.
Output 2.2 Sub-projects focused on community and ecosystem-based adaptation for medium to large communities implemented.	Number of ecosystem-based adaptation (EbA) sub-projects implemented in medium to large communities.	Sub-project progress reports and field assessments and completion reports documenting the implementation of EbA initiatives in selected communities.	0	3 EbA sub-projects implemented in medium to large communities	7 EbA sub-projects fully implemented across target communities by the end of the programme	Medium to large communities will have the necessary governance structures and capacity to implement EbA projects, with local governments actively supporting adaptation initiatives.
	Number of climate-resilient sanitation	Infrastructure project reports detailing	0	2 climate-resilient sanitation and	5 climate-resilient sanitation and	Local governments and service providers will prioritize climate-resilient infrastructure upgrades

	and waste management systems incorporated into medium to large communities' infrastructure sub-projects.	sanitation and waste management system upgrades and post-implementation inspections and evaluations of infrastructure resilience to climate change		waste management systems operational	waste management systems operational by the end of the programme	and have the necessary resources for implementation.
	Number of hectares impacted by NbS interventions aimed at improving climate resilience in medium to large communities (e.g., aquifer recharge, CO2 sequestration, flood and drought mitigation	GIS mapping data and ecological assessments and field verification reports confirming the impact on ecosystems and water security.	0	100 hectares impacted by NbS interventions	250 hectares impacted by NbS interventions by the end of the programme.	Suitable areas for NbS interventions will be identified and secured for project implementation, and communities will cooperate in land management efforts.
	Number of direct and indirect beneficiaries (disaggregated by gender) with improved water, sanitation, and waste services in medium to large communities.	Beneficiary records from project interventions, disaggregated by gender and post-project surveys and beneficiary feedback evaluations.	0	15,000 direct and indirect beneficiaries, with at least 40% women	30,000 direct and indirect beneficiaries, with at least 50% women, by the end of the programme	Community members will actively engage with project activities, and gender inclusivity will be ensured in service access and project planning.
	Reduction in flood risk and improvements in water quality due to upgraded waste management systems in medium to large communities.	Water quality monitoring reports and flood risk assessments and post-project environmental impact evaluations showing reductions in drainage blockages and flood incidents.	0	10% reduction in flood risks and water quality improvements in participating communities	25% reduction in flood risks and significant water quality improvements by the end of the programme	Waste management interventions will be implemented on time, and communities will maintain proper use of systems to prevent blockages and mitigate flooding.
	Number of best practices and case studies from other	Documentation of case studies and best practices	0	2 best practice case studies	5 best practice case studies integrated into	There will be successful knowledge transfer from the IDB initiatives, and the lessons learned from other regions will be applicable to the unique

	IDB initiatives (e.g., Water Funds Program) leveraged in the implementation of EbA sub-projects.	adapted for the EbA projects and reports on knowledge transfer and stakeholder consultations.		from the LAC region applied	sub-projects by the end of the programme	conditions of medium to large communities in the Amazon Basin.
	Number of stakeholders (disaggregated by gender) involved in consultations and project selection for EbA sub-projects in medium to large communities.	Stakeholder consultation records and gender-disaggregated attendance logs and project selection criteria reports, and stakeholder feedback.	0	300 stakeholders involved in consultations, with at least 40% women	600 stakeholders involved, with at least 50% women, by the end of the programme	Local stakeholders will be actively involved in the consultation process, ensuring broad participation from diverse groups, including marginalized and vulnerable populations, including indigenous peoples.
	Total value of climate-resilient physical assets (e.g., WASH infrastructure, flood defenses, climate-resilient waste management systems, ecosystem-based adaptation projects) implemented in medium to large communities.	Infrastructure project budgets and cost assessments, completion reports, insurance evaluations and infrastructure audits	0	USD 3 million in resilient physical assets across all medium to large community sub-projects	USD 6 million in resilient physical assets by the end of the programme	Local authorities and communities will collaborate to maintain and protect infrastructure investments, ensuring that assets remain resilient to future climate challenges.
Output 2.3. Novel technologies and small-scale adaptation measures on WSW sectors supported, aimed to strengthen resilience of small vulnerable communities	Amount of new available funding to strengthen resilience (USD)	Annual reviews of projects carried out by sector regulators (WSW), community-level reports on implemented technologies and measures, financial reports from the finance facility and project stakeholders.	0	USD 4 million: Dividing the Available Funding into Categories: Water Supply Technologies: Mid-Term: USD 1.5 million Sanitation Solutions:	USD 12 million: Dividing the Available Funding into Categories: Water Supply Technologies: Final: USD 4 million	Activities in vulnerable communities can be very atomized therefore it would be better to assess the impact of the global amount of new funds than by the number or typology of actions.

		Definitions and Categories of Novel Technologies and Small-Scale Adaptation Measures: Water Supply Technologies: • Rainwater harvesting systems. • Solar-powered water pumping solutions • Small-scale desalination units for remote communities Sanitation Solutions: • Climate-resilient latrines and sewage systems • Eco-friendly waste treatment systems, including composting toilets. Wastewater Management: • Decentralized greywater recycling systems • Small-scale constructed wetlands for wastewater treatment		Mid-Term: USD 0.8 million Wastewater Management: Mid-Term: USD 0.5 million Community-Based Water Retention Systems: Mid-Term: USD 0.7 million Flood and Drought Mitigation: Mid-Term: USD 0.3 million Climate Information Technologies: Mid-Term: USD 0.2 million	Sanitation Solutions: Final: USD 2.5 million Wastewater Management: Final: USD 2 million Community-Based Water Retention Systems: Final: USD 1.5 million Flood and Drought Mitigation: Final: USD 1 million Climate Information Technologies: Final: USD 1 million	

		Community-Based Water Retention Systems: • Managed aquifer recharge (MAR) schemes • Small dams or retention ponds for water storage during dry seasons Flood and Drought Mitigation: • Early warning systems for floods • Small-scale flood barriers and protective infrastructure Climate Information Technologies: • Mobile-based applications for climate data dissemination GIS-based tools for community-led planning and adaptation strategies				
Output 2.4 Support provided for the origination, design, and deployment of adaptation measures in the WSW public sector, emphasizing EbA	Number of new feasibility studies of large-scale projects funded which incorporate investments on EbA in priority areas	Reviews of feasibility studies from projects with EbA by environmental and housing institutions in each country.	0	Completion of 2 new feasibility studies that assess large-scale projects incorporating EbA in priority areas	Completion of 4 new feasibility studies that assess large-scale projects incorporating EbA in priority areas. 2 master plans for water security: These	Hectares under EbA and SbN intervention: The master plans will outline the specific hectares that will be restored or protected through EbA and SbN approaches.

					plans will include vulnerability assessments for climate change impacts and identify priority areas for EbA and SbN interventions.	
Outcome 3. Strengthened governance and enabling environment to foster climate resilience and low-carbon development						
Outcome 3. Strengthened governance and enabling environment to foster climate resilience and low-carbon development	Amount of green and climate finance mobilized for adaptation projects in the WSW sector, leveraging local and international funding for EbA and NbS.	Financial reports from local and international funding sources and documentation of secured climate finance (e.g., contracts, grants).	0	USD 100 million mobilized through financial mechanisms	USD 200 million mobilized through innovative financial mechanisms by the end of the programme	Global and regional financial institutions will remain committed to providing climate adaptation funding, and countries can access these funds effectively.
Output 3.1 National and regional policies and institutional frameworks to foster an integrated approach to adaptation looking at the basin as a transboundary system enhanced.	Number of new or revised policies and/or institutional frameworks presented and endorsed at the national, regional, and local levels promoting climate resilience in the WSW sector.	Official policy documents, legislative approvals, and national/regional government reports and meeting minutes from stakeholder consultations and policy revision workshops.	0	5 new or revised climate-resilient policies and frameworks enacted by year 2	10 new or revised climate-resilient policies and/or institutional frameworks developed, presented, and endorsed by the end of the programme.	Governments and stakeholders are willing and capable of adopting and revising policies in a timely manner with adequate technical support.
	Number of operationalized policies and frameworks actively supporting climate resilience in the WSW sector.	Implementation reports, government action plans, integration into national budgets.	0	3 operationalized policies by year 2	8 operationalized policies by the end of the programme.	Governments are committed to implementation and integration of policies.
	Degree of integration of climate-resilient policies into	Reports from sectoral ministries, integration into national plans and	0	50% of policies integrated by year 2	100% of policies integrated by the end of the programme.	Stakeholders collaborate to integrate policies into national planning.

	national development and water management plans.	strategies, budget allocations.				
	Number of formal transboundary cooperation mechanisms established between Amazon Basin countries, including data exchange and resource management protocols.	Signed cooperation agreements and data-sharing protocols and reports from transboundary water management committees and regional organizations like ACTO.	0	2 formal transboundary cooperation mechanisms established, with preliminary data exchange protocols by year 2.	5 formal transboundary cooperation mechanisms in place, including established data-sharing protocols by the end of the programme.	Basin countries will continue to engage in dialogue and collaboration despite potential political and economic changes in the region.
	Effectiveness of transboundary cooperation mechanisms in influencing policy decisions on water management.	Meeting minutes, joint policy actions, transboundary cooperation platform reports.	0	2 mechanisms influencing decisions by year 2	5 mechanisms influencing decisions by end of the programme.	Continued regional cooperation on transboundary water management.
	Number of stakeholders (disaggregated by gender) trained in accessing and managing climate finance for adaptation projects.	Training attendance records, disaggregated by gender and post-training surveys and evaluation reports.	0	250 stakeholders trained, with at least 35% women participating	500 stakeholders trained, with at least 40% being women or from marginalized groups.	Adequate local capacity and willingness exist to participate in training, and gender inclusivity will be supported by the involved institutions.
	Establishment and operationalization of an Amazon hydroclimatic information platform to support real-time monitoring and early warning systems.	Platform development and operational reports and data-sharing agreements between countries.	0	Hydroclimatic information platform developed and in testing phase	A fully functional hydroclimatic information platform covering all Amazon Basin countries	All Amazon Basin countries will contribute data and actively participate in the development of the platform, and technical infrastructure will be available.

	Number of new mechanisms or improved existing ones for transboundary cooperation to enhance water management resilience.	Official cooperation documents, sub-project proposals, and institutional reports and meeting minutes and agreements between regional institutions	0	1 new or improved transboundary cooperation mechanism operational	3 new or improved transboundary cooperation mechanisms implemented	Political stability and continued willingness of countries to cooperate on transboundary water management will enable the establishment of new mechanisms.
Project/programme co-benefit indicators						
Co-benefit 1	Improvements in children's health (Decrease in mortality rate due to infectious and parasitic diseases in children under 5 years of age)	National epidemiological surveillance systems and https://platform.who.int/	3.5 Average % mortality in children under 5 years old	1%-rate reduction	2%-rate reduction	The baseline is estimated by calculating the infant mortality percentages for the basin countries for which the WHO has data.
Co-benefit 2	Increase in carbon sinks due to restorations carried out	Remote sensing, allometric models and forest inventories	0	0	7.75 million tCO_2e are derived from NbS activities within Component 2 that preserve and restore forest cover	As for reforestation, the absence of vegetation is assumed, therefore the baseline is considered zero.
Co-benefit 3	Decrease in time women and girls spend on water supply and sanitation activities.	Intermediate and final survey (qualitative or quantitative approach) on reduction of hours dedicated to carrying water	3.5-20 hours/week	5%-time reduction	10%-time reduction	With the interventions, more water will be available, and the time spent carrying water will be reduced by at least 10%. This means freed up time to dedicate to paid work and increased income.
Co-benefit 4	Decrease in school dropout rates among girls and adolescents of menstruating age due to improved	Intermediate and final survey (qualitative or quantitative approach) on	4 days a month	2 days a month	0 days a month	With the interventions, girls and adolescents will be able to manage their menstrual hygiene effectively at home and at school, enabling them to attend classes during their menstruation. It has been observed that dropouts can average four days per month, which serves as a baseline.

	management of menstrual hygiene at home and at school.	reduction of school dropout				

E.6. Project/programme activities and deliverables

Activities	Description	Sub-activities	Deliverables
Activity 1.1.1 Regional hot-spot analysis of the western region of the Amazon sedimentary aquifer system	Regional hot-spot analysis of the western region of the Amazon sedimentary aquifer system, including an aquifer vulnerability assessment to climate change and to contamination from anthropogenic (Mercury) and non-anthropogenic (Arsenic); and surface-groundwater dynamic modelling for better understanding of aquifer recharge natural patterns and functionality in at least three (3) priority areas	• Generation of the conceptual model of aquifer behavior. • Downscaling of hydrological models in the area (e.g., HMS) to determine potential infiltration in recharge areas. • Construction of the dynamic numerical groundwater model with contaminant transport module. • Generation of scenarios and sensitivity analysis of the model.	Characterization of 3 aquifer systems: • Conceptual model of the aquifer behavior • Downscaling of hydrological models • Dynamic numerical groundwater model with contaminant transport module. • Scenarios and sensitivity analysis of the model.
Activity 1.1.2 Conduct studies to characterize the climate impacts on river dynamics of priority Amazonian rivers.	Conduct studies to characterize the climate impacts on river dynamics (including surface and groundwater interactions by a combination of hydrological and hydrodynamic modelling) of priority Amazonian rivers	• DTM and bathymetry • 2D hydrodynamic model to reproduce river flooding according to climate change scenarios. • Development of precipitation and hydrology scenarios for flooding or drought • Linking of fluvial hydrodynamic and hydrogeological models where there is a need to assess the effects on water intakes under drought scenarios. • Inclusion of gender perspective on the use and management of water resources.	2 Studies of river dynamics of major vulnerable rivers
Activity 1.1.3 Develop a centralized, regional information system linked with hydro-meteorological monitoring stations using real-time water balance models	Support of a regional water resources information system, through water balance modelling, linked to hydro-meteorological monitoring stations to enhance river forecasting and with specific modelling capabilities for incorporating climate change and water demand scenarios that include groundwater where possible.	• Expansion of hydrological modeling at the sub-catchment level with prioritization in areas of severe impacts: deforestation, occupation of riverbeds, presence of open-pit mining, slope destabilization, etc. • Development of hydrological models for various work scenarios. Incorporation of meteorological scenarios of climate change. • Construction of water resources management models to determine the series of available natural resources and	• Regional hydrological models with climate change scenarios and long term probabilistic meteorological predictions. In some cases, it could be developed by the leveraging upon on going regional modeling efforts in the Amazon as the regional HydroBID) model in development or other regional modeling platforms as the WMO's HydroHUB or HydroSOS (https://wmo.int/activities/global-

		series altered by uses or water balance series. • Construction of hydrological prediction models fed by short- and medium-term meteorological predictions to determine the evolution of resources in the coming days or weeks. • Construction of hydrological prediction models fed by long-term probabilistic meteorological predictions to detect anomalies of excess or deficiency of resources at the seasonal level.	hydrometry-support-facility-wmo-hydrohub) • 6 Numerical models for planning, hydrological balance, determine flood zones, sediment transport, aquifer management, quality diffusion, etc. Although we quantify it in number of projects, these will try to add an area that doubles the current area modeled in real time in the medium term and quadruples it at the end of the Programme.
Activity 1.1.4 Strengthen water quality monitoring capabilities by combining global remote sensing datasets with continuous local monitoring networks	Support water quality monitoring systems by a combination of international remote sensing datasets (i.e., Sentinel, Modis, Landsat, RapidEye)	• Development/Implementation of quality parameter algorithms through remote sensing. • Construction of the systematic quality determination model through satellite images and generation of alerts.	Model for water quality determination through satellite imagery and generation of alerts implemented.
Activity 1.2.1 Advance priority monitoring stations for an integrated flood and drought management system	Advance priority monitoring stations under the Amazon Project for an integrated flood and drought management system to mitigate flood and drought events for vulnerable communities, including indigenous peoples, and establish at least 35 additional stations to be prioritized jointly by the countries from a transboundary perspective coordinated by ACTO. Get a sufficient density to incorporate climate and hydro-meteorological modelling for flood and drought forecasting at a regional and sub-systems level- thereby improving the reliability of forecasting and enhancing EWS for vulnerable communities, including indigenous peoples. This activity will also include the implementation of monitoring protocols to be used in flood and drought risk and impact assessment	• Selection of the most relevant river points for control through the system • Definition of variables to measure, technology selection, and determination of energy requirements, communication systems, and auxiliary elements for operation, calibration, continuous testing (e.g., limnimeter, flow measurement elements, etc.), and maintenance. • Construction of control points, equipment installation, calibration, and commissioning. • Drafting of operation, calibration, maintenance, communication, information sharing protocols, etc., adapting them to international recommendations (such as WMO) and requirements of each member country's hydro-meteorological institution, as well as the needs of the ORA (ACTO) to incorporate this data into its regional monitoring system. • Acquisition of complementary elements for hydro-meteorological national services that will assume the points in their control networks.	• 15 hydro-meteorological monitoring stations. • 20 water quality monitoring stations • 4 Doppler radars

Activity 1.2.2 Development of data processing center for the Amazon basin, integrated to ORA	Development of data processing center for the Amazon basin, integrated to ORA, with cloud-based access, which would include promoting basin level models such as Flash Flood Guidance System (FFGS) or NASA's GEOGLOWS. This includes developing information and visualization control rooms where needed.	• Development and implementation of drought/flood management systems and protocols for operational management models • Identification of infrastructure (hardware) and platform (software) needs in ORA to meet the information, knowledge systems, and early warning requirements across the Amazon basin. • Build or improve a common IT platform to store monitoring, deduced, or forecasted data and facilitate the implementation of cross-border query tools, report generation, and dashboards. • Design and implementation of the necessary IT and cybersecurity adjustments for the expansion of ORA services in surveillance and forecasting. • Acquisition or expansion of system backup services in the cloud through a reputable and proven provider. • Definition of specific functionalities for information visualization, alert construction and management, information analysis systems (Business Intelligence), reporting systems, transparency and bidirectional communication exchange requirements between ORA and member countries' institutions. • Training and reinforcement of human resources dedicated to operating the system at ORA.	1 transboundary EWS for floods and drought implemented
Activity 1.2.3 Dissemination of gender & socially inclusive advisories	Dissemination of gender & socially inclusive advisories that contemplate most vulnerable populations, including indigenous peoples, to improve forecasting functionality.	• Characterization of the main ethnic groups involved, communication means used in the area, associations, trade unions, NGOs, and activists operating in the most vulnerable communities, as well as community leaders and levels of indigenous autonomy in each country or area. • Development of an adaptation programme for the different communities benefiting from the Programme, including languages, messages, media, dissemination means,	• Adaptation programme for isolated communities • Adaptation programme for non-isolated communities • Cultural adaptation and translation programme for Indigenous communities

		and graphic content to convey risks, actions, alerts, as well as key communicators and decision-makers in local communication. • Generation of inclusive communication content, respectful of indigenous communities, minorities and gender. • Development of the communication protocol and transmission of hydrological alerts in the territory. • Facilitators training and protocol implementation. • Generation of cultural adaptation communication content, considering women and diverse population groups. • Translation of communication material into indigenous languages spoken in the areas of the projects. • Adaptation of communication material for people with disabilities. • Development of the communication protocol and transmission of hydrological alerts in the territory. • Facilitators training and protocol implementation. • Characterize the population socio-demographically, with disaggregation by gender, PwD, PI, AD, and LGBTQ+. • Identify the different languages spoken in the areas of influence, to use them in the dissemination of alerts.	
Activity 1.2.4 Implement community-based participatory monitoring programs, enabling trained local groups to collect and report data on water consumption patterns, water quality, and climate impacts	This data will feed into the central M&E system, ensuring that local perspectives contribute to decision-making processes and enhance the overall effectiveness of the forecast and early warning systems.	• Desing the community-based participatory monitoring program • Train local groups to collect and report data. • Start implementation with a pilot community. • Establish a central repository of information reported	• 1 training for communities by country • 1 pilot community by country collecting and reporting on water consumption patterns, water quality and climate change impacts
Activity 2.1.1 Implementation of sub-	Implementation of sub-projects in small communities, including call for proposals project selection using the eligibility criteria,	• Mapping and prioritization of areas with the greatest need/impact to implement the	• 1 sub-project for communities with less than 10,000 inhabitants that

projects in small communities	stakeholder consultations on project selection.	majority of typologies of works based on natural solutions and particularly EbA. • Contact and negotiation with local leaders and small service providers (river transportation, materials, translators, social agents, etc.). • Verification and adjustment for projects in areas with environmental protection designations. • Drafting of each sub-project and social consultation. • Development of solutions and sub-projects • Training of collaborators if necessary and workshops to raise awareness and communicate the benefits of the project. • Cultural adapted training for diverse populations groups. • Including women, persons with disabilities, indigenous, afro descendant and LGTBQ+ population in the trainings and workshops	implements EbA, water and sanitation solutions, for each country. • 1 sub-project for communities with less than 10,000 inhabitants for solid waste management, for each country • 12 training workshops • 6 social consultations • Training with cultural adaptation for diverse population groups
Activity 2.1.2 Design and implement community-driven water resilience projects specifically led by women and Indigenous groups	These projects will focus on critical water resilience efforts such as rainwater harvesting, wetland restoration, and small-scale water recycling systems. By empowering marginalized communities, particularly women and Indigenous populations, to take leadership roles in these projects, this activity will foster local ownership and ensure that adaptation measures are tailored to the specific needs and knowledge of these groups	• Selection of the communities and water resilience projects to be implemented. • Guide women and indigenous groups. • Design activities to empower marginalized communities (women and indigenous people)	• 1 community-driven water resilience project led by women and indigenous people implemented by country
Activity 2.1.3 Develop a customized "Amazonia Best Practices" training program	Develop a customized “Amazonian Best Practices” training program.	• Selection of the most relevant actions in terms of impact and/or learning. • Compilation of recommendations and technical improvements in planning, design, implementation, and maintenance of each type of intervention. • Compilation of recommendations and improvements in the social and gender approach and management of small communities to ensure the success of these types of interventions in small communities.	• 6 documents of lessons learned, recommendations, risks. • 1 Document of “Amazonian best practices”, with gender and diversity perspective • 6 community champions (including women and diverse populations)

		• Listing of threats and risks detected in the implementation of the actions. • Consolidation of learnings, recommendations, and improvements into a guide on "Best Practices for Climate Change Adaptation and Water Resilience in the Amazon" • Including a gender and diversity perspective in the training program	
Activity 2.1.4 Develop a strategy for scaling-up investments	Develop a strategy for scaling-up investments for Ecosystem based Adaptation in small scale communities	• Analysis of standardization of actions by typology of work or intervention. • Analysis of needs and limitations in the financing of interventions and their subsequent maintenance, especially focused on ensuring the sustainability of the actions. • Proposal of medium to long-term financing mechanisms and support. • Generation of the strategy for scaling up interventions and social and economic sustainability.	1 strategy for scaling-up investments for Ecosystem based Adaptation in small to medium scale communities
Activity 2.1.5 Dissemination of lessons learned and best practices	Dissemination of lessons learned and best practices	• Generation and adaptation (including cultural adaptation) of dissemination material for best practices. • Development of a training programme in EbA interventions in small-medium communities for decision-makers and professionals including a gender balance of the participants. • Plan for dissemination of success stories and new innovative practices in social and economic sustainability.	1 Programme of dissemination of lessons learned best practices and experiences implemented
Activity 2.1.6 Develop customized gender sensitive capacity-building programs for woman and marginalized communities on climate adaptation, water governance and leadership	This will include providing resources for women's cooperatives focused on sustainable water use	• Design a gender sensitive capacity building program for women and marginalized communities on climate adaptation, water governance and leadership. • Selection of communities and local groups to be capacitated. • Impart capacity building program	• 1 community with gender sensitive capacity building program by country
Activity 2.2.1 Implementation of sub-	Implementation of sub-projects in medium to large communities, including project selection	• Definition of urban or peri-urban areas with the greatest need/impact to implement the	• 1 sub-project for communities with more than 10,000 inhabitants that

projects in medium to large communities	using the eligibility criteria, stakeholder consultations on project selection.	majority of typologies of works based on natural solutions and particularly EbA. • Selection of communities with more than 15,000 inhabitants to benefit from the actions. The selection will be based on environments facilitating their implementation both for accessibility and for the interest and collaboration of potential beneficiaries. • Contact and negotiate with local authorities, beneficiary groups, and potential service providers (river transportation, materials, social agents, etc.). • Verification and adjustment for projects in areas with environmental protection designations. • Drafting of each sub-project, social and environmental consultation. • Development of sub-project • Compilation of recommendations and improvements in the social and gender approach and management of small in the planning, design, implementation, and maintenance of each type of intervention. • Listing of threats and risks detected in the implementation of the actions. • Consolidation of learnings, recommendations, and improvements into a guide on " Best Practices for Climate Change Adaptation and Water Resilience in the Amazon". • Development of a training programme in EbA interventions in medium-large communities for decision-makers and professionals, including a gender and diversity balance of the participants.	implements EbA, water and sanitation solutions, for each country. • 6 training workshops • 6 social consultations
Activity 2.3.1 Analyze financial mechanisms to generate EbA solutions	Analysis of existing financial mechanisms to generate EbA solutions	• Analyze the financial needs required. • Analyze potential financial mechanisms to generate EbA solutions. • Analyze the capacity of increasing financial intermediaries supporting women-led businesses in the beneficiary communities.	1 Document with financial mechanisms to generate EbA solutions and its commercialization.

Activity 2.3.2 Develop a cross-cutting scorecard mechanism	Develop a cross-cutting scorecard mechanism to assess, monitor and track the impacts of proposed investments towards achieving climate resilience, GHG reduction, gender and social inclusion and strengthened environmental health.	• Define the effectiveness variables of the service by which interventions will be evaluated in terms of improving water security or resilience to hydro-meteorological risks and their economic sustainability. • Define the control variables of the solutions and their implementation process in terms of the inclusion of vulnerable communities, ethnic minorities, or gender. • Build a dashboard with the aforementioned variables, monitoring frequencies, and resources needed to control the impacts of the proposed investments.	1 Cross-cutting scorecard mechanism to assess, monitor and track the impacts of proposed investments towards achieving climate resilience, GHG reduction, gender and social inclusion and strengthened environmental health.
Activity 2.3.3 Develop and implement promotion and dissemination plans to support national institutions and/or NDBs to coordinate activities with other entities for direct investment in climate adaptation interventions	Develop and implement promotion and dissemination plans to support national institutions and/or NDBs to coordinate activities with other public and private entities for direct investment in climate adaptation interventions and to educate society on the economic value and importance of such activities.	• Adapt dissemination material of the new solutions to ensure safe water and climate adaptation to financial entities and the public. • Coordinate activities with government entities that finance climate change projects, water services, or natural risk management in each country to enhance synergies and promote their activities. • Coordinate with local or international entities that finance climate adaptation projects and gap closure in WSW systems. • Create spaces to share experiences, interests, and enhance contact between investors. • Define specific promotion and dissemination plans.	6 Campaigns to raise awareness and attract public funds
Activity 2.3.4 Strengthen stakeholders working in related areas	Strengthen stakeholders working in related areas (climate finance, WSS sectors, NBSs, etc.) through actions aimed at: correctly assessing risk and opportunities associated with investments in businesses leveraged by ecosystem services and natural capital, and (iii) measuring and monitoring environmental and social impacts	• Define content to work with these entities to strengthen them: decision-making processes for resource allocation, risk assessment, and opportunities in businesses leveraged by ecosystem services and natural capital. • Present the monitoring dashboard of companies and interventions funded through these processes for monitoring and impact evaluation. • Plan dissemination and coordination activities.	1 Announcement and training in the use of the cross-cutting scorecard mechanism

Activity 2.3.5 Design a program offering incentives, such as rebates for water-efficient appliances and subsidies for sustainable agricultural practices	These incentives will prioritize economically vulnerable communities, where adoption of water-saving technology is limited, to foster greater accessibility and uptake	• Identify and characterize sustainable agricultural practices suitable for Amazonia. • Develop a program by country with incentives	1 program offering incentives for water efficient appliances and subsidies for sustainable agricultural practices by country
Activity 2.4.1 Carrying out an assessment of WSW infrastructure projects in the region to develop and implement a strategic investment plan	Carrying out an assessment of existing and ongoing infrastructure projects in the region to develop and implement a strategic investment plan to i) upgrade existing water and sanitation and solid waste infrastructure, ii) prioritize activities that enhance climate resilience in ongoing infrastructure projects, and iii) identify opportunities and develop a strategic financing plan for future climate-sensitive drinking water and sanitation investments.	• Identify WSW projects in institutions linked to drinking water services, housing, or equivalents in each of the countries, at the national or subnational level, as well as in institutions promoting and structuring public-private collaboration projects. • Identify climate change adaptation projects and risk management for floods or droughts within institutions linked to environmental sustainability, water agencies, basin commissions, risk management, at the national or subnational level, as well as institutions promoting and structuring public-private collaboration projects. • Define a financial situation plan for prioritized projects, allowing for increased investment capacities of public entities, incorporating novel public-private financing mechanisms.	1 Strategic investment plan
Activity 2.4.2 Establish ‘Train-the-Trainer’ program for local water utilities	A training program to operate and maintain local water utilities, ensuring a sustainable foundation for long-term maintenance of new systems	• Desing the program for training local water utilities • Identify local water utilities to be train as trainers. • Generate a model of training to replicate	1 ‘train the trainer’ program stablished
Activity 2.4.3 Climate resilient upgrades to	Climate resilient upgrades to infrastructure projects and projects involving incremental	• Select cases in all areas of the Amazon basin, upper, middle, and lower, and share	1 Document for Climate resilient upgrades to infrastructure projects and projects involving

infrastructure projects in the WSW public sector	financing of climate resilient infrastructure in planned projects in the WSW public sector.	interventions carried out in the Amazon territory or elsewhere in the world to preserve resources, ensure water production from ordinary sources, replace sources to cope with droughts, restore ecosystem services to improve water quality, nature-based solutions for sediment control, river mobility, and flood defense. • Define changes and additions in climate adaptation approaches in ongoing projects or existing projects where an expansion of the work is proposed to accommodate population growth or new requirements.	incremental financing of climate resilient infrastructure in planned projects in the WSW public sector.
Activity 2.4.4 Identify projects which incorporate large scale investments on natural-based solutions	Identify at least four (4) projects which incorporate large scale investments on natural-based solutions, in the priority areas for drought management, flood control and aquifer recharge, and secure funding for their implementation through a strategic financial plan for public investment.	• Identify at least four large-scale projects where climate change adaptation interventions will be carried out in terms of water security and resilience to floods and droughts. "Large scale" will be defined according to the criteria. Exclusively or shared with other objectives, the projects must at least incorporate the following key elements of the program: (i) improvement, replacement, or supplementation of traditional resource sources through preservation programs and water production based on natural solutions and aquifer recharge; (ii) Adaptation to drought management through demand management programs, improved efficiency, or recovery of source quality; (iii) Adaptation of high-risk flood areas or riverbed movement through green infrastructure, improvement of drainage systems, or coexistence through early warning systems. • Propose a solution approach based on the project's location and the single or multiple objectives pursued in the interventions. • Support responsible public institutions, responsible for the development and implementation of the projects, in the proper incorporation of the proposed solutions for the Programme, as well as recommendations for sustainable	At least 4 projects for large-scale investments on NbS at feasibility level

		management at the economic and social levels. • Generate an investment plan for the development of the four key projects, incorporating public funding, as well as economic sustainability mechanisms for the long-term success of the interventions.	
Activity 2.4.5 Conducting training and capacity building of sectorial and finance public institutions of the riparian countries on climate finance mechanisms for climate adaptation projects	Conducting training and capacity building of sectorial and finance public institutions of the riparian countries on climate finance mechanisms for climate adaptation projects, including training on innovative project finance, project structuring and public participation	• Define a plan for exchanging experiences between the leaders of successful cases and the members of the institutions committed to using the programme for their projects, both user entities in the water or risk sector, and those in the public or private financing environments. • Develop specific training on novel climate-responsive financial mechanisms and project structuring for officials of the beneficiary institutions of the member countries. • Support the projects proposed for intervention by the Programme for dissemination in international forums seeking specific climate adaptation funds.	12 training and capacity building of sectorial and finance public institutions of the riparian countries on climate finance mechanisms for climate adaptation projects, including training on innovative project finance and project structuring
Activity 3.1.1 Conduct a gap analysis of financial, institutional, and regulatory frameworks in each of the ACTO member countries to assess ways for more effective leveraging of green local and international financing for EbA projects in water, sanitation, and waste management sector.	Conduct a gap analysis of financial, institutional, and regulatory frameworks in each of the ACTO member countries to assess ways for more effective leveraging of green local and international financing for EbA projects in the water, sanitation and waste management sector. The analysis will produce policy reform recommendations to enhance investments in climate adaptation interventions.	• Analysis and determination of limitations and potential improvements in the current regulations and institutional organization of the member countries of ACTO. • Recommendations and proposals to facilitate the participation of private funds and structure PPP projects in the areas of water security and resilience to floods through green solutions. • Develop a plan for technical and legal support in the processes of regulatory, organizational, or financial modification that the member countries carry out. Given that political and regulatory procedures can be lengthy processes, this action will be considered successful to the extent that such processes are initiated, and institutions ensure resources to implement the adjustments and changes.	1 gap analysis of financial, institutional, and regulatory frameworks in each of the ACTO member countries to assess ways for more effective leveraging of green local and international financing for EbA projects in the water, sanitation and waste management sector.
Activity 3.1.2 Implement a capacity building	Implement a capacity building programme at regional, national, and sub-national levels to	• Development of training and empowerment material for institutional stakeholders to	At least 3 Amazonian countries that had advisory on regulations related to the

programme at regional, national, and sub-national levels to optimize access to green and climate financing, both nationally and internationally.	optimize access to green and climate financing, both nationally and internationally. The Programme will establish a regional platform/panel to track progress and share best practices on climate-resilient and low-emissions investment in the WSW sector	understand the characteristics and conditions for accessing green and climate adaptation funds. This material will incorporate best practice guides and recommendations developed in other Programme activities. • Drafting and implementation of an institutional empowerment plan that includes workshops, courses, exchanges, and other activities to promote the training of professionals selected by their responsible institutions. Collaboration with university entities and research centers specialized in the Amazon may be included to disseminate knowledge and enhance synergies among different projects in the territory.	structuring of EbA projects which impact improving WSW services or resilience to floods
Activity 3.1.3 Assess regional data exchange mechanisms and protocols needed to develop and maintain an Amazon hydroclimatic information platform for the access and exchange of hydrological and meteorological data for early warning systems, and regional planning (as envisioned in Component 1)	Assess regional data exchange mechanisms and protocols needed to develop and maintain an Amazon hydroclimatic information platform for the access and exchange of hydrological and meteorological data for early warning systems, and regional planning. As part of this activity, procedures and/or data sharing protocols can be formulated, taking advantage of, and improving existing hydro-climatic platforms. For example, ensuring the interoperability of the ARO with new hydrological and meteorological modules.	• Development of capacity programs, protocols, and guides • Dissemination of protocols for sharing hydro-meteorological data and information among the different member countries and establishment of bidirectional exchange processes of data, information, products, and services derived from global basin modeling and EWS.	• 12 capacity programs for institutions. • 10 publications (protocols, guides)
Activity 3.1.4 Assessment of existing mechanisms for transboundary cooperation, water resources governance, planning and management in the context of current institutional frameworks	Assessment of existing mechanisms for transboundary cooperation, water resources governance, planning and management in the context of current institutional frameworks (as the ACTO and other bilateral/multilateral agreements or commitments) to identify, design and propose new mechanisms and best practices for technical and institutional strengthening towards improving transboundary cooperation and coordination in the basin.	• Map of institutions in the field of WSW or risks of the member countries of ACTO that are already collaborating at the transboundary, bilateral, or multilateral level. • Analysis and proposals for improving existing cooperation processes. • Proposals for actions and agreements between member countries to empower ACTO as a center for the convergence of data and management policies for the entire Amazon.	• 1 commitment between riparian countries for joint basin planning, real-time information transfer or historical records, operation agreements for key infrastructure throughout the area, and policy harmonization • Establishment of permanent multilateral technical forums to manage cross-border coordination and the implementation of climate change adaptation measures

		• Development of commitments between riparian countries for joint basin planning, real-time information transfer or historical records, operation agreements for key infrastructure throughout the area, and policy harmonization. • Establishment of permanent multilateral technical forums to manage cross-border coordination and the implementation of climate change adaptation measures.	

E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)

Monitoring for the Programme will be in line with IDB's and GCF's policies and the terms of the FAA. The implementation of each sub-project will be managed and monitored by IDB's in-house staff, project management unit and consultants. As specified in the Loan and Grant Agreements between project implementing agencies and IDB, they are obliged to report on the use of proceeds of the Programme, the progress of the Programme indicators, and the environmental and social performance of the project to the IDB on an annual basis, in line with IDB's standard reporting requirements.

Programme Level. IDB will prepare Programme-level Annual Performance Reports (APRs) in the format specified by GCF detailing (a) activities conducted during the year, status of implementation, potential issues, and solutions; (b) progress against targets and indicators given in this proposal.

Sub-Project Level. A monitoring manual has been realized to provide a guideline on how to determine the impact of projects (See Annex 11).

Evaluations. A mid-term independent evaluation is planned for year 4. And once the implementation period has ended, a final independent evaluation will be undertaken to evaluate programme results and impacts.

F. RISK ASSESSMENT AND MANAGEMENT

F.1. Risk factors and mitigations measures (max. 3 pages)

Selected Risk Factor 1: Data exchange obstacles

Category	Probability	Impact
Technical and operational	Low	High

Description

Under Component 1, the exchange of hydroclimatic data is crucial. Nevertheless, there is the possibility that the exchange will not be carried out satisfactorily for different reasons: heterogeneity in data generation and processing of the beneficiary countries, insufficient institutional capacities and regulatory frameworks, and important technological gaps. Limitations in hydrometeorological monitoring could lead to less accurate event forecasting and reduce the effectiveness of preventive measures. It would also lead to gaps in the regional database. The risk can be managed within the framework of ACTO, since communication and cross-border agreements have been established and these have been successful in the development of previous efforts (for example, the Amazon Regional Observatory or the publication of the Atlas of Hydroclimatic Vulnerability of the Amazon region).

Mitigation Measure(s)

Efforts will be made to promote the exchange of information among the meteorological services of the Amazon countries. We'll determine the need for online training to standardize data processing, develop user-friendly systems, and implement safeguards against third-party data breaches, among other measures. The WMO Unified Policy for International Earth System Data Exchange will be promoted. Coordination through ACTO to coordinate data exchange protocol agreements will be fostered.

Selected Risk Factor 2: Innovative technologies and EbA solutions not adopted

Category	Probability	Impact
Technical and operational	Medium	Medium

Description

A behavioral change does not occur and implementation of the proposed Programme activities (including operations and maintenance of those set out in Output 2.2) ceases after the conclusion of the Programme because rural communities are not willing to invest in new technologies or maintain EbA interventions. There could be a risk of not making visible the potential of EBA actions in terms of adaptation to climate change.

Mitigation Measure(s)

Communities and influential actors at the territorial level (such as water operating organizations) will be involved in the design and operation of EBA interventions, which may be done through consultation mechanisms or forums. Financial instruments will be created to encourage the adoption of new technologies and ecosystem-based adaptation interventions. Furthermore, the participation of beneficiaries will be strongly promoted. Information will also be disseminated on successful examples of EBA and NBS practices.

Selected Risk Factor 3: Overlapping programs

Category	Probability	Impact
Technical and operational	Low	Medium

Description

Overlapping or misalignment between the proposed Programme activities and those being implemented by other departments or organizations in the Amazon area that duplicate efforts.

Mitigation Measure(s)

In the process of designing the proposed Programme, close communication has been maintained with the NDAs, the technical, planning and finance ministries, as well as coordination through ACTO. This will help to avoid overlapping efforts within other programs. Due to this close coordination, it has been possible to generate a Programme framed in a prioritization exercise that responds to the national investment and climate change plans. Within the selection process of projects to be financed, synergies among activities of other initiatives will be considered.

Selected Risk Factor 4: Changes in staff or political leadership

Category	Probability	Impact

Governance	Medium	Medium
Description		
High staff turnover in executing agencies, frequent changes in government bodies, and limited institutional memory result in interruptions and delays in Programme implementation that may jeopardize programme sustainability. Additionally, changes in political leadership and civil unrest can cause delays in implementation.		
Mitigation Measure(s)		
Decisions, best practices, and lessons learned will be documented throughout the Programme to support the institutional memory that will sustain Programme's activities. In addition, the IDB team will closely monitor possible personnel changes and shifts in government priorities in the countries. IDB will also provide ongoing analysis on the importance of water security and climate change actions, ensuring a sustained interest in the program. Strong relationships have been built with representatives from each country (including NDAs) to manage potential changes. In addition to manage the significant political risks identified in Bolivia and Ecuador, a multi-pronged approach is adopted, including the following elements: 1) Continuous monitoring of political developments to identify possible changes in leadership or civil unrest. In this task, it is essential to categorize political risks and focus on those most relevant to the sustainability of the Programme. 2) Ensure alignment of the programme with national priorities to maintain political support even if there is a change in political leadership. 3) Engage national stakeholders (subnational and local levels, private entities, and neutrals) and promote country ownership during project design and implementation. 4) Develop a strategic response plan that includes scenarios for different political outcomes. 5) In the event of conflict, focus on rebuilding public institutions trust and engagement as soon as possible (adjust strategies as needed using an adaptive management approach).		
Selected Risk Factor 5: Unanticipated environmental and social impacts		
Category	**Probability**	**Impact**
Technical and operational	Low	Medium
Description		
There is the possibility of generating unforeseen environmental and social impacts. For example, an accidental spill of chemical substances on soil or an accidental discharge of wastewater or other types of waste into water bodies. In the social sphere, there are also risks due to unexpected situations, such as a poor understanding of the intervention's benefits in the communities.		
Mitigation Measure(s)		
All sub-projects implemented within the Programme will be subject to a comprehensive evaluation of environmental and social impacts and risks. In addition, special attention will be paid to the integration of management strategies for this type of impact by the implementing institutions to avoid unforeseen environmental and/or damages. Ongoing information dissemination of and stakeholder engagement in a culturally appropriate manner and with a gender approach will be carried out throughout sub-projects fife cycle.		
Selected Risk Factor 6: Difficulty in monitoring and evaluating the impact of sub-projects		
Category	**Probability**	**Impact**
Technical and operational	High	High
Description		
Reporting progress on complex programmes (with many sub-projects) can be challenging due to its multi-country nature. The executing institutions involved may have good monitoring systems for their usual operations but are not necessarily adequate to deliver geographic data or technical aspects of specific practices. There could be weak coordination between relevant institutions which gives rise to numerous mismatching information. Other operational risks include the lack of clarity on the parameters for making delegated funding decisions.		
Mitigation Measure(s)		
Regarding the lack of clarity of parameters for delegated funding decisions: a) Establish clear criteria: define specific parameters for making delegated funding decisions. b) Detailed documentation of the processes and criteria for funding decisions. c) Decision makers need to be trained on the parameters and processes. d) Review and approval: establish a review and approval process for funding decisions. Difficulty in monitoring and evaluating the impact of subprojects: a) Establish a system to collect and analyze data on the progress of sub-projects. b) Requiring regular reports from sub-projects managers. c) Carrying out independent evaluations		

to verify the impact of the sub-projects (these last two points are included in the Programme's Monitoring and Evaluation Plan)

Selected Risk Factor 7: Emergence of pandemics

Category	Probability	Impact
Technical and operational	Medium	High

Description

COVID-19 showed how a health pandemic can cause projects to be delayed or poorly implemented. Although the COVID-19 pandemic appears to be under control, there is the possibility of new events of this type.

Mitigation Measure(s)

Derived from the COVID-19 crisis, valuable lessons were obtained. The necessary logistics will be implemented to work safely, following the protocols applicable to each country. Strategies will be implemented to continue with the projects and avoid delays. Local actors will be placed as the main priority.

Selected Risk Factor 8: Lack of alignment of ESS

Category	Probability	Impact
Technical and operational	Low	High

Description

Risk of implementing agencies/ beneficiaries failing to comply with national regulations and/or IDB and GCF environmental, social requirements with standards, policies and procedures.

Mitigation Measure(s)

All projects shall be prepared and implemented in compliance with the IDB's Safeguard Policy Statement, which may be updated occasionally. Each Sub-project will be appropriately appraised and structured to meet IDB's and GCF's requirements. Environmental and social Action Plans will be developed for each subproject as part of the due diligence process during project appraisal and preparation to achieve this and executed during project implementation. Implementing such safeguards' requirements will be covenanted through financing agreements, monitored by IDB.

Selected Risk Factor 9: Limited EE capacity and suitability based on market availability

Category	Probability	Impact
Operational	Low	High

Description

There is a possibility that the EEs' capabilities to comply with the bank's standards are deficient, and they do not adapt to the needs of the current market.

Mitigation Measure(s)

As per IDB policy, before the approval of each Sub-Project, IDB's fiduciary team will perform and/or update an institutional capacity assessment on the corresponding EEs. This assessment includes overall technical capacity, adequacy of information systems, internal and external controls, and recommendations on any fiduciary risks identified. The institutional capacity assessment will include an analysis of the EE's systems to manage integrity risks, including its systems to perform due diligence on bidders and contractors, and based on the result, IDB Operational teams with OII support, in coordination with the EE, will develop a strategy to mitigate the impact of the identified gaps. Furthermore, a market demand analysis was done for all countries in the programme (included in Annex 2, Section 4.5), identifying the required investments under current market conditions. In addition, mitigating measures can improve EEs compliance with bank's standards. These include: 1) Clear understanding by the EEs through ad hoc workshops on GCF requirements. 2) Monitoring and Evaluation mechanisms: Implementing robust monitoring systems allows for ongoing assessment of loan performance and compliance with conditions. Periodic assessments can identify problems early, facilitating timely interventions. 3) Strengthening financial institutions: Improving the capacity of financial institutions is critical for effective resource allocation and management. Training and resources can enhance their ability to manage lending efficiently.

Selected Risk Factor 10: Climate risks

Category	Probability	Impact

Technical and operational	Medium	Medium
Description		
Climate risks are serious in the Amazon basin, which is highly exposed to prolonged droughts and floods. These events may damage the subprojects included in the programme or prevent their development and implementation.		
Mitigation Measure(s)		
Infrastructures and other projects will be built in compliance with standards for protection against climate risk in each country. Strengthening community management capacities is fundamental to ensure the adequate use and preservation of watershed resources.		
Selected Risk Factor 11: Project pipeline development		
Category	**Probability**	**Impact**
Technical and operational	Low	Low
Description		
There are risks associated with the project portfolio. The term pipeline is used to describe the progress of any activity toward a long-term goal that involves a series of discrete stages. For example, not assigning the appropriate priority to each task or not being able to identify problems associated with subprojects undoubtedly puts at risk the achievement of the program's central objectives.		
Mitigation Measure(s)		
Effective communication and assigning clear objectives to clear managers are ways to guarantee the correct development of the pipeline, especially considering the program's critical times.		
Selected Risk Factor 12: Coordination of multiple partners and locations		
Category	**Probability**	**Impact**
Governance	Medium	Medium
Description		
As this Programme involves different countries that make up the Amazon basin, there is a risk of not having effective and efficient communication. Communication management is a crucial aspect, in addition to effective logistics to implement actions in different locations.		
Mitigation Measure(s)		
The member countries of the Amazon Basin already have successful collaboration experiences in which they have developed communication and decision-making mechanisms. To mitigate this risk, the Programme has proposed using ACTO communication channels and drawing on the lessons learned.		
Selected Risk Factor 13: Foreign exchange risks, rising inflation and interest volatility		
Category	**Probability**	**Impact**
Financial	Medium	Medium
Description		
GCF and IDB lending will be in USD, and loans to the final beneficiaries may be in local currency. Local currency volatility is high in some participating countries, and shocks to the exchange rate would affect the borrowers' ability to repay. In addition, the interest rate volatility could affect the repayment of Sovereign Investment Loans and the overall Programme efficiency and effectiveness. Similarly, inflation could lead to higher costs and delays for the Programme.		
Mitigation Measure(s)		
According to IDB policies, the Bank does not assume exchange rate risk concerning loans under trust funds, such as the GCF. The IDB only offers the possibility of covering currency conversions for loans financed with ordinary capital. At the time of subproject design, and under specific circumstances, the IDB could partially cover this risk for the portion of the IDB ordinary capital. Regarding interest rate volatility, the following strategies are considered: 1) Sensitivity analysis of how this would affect the Programme, 2) Establishment of a clear policy to manage interest rate risk, 3) Ongoing monitoring: monitor interest rates and adjust the strategy as necessary. Regarding inflation it is recommended: a) Monitor inflation rates to anticipate possible increases; b) Conduct a sensitivity analysis: Analyze to assess how changes in inflation would affect the Programme; c) Periodic review, monitoring, and forecasting of investment plans. Budget review: Review and update Programme budgets to reflect changes in inflation. Also establish a plan to deal with extreme inflation scenarios: a) Identify critical areas of the programme that are most vulnerable to inflation. b) Purchase planning: Anticipate purchases to avoid price increases or shorter and more regular procurement processes; c) Supplier diversification: find suppliers in different markets to reduce reliance on local markets. d) Build reserves: build financial reserves to deal with cost increases.		

Selected Risk Factor 14: **Unidentified financing of money laundering, terrorist financing, and prohibited practices**		
Category	**Probability**	**Impact**
ML/FT	Low	High
Description		
National financial systems are subject to country compliance with the international standards of the Anti- Money Laundering and Combating the Financing of Terrorism policy, embedded in national policymaking of all target countries.		
Mitigation Measure(s)		
Because all financial operations under Programme activities are carried out in the context of the financial and capital markets, subject to national regulation, this risk is considered low. Nonetheless, the IDB will not only establish specific rules and eligibility criteria for all financial transactions in each target country (as part of the IDB project cycle), but all portfolios financed will be subject to the IDB's non-objection. Additionally, the use of cash, vouchers, or any modality that complicates fund tracking will be discouraged.		

G. GCF POLICIES AND STANDARDS

G.1. Environmental and social risk assessment (max. 750 words, approximately 1.5 pages)

119. Higher Environmental and Social (E&S) risk and impact activities will be excluded from this Programme, the potential E&S risks and impacts are likely to be low to moderate, largely manageable by standard and available mitigation measures. Therefore, this transaction is categorized as Category B, (refer to the Fund's environmental and social safeguards-Decision B.07/02).

Category B	Activities with potential limited adverse environmental and/or social risks and impacts that individually or cumulatively, are few, generally site-specific, largely reversible, and readily addressed through mitigation measures.

Source: Revised Environmental and Social Policy. GFC, 2021

120. In 2021, the IDB adopted a new Environmental and Social Policy Framework (ESPF) that has 10 environmental and social performance standards, including human rights, labor, community health and safety, as well as more explicit provisions for people with disabilities, vulnerable groups, indigenous peoples, afro-descendants or other traditional groups. In addition, it considers potential risks to workers and communities, including risks associated with pandemics and epidemics and are aligned with international best practices on biodiversity protection and conservation. The ESPF also reinforces existing commitments to gender equality, stakeholder engagement, disaster and climate change risk and resilience, minimizing greenhouse gas emissions, and protecting the natural capital of the countries involved.

121. Sub-Projects to be implemented as part of this Programme will be designed, implemented, monitored, and decommissioned under the IDB policies, applicable regulatory requirements, and international best practices. The procedures and guidelines also describe the process for developing measures to avoid and mitigate potential adverse impacts, as well as opportunities to improve the environmental and social outcomes of projects. The IDB is committed to the principles of transparency, accountability, and stakeholder participation, and promotes the adoption and implementation of these principles by its clients. Each project will require a Stakeholder Engagement Plan, and a Grievance mechanism.

122. Although the Programme is expected to have positive contributions to natural resources, if EE does not comply with the implementation of action plans and GIIP, negative impacts may occur. However, based on the proposed environmental and social management approach, these risks and impacts can be easily addressed through well-established mitigation measures and compliance with the applicable IDB ESPF.

123. The following table provides a general overview of environmental and social risks and impacts pre identified for this facility, and its respective mitigation measures:

Table 4. Assessment of E&S risks and impacts, and mitigation measures

	E&S Risks and Impacts	**Mitigation Measures**
ESPS1	**Assessment and Management of Environment and Social Risks and Impacts** Sub-projects in the WSW sector have the potential to result in diverse direct,	All borrowers will prepare an ESMS that incorporates the following elements: (i) project-specific environmental and social framework; (ii) identification of risks and impacts; (iii) management programs; (iv) organizational capacity and competency; (v) emergency preparedness and response; (vi) stakeholder engagement; and (vii) monitoring and review. Implementing partners will screen sub-projects performance

	indirect, and cumulative environmental and social (E&S) risks and impacts.	against: (i) Exclusion List; (ii) applicable E&S laws and regulations; and (iii) the ESPS (for medium risks long-term sub-projects). Category B sub-projects must present an E&S Assessment and E&S Management Plan to ensure that risks and impacts are identified, assessed, and managed in accordance with the applicable ESPSs. Low-risk FI sub-projects will apply applicable national and local ESHS legislation.
ESPS2	**Labor and Working conditions.** Risk and impacts could result from certain types of activities, if for example, there is any intervention that includes photovoltaics to increase energy efficiency in water or wastewater plants, which could have risks of child and forced labor practices (including supply chain-related practices). Occupational, health and safety risks could also occur during construction and operation phases of project implementation, including accidents, exposure to chemical components and manipulation of hazardous materials.	Sub-projects will adopt and implement labor management policies and procedures to respect and protect the fundamental rights of sub-project´s workers; ensure compliance with national employment and labor laws; promote the fair treatment, non-discrimination, and equal opportunity of workers; promote safe and healthy working conditions, and the health of workers; prevent the use of child labor and forced labor; and ensure that accessible and effective means to raise and address workplace concerns are available to workers. In addition, they will implement an occupational health and safety programme considering inherent risks related to the sub-project and specific classes of hazards, including physical, chemical, biological, and radiological hazards and risks of accidents. The IDB will support the development of a checklist of sectoral labor practices and working conditions and a guidance evaluation for the Programme sectors.
ESPS3	**Resource efficiency and Pollution Prevention.** Risks related to the final disposal for waste and hazardous materials and hazardous waste, during construction works, demolition and among others. Risks related to cleaning of water bodies such as contaminated sludge, plastics, woods, diverse waste. Incorrect waste disposal could also increase the likelihood of vector bone diseases. Impacts and risks related to sludge production in wastewater treatment plants, and its final disposal. Risks related to the effluents and water quality. Wastewater pollution. Risks related to odors and emissions, that could occur during the operation phase, as well as emissions associated from methane and nitrous oxygen produced in the sanitation processes and/or solid waste management, as well as leachate management. Hazardous materials that will be used or generated during the operation phase of the project, such as chlorine, sludge, fuels, and oils. If these are inadequately stored, managed, and disposed of, there is a risk of surface water and groundwater.	Implementing partners will review applicable required environmental permits based on sector and country requirements, as well as against selected EHS guidelines. Mitigation measures to be included on the specific environmental and social management plans as part of the ESMS, such as Waste Management and demolition Program, Quarry Exploitation and Waste Disposal Program, Garbage Accumulation Mitigation Programme in Canals and Environmental Protection Areas, and a Work Environmental Control Program, Water and Effluent Monitoring Program, Odor Dispersion and Air Quality Control Program, Vector Bone Diseases Program. • Water management plan and water balance to be included. • Production, storage, and handling to utilize GIIP. • Water management plan according to GIIP

	Pollution by runoff and infiltration, respectively, of the spilled materials.	
ESPS4	**Community, Health and Safety and Security** Affected communities EHS risks- related may include: • Accidents related to the circulation of vehicles and construction machinery, • contact with hazardous materials and the presence of security personnel, • The demolition phase has specific risks, mainly accidents from people entering the demolition area, • Access to resources and benefit sharing issues (including Environmental Services related to provision), • Exposure to hazards (physical and chemical), water-borne diseases • Nuisance by noise, dust, and movement of heavy machinery, blocking access to housing and / or public infrastructure, • Possible conflicts between construction personnel and the population. Disaster and Climate Change risks: • Exposure of the infrastructure to natural hazards, that could be exacerbated by climate change, including hydrometeorological events could be aggravated, depending on the location of the infrastructure.	Mitigation measures to be included on the specific environmental and social management plans as part of the ESMS, such as Vector Bone Diseases Program, Odor Dispersion and Air Quality Control Program, Traffic Control Program. Disaster and climate change risk assessment and a disaster and climate change management plan, where applicable. In addition, an Emergency Preparedness and Response (EPRP), will be included as part of the sub-project, when needed. IDB will support the development of sectoral affected communities EHS checklists and guidance assessments for the Programme sectors such as community health and safety programs, Vector Bone diseases program, traffic safety program.
ESPS5	**Land Acquisition and Involuntary Resettlement** The construction of the proposed infrastructure might require land acquisition or restrictions on land use and access to assets and natural resources that result in involuntary resettlement of population: physical displacement (relocation, loss of land or shelter), and/or economic displacement (loss of land, assets, or restrictions on land use, assets, and natural resources leading to loss of income sources or other means of livelihood).	The Borrower will consider feasible alternative sub-project designs to avoid or minimize physical and/or economic displacement. For this programme, sub-projects that cause large-scale physical and/or economic displacement of vulnerable population or Indigenous Peoples will not be allowed. For other cases, and when displacement cannot be avoided, a Resettlement Plan and/or Livelihood Restoration Plan will be developed and implemented, offering subproject-affected people compensation for loss of assets at full replacement cost and other assistance to help them improve or restore their standards of living or livelihoods, as provided in the ESPS 5. Engagement with subproject-affected people during the planning, implementation, monitoring, and evaluation of compensation payments, livelihood restoration activities, and resettlement.
ESPS6	**Biodiversity Conservation and Sustainable Management of Living Natural Resources.**	All sub-projects must be designed and operated such that they do not result in the net loss of biodiversity in affected natural habitats.

	- Conversion of natural habitats, including surface waters - Negative impacts to critical habitats, either terrestrial or aquatic, including legally protected areas and internationally recognized areas such as KBAs and Ramsar sites - Terrestrial or aquatic habitat degradation due to inadequate management of solid waste and/or effluents. - Aquatic habitat degradation is due to reduction of flows in surface waters, including short-term or seasonal impacts in critical hydroperiods. Impingement and entrainment of fish, fish larvae, fish eggs, plankton, and other aquatic organisms	Exclusion of sub-projects requiring significant conversion or degradation of natural habitats, including surface waters. Exclusion of sub-projects in legally protected areas that involve conversion of natural habitat, including surface waters. Should the sub-project have critical habitats in its area of influence, the borrower should include a Biodiversity Action Plan to achieve net gains for biodiversity values for which critical habitats are designated. Adequate design, operation, and monitoring of solid waste and wastewater collection, treatment, and disposal systems, considering environmental quality requirements to maintain native biodiversity. Watershed management plans and water use contingency plans to maintain ecological flows during critical periods. Adequate design, construction, and maintenance of water intake structures
ESPS7	**Adverse impacts to indigenous and traditional peoples.**	Sub-projects in areas with presence of Indigenous Peoples, as defined in ESPS 7, will carry out a sociocultural analysis to identify potential social, cultural and environmental impacts on them. Sub-projects with significant adverse impacts on Indigenous Peoples will not be eligible. This includes relocation of Indigenous Peoples from lands and natural resources subject to traditional ownership or under customary use impacts; adverse impacts on land and natural resources subject to traditional ownership or customary use; significant impacts on natural heritage that is essential identity and/or cultural, ceremonial, or spiritual aspects of Indigenous Peoples lives; and impacts on Indigenous Peoples in isolation or initial contact. In case non-significant adverse impacts are produced, meaningful consultation will be undertaken in order to know if adverse impacts avoided, minimized or if it possible to compensate in a culturally appropriate manner commensurate with the nature and scale of such impacts and the vulnerability of the affected Indigenous Peoples. Additionally, sub-projects shall (i) respect and foster full respect for the human rights, collective rights, dignity, aspirations, culture, and natural resource-based livelihoods; (ii) promote sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner; and (iii) respect and preserve the culture, knowledge, traditional knowledge, and practices of Indigenous Peoples. Throughout the subproject's life cycle, an ongoing relationship with the Indigenous Peoples affected by the subproject will be established and maintained based on meaningful consultation in a culturally appropriate manner, respecting Indigenous Peoples governance, language, and their rights. Free, Prior and Informed Consent (FPIC) of the affected Indigenous Peoples will be carried out when deemed necessary.

ESPS8	**Adverse impacts on cultural heritage.**	Sub-projects will identify cultural heritage in its area of intervention and assess potential risks during project construction and operation. The Borrower will consider feasible alternative subproject designs to avoid significant adverse impacts to cultural heritage. If the proposed location of a sub-project is in areas where cultural heritage is expected to be found during construction or operation, provisions for managing chance finds will be developed.
ESPS 9	**Gender equality**	Sub-projects must assess and prevent adverse risks and impacts based on gender, sexual orientation, and gender identity; and avoid exclusion from subproject-derived on the grounds of genders sexual orientations or gender identity. Sub-projects must develop and implement measures to prevent and mitigate risks of sexual and gender-based violence, including sexual abuse, exploitation and harassment (SEAH) by sub-project workers against persons in the community or other sub-project workers. These measures may include: – Developing, implementing, enforcing, and monitoring a sub-project´s Code of Conduct establishing a zero-tolerance for SEAH against community members and workers. All contractors and workers must adhere to this Code of Conduct. – Educating all sub-project workers on SEAH, Code of Conduct, and how to report violations of the Code of Conduct. – Informing local communities about project related SEAH risks, prevention and mitigation measures put in place and how to report complaints of SEAH through the sub-project´s grievance mechanism. – Procedures on how to respond to any allegation of SEAH. All sub-projects must put in place a grievance mechanism with specific procedures to receive, register and manage SEAH allegations.
ESPS 10	**Stakeholder engagement and information disclosure**	Development and implementation of a Stakeholder Engagement Plan (SEP) aimed at promoting and providing the means for effective and inclusive engagement with stakeholders, especially sub-project-affected people, throughout the sub-project's life. Disclosure of relevant sub-project environmental and social information in local languages and in an accessible and culturally appropriate manner. Consultation process with sub-project stakeholders, especially sub-project affected populations, during sub-project preparation. Establishment of a sub-project grievance mechanism for stakeholders to raise questions, proposals, concerns and grievances regarding the sub-project environmental and social impacts and management.

124. To do so, IDB review will focus on improving executing entities' capacity and commitment to assure adequate level of safeguards implementation. IDB will review any existing E&S Management System (ESMS) for selected PDBs that will receive funding from Sub-Projects under the Programme. As part of the ESMS review, IDB will follow the IDB E&S procedure and apply its Platform for the Analysis of Institutional Capacity (PACI, as per the acronym in

spanish) tool to identify needs for capacity building and institutional strengthening in ESG aspects.

125. For a complete description of the components of the E&S risk and impacts assessment and management approach applied by the IDB in both the preparation and execution of the Programme, see Annex 6.

G.2. Gender assessment and action plan (max. 500 words, approximately 1 page)

126. Women and men within indigenous peoples, Afro-descendants and various population groups that depend on and take advantage of natural resources have different roles and purposes. The knowledge, needs, priorities, experiences, and capacities of women (especially as primary users and managers of water resources) continue to be ignored or undervalued. Amid the diversity of the Amazon region, women and men participate in different ways in making decisions about the management of natural resources and have different levels of access and control over them and the derived benefits. These differences also generate inequalities in the vulnerability and resilience that women and men have in the face of environmental risks.

127. Additionally, climate change exacerbates health risks for women and diverse populations in the Amazon basin, including indigenous communities. Reduced access to health services during extreme weather events increases the incidence of maternal injuries, illnesses, and deaths (UNFPA, 2019). Displacement caused by climate disasters also exposes women and diverse populations to increased risks of exploitation, human trafficking, and gender-based violence as they struggle to rebuild their lives in unfamiliar and often precarious environments (UNHCR, 2020). In the face of these multifaceted challenges, it is imperative to empower these communities through inclusive decision-making processes, access to resources and design of sustainable adaptation strategies to build inclusive resilience to climate change.

128. For this, a Gender Assessment was carried out to understand the gender situation in the countries that are included in the programme and identify gender issues and develop recommendations to promote gender equality, the empowerment of women and development with the identity of please, the inclusion of people with disabilities, Afro-descendant and the LGTBQ+ population. With the information analyzed in the Gender Assessment, the Gender, and Diversity Action Plan (See Annex 8) is designed, which provides a specific framework for gender and social inclusion and with specific deadlines to implement relevant gender and diversity activities. The Plan articulates complementary activities with gender goals and inclusion of Indigenous Peoples (IP), Afro-descendants (AD), People with Disabilities (PwD), and peasant communities in the Amazon basin.

129. These types of activities were included transversally in the programme. Component 1 includes actions such as a regional study on gender violence gaps in women due to their role in the collection and maintenance of water, including Actions to prevent violence and support female victims. As well as campaigns, material, and final reports to ensure the participation of women and diverse populations. Component 2 includes implementing six water management subprojects in Indigenous and Afro-descendant communities with innovative solutions developed. In addition, a country study on local intermediaries will be conducted to establish a baseline of their support for women-led companies. Component 3 includes training actions, such as regional, national, and subnational capacity development to optimize access to green and climate financing that includes a gender and diversity approach. The gender action plan includes indicators and goals for the various actions proposed within the plan.

130. In addition to these planned activities, each subproject of the program will follow the IDB's Environmental and Social Policy Framework (ESPF), which includes the Environmental and Social Performance Standard on Gender Equality (ESPS 9), which aims to minimize gender risks and impacts and introduce effective measures to avoid, prevent or mitigate them and, thus, eliminate the possibility of creating gender inequalities or reinforcing pre-existing ones.

G.3. Financial management and procurement (max. 500 words, approximately 1 page)

131. The proposed Programme will be led by IDB Water and Sanitation Division (WSA) and the Amazon Coordination Unit (ACU)[12] in close coordination with the Climate Change (CCS) Division. This multi-sectoral approach incorporates synergies in the development of projects, by combining extensive know-how on the design and implementation of innovative financial instruments.

132. Financial resources from the GCF will be managed in accordance with the AMA, with the establishment of the GCF Account by IDB. This account serves as the conduit for all GCF resources related to the Program, with disbursement decisions based on forecasted sub-project needs. IDB ensures commitment of GCF resources to specific sub-projects upon request.

133. The financial management, oversight, and reporting follow IDB policies, AMA, and FAA requirements, outlined in Subsidiary Agreements. These agreements delineate eligible activities, disbursement periods, and implementation guidelines, including the structure of GCF-funded activities within EEs.

134. Disbursements, reporting, monitoring, and evaluation of the Project adhere to IDB Policies and Procedures, including Financial Management Guidelines. Disbursement of GCF resources to IDB is contingent upon approved resource allocations and effective Subsidiary Agreements for individual operations.

135. Following IDB policies, loan resources are disbursed to EEs as advances or reimbursements within the designated loan disbursement period. EEs must submit audited financial statements and periodic reports, ensuring compliance with eligibility criteria and progress towards development objectives. IDB applies its hiring and procurement policies when acting as EE and requires other EEs to follow applicable IDB procurement policies for GCF resource usage. In all projects, the IDB applies the Institutional Capacity Assessment Platform (PACI, by its acronym in Spanish) to evaluate the key areas involved in implementation and execution. This evaluation plays a crucial role in assessing the capacity of the executing entity (EE). In procurement, a comprehensive plan is developed that includes supervision arrangements. This supervision ensures adherence to procurement policies, with the Bank providing support to the executing agency (EA) throughout the process. The PACI results are used to create a supervision plan that identifies the processes requiring prior review. Additionally, a fiduciary training plan is developed. In cases of inadequate institutional capacity, hiring international procurement consultants to assist the EE may be considered.

136.

137. The GCF Account undergoes external audits annually as mandated by the AMA. IDB submits an assertion report and an external auditor's report on the effectiveness of internal controls and the accuracy of financial statements for all trust funds, including the GCF Account. Fund resources cover audit costs.

G.4. Disclosure of funding proposal

☐ No confidential information: The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.

☒ With confidential information: The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:

- full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and
- redacted copy for disclosure on the GCF website.

[12] WSA will lead the operations under the Programme for the Water and Sanitation sector. ACU is the technical coordinator of the financial mechanisms under Amazonia Forever Program of the IDB. As such, it will lead aspects related to the technical coordination of the Programme with other initiatives and financial mechanisms of the IDB Group in the Amazon region to ensure complementarity.

The funding proposal can only be processed upon receipt of the two copies above, if it contains confidential information.

[1] Environmental and Social Performance Standard

G. ANNEXES

H.1. Mandatory annexes

☒	Annex 1	NDA no-objection letter(s) **(template provided)**
☒	Annex 2	Feasibility study - and a market study, if applicable
☒	Annex 3	Economic and/or financial analyses in spreadsheet format
☒	Annex 4	Detailed budget plan **(template provided)**
☒	Annex 5	Implementation timetable including key project/programme milestones **(template provided)**
☒	Annex 6	E&S document corresponding to the E&S category (A, B or C; or I1, I2 or I3): **(ESS disclosure form provided)** ☐ Environmental and Social Impact Assessment (ESIA) or ☐ Environmental and Social Management Plan (ESMP) or ☐ Environmental and Social Management System (ESMS) ☐ Others (please specify – e.g. Resettlement Action Plan, Resettlement Policy Framework, Indigenous People's Plan, Land Acquisition Plan, etc.)
☒	Annex 7	Summary of consultations and stakeholder engagement plan
☒	Annex 8	Gender assessment and project/programme-level action plan **(template provided)**
☒	Annex 9	Legal due diligence (regulation, taxation and insurance)
☒	Annex 10	Procurement plan **(template provided)**
☒	Annex 11	Monitoring and evaluation plan **(template provided)**
☐	Annex 12	AE fee request **(template provided)**
☐	Annex 13	Co-financing commitment letter, if applicable **(template provided)**
☐	Annex 14	Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule

H.2. Other annexes as applicable

☐	Annex 15	Evidence of internal approval **(template provided)**
☒	Annex 16	Map(s) indicating the location of proposed interventions
☒	Annex 17	Multi-country project/programme information **(template provided)**
☐	Annex 18	Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
☐	Annex 19	Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity
☐	Annex 20	First level AML/CFT (KYC) assessment
	Annex 21	Operations manual (Operations and maintenance)
☒	Annex 22	Assessment of GHG emission reductions and their monitoring and reporting (for mitigation and cross cutting-projects)[13]
☐	Annex X	Other references

** Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*

[13] Annex 22 is mandatory for mitigation and cross-cutting projects.

No-objection letter issued by the national designated authority(ies) or focal point(s)

BICENTENARIO DE BOLIVIA

ESTADO PLURINACIONAL DE BOLIVIA

MINISTERIO DE PLANIFICACIÓN DEL DESARROLLO

La Paz,
MPD/VPC/DGSC-NE 0237/2024

Señora
Julia Johannsen
Representante
BANCO INTERAMERICANO DE DESARROLLO
Presente. -

Ref.: Remisión de la carta de no objeción

De mi consideración:

Mediante la presente, en mi calidad de Autoridad Nacional Designada tengo a bien remitir a usted la carta de no objeción para la presentación de la Propuesta de Financiamiento del Programa "Mejorar la resiliencia climática aumentando la seguridad hídrica en la cuenca del Amazonas" ante el Fondo Verde para el Clima.

Con este motivo, saludo a usted con las atenciones de mi más alta y distinguida consideración.

Carlos David Guachalla Terán
VICEMINISTRO DE PLANIFICACIÓN Y COORDINACIÓN
MINISTERIO DE PLANIFICACIÓN DEL DESARROLLO

DIRECCIÓN GENERAL DE SEGUIMIENTO Y COORDINACIÓN
V°B°
Edson Leonil Apaza Otalora
VPC
M.P.D.

DIRECCIÓN GENERAL DE SEGUIMIENTO Y COORDINACIÓN
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No-objection letter template for programmes

GREEN
CLIMATE
FUND

BICENTENARIO DE BOLIVIA

ESTADO PLURINACIONAL DE BOLIVIA

MINISTERIO DE PLANIFICACIÓN DEL DESARROLLO

To: The Green Climate Fund ("GCF")

La Paz, 12 April 2024

Re: Funding proposal for the GCF by the Inter-American Development Bank (IDB) regarding Improving Climate Resilience by Increasing Water Security in the Amazon Basin

Dear Madam, Sir,

We refer to the programme titled Improving Climate Resilience by Increasing Water Security in the Amazon Basin in the Plurinational State of Bolivia as included in the funding proposal submitted by the Inter-American Development Bank (IDB) to us on 10 April 2024.

The undersigned is the duly authorized representative of the Ministry of Development Planning, the National Designated Authority of the Plurinational State of Bolivia.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

(a) The government of the Plurinational State of Bolivia has no-objection to the programme as included in the funding proposal;
(b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of the Plurinational State of Bolivia;
(c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

VºBº Edson Leonil Apaza Oruora VPC M.P.D. — DIRECCIÓN GENERAL DE SEGUIMIENTO Y COORDINACIÓN

Mr. Carlos David Guachalla Terrazas
Vice-minister of Planning and Coordination
Ministry of Development Planning
Plurinational State of Bolivia

MINISTÉRIO DA FAZENDA
Secretaria de Assuntos Internacionais
Subsecretaria de Financiamento ao Desenvolvimento Sustentável
Coordenação-Geral de Finanças Sustentáveis

Carta SEI nº 116/2024/MF

To: The Green Climate Fund ("GCF")

August 15, 2024

Ms. Mafalda Duarte

Executive Director
Secretariat of the Green Climate Fund
175 Art Center-daero
Yeonsu-gu, Incheon 22004

Republic of Korea

Re: Funding proposal for the GCF by the Inter-American Development Bank (IDB) regarding the Programme "Improving Climate Resilience by Increasing Water Security in the Amazon Basin".

Dear Madam,

We refer to the programme titled "Improving Climate Resilience by Increasing Water Security in the Amazon Basin" in Brazil as included in the funding proposal submitted by the Inter-American Development Bank (IDB) to us on April 5, 2024.

The undersigned is the duly authorized representative of the Secretariat for International Affairs of the Ministry of Finance, the National Designated Authority of Brazil.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

a) The government of Brazil has no-objection to the programme as included in the funding proposal;

b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Brazil;

c) In accordance with the GCF's environmental and social safeguards, the programme as

included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

Document signed electronically

IVAN TIAGO MACHADO OLIVEIRA

Deputy Secretary for Sustainable Development Finance

National Designated Authority

Documento assinado eletronicamente por **Ivan Tiago Machado Oliveira**, **Subsecretário(a)**, em 22/08/2024, às 21:23, conforme horário oficial de Brasília, com fundamento no § 3º do art. 4º do Decreto nº 10.543, de 13 de novembro de 2020.

A autenticidade deste documento pode ser conferida no site https://sei.economia.gov.br/sei/controlador_externo.php?acao=documento_conferir&id_orgao_acesso_externo=0, informando o código verificador **43903124** e o código CRC **927709D7**.

Processo nº 19995.000422/2024-33. SEI nº 43903124

Departamento
Nacional de Planeación

Bogotá D.C., martes, 29 de octubre de 2024

20244541260331

Al responder cite este Nro.
SCCGR 20244541260331

To: The Green Climate Fund ("GCF")
Att. executive-office@gcfund.org

Re: Funding proposal for the GCF by Inter-American Development Bank (IDB) regarding Improving Climate Resilience by Increasing Water Security in the Amazon Basin.

Dear Madam, Sir,

We refer to the programme titled *Improving Climate Resilience by Increasing Water Security in the Amazon Basin* in Colombia as included in the funding proposal submitted by **Inter-American Development Bank (IDB)** to us on 14 May 2024.

The undersigned is the duly authorized representative of National Planning Department, the National Designated Authority of Colombia.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

(a) The government of Colombia has no-objection to the programme as included in the funding proposal;
(b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Colombia;
(c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

DNP
Firmado digitalmente

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

_____

CAROLINA DIAZ GIRALDO
Director of Environment and Sustainable Development
National Planning Department
Government of Colombia

CC: manueln@iadb.org; raulmu@iadb.org; proberts@iadb.org; gloriav@iadb.org;

To: The Green Climate Fund ("GCF")

Quito – Ecuador, March 5th, 2024

Re: Funding proposal for the GCF by the Inter-American Development Bank (IDB) regarding Improving Climate Resilience by Increasing Water Security in the Amazon Basin

Dear Madam, Sir,

We refer to the programme titled Improving Climate Resilience by Increasing Water Security in the Amazon Basin in the Republic of Ecuador as included in the funding proposal submitted by the Inter-American Development Bank (IDB) to us on 27 February 2024.

The undersigned is the duly authorized representative of the Ministry of Environment, Water and Ecological Transition, the National Designated Authority of the Republic of Ecuador.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

(a) The government of the Republic of Ecuador has no-objection to the programme as included in the funding proposal;
(b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of the Republic of Ecuador;
(c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

_____

Mr. Ángel Sandoval
Undersecretary of Climate Change
Ministry of Environment, Water and Ecological Transition
Republic of Ecuador

To: The Green Climate Fund ("GCF")

Lima, 7 November 2024

Re: Funding proposal for the GCF by Inter-American Development Bank - BID regarding Improving Climate Resilience by Increasing Water Security in the Amazon Basin

Dear Madam, Sir,

We refer to the programme titled Improving Climate Resilience by Increasing Water Security in the Amazon Basin in Peru as included in the funding proposal submitted by BID to us on 27 February 2024.

The undersigned is the duly authorized representative of Ministry of Economy and Finance, the National Designated Authority of Peru.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

(a) The government of Peru has no-objection to the programme as included in the funding proposal;
(b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Peru;
(c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

_____

Mr. Jose Alfredo La Rosa Basurco
General Director, General Directorate of International Economic Affairs, Competition and Productivity
Ministry of Economy and Finance
Peru

No-objection letter template for programmes

GREEN CLIMATE

MPORTANT NOTE]

- Please note the NOL template for projects and NOL template for programmes are different. **You are advised to choose the rigl NOL template (i.e. Project NOL Template or Programme NOL template)** Kindly refer to Section A1 of the Funding Propos or Concept Note for the project category.

- The content of the NOL templates follows the No objection procedure adopted by Decision B.08/10. The NoL templates a therefore not subject to deviation. No additional text should be added or removed from the template.

MINISTRY OF SPATIAL PLANNING AND ENVIRONMENT

Prins Hendrikstraat no 22
Paramaribo, Suriname
Tel: +597-522020 email: secmin@rom.gov.sr

To: The Green Climate Fund ("GCF")

Our Ref: MINROM/GCF/vg/128/24 Paramaribo,9 April 2024

Re: Funding proposal for the GCF by the Inter-American Development Bank (IDB) regarding Improving Climate Resilience by Increasing Water Security in the Amazon Basin

Dear Madam, Sir,

We refer to the programme titled Improving Climate Resilience by Increasing Water Security in the Amazon Basin in the Republic of Suriname as included in the funding proposal submitted by the Inter-American Development Bank (IDB) to us on 4 March 2024.

The undersigned is the duly authorized representative of the Ministry of Spatial Planning and Environment, the National Designated Authority of the Republic of Suriname.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

(a) The government of the Republic of Suriname has no-objection to the programme as included in the funding proposal;
(b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of the Republic of Suriname;
(c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

His Excellency Mr. Marciano Dasai
Minister
Ministry of Spatial Planning and Environment
Republic of Suriname
CC MOF, MONR

Environmental and social safeguards report form pursuant to para. 17 of the IDP

Basic project or programme information	
Project or programme title	Improving Climate Resilience by Increasing Water Security in the Amazon Basin
Existence of subproject(s) to be identified after GCF Board approval	Yes
Sector (public or private)	Public
Accredited entity	Inter-American Development Bank (IDB)
Environmental and social safeguards (ESS) category	Category B
Location – specific location(s) of project or target country or location(s) of programme	Amazon Basin: Bolivia, Brazil, Colombia, Ecuador, Peru, and Suriname
Environmental and Social Impact Assessment (ESIA) (if applicable)	
Date of disclosure on accredited entity's website	Friday, January 17, 2025
Language(s) of disclosure	English, Spanish, Portuguese, and Dutch
Explanation on language	These are the official languages of the target countries.
Link to disclosure	English: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-13 Spanish: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-6 Portuguese: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-17 Dutch: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-9
Other link(s)	The disclosure of the Annex 6 is available in the following website: https://www.iadb.org/en/project/RG-T4551 - under project documentation Preparation phase.
Remarks	An ESIA consistent with the requirements for a Category B programme is contained in the "Environmental and Social Analysis and Environmental and Social Management Framework (Annex 6)".
Environmental and Social Management Plan (ESMP) (if applicable)	
Date of disclosure on accredited entity's website	Friday, January 17, 2025
Language(s) of disclosure	English, Spanish, Portuguese, and Dutch
Explanation on language	These are the official languages of the target countries.

Link to disclosure	English: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-13 Spanish: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-6 Portuguese: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-17 Dutch: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-9
Other link(s)	The disclosure of the Annex 6 is available in the following website: https://www.iadb.org/en/project/RG-T4551 - under project documentation Preparation phase.
Remarks	An ESMP consistent with the requirements for a Category B programme is contained in the "Environmental and Social Analysis and Environmental and Social Management Framework (Annex 6)".
Environmental and Social Management System (ESMS) (if applicable)	
Date of disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Explanation on language	N/A
Link to disclosure	N/A
Other link(s)	N/A
Remarks	N/A
Any other relevant ESS reports, e.g. Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF), Indigenous Peoples Plan (IPP), Indigenous Peoples Planning Framework (IPPF) (if applicable)	
Description of report	Indigenous Peoples Plan Framework (IPPF), Strategic Environmental and Social Assessment
Date of disclosure on accredited entity's website	Friday, January 17, 2025
Language(s) of disclosure	English, Spanish, Portuguese, and Dutch
Explanation on language	These are the official languages of the target countries.
Link to disclosure	**English**: (i) IPPF: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-15 (ii) SESA: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-14 **Spanish:** (i) IPPF: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-8

	(ii) SESA: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-7 **Portuguese:** (i) SESA: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-18 (ii) IPPF: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-19 **Dutch:** (i) SESA: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-11 (ii) IPPF: https://www.iadb.org/document.cfm?id=EZIDB0002411-426738055-10
Other link(s)	The disclosure of the Annex 6 is available in the following website: https://www.iadb.org/en/project/RG-T4551 - under project documentation Preparation phase.
Remarks	N/A
Disclosure in locations convenient to affected peoples (stakeholders)	
Date	Friday, January 17, 2025
Place	Printed copies of the documents have been made available to stakeholders in the following locations: **Bolivia:** IDB Country Office - Av.6 de Agosto 2818, La Paz, Bolivia. **Brazil:** IDB Country Office: Setor de Embaixadas Norte Quadra 802 Conjunto F Lote 39 - Asa Norte, Brasília - DF, Brasil **Colombia:** IDB Country Office - Carrera 7 N 71-21, Torre B Piso 19. Edificio Avenida Chile, Bogotá, Colombia **Ecuador:** IDB Country Office- Avenida Simon Bolivar S/N y Via NayónComplejo Corporativo Ekopark - Torre 5,Piso 3 170124, Quito, Ecuador **Peru:** IDB Country Office: Dean Valdivia 148-Piso 10Centro Empresarial Platinum Plaza San Isidro, Lima, Perú **Suriname:** IDB Country Office: Peter Bruneslaan 2-4 Paramaribo, Suriname

Date of Board meeting in which the FP is intended to be considered	
Date of accredited entity's Board meeting	Monday, February 17, 2025
Date of GCF's Board meeting	Monday, February 17, 2025

Note: This form was prepared by the accredited entity stated above.

Secretariat's assessment of FP261

Proposal name:	Improving Climate Resilience by Increasing Water Security in the Amazon Basin
Accredited entity:	Inter-American Development Bank
Country/(ies):	Bolivia (Plurinational State of), Brazil, Colombia, Ecuador, Peru, Suriname
Programme size:	Large

I. Overall assessment of the Secretariat

1. The funding proposal is presented to the Board for consideration with the following remarks:

Strengths	Points of caution
Strategic impact and alignment: The programme strongly aligns with GCF investment criteria by aiming to enhance climate resilience and water security for 1.52 million direct and 4.15 million indirect beneficiaries across six countries, including vulnerable and Indigenous communities.	Variability in the capacity of executing entities across countries may affect the quality and consistency of programme implementation.
Innovation and paradigm shift: The programme represents a significant shift in how climate resilience is approached in the water sector. It introduces a blended finance facility designed to integrate climate resilience into mainstream water management. By creating a model that can be replicated across borders, it combines advanced climate information systems with practical adaptation measures on the ground. The goal is to transform the sector by using a blended finance approach that merges ecosystem-based adaptation with innovative financial strategies.	Success is contingent on sustained regional cooperation and alignment of national policies, which may be difficult to maintain over time.
Sustainability: This approach aims to develop scalable and replicable solutions for climate-resilient, low-carbon water supply, sanitation, and waste technologies and infrastructure throughout the Amazon Basin.	The extensive monitoring and evaluation requirements across multiple countries and components could strain resources and expertise, potentially leading to gaps in data collection and impact assessment.
Stakeholder engagement: The programme incorporates gender-sensitive approaches aimed at empowering women and marginalized groups, thereby enhancing	

community resilience and ensuring equitable benefits for all. It includes comprehensive stakeholder engagement plans to ensure meaningful participation from diverse communities, including Indigenous Peoples, Afrodescendants, and persons with disabilities.	
Financial efficiency: The programme shows financial efficiency with a co-financing ratio of 1.41, leveraging significant additional resources. The adaptation cost per beneficiary is reasonable at USD 106.5 for direct beneficiaries and USD 28.6 overall, indicating cost-effective interventions.	
Climate information and early warning systems: Enhance early warnings for all initiatives and risk-based decision-making at sector and national budget levels.	

2. The Board may wish to consider approving this funding proposal in accordance with the terms listed in the term sheet agreed between the Secretariat and the accredited entity (AE), and, if considered appropriate, subject to the conditions set out in annex II of document GCF/B.41/02.

II. Summary of the Secretariat's assessment

2.1 Programme background

3. The Amazon Region faces acute vulnerability to climate change, experiencing significant impacts through rising temperatures, increased aridity, sea level rise, coastal erosion, and acidification of water bodies. Recent severe droughts have diminished water availability, adversely affecting agricultural production, traditional fishing, food security, and public health. Home to the world's largest tropical rainforest, the Amazon Basin stands as one of the Earth's most biodiverse regions. It serves as a crucial carbon sink, sequestering carbon through its vegetation and soil systems. Moreover, it constitutes the world's largest catchment basin, covering 6 per cent of the Earth's surface and discharging over 6,500 km^3 of water annually. This represents 70 per cent of South America's freshwater discharge and approximately 20 per cent of global freshwater ocean input. The basin generates a unique "flying rivers" phenomenon, transporting about 20 billion tonnes of water vapour daily from the Amazon rainforest to regions as far as northern Argentina.

4. According to the diagnostic analysis that the Amazon Cooperation Treaty Organization (ACTO) conducted in 2018, the following priority issues were identified: (i) water pollution, (ii) deforestation, (iii) biodiversity loss, (iv) extreme hydroclimatic events, (v) erosion, (vi) sediment transport, (vii) sedimentation, (viii) land-use change, (ix) glacier loss, (x) major infrastructure projects, and (xi) inadequate integrated water resource management. Climate change significantly exacerbates these problems, resulting in more severe and frequent events that profoundly affect ecosystems, human health and well-being, and the global economy. Notably, since mid-2023, the Amazon River Basin has experienced an exceptional drought, caused by persistently low rainfall and consistently high temperatures across the entire basin throughout the year.

5. Despite ongoing regional and participatory planning initiatives, the Amazon Region continues to face expanding degradation, with both gradual and sudden climate-change impacts becoming increasingly evident. This degradation has triggered public health concerns and disrupted ecosystem services. Furthermore, socioeconomic vulnerabilities, particularly inequality and poverty, are exacerbated by the region's economic dependence on natural resource-based commodities. Enhancing water security in the Amazon region has become imperative. This can be achieved through targeted investments in water supply, sanitation, and waste (WSW) infrastructure to strengthen climate resilience among the basin's population, while simultaneously preserving essential ecosystem services to ensure sustainable water, food, and energy supplies.

6. The AE of this programme, the Inter-American Development Bank (IDB), has identified the following barriers, that IDB will address with the proposed programme:

(a) Limited data and ability to forecast or provide early warning or multi-hazard climate risks, combined with limited data exchange between basin countries;

(b) Limited knowledge of climate-change impacts on water security;

(c) Poor implementation of existing policies on climate-change adaptation for the water sector and limited integration of integrated water resources management (IWRM) and ecosystem-based adaptation (EbA) considerations into sectoral water policies;

(d) A lack of an enabling environment, including regulatory incentives for investing in climate-change adaptation strategies focused on water security;

(e) A lack of medium and/or long-term finance with adequate concessional conditions for adaptation investments in WSW sectors benefiting vulnerable communities, including Indigenous Peoples; and

(f) High perceived risks by the local financial sector regarding climate investments in WSW projects.

7. Against this backdrop, the proposed programme will strengthen the resilience of vulnerable communities, including Indigenous Peoples, and crucial ecosystems within the Amazon Basin against the anticipated impacts of climate change on water security and ecosystem services. This will be accomplished by employing an adaptation-focused and integrated water management strategy that accounts for current and future changes in water distribution, supply variability, demand, and supports the promotion or restoration of ecosystems' abilities to deliver essential hydrological services.

8. The total financing for this proposed programme is USD 391,428,631 with total GCF funding requested of USD 162,152,791. Of the GCF requested funding, USD 86,876,068 will be provided in senior loans with USD 75,276,723 in grants, which leverages USD 229,275,840 (USD 216,989,840 in senior loans and USD 12,286,000 in grants) in co-finance by IDB. The environmental and social safeguards category of this programme is B.

9. The programme will directly benefit 1,522,249 vulnerable people (3 per cent of the regional population in the Amazon Basin area) and indirectly benefit a further 4,156,701 vulnerable people (7 per cent of the regional population in the Amazon Basin area) within six countries.

2.2 Component-by-component analysis

Component 1: Strengthening the knowledge base and information systems on climate change impacts and water security to enhance preparedness and response to extreme climate and slow-onset events (total cost: USD 29.29 million; GCF cost: USD 23.33 million)

10. This component seeks to bolster knowledge and access to information regarding the impacts of climate change on water security, thereby enhancing preparedness and response to both extreme and gradual climate events. It tackles bottlenecks of limited data availability and knowledge of how climate change impacts water security by improving data management and information systems, as well as developing decision-making tools to address short-term climate extremes and support medium- and long-term climate adaptation planning. The component will promote the creation and implementation of regional transboundary protocols for shared access and management of hydrometeorological and water-security-related data, in alignment with initiatives like the World Meteorological Organization's HydroHub. The activities in this component are transformative and will complement IWRM efforts, which would then tackle the intensified effects of climate change throughout the Amazon Basin. By enhancing existing water governance frameworks, this component aims to reduce community vulnerability, mitigate the risks of maladaptation, and lay the foundation for an integrated multisectoral (nexus) water-management approach across basin boundaries. Specific activities include:

(a) Output 1.1: Amazon-Basin-level water resource mapping and knowledge integration with improved climate modelling:

  (i) Activity 1.1.1: Regional hotspot analysis of the western region of the Amazon sedimentary aquifer system, including an aquifer vulnerability assessment to climate change and contamination from anthropogenic (mercury) and non-anthropogenic (arsenic); surface–groundwater dynamic modelling for a better understanding of aquifer recharge natural patterns and functionality in at least three (3) priority areas;

  (ii) Activity 1.1.2: Conduct studies to characterize the climate impacts on river dynamics (including surface and groundwater interactions by combining hydrological and hydrodynamic modelling) of priority Amazonian rivers (priority rivers would be identified during the project proposal stage);

  (iii) Activity 1.1.3: Support of a regional water resources information system, through water-balance modelling, linked to hydrometeorological monitoring stations to enhance river forecasting and with specific modelling capabilities for incorporating climate change and water demand scenarios that include groundwater where possible; and

  (iv) Activity 1.1.4: Support water-quality monitoring systems by combining international remote sensing data sets (i.e. Sentinel, Modis, Landsat, Rapid-Eye) and local continuous water-quality monitoring networks; and

(b) Output 1.2: Climate information and early warning systems enhanced:

  (i) Activity 1.2.1: Advance priority monitoring stations for an integrated flood and drought management system, including the establishment of at least 35 additional stations and 4 Doppler radar units;

  (ii) Activity 1.2.2: Development of a data-processing centre for the Amazon Basin, integrated into the Amazon Regional Observatory, with cloud-based access, including promoting basin-level models such as the Flash Flood Guidance System or the Group on Earth Observations Global Water Sustainability;[1] and

  (iii) Activity 1.2.3: Dissemination of gender and socially inclusive advisories that consider most vulnerable populations, including Indigenous Peoples to improve forecasting functionality.

[1] See www.geoglows.org/

Component 2: Catalyse climate investments for climate-resilient and low-carbon water supply, sanitation, and waste technologies and infrastructure (total cost: USD 333.72 million; GCF cost: USD 116.72 million)

11. Component 2 will focus on overcoming barriers around 1) limited knowledge; 2) limited enabling environments; and 3) lack of concessional and patient capital, to support climate-resilient and low-carbon WSW technologies and infrastructure in the Amazon Basin region. This will be achieved by implementing national projects that highlight innovative, climate-resilient IWRM technologies, including EbA strategies. The goal is to reduce the water sector's vulnerability by promoting water conservation, enhancing water efficiency and reuse, and bolstering protection against water-related disasters. These interventions are aligned with pathways 1 and 2 of the *GCF Water Security Sectoral Guide*,[2] which emphasize preserving water resources and improving resilient water supply and sanitation services. This approach directly supports various adaptation benefits, ensuring communities are better equipped to handle climate change impacts.

12. The component includes four main outputs designed to adapt to the specific needs of various populations, from small rural communities (output 2.1) to larger, more complex cities (output 2.2). Output 2.3 will implement advanced technologies to reduce climate vulnerability and promote a comprehensive approach to subproject-level interventions, ensuring that each project includes innovative tools and systems to enhance resilience. Moreover, output 2.4 aims to create new financial mechanisms and funds to cover operational costs, support disaster recovery efforts, and encourage international collaboration for replication, ensuring the long-term sustainability of interventions. This output will establish a financial foundation for ongoing and future climate-resilience activities, fostering a robust framework for adaptive management and scalable solutions. Specific activities under this component include:

(a) Output 2.1: Subprojects focused on community and EbA for small communities implemented:

  (i) Activity 2.1.1: Implementation of subprojects in small communities;

  (ii) Activity 2.1.2: Design and implement community-driven water-resilience projects specifically led by women and Indigenous groups;

  (iii) Activity 2.1.3: Development of a customized "Amazonian best practices" training programme;

  (iv) Activity 2.1.4: Development of a strategy for scaling-up investments;

  (v) Activity 2.1.5: Dissemination of lessons learned and best practices; and

  (vi) Activity 2.1.6: Develop customized gender-sensitive capacity-building programmes for women and marginalized communities on climate adaptation, water governance, and leadership.

(b) Output 2.2: Subprojects focused on community and EbA for medium to large communities implemented:

  (i) Activity 2.2.1: Implementation of subprojects in medium to large communities, including project selection using eligibility criteria and stakeholder consultations;

(c) Output 2.3: Novel technologies and small-scale adaptation measures on the WSW sectors supported, aimed to strengthen resilience of small vulnerable communities:

  (i) Activity 2.3.1: Analyse innovative financial mechanisms to generate EbA solutions, including identification, design and proposal of specific technical and

[2] See www.greenclimate.fund/document/sectoral-guide-water-security

financial mechanisms to promote private–public participation for financing the implementation of EbAs (thematic bonds, water funds, parametric insurances, performance-based contracts, guarantees);

(ii) Activity 2.3.2: Develop a cross-cutting scorecard mechanism to assess, monitor and track the impacts of proposed investments towards achieving climate resilience, greenhouse gas reduction, gender and social inclusion and strengthened environmental health;

(iii) Activity 2.3.3: Develop and implement promotion and dissemination plans to support national institutions and/or national development banks to coordinate activities with other entities for direct investment in climate-adaptation interventions and to educate society on their economic value and importance;

(iv) Activity 2.3.4: Strengthen stakeholders working in related areas, WSW sectors, nature-based solutions, etc., through actions aimed at: (i) optimizing financial resource allocation decisions; (ii) correctly assessing risk and opportunities associated with investments in businesses leveraged by ecosystem services and natural capital; and (iii) measuring and monitoring environmental and social impacts of funded ventures by using the scorecard mechanism; and

(v) Activity 2.3.5: Design a programme offering incentives, such as rebates for water-efficient appliances and subsidies for sustainable agricultural practices; and

(d) Output 2.4: Support provided for the origination, design, and deployment of adaptation measures in the WSW public sector, emphasizing:

(i) Activity 2.4.1: Carrying out an assessment of WSW infrastructure projects in the region to develop and implement a strategic investment plan aiming to

(1) Upgrade existing water, sanitation and solid waste infrastructure;

(2) Prioritize activities that enhance climate resilience in ongoing infrastructure projects;

(3) Identify opportunities and develop a strategic financing plan for future climate-sensitive drinking water and sanitation investments in the Amazon Basin;

(4) Identify cultural adaptation needs for diverse population groups; and

(5) Conduct skills gap assessments to identify areas where local workers and institutions need more training;

(ii) Activity 2.4.2: Establish a “Train-the-trainer” programme for local water utilities to operate and maintain these systems, ensuring a sustainable foundation for long-term maintenance of new systems;

(iii) Activity 2.4.3: Climate-resilient upgrades to infrastructure projects and projects involving incremental financing of climate-resilient infrastructure in planned projects in the WSW public sector; and

(iv) Activity 2.4.4: Identify projects which incorporate large-scale investments on natural-based solutions (including, for example, the EbA to adaptation), in the priority areas for drought management, flood control and aquifer recharge, and secure funding for their implementation through a strategic financial plan for public investment.

Component 3: Promote capacity and develop an enabling environment for climate-change planning and investment, regional exchange of data and information and transboundary

cooperation mechanisms for water security (total cost: USD 8.98 million; GCF cost: USD 4.5 million)

13. This component will provide technical assistance aimed at guiding the development and effective implementation of adaptation activities within the WSW sectors, specifically to address the poor implementation of existing policies on climate change and limited integration of IWRM and EbA as well as to tackle the lack of an enabling environment. This component will deploy technical cooperation designed to enhance the enabling environment for coordination among Amazon Basin countries, including transboundary collaboration for water security. Specific activities under this component include:

(a) Output 3.1: National and regional policies and institutional frameworks to foster an integrated approach to adaptation looking at the basin as a transboundary system enhanced:

  (i) Activity 3.1.1: Conduct a gap analysis of financial, institutional, and regulatory frameworks in each of the countries benefiting from the programme to assess ways for more effective leveraging of local and international green financing for EbA projects in the WSW sector;

  (ii) Activity 3.1.2: Implement a capacity-building programme at regional, national, and subnational levels to optimize access to green and climate financing for WSW projects;

  (iii) Activity 3.1.3: Assess regional data exchange mechanisms and protocols necessary to develop and maintain an Amazon hydroclimatic information platform for the access and exchange of hydrological and meteorological data; and

  (iv) Activity 3.1.4: Assess existing mechanisms for transboundary cooperation to improve resilient water management and reduce community vulnerability to climate change within the context of current institutional frameworks (such as ACTO) and other bilateral/multilateral agreements.

Technical transversal cooperation (total cost: USD 10.60 million; GCF cost: USD 10.60 million)

14. This component will conduct activities to create mechanisms for the inclusion of gender and diversity, including women, Indigenous populations, Afrodescendants, persons with disabilities and lesbian, gay, bisexual, transgender and queer and more persons in order to ensure inclusivity of the interventions across the participating countries.

Monitoring and evaluation components (total cost: USD 6.35 million; GCF cost: USD 6.00 million)

15. This cost will cover the relevant activities required to monitor and evaluate the programme's progress towards the targets set out in the logical framework, particularly at the GCF outcome and project level, and with respect to co-benefits. The cost is about 1.62 per cent of the total project cost.

Project management (total cost: USD 2.50 million; GCF cost: USD 1.00 million)

16. The total project management cost, including the co-financing portion, is 0.64 per cent of the total programme budget, which is in compliance with the general principles and indicative list of eligible costs covered under the GCF Policy on fees for accredited entities and delivery partners.

III. Assessment of performance against investment criteria

3.1 Impact potential *Scale: Medium to high*

17. The programme aims to directly benefit 1.52 million people, with a focus on enhancing water security and resilience to climate-change impacts such as floods and droughts. Indirectly, it will impact 4.15 million people by improving ecosystem services and infrastructure resilience across the Amazon Basin.

3.2 Paradigm shift potential *Scale: Medium to high*

18. The programme seeks to integrate climate risk management into regional policies and infrastructure planning, promoting sustainable water management practices. It aims to demonstrate scalable, climate-resilient infrastructure models that can be replicated across the Amazon Basin and beyond. By establishing a finance facility and showcasing successful adaptation models, the programme encourages private-sector investment and policy adoption, facilitating broader regional and global replication.

3.3 Sustainable development potential *Scale: High*

19. The programme supports multiple Sustainable Development Goals (SDGs) through its comprehensive approach to climate resilience in the Amazon Basin. SDG 1 (No poverty) and SDG 10 (Reduced inequalities) are addressed by enhancing livelihood opportunities and reducing vulnerability to climate-related economic shocks, particularly for marginalized communities. SDG 5 (Gender equality) is supported through targeted interventions that promote women's participation in climate-adaptation efforts and decision-making processes. SDG 6 (Clean water and sanitation) is directly tackled by improving water security and sanitation infrastructure across the region.

20. SDG 11 (Sustainable cities and communities) is advanced through the programme's focus on urban resilience and waste management, while SDG 13 (Climate action) is at the core of the initiative, with its emphasis on climate adaptation and resilience-building. SDG 15 (Life on land) is supported through the programme's EbA approaches and nature-based solutions, which help preserve and restore the Amazon's vital ecosystems. By addressing these interconnected goals, the programme demonstrates a holistic approach to sustainable development that recognizes the complex relationships between climate, environment, and human well-being in the Amazon Basin.

3.4 Needs of recipients *Scale: High*

21. The need for GCF funding for this programme is clearly demonstrated through its role in enhancing climate resilience within existing activities and investments. The funding will specifically target the integration of climate considerations into WSW services, addressing a critical gap in current infrastructure and service delivery. This financial support is essential for transforming conventional WSW approaches into climate-resilient systems that can withstand increasing environmental pressures in the region.

3.5 Country ownership *Scale: High*

22. The programme demonstrates strong country ownership through its close alignment with the nationally determined contributions of the target countries in the Amazon Basin. This alignment ensures that the programme's objectives and activities are in harmony with each country's climate priorities and commitments under the Paris Agreement. Furthermore, the regional coordination facilitated by ACTO reinforces the collaborative nature of the programme, fostering a sense of shared ownership among participating countries. This regional approach

not only enhances the effectiveness of climate adaptation efforts but also strengthens existing cooperation frameworks in the Amazon region.

23. The development of the programme proposal was initiated in response to a gap identified by the Amazon countries themselves, underscoring its relevance to local needs and priorities. To further enhance country ownership, a series of regional workshops and bilateral meetings were conducted throughout the proposal development process. These consultations provided a platform for stakeholders from each country to contribute their insights, refine the programme's components, and ensure that it addresses the specific climate challenges faced by their communities. This participatory approach in the programme's design phase has fostered a strong sense of ownership among the participating countries, increasing the likelihood of successful implementation and long-term sustainability of the climate-resilience efforts in the Amazon Basin.

3.6 Efficiency and effectiveness *Scale: Medium*

24. The proposal offers a high-quality and rigorous economic and financial analysis (EFA), effectively demonstrating the programme's efficiency and effectiveness. The EFA evaluates six interventions, each requiring direct capital and operational expenditures across the six targeted countries. These interventions include rural sanitation, urban sanitation, solid waste management, urban water, rural water, and green drainage.

25. Long-term economic viability is supported by positive economic indicators across most interventions in the target countries. Economic benefits were valued in terms of societal and health outcomes, including reductions in infant mortality, healthcare cost savings, time savings in water collection, and decreases in diarrhoeal incidence. The model forecasts positive economic net present values and economic internal rates of return (IRRs) exceeding country-specific social discount rates for most interventions. Rural sanitation and the early warning system are the least economically viable, requiring full GCF concessional support through grants, while solid waste management is the most viable, with economic IRRs above 25 per cent across the board.

26. Financial viability over the 25-year period, based on the financial modeling conducted for this programme, is broadly supported by financial indicators for the six interventions, although results vary. Urban interventions demonstrate profitability, whereas rural ones are either marginally profitable or non-profitable, with financial IRRs falling below the financial discount rates. Each subproject's financial structure includes a mix of GCF grants, GCF loans, and IDB loans. The fund allocation methodology is well-defined, setting minimum financial performance targets and assessing GCF additionality. The proponent shows that fund optimization was achieved by targeting the minimum necessary level of GCF intervention.

27. Concessionality was comprehensively assessed during the appraisal process. For GCF, a low concessionality level was applied, taking into account factors like financial performance, as highlighted in the EFA, and the target countries' macroeconomic conditions. IDB loan pricing follows the standard policy of the AE, using a secured overnight financing rate with minimal margin and lending spread. The AE confirms that the two loans will not be blended, and GCF concessionality will be passed to subprojects via a weighted average interest rate. Debt service coverage ratios for most subprojects are expected to be around 1.2, ensuring adequate cash reflows for repayment.

28. The adaptation cost per direct beneficiary is USD 106.5, and USD 28.6 per total beneficiary, positioning it within the median range of the GCF adaptation portfolio for Latin America and the Caribbean. Cofinancing is substantial, with a ratio of 1.41. The proposal aims to establish a portfolio of "best practices in the Amazon Basin", with financial performance to be closely monitored throughout programme implementation.

IV. Assessment of consistency with GCF safeguards and policies

4.1 Environmental and social safeguards

29. **Programme overview**. The programme aims to: (i) increase climate resilience in water resources management through enhanced preparedness and response to extreme climate events; (ii) improve resilience in ecosystem services and carbon stocks of sociological systems and livelihoods; and (iii) strengthen governance and the enabling environment for climate resilience and low-carbon development in the Amazon Basin. The programme's social co-benefits include the improvement of children's health arising from: (i) an expected decrease in the mortality rate due to infectious and parasitic diseases in children; (ii) the provision of safe water and sanitation in homes and workplaces; and (iii) improved access to hygiene and, therefore, health. Economic co-benefits are also related to improving children's health because of the savings in public health costs. Its environmental co-benefits include the preservation and restoration of forest lands and cover as a result of employing natured-based solutions that also improve other ecosystem services such as air purification, soil creation and pollination, among others.

30. **Environmental and social risk category and safeguard instrument.** The programme will provide financing to public sector projects in the WSW sector, and technical assistance for the building of capacities and systems, and the development of a policy framework and investment plans on water resources. The financing of projects under the programme will be in the form of loans and grants to public sector entities implementing specific projects, or to financial intermediaries for the funding of a portfolio of projects. The AE has assigned an environmental and social risk Category B for the programme. The Secretariat concurs with the risk category and it is within the AE's environmental and social risk accreditation level. The AE has prepared an Environmental and Social Analysis and Environmental and Social Management Framework (ESMF) for the programme.

31. Compliance with GCF's Environmental and Social Safeguards (ESS) standards: Paragraphs 32–39 below describe how the programme complies with the standards.

32. **ESS1. Assessment and Management of Environmental and Social Risks and Impacts.** The AE has submitted an Environmental and Social Analysis and an ESMF and a Strategic Environmental and Social Assessment (SESA). The SESA provides an overview of the social and environmental profile of the Amazon Basin, the prevailing issues and contextual risks, and the water and sanitation gaps in the area. The ESMF identifies potential environmental and social impacts and risks of the programme activities and corresponding mitigation measures. It also outlines the procedures for evaluating the environmental and social aspects of individual subprojects or operations in the case of financial intermediaries.

33. **ESS2. Labor and Working Conditions.** The standard on Labor and Working Conditions is applicable to the programme's subprojects that involve construction and operation of facilities. The ESMF has identified some general and indicative examples of potential risks associated with the Labor and Working Conditions standard, such as accidents during construction, the use of child and forced labour, and risks of exposure to hazardous substances and materials, and poisonous or venomous animals. To manage the risks of labour and working conditions, the ESMF mentions that subprojects will adopt and implement labour management policies and procedures which are aligned with the standard, as well as an occupational health and safety programme which will address inherent risks related to the subproject and specific classes of hazards, including physical, chemical, biological, and radiological hazards and risks of accidents. The AE will reportedly support the development of a checklist of sectoral labour practices and working conditions and guidelines for evaluation of compliance with the standard.

34. **ESS3. Resource Efficiency and Pollution Prevention.** The programme will increase water availability through proper aquifer management. Energy use is expected to be minimal as the programme will promote nature-based and EbA type subprojects. In terms of pollution, the subprojects under this programme (water and sanitation and solid waste) will also generally reduce contamination of soil, surface water and groundwater from sewage and organic matter. The design and location of this infrastructure should take into consideration the presence or proximity of receptors (settlements, water sources, and critical habitats), and the risk of natural hazards, including tectonic hazards, wildfires, landslides and flood events. If not properly designed, a solid waste facility may result in the contamination of groundwater from leachate. Air pollution may also occur during the operation of sewage treatment and solid waste facilities in the form of strong odours. Moreover, during construction of the infrastructure, there will be risks of temporary air and water quality deterioration due to the emission of dust and particulate matter, noise and disposal of waste from the construction activities. To address these risks, the ESMF mentions that subprojects will comply with country regulations and permit requirements and conform with the relevant environmental, health and safety (EHS) guidelines. The ESMF also mentions various management plans (e.g. Waste Management and Demolition, Quarry Exploitation and Waste Disposal, Garbage Accumulation Mitigation in Canals and Environmental Protection Areas, Work Environmental Control, etc.) to be included as necessary, as specific management measures for the subprojects.

35. **ESS4. Community Health, Safety and Security.** Communities will potentially be exposed to hazards during the construction of infrastructure or facilities, including the risk of traffic accidents, exposure to hazardous materials, waterborne diseases, vector-borne diseases, the spread of diseases from external workers, and possible conflicts with subproject personnel including security personnel. There are also risks to local communities from natural hazards, including hydrometeorological events and wildfires, which could be aggravated by the poor location or inadequate design of infrastructure. The ESMF indicates that measures to manage these risks will be included in the specific environmental and social management plans, such as Vector-borne Diseases Programme, Traffic Control Programme, Disaster and Climate Change Management Plan, and Emergency Preparedness and Response. The AE reportedly will also support the development of sectoral EHS checklists and guidance. Subprojects will be required to develop and implement measures to prevent and mitigate risks of gender-based violence, including sexual exploitation, abuse and harassment (SEAH) committed by subproject workers against persons in the community or other subproject workers, by adopting a code of conduct for workers and implementing an educational campaign.

36. **ESS5. Land Acquisition and Involuntary Resettlement.** The construction of infrastructure and facilities may require the acquisition of land or restrictions on land use and access to assets and natural resources, which may result in involuntary resettlement/physical displacement (i.e. relocation of homes), and/or economic displacement (i.e. loss of land, assets, or restrictions on land use, assets, and access to natural resources leading to loss of income sources or other means of livelihood). However, the programme will avoid or minimize involuntary resettlement impacts by requiring the borrower to consider feasible alternative subproject designs. Proponents of subprojects that have involuntary resettlement impacts will be required to develop and implement a Resettlement Plan and/or Livelihood Restoration Plan (RP/LRP). There will be full engagement with subproject-affected people during the planning and implementation of the RP/LRP. Subprojects that cause large-scale physical and/or economic displacement of vulnerable populations or Indigenous Peoples will be excluded from being financed under the programme.

37. **ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources.** The ESMF has identified the following potential impacts of subprojects to be supported under the programme: (a) loss of vegetation cover; (b) disturbance of fauna; (c) conversion, alteration and/or degradation and other negative impacts of habitats, including natural habitats and critical habitats, and internationally recognized areas such as key

biodiversity areas and Ramsar sites; and (d) impingement and entrainment of fish, fish larvae, fish eggs, plankton, and other aquatic organisms. These impacts may potentially result in a net loss of biodiversity. To manage these impacts, the ESMF has identified the following management measures: (i) all subprojects must be designed and operated such that they do not result in the net loss of biodiversity in affected natural habitats; (ii) for subprojects that have critical habitats in their area of influence, a Biodiversity Action Plan must be prepared and implemented; (iii) adequate design, operation and monitoring of solid waste and wastewater collection, treatment, and disposal systems, considering environmental quality requirements to maintain native biodiversity; (iv) adoption of watershed management plans and water use contingency plans to maintain ecological flows during critical periods; and (v) adequate design, construction, and maintenance of water intake structures. In addition, the following subprojects will be excluded from programme support: (i) those which involve significant conversion or degradation of natural habitats; (ii) those which have measurable adverse impacts on critical habitats; (iii) those that are in legally protected areas and involve any conversion of natural habitats.

38. **ESS7. Indigenous Peoples.** There is presence of Indigenous Peoples (IPs) in all the countries involved in the programme. The AE has provided an IP Plan Framework to comply with the IP Policy and ensure that free, prior and informed consent is secured for the activities that so require. The Exclusion List ensures that lands, natural resources, cultural and natural heritage of Indigenous Peoples are not adversely impacted by the activities undertaken, that Indigenous Peoples are not relocated away from their lands and natural resources, and that Indigenous Peoples in isolation or initial contact are not impacted by the project. The AE is recommended to have a sound participative approach and engage with the GCF Indigenous Peoples Advisory Group on relevant Indigenous Peoples' issues that may be encountered.

39. **ESS8. Cultural Heritage.** The risk on cultural heritage will be assessed as part of the subproject environmental and social assessment. However, removal, significant alteration or damage to critical cultural heritage, will not be allowed under the programme. When the proposed location of a subproject is in areas where cultural heritage is expected to be, the subprojects will identify and assess potential risks during subproject construction and operation and the borrower will develop provisions for managing chance finds.

40. **Implementation arrangements.** The AE will assign an environmental, social and governance (ESG) specialist to each specific Category B subproject that is prepared under the programme. Depending on the environmental and social contexts of the particular subproject, this may be either an environmental or social specialist with experience working with Indigenous Peoples and additional specialists may be assigned to support the subproject as needed. External consultants may also be hired to provide support when needed. Each subproject will have a specific management system. During the subproject appraisal, the ESG specialist will prepare reports, establish the level of detail and periodicity of supervision and monitoring, through periodic reports, field visits, and specific environmental assessments, which are necessary for the approval and execution of the subproject.

41. **Stakeholder engagement and information disclosure.** At the programme level, the proposal was developed in consultation and collaboration with key stakeholders, which included technical staff from ACTO member countries, the Global Water Partnership (GWP), national designated authorities and other relevant government agencies. Systematic engagements were also undertaken by the AE with different actors including Indigenous groups, Afrodescendants, women's associations, chambers, start-up enterprises, foundations, and local and international non-governmental organizations. A Stakeholder Engagement Plan (SEP) has been prepared which articulates programme-level stakeholder engagement objectives, rationale, methodology, strategies and deliverables. At the subproject level, subprojects will be required to develop and implement an SEP aimed at promoting and providing the means for effective and inclusive engagement with stakeholders, especially subproject-affected people,

throughout the subproject's life. This would include the requirement to disclose relevant subproject environmental and social information in local languages and in an accessible and culturally appropriate manner. Proponents of subprojects will also be required to undergo a consultation process with subproject stakeholders, especially subproject-affected populations, during subproject preparation.

42. **Grievance redress mechanism.** At the programme level, the AE's Independent Consultation and Investigation Mechanism provides a mechanism and process to address allegations of harm by subprojects as a result of noncompliance with the AE's operational policies. The programme will likewise require the establishment of a grievance mechanism at the subproject level. Stakeholders may submit complaints regarding a subproject to: (i) the subproject grievance mechanism; (ii) any appropriate local grievance mechanisms; or (iii) directly to the AE, which will respond within a reasonable time frame. Subprojects will establish mechanisms to receive and facilitate the resolution of concerns and grievances from project-affected people and other environmental and social impacts, as well as for workplace concerns regarding labour and working conditions.

43. **Sexual exploitation, abuse, harassment (SEAH):** The programme has potential SEAH risks related to the implementation of activities in communities by project workers. All subprojects will be expected to analyse and mitigate risks of project-related gender-based violence, including SEAH committed by project workers against community members and other project workers. Measures to address these risks outlined in the environmental and social analysis and environmental and social management framework include: (i) developing and requiring adherence to a code of conduct that establishes zero tolerance for SEAH against community members and workers; (ii) training all workers on SEAH, the code of conduct as well as reporting violations; and (iii) raising awareness of local communities about SEAH risks, established prevention and mitigation measures and how to report complaints of SEAH through grievance redress mechanisms. The grievance redress mechanism for people affected by the project and other stakeholders as well as the one for project workers will be required to have specific procedures for receiving, registering, and investigating SEAH-related complaints. The AE will ensure that special attention is given for the protection of confidentiality and safety of SEAH survivors along the entire process and that a fair assessment and due process is undertaken for all those implicated. The stakeholder engagement process will include informing stakeholders about the grievance redress mechanisms available to them, including the GCF Independent Redress Mechanism.

4.2 Gender policy

44. The AE provided a gender assessment and action plan with the funding proposal and, therefore, complies with the requirements of the GCF Updated Gender Policy. The gender assessment highlights significant gendered barriers faced by women in the Amazon region, which stem from sociocultural norms, economic disparities, and limited access to resources. Women are primarily responsible for household water collection, which restricts their ability to participate in income-generating activities, leading to time poverty. This burden is exacerbated by insufficient access to clean water and sanitation facilities, making women and girls more vulnerable to health issues and reducing their participation in education and economic opportunities. Additionally, women have limited access to land tenure, are underrepresented in decision-making roles related to natural resource management and face social and physical barriers that restrict their participation in community activities, leading to increased vulnerability to environmental risks. These challenges are deeply rooted in gender norms that marginalize women's roles and limit their access to resources, knowledge, and decision-making power.

45. The gender action plan (GAP) addresses several of the gendered barriers identified in the gender assessment through targeted actions aimed at promoting gender equality, social inclusion, and empowerment. The GAP defines activities, indicators, and targets for women's participation and benefit with corresponding timelines, budget and gender expertise. Key components of the GAP include the development of gender and diversity analysis to understand the specific challenges faced by women, Indigenous Peoples, Afrodescendants, and other marginalized groups in the context of water security. The GAP emphasizes capacity-building and training to ensure active participation by women and diverse groups in natural resource management, including workshops aimed at enhancing female leadership in water management. Additionally, the GAP incorporates the prevention of gender-based violence by conducting regional studies and integrating awareness campaigns in subprojects to support women facing this violence. Efforts are also being made to mainstream gender and diversity across all project components, ensure gender-sensitive capacity-building, and adapt infrastructure to be accessible and culturally appropriate for all population groups. These initiatives are designed to bridge gender gaps, increase women's participation in climate-resilience activities, and create an enabling environment for equitable resource management.

46. A number of subprojects will be aimed at enhancing the quality of life for women in the water sector. The AE is advised to use the additional gender analyses that will be undertaken to design and implement activities that address the needs and priorities of women in the subproject locations.

4.3 Risks

47. The Secretariat's overall assessment for the programme is low risk.

4.3.1. Accredited entity/executing entity capability to execute the current programme (medium risk)

48. Subprojects/executing entities (EEs) will be determined ex post during programme implementation. From the indicative list of already identified EEs included in the funding proposal, some EEs may not be able to comply with IDB standards in terms of capacity or suitability based on the needs of the current market(s). This could result in challenges during implementation and the programme's reach and impact could be lower than expected. IDB will conduct due diligence on the EEs prior to the approval of each subproject and provide the evidence to GCF as described in the term sheet.

4.3.2. Programme-specific execution risks (low risk)

49. **Political instability**: Complex political and social dynamics could alter government priorities, regulations or the level of support for the programme, and cause delays in implementation. As mitigation measures, the AE has built strong relationships with representatives of each country to manage potential changes and has described in the funding proposal a risk management approach in countries where political risk is identified as significant.

50. **Credit risk**: GCF loans of USD 86.87 million will be provided to the sovereign government or the EEs with a sovereign guarantee, and are therefore exposed to sovereign credit risk. Credit risk differs among the six participating countries as shown by their sovereign rating by Standard and Poor's and Moody's respectively: Bolivia (Plurinational State of) (CCC+/Caa3), Brazil (BB/Ba1), Colombia (BB+/Baa2), Ecuador (B-/Caa3), Peru (BBB-/Baa1) and Suriname (CCC+/Caa1). The Secretariat notes a recent positive rating trend for some of these countries: Moody's upgraded the rating for Brazil to Ba1 outlook positive in October 2024 and the outlook for Peru to stable in September 2024. The rating for Suriname was upgraded to

Caa1 outlook positive by Moody's in October 2024 and to CCC+ outlook stable by Standard and Poor's in December 2023. The term sheet includes a ceiling limit in one single host country for GCF financing (loan and grant combined).

4.3.3. Compliance risk (medium risk)

51. Proposed programme activities include those that pose a relatively lower money-laundering and terrorist financing (ML/TF) risk, such as technical assistance and strengthening of climate-data information systems, as well as those that present a higher inherent ML/TF risk, such as strengthening of waste management and sanitation system infrastructure. The AE has assessed ML/TF and the risk of other prohibited practices as low as it will establish specific eligibility criteria and rules for all financial transactions in each target country. Moreover, the institutional capacity assessments by the AE of EEs, to be conducted prior to subproject approval, include checks of their ability to manage ML/TF and other integrity risks, conduct due diligence, and maintain reporting channels.

52. Programme subprojects will be implemented by the AE or third-party EEs such as ministries, public or governmental institutions involved in water resource management, national development banks, or other subnational institutions depending on the nature and scope of the activities. The AE internal controls to be applied during programme implementation also include the identification, assessment, and mitigation of integrity risks by the IDB Office of Institutional Integrity.

53. On the basis of the controls to be applied in programme implementation, as well as the elevated risks associated with certain proposed activities, and the fact that third-party EEs will be confirmed after programme approval, compliance risk is determined to be medium.

4.3.4. GCF portfolio concentration risk (low risk)

54. In case of approval, the impact of this proposal on the GCF concentration risk remains within the monitoring thresholds of the risk appetite statement in terms of results areas, single proposal or AE concentration.

4.4 Fiduciary

55. The programme will be supervised by IDB as an AE. At the subproject level, and implementation will be governed by IDB procedures and policies.

56. Components 1, 2 and 3 will be implemented through a set of subprojects approved by IDB in accordance with its internal policies and procedures, and aligned with programme's eligibility criteria.

57. Activities would be implemented either by third-party EEs or IDB, according to its nature and scope. EEs will be defined during programme implementation depending on the given activities and according to the criteria presented in the funded activity agreement. IDB will assess their technical, financial and institutional capacity to fulfil the role prior to entering into any subsidiary agreement.

58. IDB will carry out all appropriate due diligence on each subproject, including all checks and assessments on the borrowers and/or grantees. The borrower and the grantee are executing entities. It is the responsibility of IDB to ensure that EEs monitor and collect the data required for the proper execution of the monitoring and evaluation plan, in accordance with the corresponding subproject. This data will then be integrated and reported at the programme level.

59. The financial management, oversight, and reporting follow IDB policies, accreditation master agreement, and funded activity agreement requirements, outlined in subsidiary agreements. These agreements delineate eligible activities, disbursement periods, and implementation guidelines, including the structure of GCF-funded activities within EEs.

60. Disbursements, reporting, monitoring, and evaluation of the project adhere to IDB policies and procedures, including financial management guidelines. Disbursement of GCF resources to IDB is contingent upon approved resource allocations and effective subsidiary agreements for individual operations.

61. Following IDB policies, loan resources are disbursed to EEs as advances or reimbursements within the designated loan disbursement period. EEs must submit audited financial statements and periodic reports, ensuring compliance with eligibility criteria and progress towards development objectives.

62. The GCF account undergoes external audits annually as mandated by the accreditation master agreement. IDB submits an assertion report and an external auditor's report on the effectiveness of internal controls and the accuracy of financial statements for all trust funds, including the GCF account.

4.5 Results monitoring and reporting

63. As an adaptation initiative, the programme aims at generating diverse adaptation results across all four GCF adaptation result areas. It is estimated that 1,522,249 direct beneficiaries and 4,156,701 indirect beneficiaries will receive various adaptation benefits, which together account for 10.5 per cent of 54,133,373 inhabitants of the Amazon Basin.

64. Definitions and broad methodologies have been provided by the AE to estimate the adaptation beneficiaries. Acknowledging the difficulties of beneficiary estimation at this stage without detailed information about subprojects, it was laudable that the AE has proposed the methodologies divided into several intervention areas such as water, sanitation, restoration, etc.

65. The theory of change diagram adequately captures different levels of expected changes as well as logical linkages between them from the goal statement to the proposed activities. It is good that the theory of change diagram identifies co-benefits, which can be achieved along the way towards climate results and captures the causal relationships between outcomes and co-benefits. The comment was made on the expanded public- and private-sector financing because it was not clearly depicted in the theory of change diagram, but the AE has clarified and agreed to measure the change as a part of an enabling environment, particularly using core indicator 7.

66. There were several iterations on the logical framework, and now it is assessed that it is of good quality with adequate GCF Integrated Results Management Framework indicators and as well as a set of programme-specific indicators which can properly monitor the intended results at both outcome and output levels.

4.6 Legal assessment

67. The Accreditation Master Agreement was signed with the Accredited Entity on 29 August 2017, and became effective on 30 March 2018, which was amended and restated pursuant to a first amendment and restatement agreement dated 16 April 2024, and which became effective on 17 May 2024 (the "AMA").

68. The Accredited Entity has not provided a legal opinion/certificate confirming that it has obtained all internal approvals, and it has the capacity and authority to implement the programme.

69. The proposed programme will be implemented in Bolivia, Brazil, Colombia, Ecuador, Peru and Suriname (each a "Host Country"), countries in which GCF is not provided with privileges and immunities. This means that, amongst other things, GCF is not protected against litigation or expropriation in these countries, which risks need to be further assessed. Moreover, the ability of GCF to undertake redress activities and/or investigations in such countries may be hindered due to the absence of privileges and immunities for relevant GCF personnel.

70. Therefore, it is recommended that the Board considers whether disbursements of GCF proceeds should only be made after GCF has obtained satisfactory protection against litigation and expropriation in the countries, or has been provided with appropriate privileges and immunities for GCF and its personnel.

71. The Funding Proposal describes several implementation options for the programme. Under some of these options, the borrower or grantee that receives the GCF funds directly from the Accredited Entity (the "Borrower/Grantee") may not be the entity that is implementing the programme's activities (the "Implementing Entity"). While the Accredited Entity will use best efforts to enter into agreements directly with each Implementing Entity, it may not always be feasible for the Accredited Entity to do so. In such a scenario, there will only be an agreement between the Accredited Entity and its immediate Borrower/Grantee (each a "Subsidiary Agreement"), with the Borrower/Grantee entering into a separate execution agreement with the Implementing Entity in order to pass down the relevant GCF requirements (each an "Execution Agreement"). The Accredited Entity will not be a party to the Execution Agreement. However, it will approve the Execution Agreement prior to it being signed.

72. The absence of a direct legal relationship between the Accredited Entity and the Implementing Entity means that the Accredited Entity does not have direct recourse against the Implementing Entity. To mitigate this risk, the Secretariat and the Accredited Entity have agreed in the term sheet that the Borrower/Grantee will be accountable for all the actions of the Implementing Entity and that the Accredited Entity shall require in the Subsidiary Agreements that the obligations of the Implementing Entity shall be fulfilled to the satisfaction of the Accredited Entity.

73. The Accredited Entity has requested that the provisions of the AMA that allow GCF to step into the Accredited Entity's contractual arrangements with Borrowers/Grantees be disapplied because provisions dealing with the transfer of rights, obligations and liabilities are not included in the Accredited Entity's financing agreements and the Accredited Entity is not able to treat its counterparties differently. Having regard to the Accredited Entity's explanation and the nature of such contractual arrangements (agreements with sovereign entities), the Secretariat has agreed to the Accredited Entity's request.

74. To address the matters raised in this section, it is recommended that any approval by the Board is made subject to the following conditions:

(a) Submission by the Accredited Entity to the Fund of a certificate or legal opinion, in form and substance satisfactory to the GCF Secretariat, within 120 days after Board approval, confirming that the Accredited Entity has obtained all final internal approvals needed by it and has the capacity and authority to implement the proposed programme;

(b) Signature of the funded activity agreement in a form and substance satisfactory to the GCF Secretariat within 180 days from the date of Board approval, or the date the Accredited Entity has provided a certificate or legal opinion confirming that it has obtained all final internal approvals, whichever is later; and

(c) Completion of the legal due diligence to the satisfaction of the GCF Secretariat.

Independent Technical Advisory Panel's assessment of FP261

Proposal name:	Improving Climate Resilience by Increasing Water Security in the Amazon Basin
Accredited entity:	Inter-American Development Bank
Country/(ies):	Bolivia (Plurinational State of), Brazil, Colombia, Ecuador, Peru, Suriname
Programme size:	Large

I. Assessment of the independent Technical Advisory Panel

1. The Amazon basin faces significant impacts from climate change, including floods, droughts and fires, which will be increasingly exacerbated by extreme rainfall events and high temperatures. Countries in the region must therefore improve land and water management policies, enhance early warning systems and develop more robust water, sanitation and waste (WSW) management systems.

2. The programme, to be implemented in six Amazon Cooperation Treaty Organization (ACTO) signatory States (Bolivia (Plurinational State of), Brazil, Colombia, Ecuador, Peru and Suriname), seeks to enhance climate resilience by strengthening water management across the Amazon basin.

3. The three programme components seek to:

(a) Increase climate resilience in water resources management through enhanced preparedness and response to extreme climate events in the Amazon basin (outcome 1);

(b) Improve the resilience, ecosystem services and carbon stocks of Amazonian socioecological systems and livelihoods (outcome 2); and

(c) Strengthen governance and the enabling environment in order to foster climate resilience and low-carbon development in the Amazon basin (outcome 3).

4. The programme will be implemented through a set of subprojects consisting of a single activity or a set of activities under the respective components. The subprojects are to be approved by the accredited entity (AE), the Inter-American Development Bank (IDB), in accordance with its internal policies and procedures and the programme's eligibility criteria.

5. The execution modalities differ between the programme components:

(a) Executing entities under component 1 will be ministries, water agencies and hydrological and meteorological national services/offices or similar public/government institutions involved in water resources management and hydrological–climate monitoring and forecasting;

(b) Executing entities under component 2 will be ministries of housing, water and sanitation, development and planning, as well as national development banks or other subnational institutions responsible for the administration and provision of water, sanitation and solid waste management services; and

(c) The executing entity under component 3 is envisaged to be ACTO.

6. The total budget for the seven-year implementation period is USD 391.43 million, which consists of a funding request to GCF of USD 162.15 million, with co-financing of USD 216.99 million. The distribution of grants and loans, by programme component, is shown in the table below. The requested GCF contribution amounts to 41 per cent of the total budget, and covers 86 per cent of all grant funding.

Budget summary by component (millions of United States dollars)

Component	GCF			IDB			Total
	Grant	Loan	Total	Grant	Loan	Total	
1. Strengthening the knowledge base and information systems on climate change impacts and water security to enhance preparedness and response to extreme climate and slow onset events	23.33	0.00	23.33	5.96	0.00	5.96	29.29
2. Catalyse climate investments for climate-resilient and low-carbon WSW technologies and infrastructure	32.85	83.88	116.73	0.00	216.99	216.99	333.72
3. Promote capacity and develop an enabling environment for climate change planning and investment, regional exchange of data and information, and transboundary cooperation mechanisms for water security	1.50	3.00	4.50	4.48	0.00	4.48	8.98
Technical transversal cooperation, project management, and monitoring and evaluation	17.59	0.00	17.59	1.85	0.00	1.85	19.44
Total	75.28	86.88	162.15	12.29	216.99	229.28	391.43

Source: adapted from the funding proposal, annex 4, detailed_budget_plan_20241113, sheets: "detailed budget" and "budget per country per output".

7. In its assessment, the independent Technical Advisory Panel (iTAP) considered the document package as submitted on 15 November 2024, along with written responses (6 and 13 December 2024) to questions posed by the iTAP and additional information provided during a Zoom call between the iTAP, the AE and the GCF Secretariat on 10 December 2024.

1.1 Impact potential *Scale: Medium to High*

8. The proposed programme "aims to enhance the resilience of vulnerable communities, including Indigenous Peoples, and key ecosystems in the Amazon basin to the anticipated impacts of climate change on water security and ecosystem services. This will be achieved through an adaptation-focused and integrated water management approach…and the promotion or restoration of the ecosystems' capacity to provide essential hydrological services" (funding proposal, para. 4).

9. The "advances will be measured in four GCF Results Areas for adaptation: ARA1 Most vulnerable people and Communities, including Indigenous People, ARA2 Health, well-being,

food, and water security, ARA3 Infrastructure and built environment, and ARA4 Ecosystem and ecosystem services" (funding proposal, para. 9).

10. As explained in the funding proposal and its annex 22(b), the proposed programme's interventions are estimated to benefit more than 1.5 million people directly. With a basin population of more than 54 million people (as estimated in 2023), the number of direct beneficiaries is almost 3 per cent of the population of the Amazon basin. Indirect benefits are estimated to reach approximately 4.2 million people. The calculation of the number of female beneficiaries is based on the nationwide female ratio of the population of the participating countries.

11. Approximately 1.16 million people are estimated to benefit directly from the early warning systems that are to be strengthened under component 1. This estimate is based on an assumption that the population within a radius of 250 kilometres of a Doppler radar will directly benefit. The number of indirect beneficiaries of this component, 3.6 million people, is calculated as the estimated population at risk from flooding in the corresponding sub-basins.

12. The number of direct beneficiaries of component 2 activities, nearly 360,000 people, corresponds to people in communities with a high risk of drought, who are estimated to benefit from interventions for water, sanitation and solid waste management infrastructure, and land restoration, subject to budget availability. The number of indirect beneficiaries of this component, more than 500,000 people, is calculated as the estimated population at a high risk of flooding in the corresponding sub-basins.

13. The potential number of beneficiaries from component 3 activities has not been assessed. To the extent that the activities of the programme manage to develop capacities and catalyse integrated approaches and transboundary cooperation, there may arguably be a greater number of indirect beneficiaries of an improved enabling environment to foster climate resilience and low-carbon development in the Amazon basin (outcome 3).

14. The iTAP positively notes that the programme is concerned with the production of "specific, measurable outputs that contribute to climate resilience" and that this has been consistently applied in the estimation of potential beneficiaries.

15. The iTAP also recognizes the inherent difficulties in assessing and quantifying the benefits of climate resilience and water security interventions. Noting that the actual interventions of the programme will depend upon which specific subprojects become reality, and with which specific execution and implementation modalities, a *successful* programme implementation could potentially reach greater numbers of both direct and indirect beneficiaries.

16. Further, the iTAP sees opportunities for increased learning, information exchange and communication through working with qualitative indicators and information for programme activity implementation and monitoring. This is discussed further in section 1.2 below and is reiterated in recommendation 1 in section II below.

17. One of the anticipated co-benefits is an increase in carbon sinks from land restoration and nature-based solutions (NbS). This mitigation impact contribution is estimated at 7.97 million t CO_2 eq over the 20-year lifetime of the programme.

18. The CO_2 sequestration will be achieved through the NbS implemented through the subprojects of component 2 that promote climate-resilient and low-carbon WSW technologies and infrastructure. The actual quantity of CO_2 sequestrated and stored will be largely dependent upon how the subprojects will be implemented and maintained. It should also be noted that the programme's overall focus is on adaptation and that the increase in carbon sinks is a co-benefit.

19. Given that the subprojects are yet to be defined, it is not possible to gauge with any certainty what level of adaptation benefit or mitigation co-benefit will be realized. As discussed in section 1.6 below, the eligibility criteria for subproject selection are still under elaboration

and negotiation. To avoid any risk of climate relevance being reduced to a tick-box "yes/no" indicator relating to the presence of climate policy in the country, the iTAP recommends that logical reasoning for how each subproject contributes to enhanced climate resilience be elaborated and considered in the subproject origination and selection process (see recommendation 2 in section II below).

20. Altogether, the impact potential is assessed as medium to high.

1.2 Paradigm shift potential *Scale: Medium to High*

21. The programme recognizes the complexity and systemic nature of the climate risks affecting the Amazon basin. For this reason, a comprehensive intervention approach with actions that cover the entire system has been designed. The three components are highly complementary:

(a) Component 1 takes steps towards the development of the Impact-Based Multi-Hazard Early Warning System (IB-MHEWS) for managing and mitigating the effects of climate hazards;

(b) Component 2 implements subprojects for WSW systems (technologies and infrastructure) in small, medium and large communities (urban centres). This will involve water conservation, improving water efficiency, water reuse and protection from water-related disasters. This is to be integrated with ecosystem-based adaptation (EbA) strategies, including wetland restoration, riparian buffer creation, reforestation, sediment capture, and water quality protection and regeneration of aquifer recharge zones and hence climate-resilient development; and

(c) Component 3 supports the development of national and regional policy frameworks by promoting institutional capacities for climate change planning and transboundary cooperation. This contributes to the enabling environment to incentivize climate-proofing and to guide investments towards the application of NbS and climate-resilient approaches.

22. The programme's contribution to an enabling environment or to strengthening the regulatory framework and policies will, however, be limited by the relatively small amount of funds dedicated to component 3. With only 2.3 per cent of the total budget, including both grants and loans, this work will be an operationally minor part of the programme.

23. The funding proposal suggests "The enhancement will be achievable and traceable through the following measurable changes:

(a) "Number of new or revised policies and frameworks that are enacted and promote climate resilience in the WSW sector.

(b) "Formal transboundary cooperation legal agreements and mechanisms established between Amazon Basin countries, with protocols for data exchange, monitoring systems and resource management.

(c) "Development of watershed transboundary master planning along with coordinated environmental and resource planning for enabling cross-border investments ...

(d) "Creation of financial mechanisms that support long-term investments in climate adaptation, including leveraging local and international green finance for ecosystem-based adaptation EbA and NbS.

(e) "Capacity-building efforts resulting in increased numbers of trained stakeholders (disaggregated by gender) who can access and manage climate finance" (funding proposal, para. 49).

24. As mentioned in paragraph 16 above, the iTAP sees opportunities for increased learning, information exchange and communication through working with qualitative indicators and information for programme activity implementation and monitoring. The achievements listed in paragraph 23 above, albeit potentially rather low in number, may have substantive and lasting effects on the enabling policy environment in the Amazon basin. A systematic use of qualitative data, as proposed in recommendation 1 in section II below, may give insight into what policy mechanisms work in the Amazon basin context and can be used for learning and communication.

25. The potential for knowledge creation is considerable:

(a) Component 1 develops the understanding of climate impacts on the hydrological system and its impacts on local communities (e.g. flooding, drought, water quality). It also seeks to institutionalize monitoring and early warning systems;

(b) Component 2 advances technical knowledge and understanding of new technologies and the use of EbA and NbS, along with insight into ways to sustainably fund climate interventions; and

(c) Component 3 builds awareness and knowledge at the political, financial and community level around the regulatory environment in order to further guide the focus of the investments.

26. The community-based participatory monitoring envisaged as activity 1.2.4 will allow the recognition and formalization of communities' *ecological* monitoring to track long-term qualitative and quantitative environmental change (see recommendation 1 in section II below). The activity seeks to ensure "that local perspectives contribute to decision-making processes and enhance the overall effectiveness of the forecast and early warning systems" (funding proposal, para. 44).

27. The programme's potential to catalyse change beyond a one-off investment can be assessed in relation to the plans and measures for sustainability, replication and scaling up. The programme emphasizes developing the capacity of the executing entities, such as the relevant ministries of the participating countries and ACTO. The replication and potential for scaling up is to be assured by developing a finance facility to channel climate investments into water and sanitation.

28. The anticipated finance facility for the Amazon region is to channel investments into climate-resilient WSW management. Concretely, the facility will support EbA interventions under component 2. In addition, activity 2.3.1 will analyse innovative financial mechanisms to generate EbA solutions beyond the programme. In the question and answer exchange between the iTAP and the AE, it was found that some mechanisms (e.g. "water funds" that contribute to conservation activities) already operate in the region, whereas other innovative mechanisms have yet to be tested in the Amazon context.

29. Given that the majority of the programme is dedicated to the financing of WSW subprojects that integrate EbA and NbS, the programme should generate valuable experience on how to effectively ensure the funding of climate-resilient infrastructure and conservation activities. The iTAP proposes that the AE emphasize the production and dissemination of learning materials from the analysis of financial mechanisms in order to generate EbA solutions (see recommendation 3 in section II below).

30. It was noted in the question and answer exchange between the iTAP and the AE that delays in the handover of equipment to the final user may inadvertently exacerbate challenges with regard to the equipment's maintenance. In order to ensure the successful implementation of the envisaged maintenance plans, the iTAP suggests that the AE encourage all executing and implementing entities to hand over all installations and equipment to the relevant agency or organization responsible for its use and maintenance as early as possible. This would apply to

hydrological and meteorological equipment procured under component 1 and to the infrastructure systems to be built in small, medium and large communities under component 2. Such early action should help to ensure the correct functioning and maintenance of the relevant equipment and systems (see recommendation 4 in section II below).

31. The programme seeks to improve the basin-level hydrological and meteorological network and make IB-MHEWS available to facilitate forecast-based action and respond on time to extreme climate events such as floods and droughts. As a multi-hazard system, it will analyse both rapid and slower changes over time and will give appropriate warnings on droughts, fires and critical pollution loads, spills and/or accidents. With regard to the proposed use of qualitative community-based ecological information and data, the system should also issue warnings on threats to people and the environment related to long-term ecological and land-use changes.

32. Activity 1.2.3 anticipates issuing "gender & socially inclusive advisories" (funding proposal, para. 44) and to identify the different languages to be used for alerts. This is important but may be insufficient for an effective end-to-end and people-centred early warning system.[1] The iTAP suggests, as reiterated in recommendation 5 in section II below, that subprojects in component 1 may add preparedness for response capabilities and anticipatory action. Authorities and communities need to know, and practice, how to respond in order for the IB-MHEWS to be trusted to effectively protect society and the environment.

33. Altogether, the paradigm shift potential is assessed as medium to high.

1.3 Sustainable development *Scale: Medium to High*

34. The programme seeks to contribute specifically to the achievement of several of the Sustainable Development Goals (SDGs). Principally, it will contribute towards SDG 13 (climate action), SDG 6 (clean water and sanitation), SDG 11 (sustainable cities and communities) and SDG 10 (reduced inequalities). The programme will also contribute to SDG 1 (end poverty), SDG 5 (gender equality) and SDG 15 (life on land).

35. Anticipated environmental co-benefits are the greenhouse gas emissions sequestered and stored through the NbS and EbA activities of component 2. These activities include forest preservation and restoration. Moreover, to the extent that pollution monitoring and regulation will be improved, there may be a contribution to cleaner rivers, groundwater and soils. The investments in WSW systems should directly contribute to reducing pollution loads in the Amazon basin. The programme will monitor environmental co-benefits from increased carbon sinks through ecosystem restoration activities.

36. Social co-benefits may be derived from investments in WSW systems. Increasing access to safe WSW management will reduce the proliferation and potential spread of infectious diseases. Young (and malnourished) children are the most vulnerable to infectious diseases, and the programme will measure social and economic benefits such as a decrease in mortality due to infectious and parasitic diseases in children under five years of age.

[1] As defined by the United Nations Office for Disaster Risk Reduction: "Effective 'end-to-end' and 'people-centred' early warning systems may include four interrelated key elements: (1) disaster risk knowledge based on the systematic collection of data and disaster risk assessments; (2) detection, monitoring, analysis and forecasting of the hazards and possible consequences; (3) dissemination and communication, by an official source, of authoritative, timely, accurate and actionable warnings and associated information on likelihood and impact; and (4) preparedness at all levels to respond to the warnings received. These four interrelated components need to be coordinated within and across sectors and multiple levels for the system to work effectively and to include a feedback mechanism for continuous improvement." See https://www.undrr.org/terminology/early-warning-system.

37. Economic co-benefits are not directly highlighted in the funding proposal, but the investment and improvement of WSW systems using NbW and an EbA approach will strengthen livelihoods and income-earning opportunities. These co-benefits will depend upon which, and how, subprojects are implemented. It can be noted that economic empowerment among vulnerable communities may be the most efficient way to enhance the population's resilience to climate hazards.

38. In relation to women's empowerment and the potential for gender-sensitive or transformative development, the funding proposal pays close attention to involving and training women, especially women from vulnerable communities. However, if the role of men is overlooked (e.g. in training on good hygiene and sanitation practices), there is a risk of inadvertently entrenching unequal gender relations. This risk was discussed in the question and answer exchange between the iTAP and the AE, and the iTAP is convinced that the AE is committed to framing sanitation and hygiene as a shared responsibility across genders.

39. The funding proposal highlights two gender co-benefits. One relates to improved income-earning opportunities from improved access to water and the commensurate reduction in the collection and carrying of water. This is supported by gender-sensitive capacity-building that aims to empower women, who are disproportionately affected by water-related challenges. Additionally, improved WSW systems should enable women and girls to manage menstrual hygiene effectively at home, school and work. The second gender co-benefit is measured in terms of reduced school dropout rates among adolescent girls.

40. Altogether, the sustainable development potential is assessed as medium to high.

1.4 Needs of the recipient *Scale: Medium to High*

41. The Amazon basin faces significant impacts, including droughts, floods and heatwaves, all of which are exacerbated by climate change. Water-intensive or water-dependent activities, such as forestry, agriculture, livestock farming and fishing, which are crucial for the livelihoods of people in the Amazonian region, are highly sensitive to temperature and precipitation fluctuations. This underscores the region's vulnerability to climate variability.

42. The programme's countries (five upper-middle-income countries and one lower-middle-income country) should be able to provide funding for many of the collective pursuits of the programme. Hence, it is appropriate that 78 per cent of the consolidated programme budget is in the form of loans.

43. The Amazon region, however, has relatively unfavourable economic conditions and lower income levels, and is in many ways more exposed to climate hazards compared with the national averages. The high level of climate vulnerability and problematic social and economic conditions, as well as the need for institutional strengthening, motivate the support of GCF for the region.

44. Within the Amazon region, the programme prioritizes WSW interventions in vulnerable communities, particularly those lacking adequate infrastructure, to ensure equitable access to climate-resilient systems. In the written question and answer exchange between the iTAP and the AE, it was explained that the programme envisages including "universal design" for people with disabilities and ethno-engineering (culture adaptation) for Indigenous Peoples and people of African descendant.

45. In relation to the assessment of environmental and social risks and impacts, the funding proposal (table 4, row ESPS7, p. 85) confirms "Throughout the subproject's life cycle, an ongoing relationship with the Indigenous Peoples affected by the subproject will be established and maintained based on meaningful consultation in a culturally appropriate manner,

respecting Indigenous Peoples governance, language, and their rights. Free, Prior and Informed Consent (FPIC) of the affected Indigenous Peoples will be carried out when deemed necessary."

46. The iTAP emphasizes the importance of consultation and free, prior and informed consent in all instances (and beyond Indigenous Peoples or peoples with distinct cultural identities, lifestyles or governance systems). As further elaborated in section 1.5 below, open and inclusive consultations and dialogue can be developed into a collaboration with active project participants. This would go beyond the necessary and important concern for anyone *affected* by the intervention (see recommendation 6 in section II below).

47. Altogether, the needs of the recipients, along with the programme's ability to meet some of those needs, are assessed as medium to high.

1.5 Country ownership *Scale: Medium to High*

48. The programme responds to a unified request by the eight signatory countries of ACTO, directed to IDB through ACTO.

49. Ownership at the country level is crucial in order to ensure appropriate aims and long-term results. Reportedly, since the creation of the programme's concept note, the appropriation of the programme has been promoted with all beneficiary countries, which will continue during the implementation period.

50. No-objection letters confirming the proposed programme's conformity with national priorities, strategies and plans were submitted by the Plurinational State of Bolivia, Brazil, Colombia, Ecuador, Peru and Suriname. Guyana was included in the preparations for the funding proposal, did not produce the required no-objection letter in time, and Venezuela (Bolivarian Republic of) is not eligible for IDB funding, hence the programme is to be implemented in six of the eight ACTO countries.

51. The AE, IDB, works widely in the region and possesses in-depth experience and a track record of financing and implementing projects and programmes. The experience and track record of the executing entities, however, are harder to assess as these are yet to be defined. Notwithstanding, if capacity to implement is lacking, there is ample opportunity for support and training through the programme.

52. Stakeholder consultation has been conducted at various stages of the programme's development and is comprehensively reported on in annex 7 (summary of consultations and stakeholder engagement plan) to the funding proposal.

53. An important finding from these consultations reads "The active involvement of local and Indigenous communities in water resource management is indispensable for sustainability in the Amazon. Their traditional knowledge and direct participation are key for the effective management and protection of these resources. Establishing networks of local organizations can strengthen governance and empower community leaders, while regional coalitions, training workshops, and advocacy campaigns play a critical role in shaping policies and securing necessary funding" (funding proposal, annex 7, p. 24).

54. The programme also has a highly developed environmental and social policy framework, comprising, as appropriate, an environmental and social management system, environmental and social assessments, and environmental and social management plans. The consideration of environmental and social risks focuses on *affected* communities and environments.

55. Without compromising the AE's responsibility to fully consider environmental and social risks and avoid harm, the iTAP also sees opportunities for realizing, for example, the "full respect for the human rights, collective rights, dignity, aspirations, culture, and natural

resource-based livelihoods" of Indigenous Peoples through stakeholder engagement. As highlighted in recommendation 6 in section II below, the AE, through all the subprojects, is encouraged to work especially with Indigenous Peoples and communities with distinct cultural identities, lifestyles or governance systems as project participants beyond (or instead of) being involved in their capacity as affected communities.

56. The intention of the programme of active and respectful stakeholder engagement will enable the co-creation of knowledge. Finding ways for modern environmental management and EbA to be inspired by reciprocal nature–society relations and worldviews associated with Indigenous Peoples would be novel and may be helpful for understanding and respecting the aspirations of Indigenous Peoples. Proactive blending of local, Indigenous and ecological knowledge with contributions from science and engineering is encouraged (see recommendation 6 in section II below).

57. Altogether, the country ownership is assessed as medium to high.

1.6 Efficiency and effectiveness *Scale: Medium*

58. An economic and financial analysis was conducted (and is reported on in annexes 3 and 3b to the funding proposal). Examples of 10 subprojects are included in the funding proposal, of which 8 achieve a debt service coverage ratio of above 1.2, which should ensure the repayment of debt.

59. As emphasized throughout this assessment, the configuration of the subprojects to be implemented is critical. For example, the extent to which subprojects in component 2 consider the system or only WSW technologies and infrastructure without sufficient consideration of regulation, institutions and informal practices is difficult to assess and will depend on the process and criteria for how the subprojects of the programme will be rolled out. Recommendations 2 and 5 in section II below suggest that the accredited entity complement the eligibility criteria to strengthen the process of subproject development and selection.

60. The eligibility criteria for the selection of the subprojects are to be fully developed in the funded activity agreement but are outlined in annex 2 to the funding proposal (section 5.3). Beyond considerations of an appropriate balance between the countries, the subprojects are to be selected among proposals that meet general and specific criteria, such as:

(a) "National-level policy criteria. Projects under this Programme need to be aligned to the national policy, including the NDC, LTS, NAP, and national laws and frameworks that address climate change.

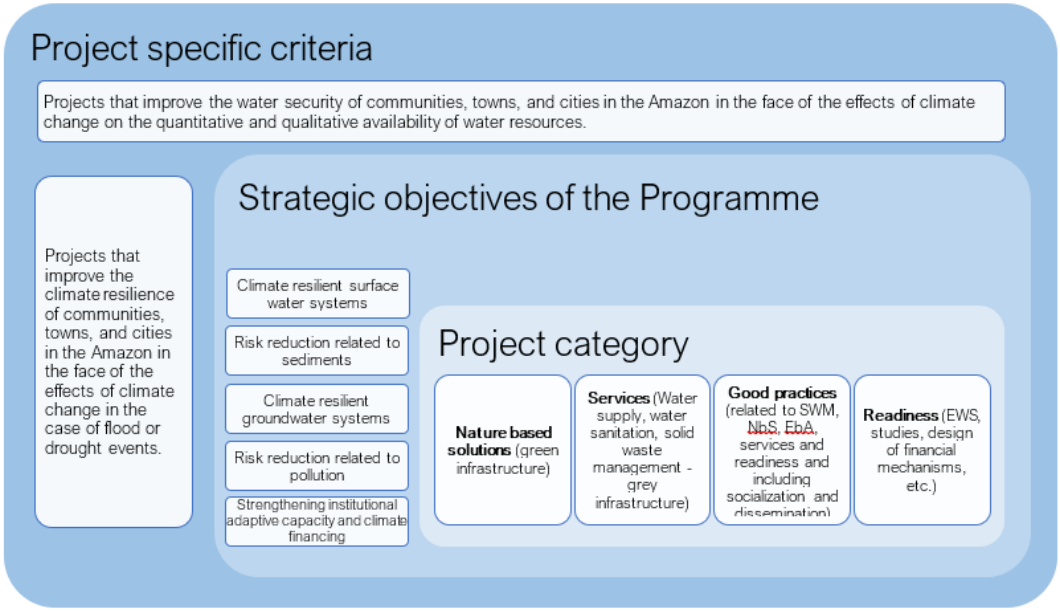
(b) Local policies and institutional project environments. Projects under this Programme must align with local policies to ensure that the necessary regulatory and business models are in place or can be established to share and manage the risk of new technologies for WSW and EbA investments.

(c) Contribution to improved transboundary water cooperation and management. Since the Programme aims to improve water security and climate resilience across the Basin, transboundary cooperation and management are desirable; therefore, transboundary projects should have preference…

(d) Comply with the Environmental and Social Criteria set out in the ESMF…

(e) Project-specific metrics…related particularly to Component 2, outputs 2.1 and 2.2" (funding proposal, annex 2, pp. 213–214).

Project-specific criteria, strategic objectives of the programme and project categories



Source: funding proposal, annex 2, figure 78 (p. 215)

61. Whereas eligibility criteria, project-specific criteria, strategic objectives and project categories (see the figure above) are spelled out in annex 2 to the funding proposal, it is not clear to the iTAP how the different criteria, categories and objectives fit together and apply to the different types of activity of the different components of the programme. There is a similar elaboration in the Operations Manual (annex 21), which makes some distinction between the eligibility criteria for subprojects in component 2 and in the other components. The iTAP finds such a distinction to be critical, but that it would more naturally be applied to the implementation-oriented outputs 2.1 (focused on community and EbA for small communities) and 2.2 (focused on community and EbA for medium to large communities) rather than the whole of component 2. The activities under outputs 2.3 and 2.4 contain more capacity development and would seem to be more similar to those of components 1 and 3.

62. The main consideration about selection criteria and institutional set-ups for the different types of subproject relate to ensuring that programme ambitions and quality checks are fully translated into the implementation modalities of outputs 2.1 and 2.2. The iTAP sees these outputs, which account for the majority of the programme's budget, as the main vehicle for influencing the living conditions of the people of the Amazon basin. In this regard, it is important that these localized subprojects be systemic in the way they support community WSW systems. A narrow focus on construction or technology would risk compromising matters of governance, cost recovery, maintenance and equitable distribution of services within participating communities. See recommendation 7 in section II below.

63. In sum, the programme is effectively a pool of capital that sits at the IDB with specific use of proceeds conditions tied to resiliency and mitigation outcomes in the Amazon region. The actual underlying interventions will be developed on a case-by-case basis with the relevant stakeholders and national partners. In essence, the programme is a managed account or a managed donor account like many others that sit in multilateral development banks and is funded by interested contributing nations. At some level, it strikes the iTAP that round-tripping funds through GCF, with its associated overheads, to a managed account alongside other GCF contributors is suboptimal from an overall efficiency standpoint.

64. The efficiency and effectiveness criterion is assessed as medium.

II. Overall remarks from the independent Technical Advisory Panel

65. Overall, the funding proposal is comprehensive and opens a range of credible pathways towards enhancing water security and climate resilience in the Amazon basin. Since the subprojects to implement the programme are not yet defined, full detail of what the programme will be is consequently not yet available. It is believed, nevertheless, that the accredited entity will pay close attention to detail and purpose in the origination and selection of subprojects.

66. The iTAP recommends that the Board approve this funding proposal.

67. To further increase the sustainability and positive impact of the programme, the iTAP suggests that the AE consider the following:

(a) Recommendation 1: systematic use of qualitative data for project monitoring, learning and communication of results in a rich manner, as well as in ecosystem monitoring, in order to describe and track long-term environmental change;

(b) Recommendation 2: as a complement to the selection criteria, add a logical reasoning argument on how each proposed subproject would contribute to the enhanced resilience of specific communities to specific climate change risks in the Amazon basin;

(c) Recommendation 3: emphasize the production of learning materials and sharing of insights from the analysis of how financial mechanisms can be designed and operationalized to support EbA solutions;

(d) Recommendation 4: enable the earliest possible handover to the relevant agency or organization of all installations and equipment (outputs 1.2, 2.1 and 2.2), with the purpose of assuring the appropriateness, functioning and (continued) maintenance of installations and equipment during the project's lifetime and beyond;

(e) Recommendation 5: add instructions to the design guidelines of the early warning systems under component 1 to ensure that IB-MHEWS subprojects include sufficient attention towards preparedness for response capabilities and anticipatory action;

(f) Recommendation 6: use opportunities across the programme for working with local communities and Indigenous Peoples as project participants for the proactive blending of local, Indigenous and ecological knowledge with contributions from science and engineering; and

(g) Recommendation 7: enhance clarity of the subprojects' institutional set-ups and differentiate more clearly between localized (mostly loan-funded) subprojects under outputs 2.1 and 2.2 and the broader (mostly grant-funded) subprojects in order to implement the overall remaining activities of the programme.

Response from the accredited entity to the independent Technical Advisory Panel's assessment (FP261)

Proposal name:	Improving Climate Resilience by Increasing Water Security in the Amazon Basin
Accredited entity:	Inter-American Development Bank
Country/(ies):	Bolivia (Plurinational State of), Brazil, Colombia, Ecuador, Peru, Suriname
Programme size:	Large

Impact potential
Many thanks for your recommendations. The proposed interventions aim to strengthen the resilience of vulnerable communities and ecosystems in the Amazon basin against climate change impacts on water security and ecosystem services. The Programme will directly benefit 1.5 million people and indirectly impact 4.2 million, focusing on adaptation areas of results. While complexity in assessment and quantifying the benefits is noted, the Programme integrates systematic use of both quantitative and qualitative data to support monitoring, evaluation, and continuous learning, as is reflected in the means of verification of the Results Framework. The logical reasoning mentioned by ITAP will be embedded in the process of origination and selection of each subproject, aligned with the impact rational described in the Programme, demonstrating how they address climate risks, community vulnerabilities, and resilience contributions as this is part of the AE impact framework and its focus on resilience. This will ensure that each sub-project aligns with program goals and clearly articulates its purpose and impact.
Paradigm shift potential
Many thanks for your feedback. We agree that the potential for knowledge generation and dissemination across the three components of the proposal is considerable, specifically considering the regional scale, its replicability in 6 countries and long-term vision of the Programme. Component 3 aims to contribute improving the enabling environment for climate investment and planning at policy and institutional level, to mitigate and manage risks in a systemic manner. In addition, the AE reckons that the transfer of installations and equipment in a timely manner is a good practice towards appropriation and long-term sustainability, which will be included as part of the sub-projects' design and execution and is consistent with IDB's approach in set up and operation other similar investments. The details of the timing and transfer will depend on the characteristics of each subproject and the local context and tailored-made to institutional arrangements and governance mechanisms in place. We also welcome the systemic use of qualitative data for project monitoring as it is in line with the information that is typically included as part of project monitoring in similar type of investments within the AE portfolio, when and if the subproject impacts ecosystems. Finally, regarding the IB-MHEWS, it is reckoned the relevance to work under an effective end-to-end and people-centred EWS. Hence, the Programme will strengthen the guidelines of the EWS to ensure preparedness for response capabilities and anticipatory action for authorities and communities.

Sustainable development potential
Many thanks for your comments. We agree with the assessment of the programme that will significantly contribute to several of the Sustainable Development Goals (SDGs). Throughout the proposal, we placed significant emphasis on gender with the active involvement and training of women, particularly those from marginalized communities. It is worth to clarify that the training program is not exclusively designed for women; however, it has been developed with a strong gender perspective, thereby mitigating the risk of perpetuating unequal gender relations. Furthermore, sanitation and hygiene are regarded as shared responsibilities among all genders.
Needs of the recipient
Many thanks for your recommendation. As stated in the Funding Proposal, throughout the Programme's life cycle, an ongoing relationship with the Indigenous Peoples under the area of influence will be maintained and enhanced based on continuous engagement, including the provision of information, dialogue and meaningful consultation in a socio-cultural appropriate manner, respecting their governance structures, languages, and their rights. This will be implemented through the Stakeholders Engagement Plan during execution as well as through the compliance of the Environmental and social Framework of the programme with the dedicated section on Indigenous peoples plan framework in each subproject. When applicable, Free, Prior and Informed Consent (FPIC) of the affected Indigenous Peoples will be carried out when deemed necessary. It is worth mention that subprojects will continuously feed and retrofitted with the knowledge and products developed under the different components with regards to the proactively engagement of IPs, not solely focussing on affectation or negative impacts.
Country ownership
Thank you for this feedback. the AE reckons that Indigenous peoples play a critical role in the Amazon and in this programme and recognizes the invaluable contributions of ancestral knowledge, which views land, water, and ecosystems as interconnected systems and will leverage on this perspective for collaboration and partnership with IP groups, as indicated throughout the proposal. In this line, the Programme will indeed work proactively together with local communities and indigenous peoples as active stakeholders and beneficiaries, particularly regarding the interventions under Output 2.1 for small communities. It is foreseen that local, community-based adaptation projects will be implemented, including not only the traditional knowledge in the design of the solutions but also engaging with communities in participatory monitoring plans. The AE also trusts that open consultations and dialogues with active participants of the sub-projects, facilitated by different activities comprised in the proposal, will encourage proactive blending of local, Indigenous, and ecological knowledge with contributions from tradition, science, and engineering.
Efficiency and effectiveness
Thanks for your comments and recommendation. While the programme has established selection criteria for subprojects that apply for all the programme -mainly Component 2-, those

that will be part of broader activities (mostly grant-funded) must also respond to the description of activities of each of those sub-components.

The AE project team also reckons the critical role that governance, cost recovery, maintenance and equitable distribution of services play vis a vis the focus on construction and technology. The AE welcomes recommendation #7 on this regard and will be included during programme the implementation.

The AE also recognizes that each institutional set-up could be different depending on the project design and the needs of the borrowers; for this reason, while some of the institutional set-ups have been described in the Operations Manual of the programme; each specific subproject could have a different set-up and will be tailored to the specific needs and activities comprised in each subproject.

Finally, we acknowledge ITAP's view regarding the design of programs, which differs from IDB's experience and will be open to exchange any experience in this regard.

Overall remarks from the independent Technical Advisory Panel:

The IDB thanks ITAP for the constructive comments and recommendations received on the Program, which are aligned with its objectives. Many of the recommendations received are already planned in the subprojects' origination and implementation phase but probably not spelled out in this programmatic phase. We will make sure that ITAP's recommendations will be considered, strengthening even further and very impactful program for the Amazon.

Annex 8. Gender Assessment

Date: August 2024

Programme Title:
Improving Climate Resilience by Increasing Water Security in the Amazon Basin

Countries:
Bolivia, Brazil, Colombia, Ecuador, Peru, Suriname

Contents

1. Introduction

More than 34 million people, including 420 indigenous peoples, live in the Amazon Region and depend on nature for food security, livelihoods, and shelter. The average percentage of Amazonian women varies between 48.3% and 49.7% of the population and differs according to different ethnic groups that are identified in each country. Two-thirds of the Amazonian population are Brazilian, and more than half live in urban centers.

In the Amazon region, women play an essential role in territorial management and local forms of environmental conservation practices within indigenous, peasant, and Afro-descendant people. This is mainly because women oversee the care of the home and family, which often also includes care of the environment. Moreover, women in the Amazon region often actively participate in different environmental care practices and sustainable use of natural resources like productive activities in agriculture, livestock, forestry, and fishing.

Amid the diversity of the Amazon region, women and men participate in different ways in decision-making regarding the management of natural resources and have different levels of access and control over natural resources and derivative benefits. These differences also generate inequalities in the vulnerability and resilience that women and men have in the face of environmental risks.

This Gender Assessment aims to provide an overview of the gender situation in the countries that are included in the program “Improving Climate Resilience by Increasing Water Security in the Amazon Basin”- identify gender issues that are relevant to the project context, and develop recommendations for advancing gender equality, women’s empowerment and the development with identity of indigenous peoples, the inclusion of people with disabilities, Afro-descendants, and the LGTBQ + population through the financed activities, to inform the development of the project’s gender action plan.

2. The IDB approach to Gender Equality and Diversity

The IDBG is committed to promoting gender equality and empowerment, which, in addition to their intrinsic value, have been shown to contribute to economic growth, development effectiveness, and breaking the cycle of intergenerational transmission of poverty. According to the IDB Gender Policy, gender equality means that women/girls and men/boys enjoy the same conditions and opportunities to exercise their rights and reach their social, economic, and political potential. The Gender Policy recognizes that pursuing equality requires actions aimed at equity, which implies providing and distributing benefits and/or resources in a way that narrows existing gaps. The understanding of gender equality is evolving in LAC societies, to ensure that rights and opportunities are not affected by diverse gender identities and gender expression.

Also, the IDBG is committed to equal access to opportunities for Diverse Peoples and Population Groups across Latin America and the Caribbean (LAC). The Bank focuses on four diverse groups that face discrimination based on their collective identity: (i) indigenous peoples; (ii) Afro-descendants; (iii) persons with disabilities; and (iv) people who identify as lesbian, gay, bisexual, transgender/transexual + other diverse gender identities and sexual orientations (LGBTQ+).

The IDBG supports Gender & Diversity policies in the region through its operations, technical assistance and through the generation of data and evidence.

To operationalize gender and diversity initiatives, the IDBG has created the Gender and Diversity Action Plan (GDAP). This plan serves as the key instrument for translating the IDB Group's commitments to gender equality and diversity into concrete actions.

As detailed in the GDAP 2022-2025, the strong commitment from the IDBG's management has been an overarching factor in advancing the mainstreaming of Gender & Diversity across sectors and operations. This commitment has been reinforced by management through (i) more systematic requests for quality mainstreaming of operations at all levels; (ii) continued inclusion of Gender & Diversity-related goals in the annual employee performance system; and (iii) human and financial resources.

3. AMAZON POPULATION AND GENDER AND DIVERSITY ASPECTS

The Amazon Region has a population of about 34 million people, of which approximately 2,2 million people are indigenous (approximately 4.6% of the Amazonian population) (IACHR, 2019[1]; RAISG, 2020[2]). There is no clarity on how many "*pueblos indígenas*" live in this region: some sources, such as the OTCA (2018[3]:12), estimate that there are around 420, while the Amazonian Georeferenced Socio-Environmental Information Network (RAISG, 2020) registers a total of 410. Similarly, it is not known exactly how many indigenous peoples in voluntary isolation and initial contact (PIACI) there are in the region: RAISG (2020) documents the existence of 82 PIACI but the OTCA (2018) estimates about 200. In addition, indigenous territories cover approximately 28% of the area of the Amazon.

The other communities that live in the region are distributed as follows: 82% peasants, 14% Afro-descendants, 2% colonos, 1% riverbanks, and 1% fishermen (Panamanian Ecclesial Network - REPAM, 2019[4]). These proportions vary from country to country. For example, in the Ecuadorian Amazon 33.12% of the population is recognized as indigenous, 59.33% as mestizo, 3.48% as white, 1.38% as Afro-Ecuadorian, and the rest in other categories such as black, mulate, and montubio (INEC, 2010[5]). For its part, in the Colombian Amazon, more than 70% of the population is not identified with any ethnic group and belongs to peasant communities; meanwhile, the indigenous population slightly exceeds 23% and people who identify as black or mulatto are over 2% (DANE, 2018[6]).

The division of the Amazonian population by sex has not been accurately identified. However, based on the information recorded by the latest national censuses, it can be estimated that for five countries in the Amazon region - Bolivia, Colombia, Ecuador, and Peru - the average percentage of Amazonian women is between 48.3% and 49.7% of the population. This population varies according to the different ethnic groups that are identified in each country. In Colombia, 307,280 Amazonian women do not self-identify with an ethnic group, 82,900 self-identify as indigenous and 9,427 as Black, Mulato, Afro-descendant or Afro-Colombian (DANE, 2018). Most women in the Ecuadorian Amazon identify as mestizas (210,462) and indigenous (121,463) (INEC, 2010). Finally, in Peru 735,597 Amazonian women identify as mestizas, 66,095 as native or indigenous to the Amazon and 38,109 as Quechuas (INEI, 2017[7]).

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[1] IACHR Inter-American Commission on Human Rights (2019). Annual Report. Link

[2] RAISG (2020). *Amazonía bajo presión 2020*. RAISG: Sao Paulo, Belém, Lima, Santa Cruz de la Sierra, Bogotá, Quito y Caracas. Red Eclesial Panamazónica -Repam. 2019. Atlas Panamazónico: aproximación a la realidad eclesial y socioambiental. Link

[3] OTCA (2018). *Informe regional sobre la situación de los bosques en la región amazónica*. Brasilia, Brasil: OTCA. Link

[4] Link to Website REPAM

[5] INEC 2010. Link to Database

[6] DANE (2018). Censo Nacional de Población y Vivienda, Colombia 2018. Departamento Administrativo Nacional de Estadística. Link

[7] INEI Censos Nacionales 2017. Link

Most of the population is Brazilian, accounting for more than 70% of the total population. Such population is followed by that of Peru and Colombia with an estimated 13% and 4% of the total Amazonian population, respectively (UCLG, 2018[8]). However, the most populous cities are Manaus and Belém in Brazil, with about 2 million inhabitants each. In addition, there are other intermediate cities, such as Iquitos in Peru, with a population of more than 400,000 inhabitants (INEI, 2017). Among the small municipalities of the region are other important cities such as Leticia (Colombia), Tabatinga (Brazil) and Puerto Maldonado (Peru), where the population ranges from 50,000 to 80,000 people (INEI, 2017; National University of Colombia, s.f).

In general, there are several characteristics of gender relations in the Amazon, however, each of these varies greatly depending on the social and environmental context from specific Amazonian social groups: (i) there is a strong community identity and political commitment among ethnic, occupational and other social groups, (ii) patriarchal cultural values among some indigenous groups assume that men represent the family and the community in public arenas, leaving women without independent autonomous property rights and representation in decision making related to forest management, (iii) the division of labor by gender is often linked to different physical spaces and areas of activity, for example, women may engage in reproductive and productive activities in the homestead/community gardens, swidden gardens, including livestock, agroforestry and non-timber forest products while men dominate in hunting, agricultural clearing and logging activities for the commercial market. In non-indigenous communities, women´s arenas are often more limited, and men typically dominate agriculture, (iv) women's productive work is often invisible to markets and outsiders due to its association with the home, family, and subsistence and because of limited market access, (v) physical isolation of many forest communities makes women's collective action more difficult, and limits access to social services and other benefits of citizenship rights, (vi) programs to support community forest management have influenced community and family gender dynamics, often creating or exacerbating gender inequalities by focusing resources on a small group of male timber managers and neglecting non-timber forest products and broader forest management tasks, (vii) over the past three decades, Amazonian women have found diverse ways to organize in support of their community struggles for land and other resources, to demand services from government and non-governments' organizations projects, and to gradually build their skills and leadership within broader community and public arenas. Inequalities increase according to area of urban/rural residence and ethnic condition, with indigenous peoples being the ones furthest behind.

Across the Amazon, indigenous women are leading solutions to protect biodiversity and global climate amidst ongoing and increasing threats to their rights and territories. They are leading communities and movements to resist land grabs, fossil fuel and mineral extraction, agribusiness expansion, and gender-based violence. Women's leadership is on the rise in the Amazon as indigenous women are speaking up, transforming their communities, and sharing their experience to build a healthier territory. During the COVID-19 crisis for example, the leadership of Amazon indigenous women became more evident as they took on crucial role in care-giving tasks using their traditional medicine. Women in the Amazon region also promote the conservation of local species, preserve the culture built around these species, and the tourism it attracts and on which their community often depends for their livelihood.

4. Legal, Regulatory, and Institutional Framework

The seven countries considered under this study have ratified or acceded to the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW)[9] and its optional protocol. They also have ratified the Inter-American Convention on the Prevention, Punishment, and Eradication of

[8] UCLG (2018). Ciudades Amazónicas: aprendizaje entre pares sobre el uso sostenible de los ecosistemas terrestres. Riberalta, Bolivia: Learning UCLG. Link

[9] CEDAW is an international treaty adopted in 1979 by the United Nations General Assembly. Described as an international bill of rights for women, it was instituted on 3 September 1981 and has been ratified by 189 states.

Violence against Women (Convention of Belem Do Para)[10]. Their constitutions address equality before the law and no one can be discriminated against based on sex. Most countries have performed a normative reform effort to establish an adequate framework for development. However, normative advances still face a deeply patriarchal and androcentric culture that is reflected in many social and institutional practices.

A. BOLIVIA

The constitution of Bolivia regulates gender equality and non-discrimination in its articles 8, 11, 14, 15, and 402, as well as in Supreme Decree No. 4,401 (Art.1). However, there are still discriminatory norms in the General Labor Law regarding the percentage of women that companies can employ (not exceeding 45%) (Art. 3), and the working hours for women (maximum of 40 hours per week, compared to 48 hours for men) (Art. 46).

The Constitution establishes shared responsibility in household tasks for both spouses or partners (Art. 64), specifies that all its members have equal rights, obligations, and opportunities (Art. 62), and recognizes the economic value of household work as a source of wealth, which must be quantified in public accounts (Art. 338). Remunerated domestic work is regulated by Law No. 2,450, Supreme Decree No. 224, and Supreme Decree No. 4,589.

In Bolivia, the Plurinational Service for Women and Depatriarchalization (SEPMUD) is a decentralized institution under the guardianship of the Ministry of Justice and Institutional Transparency, created in January 2019. Its purpose is to monitor, follow up, and evaluate the implementation of public policies towards depatriarchalizing, in favor of the effective exercise of women's rights; and promote the eradication of all forms of violence and discrimination against women. **Table 4.1.** shows the Laws with an impact on the rights of women in Bolivia.

Table 4.1. Laws with an impact on the rights of women in Bolivia

Law (year)	Description
Law 1674 against family or domestic violence (1995)	Defines and sanctions domestic violence as a crime of public order. Mainly oriented towards prevention.
Law 1678, which modifies the Penal Code to include sexual violence as a crime (1997)	Removes the term "honest woman" from the definition of crimes against sexual freedom, which subjected the judges' assessment of the victim's honesty and thus conditioned the classification and sanctioning of crimes of rape and statutory rape. It substitutes the statement of title xi of book ii of the penal code, crimes against good customs, rape, statutory rape, and indecent assault, for crimes against sexual freedom.
Supreme Decree 25087. Regulatory of the Law against family or domestic violence (1998)	Modifies the Law against family or domestic violence of 1995 and complements the actions of the State based on the definition and creation of institutions responsible for preventing and monitoring family and domestic violence and protecting victims.
Law 2033 for the protection of victims of crimes against sexual freedom (1999)	Defines and extends the penalty for crimes of rape, statutory rape, corruption of minors, and procuring. In addition to vaginal access, it

[10] The Convention of Belém do Pará defines violence against women, establishes that women have the right to live a life free of violence and that violence against women constitutes a violation of human rights and fundamental freedoms. It calls for the first time for the establishment of mechanisms for protecting and defending women's rights as essential to combating the phenomenon of violence against women's physical, sexual, and psychological integrity, whether in the public or the private sphere and for asserting those rights within society.

	considers anal and oral access as rape and provides multidisciplinary care for the victim.
Law No. 3325. Trafficking in persons and related crimes (2006)	Modifies the Penal Code of 1997, adding Chapter V on "Trafficking in Persons."
Article 15 of the Political Constitution of the State (2008)	Enshrines the rights of all persons to life and to physical, psychological, and sexual integrity.
Law 18 of the Plurinational Electoral Body (2010)	Principle of Equivalence. The Plurinational Electoral Body assumes and promotes gender equity and equality of opportunities between women and men for the exercise of their individual and collective rights (Art.4).
Law 26, Electoral Regime Law (2010)	Principle of Equivalence: "Bolivian democracy is based on gender equity and equality of opportunities between women and men for the exercise of their individual and collective rights, applying parity and alternation in the lists of candidates for all government and representation positions, in the internal election of leadership and candidacies of political organizations, and in the norms and procedures specific to indigenous origin peasant nations and peoples" (Art. 2, h). Article 11, referring to intercultural democracy, considers the principle of equivalence and alternation and states in its subsection c) "The lists of candidates from indigenous origin peasant nations and peoples, drawn up in accordance with their own norms and procedures, will respect the principles mentioned in the preceding paragraph."
Law No. 243 Law against harassment and political violence against women (2012)	Eliminates acts, behaviors, and individual or collective manifestations of harassment and violence that directly or indirectly affect women in the exercise of their political and public functions.
Law No. 263, Comprehensive Law against Trafficking in Persons (2012)	Guarantees the fundamental rights of victims through the consolidation of measures and mechanisms for prevention, protection, care, prosecution, and criminal punishment of these crimes.
Supreme Decree No. 1486. (2013)	Regulates the mechanisms and procedures for the implementation of Law No. 263 for the fight against Trafficking in Persons and related crimes.
Law 348 Comprehensive to ensure women a life free of violence (2013)	Aims to establish comprehensive mechanisms, measures, and policies for prevention, care, protection, and reparation for women in situations of violence, as well as the prosecution and punishment of aggressors, to guarantee women a dignified life and the full exercise of their rights for Living Well. It incorporates, among others, femicide in the Penal Code, Art. 7 paragraph No. 2.
Supreme Decree No. 2145, Regulation of Law No. 348 (2014)	Aims to regulate Comprehensive Law No. 348 to Ensure Women a Life Free of Violence, establishing mechanisms for prevention, care, protection, reparation, and resources for its implementation.
Supreme Decree No. 2610, which modifies and complements Supreme Decree No. 2145 (2015)	Aims to modify and complement Supreme Decree No. 2145 to Ensure Women a Life Free of Violence, regarding the report that must be made to SIPPASE and the homologation of the medical certificate.
Supreme Decree No. 2935, Regulation to Law No. 243,	Aims to regulate Law No. 243, of May 28, 2012, Against Harassment and Political Violence against Women, establishing strategies, mechanisms, and procedures for its implementation.

against Harassment and Political Violence against Women (2016)	
Law No. 807. Gender Identity Law (2016)	Establishes the procedure for changing the given name, sex data, and image of transgender and gender non-conforming individuals in all public and private documentation linked to their identity, to fully exercise the right to gender identity.
Law No. 1153 Modifies the Comprehensive Law to Ensure Women a Life Free of Violence (2019)	For access to a public position in any State Body or level of administration, whether by election, appointment, designation, or hiring, in addition to those provided by law, it will be considered an inexcusable requirement not to have a history of violence against a woman or any member of her family.
Law No. 1173, on procedural streamlining and strengthening of the comprehensive fight against violence against girls, boys, adolescents, and women (2019)	Aims to ensure the prompt and timely resolution of criminal conflicts, adopting indispensable measures to deepen oral proceedings, strengthen the fight against violence against girls, boys, adolescents, and women, avoid procedural delays and abuse of pretrial detention, and enable effective judicial protection of victims, by amending Law No. 1970 of March 25, 1999, "Criminal Procedure Code", and related provisions.
Law No. 1226 Modifies Law 1173 on Procedural Streamlining and Strengthening of the Comprehensive Fight Against Violence Against Girls, Boys, Adolescents, and Women (2019)	Establishes that in cases of domestic or family violence, pretrial detention may be considered (Art. 11, which amends Art. 232 of Law 1173).
Supreme Decree 3834 Creates the "Adela Zamudio" Immediate Registration and Alert System of the Special Force for the Fight Against Violence - FELCV (2019)	In addition to creating FELCV, it promotes its specialization. It must contain information on reports of crimes of violence against women and the family, as provided for in Law No. 348, of March 9, 2013, Comprehensive to Ensure Women a Life Free of Violence.
Decree 4012. Modifies Article 13 of Supreme Decree 2145, Regulation of the Comprehensive Law to Ensure Women a Life Free of Violence (2019)	Modification regarding the use of resources for the maintenance of services for women in situations of violence and their dependents.

B. BRAZIL

The **1988 Constitution** symbolizes the legal framework for the re-democratization of Brazil. For the formulation of the 1988 Constitution, popular participation was ensured. Regarding women's participation, the Charter of Brazilian Women to the Constituents stands out, which compiled the main demands of women's movements.

The 1988 Constitution stands out, also innovating by inaugurating its Text bringing fundamental rights, and already in its Article 5, expressly establishes equality between men and women in general. Another point of significant change is the family. The old Civil Code of 1916 contained several provisions that placed women in an inferior role within the family entity. Thus, the following constitutional provisions stand out that the rights and duties relating to the conjugal society are exercised equally by men and women and that the State will ensure assistance to the family in the person of each of its members, creating mechanisms to curb violence in the context of their relationships. The 1998 text expressly introduced the prohibition ofdiscrimination in the labor market on the grounds of gender or marital status.

The Ministry of **Women, Family and Human Rights,** former Ministry of Human Rights(2016–2018), and Secretariat for Human Rights of the Presidency of the Republic (1997–2015) is an office attached to the Presidency of Brazil. Its purpose is to implement, promote, and protect human rights, civic rights, and the rights of children, adolescents, women, families, the elderly, and the disabled.

National Secretariat of Policies for Women (SNPM) is linked to the Ministry of Women, Family and Human Rights and its main objective is to promote equality between men and women and combat all forms of prejudice and discrimination inheritedfrom a patriarchal and exclusionary society. Since its creation in 2003, SNPM has been fighting for the construction of a more just and democratic Brazil, through the valorization of women and their inclusion in the country's social, economic, political, and cultural development process. The Decree No.9.417, of June 20, 2018, transferred the National Secretariat of Policies for Women to the organizational structure of the Ministry of Women, Family, and Human Rights.

In 2004, the ***National Plan of Policies for Women*** was created to combat gender discrimination and to consolidate educational policies for an equal gender perspective. Those plans are renewed periodically. Contributes to the strengthening and institutionalization of the Policy National Convention for Women approved from 2004, and endorsed in 2007 and 2011, respective conferences. As a national plan, it reaffirms the guiding principles of the National Policy for Women: (i) women's autonomy in all dimensionsof life; (ii) search for effective equality between women and men, in all spheres; (iii) respect for diversity and combating all forms of discrimination; (iv) secular character of the State; and universality of services and benefits offered by the State; (v) active participation of women in all the public policy phases; and (vi) transversality as a guiding principle of all public policies.

Programs such as "*Minha casa, minha vida*" (My house, my life), created in 2009 to helppeople with low-income to buy their own house, almost 80% of the beneficiaries are women;and the "*Bolsa Familia*" (Family Packet), created in 2003, through which payments are transferred by the government to poor families, in the name of the woman of the family, are consolidating the role of women in social life. **Table 4.2** shows the Laws with an impact on the right of women in Brazil.

Table 4.2. Laws with an impact on the rights of women in Brazil

Law (year)	Description
Law No. 9.029 Abortion and reproductivehealth rights, employmentdiscrimination, gender discrimination (1995)	Article 1 prohibits any discriminatory and limiting practice for the effect of access to employment, ortheir maintenance, because of sex, origin, race, color, marital status, family situation or age.
Federal Law No. 11.340 The Maria da Penha Law (2006).	The law regulates violence against women in every aspect of domestic life and is regarded as a milestone in terms of national legislation on gender. The law criminalized different forms of domestic violence against women, established stricter punishment for offenders, facilitated preventive arrests, and created other special protective and relief mechanisms for women, including special courts, designated police stations, and shelters for women.
Law No. 11.441. Divorce and dissolution ofmarriage (2007)	Allowed both consensual divorce and consensual separation to be dealt with in the civil registry so that divorce, separation, and inventory and division of assets would become extra-judicial affairs when the parties agreed on its terms

Law No. 12.705 Employment discrimination, gender discrimination (2012)	This law allowed women to serve in the Brazilianarmy.
Law No. 13.104 Lei do Feminicídio Female infanticide and feticide, femicide (2015)	On March 9, 2015, Brazil's existing criminal code wasamended to criminalize femicide, with sentencing ranging from twelve to thirty years of imprisonment.
Domestic Case Law. Law No.13.811 (2019) Forced and early marriage, gender discrimination	This law amends Article 1,520 of the Civil Code in order to establish that only persons who have reached the age of marriage determined in Article 1,517 of the Civil Code may marry. This is no longer permitted as a reason to marry younger than the ageof 16.

C. COLOMBIA

The **1991 Constitution** establishes (i) the principle of non-discrimination for reasons of sex, race, national or family origin, religion, language, political or religious option (article13), (ii) equal rights and duties of the couple in family relationships, (iii) the sanction of any form of violence in the family that is considered destructive of their harmony and their (article 42); (iv) the adequate and effective participation of women in the decision- making levels of the Public Administration (article 40) and (v) equal rights and opportunities for men and women and establishes that women may not be subjected to no kind of discrimination and that she will receive special assistance during pregnancy and after childbirth and will receive food allowance (art. 43).

The **Presidential Council for the Equity of Women**, dependent on the Vice Presidency of the Republic, has assigned the following functions among others: (i) designing policies, plans, programs, projects, and necessary provisions designed to promote equality gender and empowerment for women, (ii) design and implement follow-up mechanisms for complying with internal legislation and treaties, international agreements and accords that relate to gender equality for women and (iii) establishingstrategic alliances with other sectors of government, as well as with the private sector, women's organizations, international organizations, organizations from civil society (ONG, universities and research centers), for the implementation of a public gender policy.

In the last three decades, national governments have developed different policies for women: in 1992, the **Comprehensive Policy for Women** was formulated; later, in 1994, the **Participation and Equity and Women's Policy**; in 1999, the **Plan for EqualOpportunities for Women**; in 2003, the **Women Peace Builders Policy** and in 2013 the **Gender Equality Policy for Women**. The formulation of these policies, since then,has been led by the entities responsible for the issue of gender equity. **Table 4.3** shows the laws with impact on the rights of women in Colombia.

Table 4.3 Laws with an impact on the rights of women in Colombia

Laws (year)	Description
Law 25 of 1992	Which regulates the cessation of civil effects of religious marriages by divorce
Law 48 of 1993	Determines the voluntary military service of women and is exceptionally compulsory when the circumstances determine it.

Law 100 of 1993	By means of which the general social security system is created, which regulates the principle of universality of health and social security without any discrimination. It draws attention to the pregnant woman, prenatal control, delivery care, postpartum control, and breastfeeding.
Law 43 of 1993	Which regulates the acquisition, resignation, loss, and recovery of Colombian nationality without distinction of gender
Law 82 of 1993	Where the female head of the family is supported to provide better conditions of access to credit, education, employment, housing, and microenterprise, among others.
Law 115 of 1994	Through which the general education law is issued
Law 119 of 1994	Where the restructuring of SENA is carried out; non-formal education for work has a social impact on women
Law 181 of 1995	Through which the principle of democratization without discrimination of sports, recreation, and use of free time is established.
Law 182 of 1995	Which talks about television, and establishes the protection of gender equality
Law 201 of 1995	By means of which the delegated attorney's office for the minor and the family is created
Law 248 of 1995	By means of which the Inter-American Convention to prevent, punish and eradicate violence against women is ratified.
Law 258 of 1996	By means of which the affectation to family housing is established and other provisions are issued
Law 294 of 1996	Through which domestic violence is sanctioned
Law 360 of 1997	Through which the crimes against sexual freedom and human dignity are stipulated
Law 387 of 1997	Through which prevention and comprehensive care for the displaced population is established.
Law 581 of 2000	Which regulates the adequate and effective participation of women in the decision-making levels of the branches of public power.
Law 731 of 2002	By which regulations are issued to favor rural women.
Law 823 of 2003	By which rules on equal opportunities for women are issued"
Law 1009 of 2006	By which the observatory with gender issues is created on a permanent basis
Law 1257 of 2008	Guarantee the Right of women to live a free life without Violence.
Law 1413 of 2010	For the Inclusion of the Care Economy in the System of National Accounts.
Law 1761 of 2015	By which the criminal offense of femicide is created as an autonomous crime and other provisions are dictated (Rosa Elvira Cely Law)

Law 1719 of 2014	By which some articles of Laws 599 of 2000 and 906 of 2004 are modified and measures are adopted to guarantee access to justice for victims of sexual violence, especially sexual violence. On the occasion of the armed conflict, and other provisions are issued
Law 2137 of 2021	It aims to create the National Early Warning System for the Prevention of Sexual Violence against Children and Adolescents, modify Law 1146 of 2007, and establish measures that articulate the identification, attention, prevention, and reduction of the main risk factors of sexual violence against minors in Colombia.

D. ECUADOR

The **2008 Constitution** acquires a series of commitments to achieve gender equality, including: promotion of parity in the appointment of public positions, elimination of violence in the private and public sphere against women, formulation and execution of policies to achieve equality of men and women, guarantee of women's access to property and in decision-making in the administration of a conjugal society, guarantee ofequality in access to employment, recognition as productive work of labor unpaid self- support and human care that takes place in homes, assurance of actions and services of sexual and reproductive health and protection under the law of pregnant women.

As of the approval of the 2008 Constitution, the different public policies generated by the State are oriented towards the effective enjoyment of rights to achieve equality between women and men; the gender approach is incorporated in plans and programs;and technical assistance is provided for its mandatory application in the public sector.

The **National Council for Gender Equality** was created in 1970 as the Department of Women. Later, in 1984, it became the National Office for Women. In 1986, it took the category of National Directorate for Women, of a technical operational nature, to promote full equality of women in political, legal, psychological, economic, educational,ethical, cultural life and to improve their living conditions and participation within the Ministry of Social Welfare.

In becomes the National Council of Women CONAMU, with administrative, financial, and technical autonomy, attached to the Presidency of the Republic, whose objective was toensure the incorporation of the gender approach in plans, programs, and projects, and provide advice and assistance technique for its mandatory application in all public sector organizations, through the formulation and implementation of Equal Opportunity Plans. Its objective is to ensure the full validity and exercise of the rights and rights of women and the LGBTI population.

The **National Agenda for Women and LGBTI people** 2018-2021 is a mandatory instrument of national planning and is aligned with the National Development Plan 2017-2021, it becomes the macro strategy to mainstream the principle of equality andnon-discrimination due to Gender, both for public management and for the empowerment of rights holders, a fundamental element of the entire legal system and the democratic political system. **Table 4.4** shows the legal instruments with impact on the rights of women in Ecuador.

Table 4.4. Legal or normative instruments with an impact on the rights of women in Ecuador

Laws	Description
Organic Code of theJudicial Function	Determines the competence and jurisdiction of judges ofviolence against women and the family

Code of Democracy or Organic Law on Elections and PoliticalOrganizations	Regulates the application of parity between men and women in the lists for multi-person elections; It establishesas impediments to being candidates the having exercised gender violence and not complying with the child support payments.
Organic Law of the Legislative Function	It transversally incorporates the focus on women's rights and gender equality, through the creation of the Legislative Technical Unit, whose objective is to accompany the process of creating the norm and provide the Specialized Commissions and the Plenary with, of a non-binding report on topics such as the use of non-discriminatory language inthe standard and the gender impact of the suggested standards
Organic Law of the Council of Citizen Participation and Social Control	Guarantees citizens, individually or collectively, equal rights, conditions and opportunities to participate, influenceand decide in the public life of the State and society
Organic Code of Territorial Organization, Autonomy and Decentralization	The Cantonal Councils for the Protection of Rights will haveas attributions the formulation, mainstreaming, observance,monitoring and evaluation of municipal public policies for the protection of rights, articulated with the public policies ofthe National Councils for the Equality.
Organic Code of Planning and PublicFinance	It establishes that coordination spaces will be established inthe exercise of planning and public policy, in order to incorporate gender, ethnic-cultural, generational, disability and mobility approaches.
The Comprehensive Organic Criminal Code	Typifies three types of crimes of violence against women ormembers of the family nucleus: physical violence, psychological violence and sexual violence
Children and Adolescents Code	Establishes protection mechanisms against mistreatment,abuse, sexual exploitation, trafficking and loss of children and adolescents. It stipulates visitation rights, parental authority and food.
Work Code	It specifies the rights of working women and men, maternityand paternity leave, the prohibition of untimely dismissal formaternity, the obligation to enroll in insurance for medical and social benefits.
Law on Violence against Women and the Family (Law 103)	It makes an explicit approach to violence against women and the family. It includes protection measures for victims and the prosecution of the perpetrators of this type of violence. Article 1 protects the physical and mental integrityand sexual freedom of the woman and the members of her family.
Free Maternity and Child Care Law	Guarantees the right of women to free quality and warm health care, during pregnancy, childbirth and postpartum, access to sexual and reproductive health programs.
Organic Law of Public Service of 2010	Guarantees the equal presence of men and women in thenomination and appointment positions, in the selection processes and incorporation into the public service.

Organic Law of Bilingual InterculturalEducation	Establishes equality between men and women, includes people with diverse sexual orientation and gender identity,in order to achieve a change in discriminatory cultural conceptions of any kind, in the educational system.
Organic Law of Higher Education	Establishes the principle of co-government that is understood as the shared management of universities and polytechnic schools in accordance with the principles of quality, equal opportunities, alternation, equity and genderequality.
Organic Law of Communication	Prohibits discriminatory content for reasons of ethnicity,place of birth, gender identity, cultural identity, health status, sexual orientation, judicial past and immigration status.
Organic Law of Popular and SolidarityEconomy	It establishes as popular economic units those that are dedicated to the care economy, among other activities. It defines the people responsible for the care economy, suchas those who exclusively carry out activities for the reproduction and sustainability of people's lives, in relation to the preparation of food, human care and others.

E. PERU

The **1993 Political Constitution** of Peru establishes that no one should be discriminated based on origin, race, sex, language, religion, opinion, economic condition, or any other nature.

The mission of the **Ministry of Women and Vulnerable Populations** is to become an integrated, modern, and articulating body, contributing to overcoming poverty, inequality and exclusion, with a focus on comprehensive human development and equity and generating equal opportunities for men and women.

The **General Directorate for Gender Equality and Non-Discrimination** oversees compliance with national and sectoral policies for Gender Equality and Non- Discrimination at the national level within the scope of its competence (Supreme Decree No. 003 - 2012-MIMP).

The **Gender and Climate Change Action Plan** is a management instrument that seeks to guide the action of different entities of the Peruvian State within the framework of their competencies related to mitigation and adaptation to climate change. The instrument aims to contribute to equality between men and women in the following prioritized areas: Forests, Water Resources, Energy, Food Security, Solid Waste, Health, Education and Disaster Risk Management.

Table 4.6 National regulatory framework that impacts on women in Peru

Laws (year)	Description
Law No. 28983 (2007)	Law of Equal Opportunities between Women and Men. This norm establishes that the State has the duty to adopt all the necessary measures to promote and guarantee equality between women and men to eradicate all forms of discrimination (art. 4).
Supreme Decree No. 027-2007-PCM (2007)	Defines and establishes mandatory national policies. (Equality of men and women). Annually approves indicators for each National Policy.

Supreme Decree No. 004-2012-MIMP (2012)	Constitutes the Permanent Multisectoral Commission, an instance that must monitor and contribute to the effective fulfillment of its strategic objectives and expected results, as well as its sustainability over time.
Supreme Decree No. 005-2015-MIMP (2015)	Formalizes the use of the National System of Gender Indicators. It considers this system as an instrument for the follow-up monitoring and evaluation of policies on gender equality.
Supreme Decree No. 008-2019-MIMP (2019)	Approves the National Gender Equality Policy. Six priority objectives are established in it: (i) reduce violence against women; (ii) guarantee the exercise of their rights to sexual and reproductive health; (iii) guarantee the access and participation of women in decision-making spaces; (iv) guarantee the exercise of the economic and social rights of women; (v) reduce institutional barriers that hinderequality in the public and private spheres between men and women; and (vi) reduce the incidence of discriminatory socio-cultural patterns in the population.

F. SURINAME

Suriname's Constitution of 1987 with Amendments through 1992 states that (i) no one shall be discriminated against on the grounds of birth, sex, race, language, religion, origin, education, political beliefs, economic position or any other status, (ii) supplying special protection on the job for women before and after pregnancy, for minors, disabledpersons and for those who are engaged in work which demands special efforts or who work in unhealthy or dangerous conditions, (iii) working women shall be entitled to paid maternity leave, and (iv) all employees have, independently of age, sex, race, nationality, religion or political opinions, the right to a remuneration for their work corresponding to quantity, type, quality and experience on the basis of equal pay for equal work.

The **Bureau for Gender Policy** was established in 1997 and became officially operational in 1998. In 2015 the name of the bureau was changed to the Bureau of Gender Affairs (BGA). The goal of the BGA is to be the central part of the national machinery for gender policy, with the objective to develop, coordinate, monitor, evaluate and disseminate a national gender policy that will create a balanced development with equal opportunities for men and women.

Since it was set up, the Bureau has developed two **Integrated Gender Plans of Action** (IGAP 2000-2005 and IGAP 2006-2010) and installed Gender Focal Points in various ministries as part of the government's Gender Management System.

Suriname's Multi-Annual Development Plan 2001-2005 was led by a rights-based approach to development and identified gender as a cross-cutting issue across all programs, projects, and activities[11] The development of gender policies for rural areas was emphasized in that plan In the Suriname's **Development Plans** 2012-2016 and 2017-2021 Gender is addressed in a separate chapter and is also being considered across cutting issue.

The Ministry of Home Affairs, and particularly the BGA, is responsible for the implementation and monitoring of CEDAW. Suriname has worked or **adjusted the following national legislation** since the ratification of the CEDAW[12]:

- Revision of the Criminal Code regarding the trade in women and minors in 2006.

[11] Ministry of Home Affairs. 2018. National Report Situation Analysis of Women and Men in Suriname

[12] Idem

- Revision of the Criminal Code regarding sexual crimes in 2009.
- Bill against Stalking in 2012: according to this law preventive measures can be taken by the public prosecutor to protect a possible victim.
- Adoption of the law on National Basic Health Insurance (2014).c
- Adoption of the law on Minimum Hourly Wage (2014).
- Adoption of the law on General Pension (2014).
- ILO Convention concerning Equal Remuneration for Men and Women Workers of Equal Value (Equal Remuneration Convention), 1951 no. 100, Geneva, 01 June 1951 (2016): equal pay for men and women.
- Law approving the accession of the Republic of Suriname to the ILO Convention concerning Equal Remuneration for Men and Women Workers of Equal Value (Equal Remuneration Convention), 1951 no. 100, Geneva, 01 June 1951 (2016): equal wages for men and women.
- Law approving accession of the Republic of Suriname to the Convention concerning Discrimination in Respect of Employment and Occupation, (Discrimination Employment and Occupation) Convention, 1958 no. 111, Geneva, 25 June 1958 (2016): policy for equal opportunities to prevent discrimination concerning labor.
- Law on Labor Mediation (2016).
- At present, a Law on Sexual Harassment and a bill on paid maternity leave are on draft.

5. General and Specific Sector Gaps

To establish comparable indicators among the countries under scrutiny in this report, an analysis of the gender situation in the study area is presented below. This analysis is based on data extracted from the Global Gender Gap Report (2023)[13], which focuses on four dimensions: economic participation, educational achievements, political empowerment, and health (**Table 5.1**).

Table 5.1 shows that none of the countries has reached parity (Index = 1), largely attributable to indicators related to economic participation and political empowerment. However, indicators related to educational achievements indicate that parity has been achieved in this area, as well as in participation in technical and professional areas. Likewise, parity is observed in indicators related to health and survival.

Education and Employment

Based on data extracted from the Global Gender Gap Report (2023), the detailed study of the **education attainment** data (**Fig. 5.1**) highlights that in all the countries under study female and male participation at the primary and secondary levels are mostly the same. At the tertiary level, women's participation is higher than men's.

[13] WEF (2023). *Global Gender Gap Report 2023*. Ginebra, Suiza: Autor. The Global Gender Gap Index has been introduced by the World Economic Forum, since 2006, to define a framework to capture the magnitude of gender disparities and track their evolution over time. It is based on the measurement of four dimensions: (i) Opportunity and Economic Participation; (ii) Educational Achievement; (iii) Health and Survival; and (iv) Political Empowerment, providing indices for countries that allow effective comparisons between regions and income groups and where 1 means parity and 0 represents 100% inequality.

Table 5.1. Global Gender Gap Index for the countries under study

	Bolivia	Brazil	Colombia	Ecuador	Guyana	Perú	Suriname
Global Gender Gap Index	**0.730**	**0.726**	**0.751**	**0.737**	**0.752**	**0.764**	**0.736**
Rank (out of 146 countries)	56th	57th	42th	50th	35th	34th	52th
Indicators	Score*	Score*	Score*	Score*	Score*	Score*	Score*
Economic Participation and Opportunity	**0.658**	**0.670**	**0.657**	**0.705**	**0.722**	**0.683**	**0.740**
Labour -fource participation rate (%)	0.840	0.719	0.667	0.688	0.629	0.819	0.673
Estimated earned income ($ 1,000)	0.628	0.628	0.683	0.767	0.549	0.741	0.642
Legislators, senior officials and managers	0.542	0.634	0.546	0.607	0.879	0.547	0.762
Professional and technical workers (%)	0.853	1.000	0.896	1.000	1.000	0.763	1.000
Education Attainment	**0.984**	**0.992**	**1.000**	**0.998**	**0.995**	**0.960**	**0.993**
Literacy rate (%)	0.929	1.000	1.000	0.991	0.985	0.949	0.968
Enrolment in primary education (%)	1.000	0.983	1.000	1.000	-	-	1.000
Enrolment in secundary education (%)	0.996	1.000	1.000	1.000	1.000	0.949	1.000
Enrolment in tertiary education (%)	-	1.000	1.000	1.000	1.000	1.000	-
Political Empowerment	**0.317**	**0.263**	**0.373**	**0.278**	**0.310**	**0.450**	**0.232**
Women in parliament (%)	0.859	0.215	0.406	0.631	0.555	0.634	0.416
Women in ministerial positions (%)	0.143	0.579	1.000	0.333	0.467	0.900	0.417
Years with female/male head of state (last 50)	0.034	0.120	0.000	0.000	0.051	0.071	0.000
Health and Suvival	**0.962**	**0.980**	**0.975**	**0.968**	**0.980**	**0.964**	**0.979**
Sex ratio at birth (%) **	0.944	0.944	0.944	0.944	0.944	0.944	0.944
Healthy life expectancy (years)***	1.002	1.060	1.045	1.023	1.060	1.008	1.057

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Source: Global Gender Gap Report 2023
* Imparity = 0; Parity = 1
** The gender parity benchmark is set at 0.944 (see Klasen and Wink, 2003[14])
*** The gender parity benchmark is set at 1.06, given women's longer life expectancy

[14] Klasen, Stephan & Wink, Claudia (2003). "Missing Women": revisiting the debate. *Feminist Economics*, 9(2–3), 263–299. doi.org/10.1080/1354570022000077999

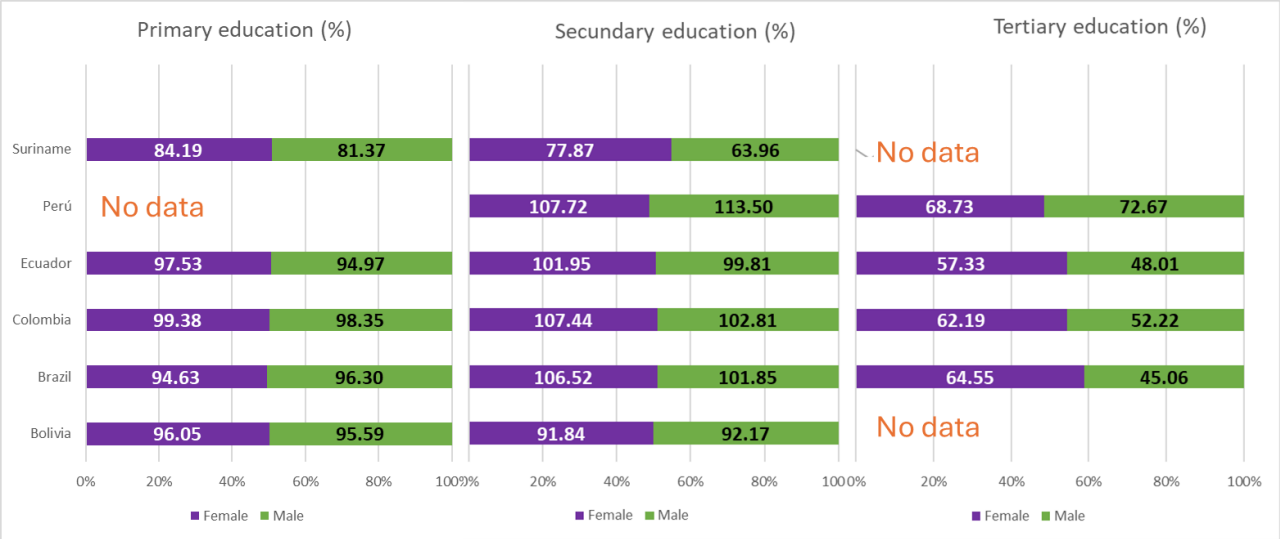
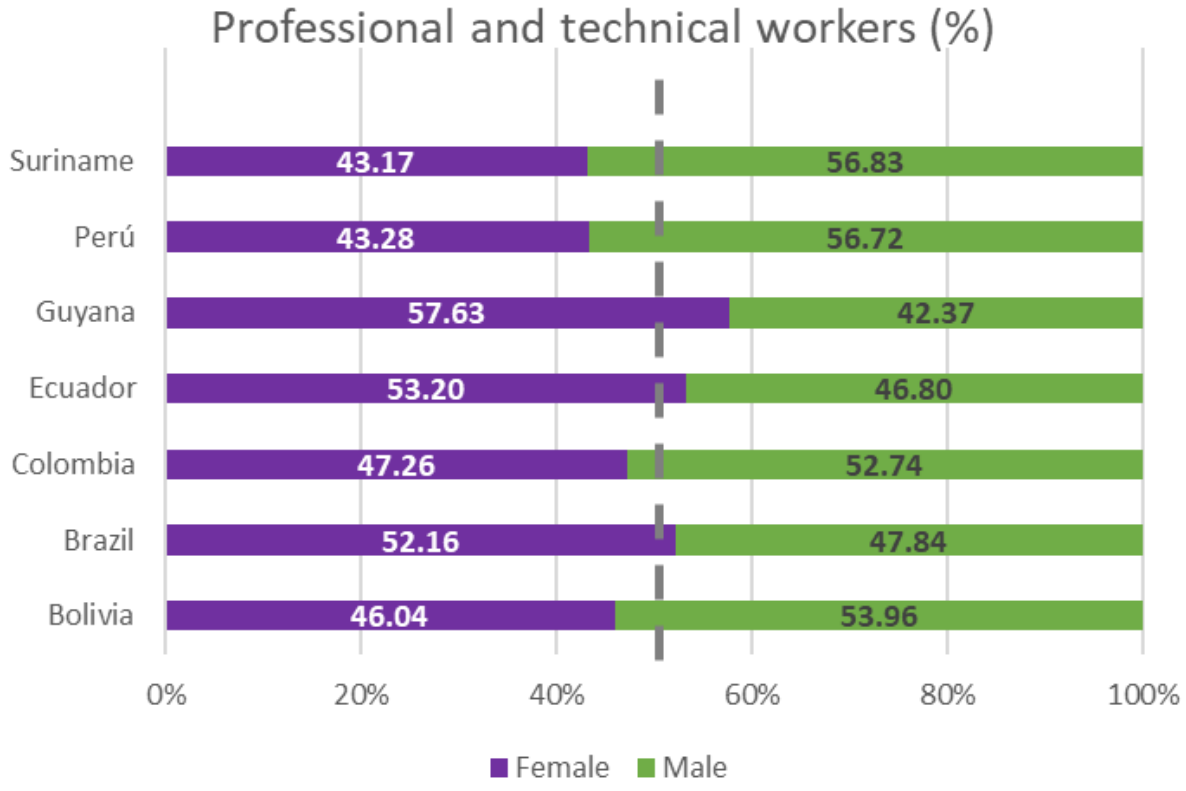


Fig. 5.1. Education Attainment. Enrolment in primary, secondary, and tertiary education (%)
Source: Global Gender Gap Report 2023

This result correlates with **Fig. 5.2**, which shows the proportion of women and men who work as *professionals and technicians* in each country. On average, the participation of women in these areas is 51% which follows the educational achievements shown in the previous figure.



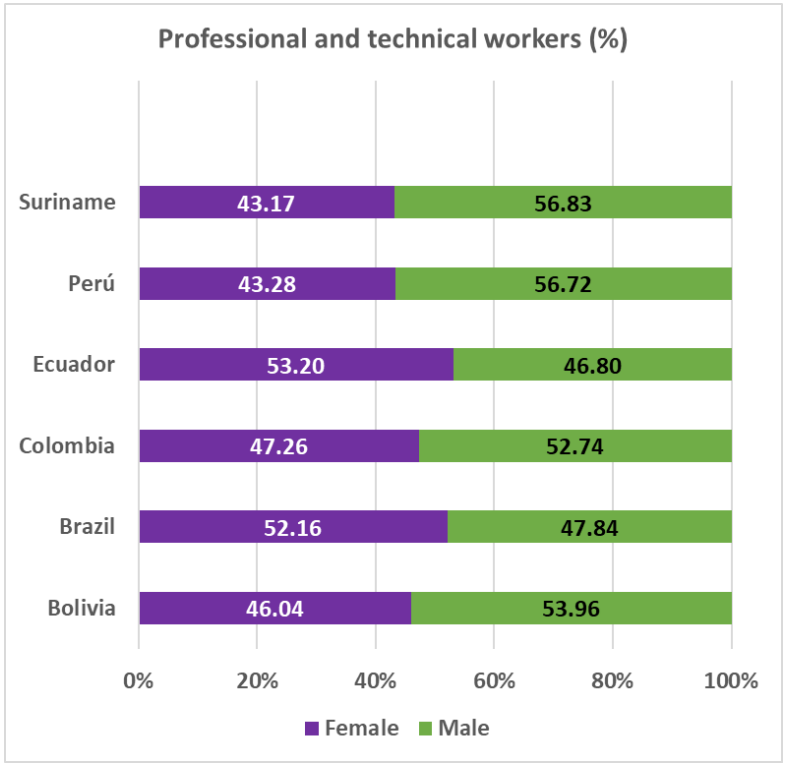


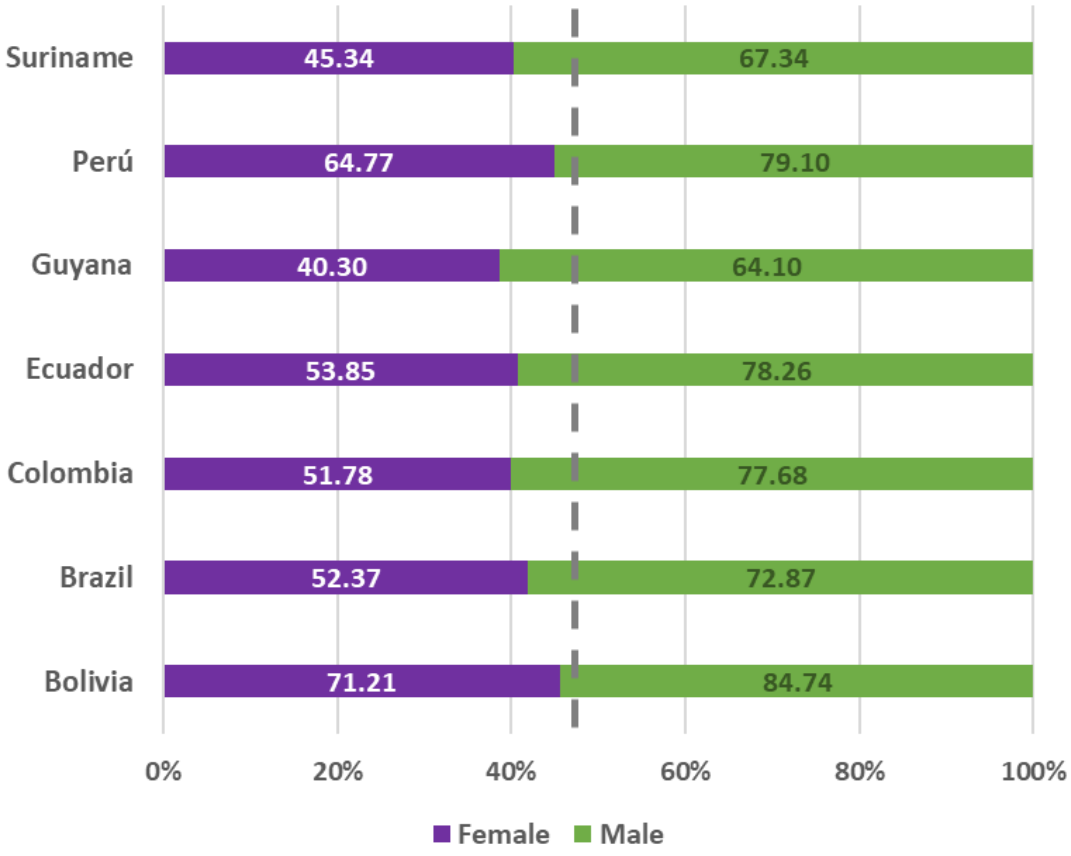
Fig. 5.2. Professional and technical workers (%)
Source: Global Gender Gap Report 2023

Although women have a higher rate of education than men, the latter face major inequalities in accessing employment. Regarding **economic participation** (WEF, 2023), the *Labor force participation rate (%)* indicator shows that parity has not been achieved in any of the studied countries. All countries present gaps in the participation of women in the labor force. The gaps present

differences that range between 13 and 26 percentage points in favor of men (**Fig. 5.3**). These gaps are wider in some countries, such as Colombia (25.90), Ecuador (24.41), and Guyana (23.80).

Results on Fig. 5.3 do not correspond to those of Fig. 5.1 and 5.2, since at the academic level, women are prepared equally or even better than men and represent more than half of the technical and professional workers in the region. When reviewing data on the participation of women in electricity, gas, and water service companies in countries under study (**Fig. 5.4**), it is observed that women's labor participation is even lower, varying from 7.69% in Suriname to 19.43% in Colombia, with an average for the 8 countries of 13.24%, below the world average, which is 18%[15] for water and sanitation sector.

[15] World Bank (2020). *Las mujeres en las empresas públicas de agua derriban barreras*. Washington DC: Author.



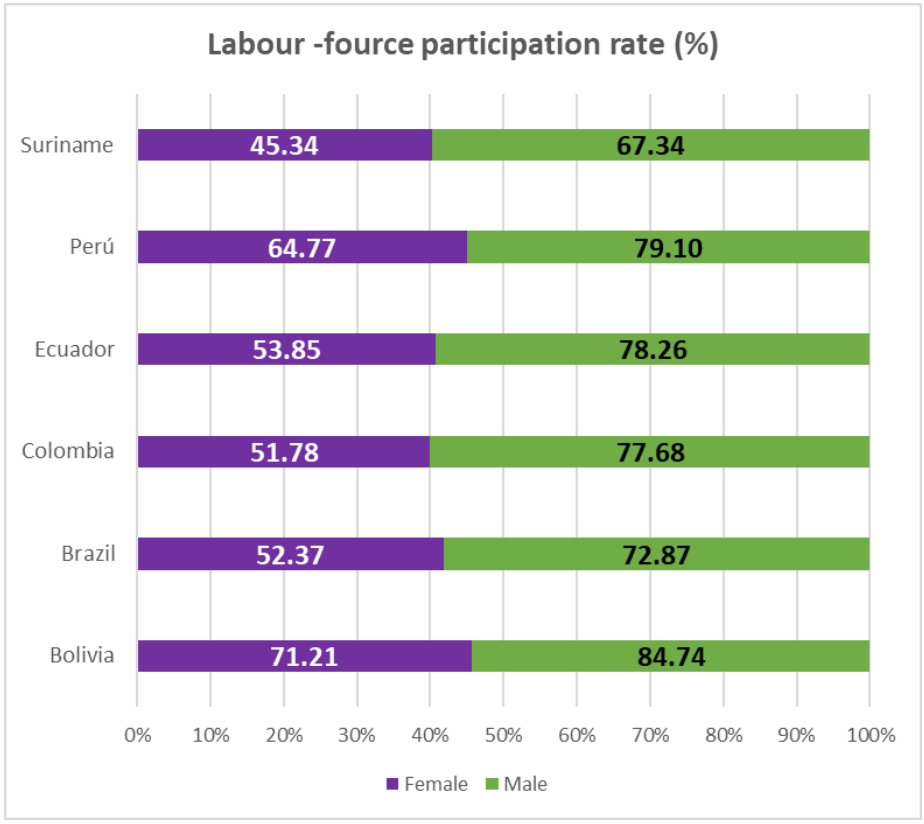


Fig. 5.3. Labor-force participation rate (%)
Source: Global Gender Gap Report 2023,

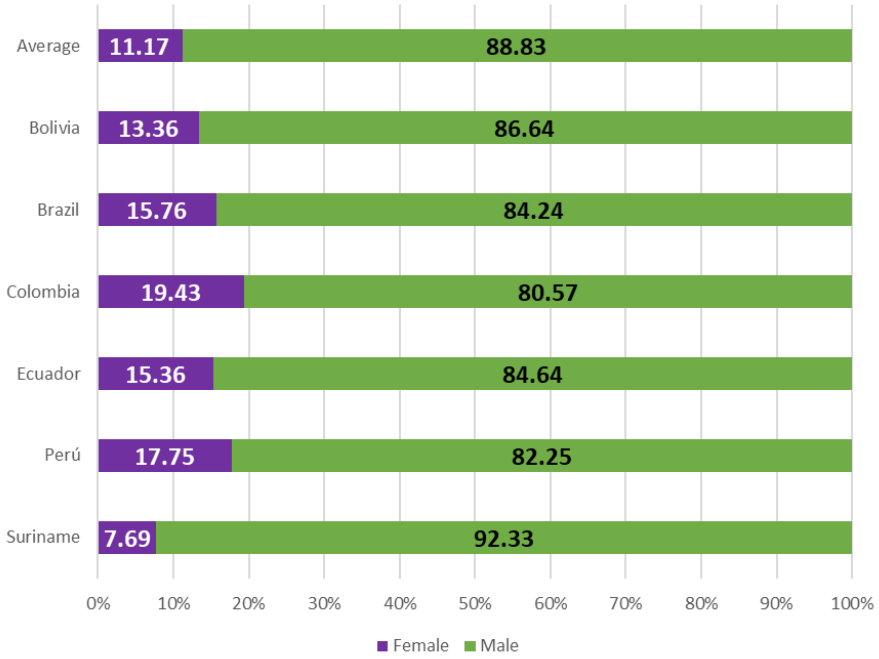


Fig. 5.4. Percentage of women employed in electricity, gas, and water service companies in studied countries - Source: OIT – Nov, 2022[16]

The data in **Fig. 5.5** represent paid productive work. When correlated with the Total Work Time reported by the Gender Equality Observatory for Latin America and the Caribbean (ECLAC), shown in **Fig. 5.6**, it is observed that in the region (and particularly in the countries of the study area), women work the same or more amount of time than men. Still, they dedicate at least twice as much time to unpaid work, which could explain the data in Fig. 3.5 and the parity not achieved with the Estimated earned income indicator shown in Table 3.1.

[16] Based on data and modeled estimates from the ILO. Link

Fig. 5.5. Estimated earned income (int'l $1,000)
Source: Global Gender Gap Report 2023

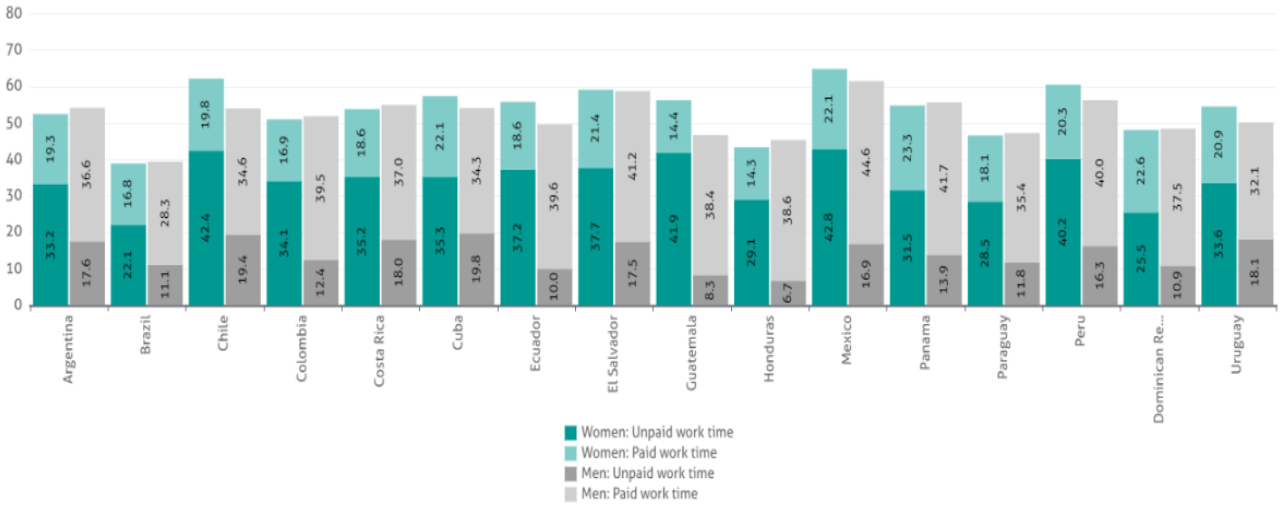


Fig. 5.6. Total Work Time. Latin America (16 countries): Average time spent on paid and unpaid work of the population aged 15 and over, by sex, by country, for the latest available data

(Average hours per week).
Source: Gender Equality Observatory, ECLAC (04/16/2024)

Child labor rates are high in the Amazon region. The main causes are found in family poverty and their need to contribute to the family economy. A greater proportion of married and maternity of women at an early age is greater than in the non-Amazonian population. Girls and adolescents are the most affected as most of their fundamental rights are violated, their optimal personal development during their childhood is hindered and usually has consequences in future stages of their lives associated with the perpetuation of situations of poverty and inequality for these women and their families (UN Women, UNFPA & UNICEF, 2018). In Bolivia, 16% of children between 10 and 14 years old and more than 40% between 15 and 17 years old are already working (2010). Brazil present similar levels: around 1 in 10 children aged 10 to 14 work and 3 in 10 between the age of 15- and 17-years old work (2010). The incidence of child labor is higher among indigenous and Afro-descendant children; this difference presents its widest gaps in Bolivia, Brazil, and Peru (CEPAL, 2022)[17].

Political representation.

With respect to **political empowerment** (which measures the possibilities that women have to participate in decision-making spaces and, therefore, to influence macro and micro-politics), Table 3.1 shows that political empowerment is the indicator with the lowest parity values (between 0.23 for Suriname to 0.45 for Peru). The indicators related to this index are women's participation in parliament (**Fig. 5.7**), women's participation in ministerial positions (**Fig. 5.8**), and years with a female/male as head of state (**Fig. 5.9**).

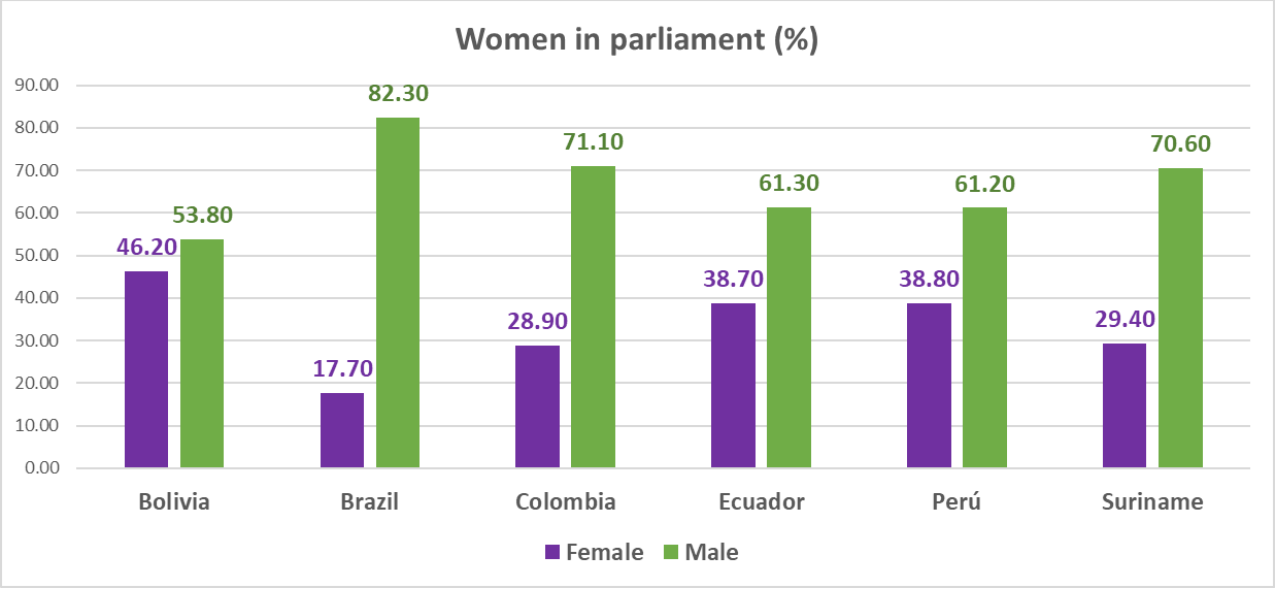


Fig. 5.7. Women in parliament
Source: Global Gender Gap Report 2023

Regarding women's participation in parliament, the country showing the highest parity for the year 2023 is Bolivia, followed by Ecuador and Peru. Brazil, on the other hand, exhibits the widest gap (64.60). Ironically, upon reviewing the percentage of women in ministerial positions, Bolivia presents the widest gap, with a difference of 75 percentage points in favor of men, followed by Ecuador (50) and Suriname (41.18), while Colombia has achieved parity (0 point difference),

[17] Maria Marta Santillan (2022) The matrix of social inequalities of the Amazonian population in the OCTA countries members.

followed by Peru (5.26).

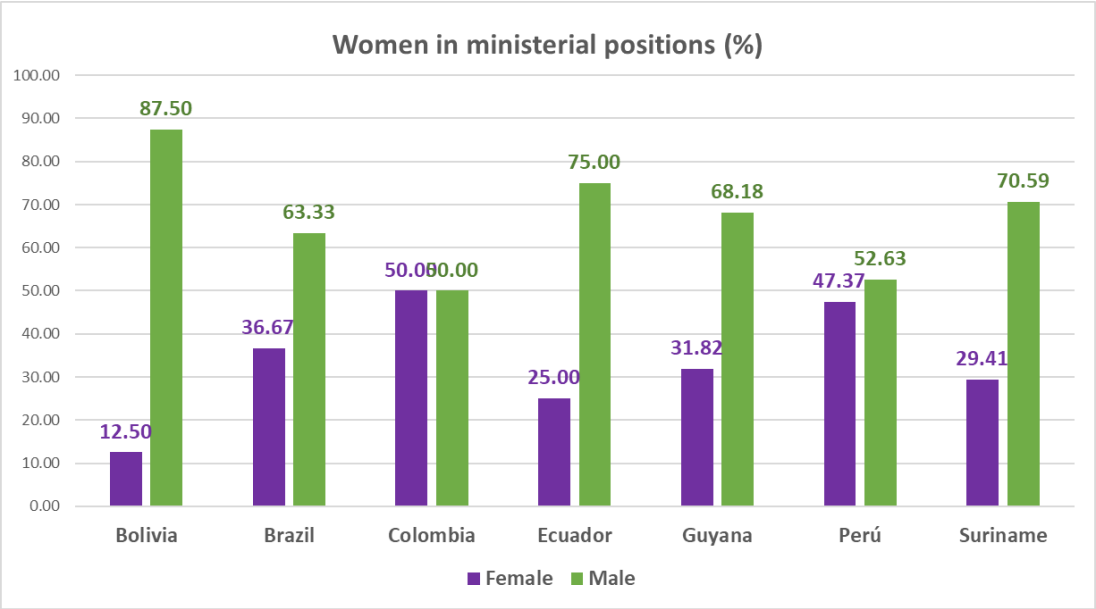


Fig. 5.8. Women in ministerial positions
Source: Global Gender Gap Report 2023,

The greatest inequality is observed in Fig. 5.9, which records the number of years the country has had a male/female head of state in recent years. As can be seen, Colombia and Suriname have never had a woman as head of state, while Peru, Ecuador, and Bolivia have only had one for very short periods (less than four years) which is less than a full presidential term. Only Brazil has had a female head of state for more than 5 years.

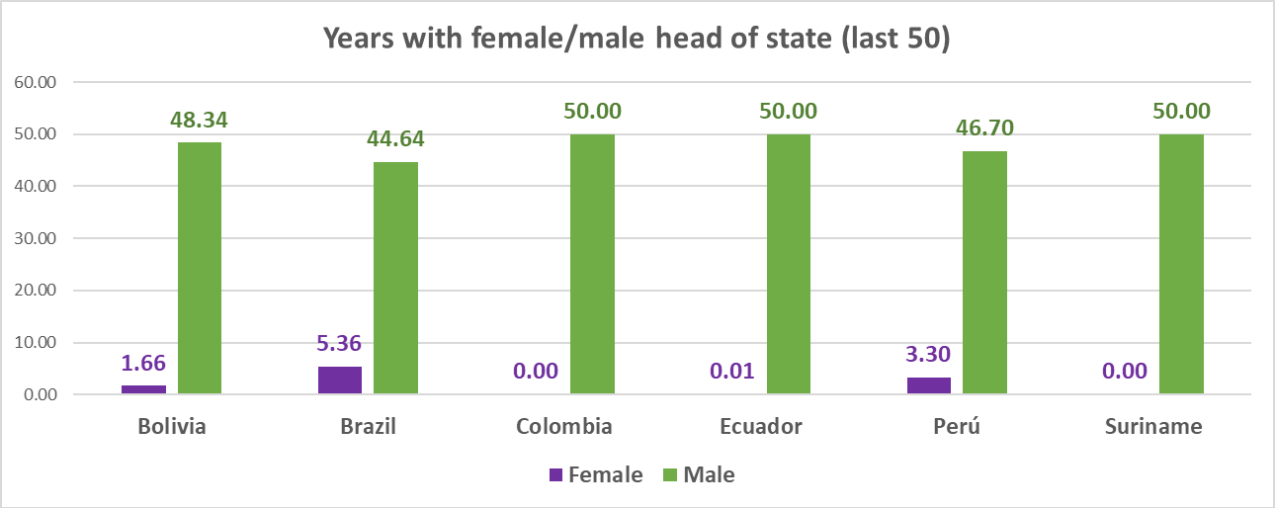


Fig. 5.9. Years with female/male head of state
Source: Global Gender Gap Report 2023

A similar trend is observed in the participation of women in the communal water boards of the countries under study. An exhaustive analysis was carried out Matos et al (2021)[18] on the profile of the members of interstate river basin committees in Brazil that found that the participation of women in decision-making positions is very low while in administrative and support positions (assistant) they reach values above 50% (**Fig. 5.10**).

[18] Matos, Fernanda; Camargo, Eldis y de Pádua, Alexandre (2021). *Gobernanza de las aguas y Género: Un estudio sobre el perfil de los miembros de comités interestatales de cuencas hidrográficas en Brasil*. Belo Horizonte, Brasil: FACE - UFMG.

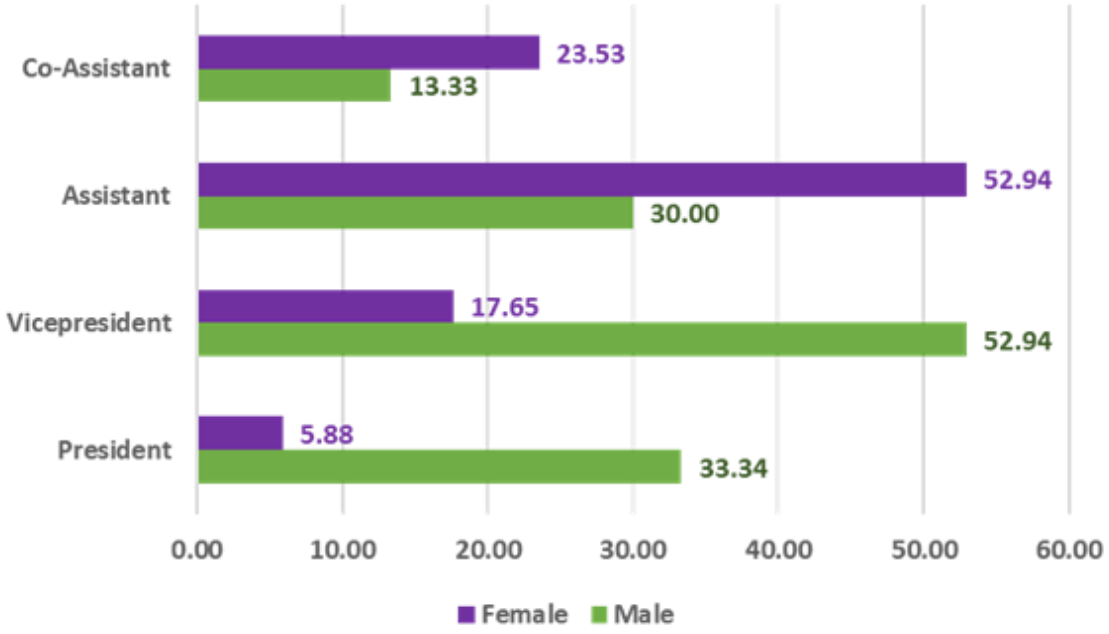


Fig. 5.10. Positions on boards of directors of interstate river basin committees in Brazil, disaggregated by gender.
Source: Marcos et al (2021)

In Peru[19], women hold 28.6% of positions on water boards, yet their representation in decision-making roles stands at a mere 7%. A 2020 study conducted by the Ministry of Housing, Construction, and Sanitation of Peru[20] revealed compelling evidence indicating that increased female participation in water committees enhanced the overall management effectiveness. Specifically, when women occupy key positions, such as administrative roles, there is a heightened likelihood of improving various operational aspects, including streamlined administrative processes, enhanced monthly fee collection, better monitoring of financial sustainability, and improved cleaning and disinfection protocols utilizing chlorine.

Despite these advancements, there were no observable enhancements in the maintenance and operation of water systems, which could potentially impact service continuity. These findings underscore an opportunity to provide women with training in technical, operational, and maintenance domains, thereby empowering them to contribute more effectively to the management of water resources.

Violence against women.

Regarding intimate partner violence, violence against women is the one with the most comparable statistics between countries. **Fig. 5.11** shows the Prevalence of gender violence in lifetime (% women) indicator, from the Global Gender Gap Report (2023), for five of the seven countries studied. This indicator measures the percentage of women who have ever had a partner and who have ever suffered physical and/or sexual violence by their partner.

Bolivia has the highest percentage (64.10%), followed by Ecuador and Colombia (around 37%), and

[19] CEPAL (2022). *Brechas, desafíos y oportunidades en materia de agua y género en América Latina y el Caribe*. *Recursos naturales y desarrollo*. Serie No. 211. Link.
[20] MVCS (2020). *Participación de la mujer rural en la gestión de las Juntas de Administradores de Servicios de Saneamiento (JASS)*. Lima: MVCS - Oficina de Evaluación de Impacto. Link

Brazil and Peru (around 33%). Guyana and Suriname did not have data available in the reviewed reports.

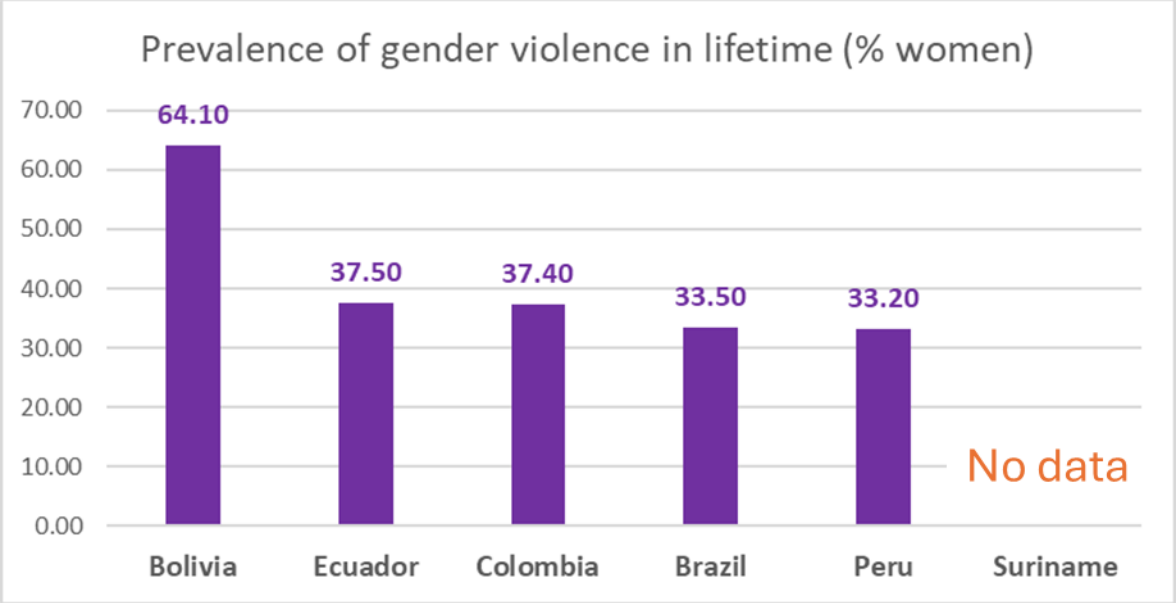


Fig. 5.11. Prevalence of gender violence in lifetime
Source: Global Gender Gap Report 2023

When correlating this figure with **Fig. 5.12**, which shows the annual absolute values of femicides, as well as the rate per 100,000 women, it is observed that among the studied countries, **Bolivia** presents the highest femicide rate, and according to data from ECLAC (2012) cited by UNDP-Bolivia, at least 100 women's deaths have been recorded per year. The report also indicates that according to the Survey on the Prevalence and Characteristics of Violence against Women (EPCVcM, 2016), 74.7% of married or cohabiting women, aged 15 or older, suffer or have suffered situations of violence in their intimate partner relationship, 88% reported suffering or having suffered psychological violence, 46.6% physical violence, 34.6% sexual violence, and 33.9% economic violence.

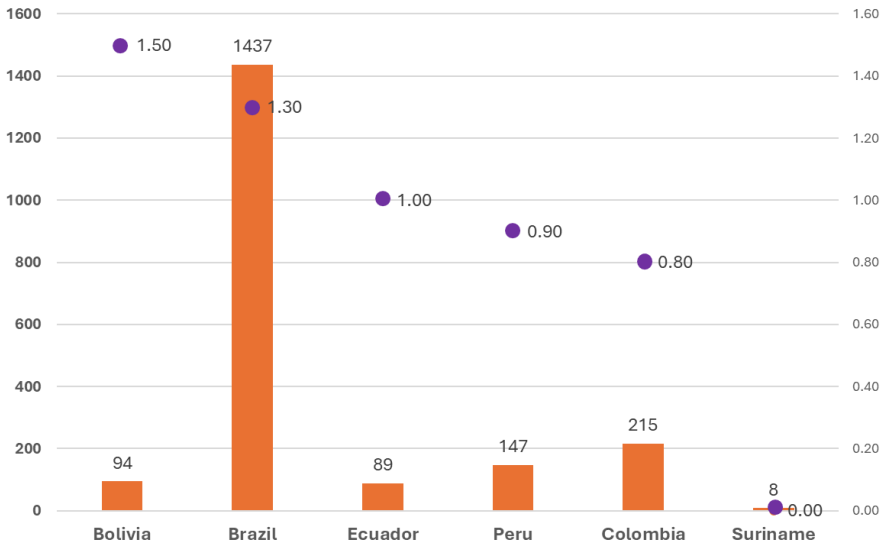


Fig. 5.12. Femicide or feminicide, most recent data available
(In absolute numbers and rates per 100.000 women)
Source: Gender Equality Observatory, ECLAC (04/16/2024)

In **Brazil**, between 2016 and 2021, there was an increase in the femicide rate of over 44%. In the state of Amazonas, out of all the women intentionally murdered by another person, more than one in five were cases of femicide[21].

In **Ecuador**, 1 in 4 women has experienced sexual violence, yet psychological violence is the most recurrent form of gender violence, occurring in 53.9% of cases. Of all women who have experienced physical violence, 87.3% have experienced it within their intimate partner relationships. Additionally, 6 out of 10 women, regardless of their ethnic self-identification, have experienced some form of gender-based violence; with a higher percentage among indigenous women (67.8%) and Afro-Ecuatorian women (66.7%)[22].

In **Peru**, official reports indicate that 7 out of 10 adult women have been victims of psychological, physical, and/or sexual violence at some point in their lives. In the year 2020, due to the isolation caused by the pandemic, gender-based violence increased from 14,049 cases in March to 24,990 cases in August[23].

In **Colombia**, the National Institute of Legal Medicine and Forensic Sciences reported 27,594 cases of violence against girls and adolescent women between 2015 and 2019. In 2021, 78 women were murdered. Four out of ten murders of women are committed by partners, ex-partners, family members, or acquaintances. It is estimated that more than 2 million women and girls are at risk of experiencing gender-based violence in 2022 (PIN); 330,000 of them, predominantly indigenous and Afro-descendant, living in the Pacific region of the country[24].

Access to Finance.

Women represent more than 40% of the economically active population in LAC. Only 17% of them are entrepreneurs in the formal economy. The main barriers they encounter to forming formal companies are (i) difficulties in leaving the informal sector (more than 60% of LAC women work in this sector[25]) or going beyond microenterprises, reducing their earning potential, (ii) gender barriers that prevent them from working longer hours outside the home, (iii) ignorance of the financial market and existing opportunities, (iv) reduced levels of financial education, (v) lack of female roles to follow in business, (vi) lack of support networks and (vii) difficulties in accessing financing without legal ownership or guarantee[26].

According to a study of 35 entrepreneurs in 15 countries in LAC, a high number of women entrepreneurs in the region feel that they have been discriminated against because of their gender (27% versus 4% for men). The main reason women-led businesses fail is lack of access to capital. LAC is the region with the second highest rate of bankruptcies of companies run by women worldwide. While most male entrepreneurs indicate that they have closed their companies due to low profitability. Women entrepreneurs point to the difficulty of obtaining financing as the mainimpediment to continuing with their businesses. The credit gap in LAC is $5bn for women-led micro businesses and $93bn for women-led

[21] UNFPA (2023). *"Men will no longer do what they want with them": Indigenous women in Brazil say enough to gender-based violence.* Web site United Nations Population Fund. Link

[22] INEC (2011). *Encuesta Nacional de Relaciones Familiares y Violencia de Género contra las Mujeres*. Web Site del Instituto Nacional de Estadísticas y Censos. Link

[23] Contreras, Manuel; Granados, Greta y Levano, Lorena (2021). Retos y alternativas para enfrentar la violencia de género en Perú. Web site del World Bank. Link

[24] ONUMujeres – Colombia. La situación de las mujeres en Colombia. Link

[25] http://www.unwomen.org/es/news/in-focus/csw61/ women-in-informal-economy

[26] Buckland, Leonora et al. Gender Lens Investing: How Finance Can Accelerate Gender Equality in Latin America and the Caribbean. IDB Invest. 2019.

SMEs[27].

The Global Banking Alliance ensures that women clients show a stronger saving behavior (16% more likely than men to save for futures), with lower risk (on average, they are morelikely to repay loans), with higher growth and lower attrition. Evidence shows that financialintermediaries that implement programs that effectively meet the needs of women see excellent financial returns.

Access to land and women's territorial care.

Although in the region there are some large and medium urban centers such as Manaus, Belém or Iquitos, the territory is eminently rural. In rural areas, the predominant forms of land management are protected natural areas, indigenous and community territories, and private properties including different productive activities. However, the land tenure of these different figures is distributed unequally among men and women, as it is usually Amazonian men who have ownership and administration over the land. For example, in the Ecuadorian Amazon only 11.85% of women have their own land, while 88.2% of maleproducers own it (PROAmazonía, 2019[28]). Likewise, in Colombia, women's access to land tenure is precarious and their ownership, or even inheritance rights and shared tenure with partners or spouses, is rarely recognized (PNUD, 2011[29]; Zorio, 2015[30]).

Different social, economic, legal, and cultural factors can explain this inequality in land tenure. For instance, Amazonian women have less access to state identification or visibility processes that allow them to participate in formalization processes. In the Peruvian Amazon about 19% of women who speak a native language and 7.2% of those who speak Spanish do not even have a National Identification Document (Villar, 2013[31]). In addition, although there is a shared tenure within collective orcommunity properties it is Amazonian men who assume mostly the custody and administration of the lands (PROAmazonía, 2019).

However, although Amazonian women do not exercise ownership over land widely, they do play an essential role in territorial management and local forms of environmental practices of conservation within Indigenous, Peasant, and Afro-descendant peoples. Thisis mainly because women oversee home and family care, which also often encompassesthe care of the natural environment. In fact, the PROAmazonía study (op.cit.) shows that inthe Ecuadorian Amazon women usually devote, on average 23 hours a week to reproductive work, almost 17 hours longer than men. Although this gap has variations according to different local communities, it has been found that usually all Amazonian women spend much more time on this type of work than men.

In addition, women are also active in the productive activities of agriculture, livestock, forestry, and fisheries in which different forms of environmental care and sustainable useof natural resources are exercised. In the Ecuadorian Amazon, 30.6% of women engage in these activities, just seven percentage points less than men, approximately (PROAmazonía, op.cit.). In the case of the indigenous population, it has been identified that indigenous women mainly assume the care of the chakras as scenarios of family agricultural production that allow subsistence, the conservation of diversity and, in manycases, the generation of economic surpluses for the home (PROAmazonía, op.cit.). In the case of productive units of peasant or mestizo families, women have a high participationin productive

[27] IFC. MSME Finance Gap, 2017.

[28] Programa Integral Amazónico de Conservación de Bosques y Producción Sostenible PROAmazonía. (2019). Diagnóstico de las mujeres amazónicas. Ministerio de Ambiente y Agua del Ecuador, Ministerio de Agricultura y Ganadería, Programa de Naciones Unidas para el Desarrollo, Green Climate Fund, Global Environmental Facility, UN Women. Link

[29] PNUD. (2011). Colombia rural: Razones para la esperanza. Informe NAcional de Desarrollo Humano. Bogotá, Colombia: INDH PNUD. Link

[30] Zorio, Sandra. (2015). Tierras, mujeres y niñez. Familia y conflicto armado. Derecho del Estado (35): 295 – 315. Link

[31] Villar, Eliana. (2013). Diagnóstico de Género en la Amazonía: Amazonas, Loreto, Madre de Dios, San Martín y Ucayali. Lima: USAID.Link.

activities but also in decision-making and resource management.

Women are more vulnerable to the impacts of climate change. Some research argued that this is the case because they have fewer economic resources to mitigate impacts, for example on productive systems of agriculture, livestock, and tourism (Montalvo, 2019[32]).Women's family and environmental care activities create a strong dependence on natural resources so any change in such resources has tremendous effects on their livelihoods as well as on their personal and social wellbeing. More importantly, "in rural areas women depend directly on the resources of their environment, on greater soil wealth, on greater clean water, for greater and better forest management, for greater andbetter seed management, greater chances of subsistence of families in decent conditions" (PROAmazonía, 2019 & ONUMujeres, 2019[33]). In addition, women face increased risks of contagion of tropical diseases, such as malaria, ZIKA, and dengue (Montalvo, 2019). Some studies in the Peruvian Amazon find that women are differentially affected by deforestation. This is because, while men own land and can take advantage of tree felling for timber sales or the expansion of productive activities, deforestation degrades the fundamental natural resources most women use to ensure the livelihoods of their families (Villar, 2013).

That is why, different organizations stress the importance of including a gender perspective in forest management, biodiversity conservation, climate change mitigation, and sustainable development (OTCA, 2019[34] PROamazonía, 2019 & ONUMujeres, 2019, Our Future Forests-Amazonia Verde, 2021[35]). There is a growing call to foster greater participation of women in the management of protected natural areas and indigenous and community territories. Together, these forms of ordering occupy more than 47% of the Amazonian territory. In fact, in the Amazon, there are about 500 protected areas, and they are estimated to cover a territorial extension of approximately 2,123,000 km^2 (RAISG, 2018[36] RAISG, 2020[37]). The country with the highest coverage of protected areas is Brazil with more than 50% and is followed by Peru with approximately 10%, respectively (RAISG, 2017[38]). According to the Amazon Network of Georeferenced Socio-Environmental Information, there are two areas (of direct and indirect use) that could benefit from a more substantial inclusion of women within governance schemes:

- Areas of direct use in which natural resources are conserved within the framework of management plans that regulate and control the different uses. These areas can occupy just under 12.4% of the Amazon territorial extension andmore than 50% of the Protected Natural Areas of the Amazon (RAISG, 2020).
- Areas of indirect use where biodiversity protection is promoted in parallel with research, education, and tourism, although human settlements are generally not allowed. It is estimated that these areas can occupy about 12% of the Land coverage of the Amazon and makeup just over 48% of the Protected Natural Areasof the region.

This is particularly relevant because there are 2,275 indigenous territories covering more than

[32] Montalvo, Natalia. (2019). Introducción. *En* PROAmazonía, Diagnóstico de las mujeres amazónicas (6-19). Ministerio de Ambiente y Agua del Ecuador, Ministerio de Agricultura y Ganadería, Programa de Naciones Unidas para el Desarrollo, Green Climate Fund, Global Environmental Facility, UN Women. Link

[33] UN Women (2019). *In the Bolivian Amazon, women are protecting the forest and empowering themselves*. Web site UNWomen. Link

[34] OTCA (2018). *Informe regional sobre la situación de los bosques en la región amazónica*. Brasilia, Brasil: OTCA. Link

[35] Link to factsheet

[36] RAISG (2018). *Amazonía en números*. Red Amazónica de Información Socioambiental Georreferenciada. Mapa online. Link

[37] RAISG (2020). *Amazonía bajo presión 2020*. RAISG: Sao Paulo, Belém, Lima, Santa Cruz de la Sierra, Bogotá, Quito y Caracas. Red Eclesial Panamazónica -Repam. 2019. Atlas Panamazónico: aproximación a la realidad eclesial y socioambiental. Link

[38] RAISG (2017). *Amazonía 2017. Áreas protegidas. Territorios indígenas*. Red Amazónica de Información Socioambiental Georreferenciada. Mapa online. Link

2,300,000 km^2 of the Amazon (RAISG, 2020). The land tenure categories of these territories may vary between: Officially recognized traditional occupation and used territories; Territories of traditional use and occupation without official recognition; Indigenous Reserve or Intangible Zone (for PIACI); Indigenous Reserve Proposal (RAISG, 2020). The countries with the largest number of indigenous territories are: Brazil with an area of 1,156,000 km^2, Peru with an area of 308,341 km^2 and Colombia with an area of 262,912 km^2. Most of these indigenous territories are officially recognized and occupy 21.9% of the coverage of the general Amazon (RAISG, 2017). Different studies have highlighted that the power of women in decision-making is low or medium comparedto that of men who are mainly responsible for the administration of resources (PROAmazonía, 2019).

However, there are already multiple organizations that have strong representation and visibility of women. In Brazil, the Coordinator of Indigenous Organizations of the Brazilian Amazon (COIAB) and the Articulation of Indigenous Peoples of Brazil (APIB) have a high representation of women promoting indigenous rights and environmental sustainability (Lima and Vieira, 2019[39]). Amazonian women (both indigenous, peasant, and Afro-descendant) have played a central role in the management of different protected areas and indigenous or community territories because they have led many of the care activitiesand, in recent years, have been actively involved in sustainable production processes (Lima and Vieira, 2019). Many of these processes respond to the emergence of bioeconomy strategies to use natural resources from local knowledge and conserve the tropical forest in parallel (Lima and Vieira, 2019; RAISG, 2020). Thus, these areas have great potential to mitigate the negative consequences of contemporary environmental degradation and ensure the conservation of the biological resources that underpin the various emerging bioeconomy initiatives. In fact, 72% of Protected Natural Areas and Indigenous Territories are free from environmental degradation related to threats of deforestation, fire, illegal mining, and pollution, among other factors (RAISG, 2020). There areeven multiple studies that point to the relationship between the delimitation of these territories and the positive impact on deforestation, which favors the maintenance of ecosystem services crucial for bioeconomy such as carbon capture, biodiversity protection, and conservation of hydrological systems (RAISG, 2020).

Gender and diverse populations' challenges related to water and sanitation.

Globally, 1.8 billion people live in households without water supply. Women and girls aged 15 and older are primarily responsible for water collection in 7 out of 10 such households, compared with 3 in 10 households for their male peers. Girls under 15 are usually more likely than boys under 15 to fetch water. In most cases, women and girls make longer journeys to collect it, losing time in education, work, and leisure, and putting themselves at risk of physical injury and dangers on the way. Moreover, women and girls are disproportionately affected by the lack of access to basic water, sanitation, and hygiene facilities, due to their needs during periods of increased vulnerability to infection around menstruation and reproduction.

Without gender equality and shifts in patriarchal culture, sustainable water, sanitation, and hygiene (WASH) outcomes are challenging to secure, women's voices are likely to remain unheard, and initiatives may inadvertently entrench unequal power relations. With women and girls responsible for most household WASH activities, strategic improvements in WASH can also be a pathway towards broader gender equality (Willetts et al., 2010). Multiple established connections link access to safely managed water, sanitation, and hygiene (WASH) and gender equality[40].

In terms of accessing to drinking water less than 40% of the population in the Amazon region have access to drinking water: (i) the Amazon region of Ecuador present the greatest gaps compared to the

[39] Lima, Luciana & Vieira, Eduardo (2019). *Indigenous Women: Keepers of the Amazon Rainforest.* The Nature Conservancy. Web site The Nature Conservancy. Link

[40] Women's studies international forum (2022). The water, sanitation, and hygiene gender equality measure (WASH-GEM): Conceptual foundations and domains of change.

rest of the country (72.8% and 49.2% respectively, 2010); (ii) all countries have important cultural gaps, especially in the case of indigenous population except for Peru. In Ecuador for instance, less than 30% of the indigenous population have access to drinking water; (iii) the gaps between urban and rural areas are also important, being more relevant in the case of Ecuador (78.2% and 30.8% respectively, 2010), (iv) the greatest access occurs in municipalities of Peru, as well as the east and south of Brazil[41].

Regarding sanitation (i) the largest gaps between the Amazon and non-Amazon regions are observed in Brazil (64.7% and 30.8% respectively, 2010) and Ecuador (76.7% and 54.0% respectively, 2010) ; (ii) the indigenous population of the Amazon Region has the lowest levels of access as well as the largest gaps with the rest of the population, especially in Brazil (36.7% and 6.9%, 2010), Bolivia (34.4% and 14.7%, 2012), and Ecuador (69.5% and 22.8%, 2010); (iii) access in rural areas is worrying, especially in Bolivia and Brazil; (iv) only Peru, Colombia and Suriname have municipalities with more than 60% of the population with access to sanitation. In the rest of the countries, access is insufficient[42].

The effects of climate change on women and diverse populations.

The impacts of climate change reverberate deeply, affecting both women and diverse populations in unique and profound ways, with indigenous communities often bearing disproportionate burdens. According to the Intergovernmental Panel on Climate Change (IPCC), the Amazon basin faces escalating risks of extreme weather events, including floods and droughts, as global temperatures continue to rise (IPCC, 2014[43]). These environmental disturbances disrupt the delicate balance of ecosystems and livelihoods, posing significant challenges for women in indigenous and rural communities who often bear the primary responsibility for securing food, water, and fuel for their families (FAO, 2017[44]).

Indigenous peoples face distinct challenges stemming from their close relationship with the land and their traditional lifestyles. Climate change compounds existing vulnerabilities, threatening cultural heritage, traditional knowledge systems, and self-sufficiency. For example, shifts in precipitation patterns and the frequency of wildfires can disrupt indigenous agricultural practices and force communities to relocate from ancestral territories (U.S. Climate Resilience Toolkit).

According to the Living Amazon Report 2022[45], The Amazon rainforest, often referred to as the "lungs of the planet," is home to approximately 2 million indigenous people belonging to over 500 different groups. These communities rely on the forest for food, medicine, shelter, and cultural practices. However, deforestation, exacerbated by climate change, threatens their way of life and exacerbates their vulnerability to environmental changes.

Moreover, indigenous communities in the Amazon are often marginalized and lack access to essential services such as healthcare, education, and clean water. As climate change intensifies, these disparities are magnified, further exacerbating health risks and socioeconomic challenges.

According to Talbot-Wright's research (2023[46]), it is crucial to consider the varied impacts of climate change based on gender when identifying necessary adaptations for the health sector. Gender-defined occupations and social attitudes often shape how climate change affects health (WHO, 2018).

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[41] Maria Marta Santillan (2022) The matrix of social inequalities of the Amazonian population in the OCTA countries members.

[42] Maria Marta Santillan (2022) The matrix of social inequalities of the Amazonian population in the OCTA countries members.

[43] IPCC. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

[44] FAO. (2017). The State of Food Security and Nutrition in the World 2017. Food and Agriculture Organization of the United Nations.

[45] Living Amazon Report, 2022, WWF Amazon Coordination Unit

[46] Talbot-Wright, Hipólito & Vogt-Schilb, Adrien (2023). Heat and High Water: Nine Pathways to Climate Resilient Development. Washinton, DC: IDB. DOI: http://dx.doi.org/10.18235/0005214

For example, heatwaves and rising temperatures disproportionately affect the health of male-dominated construction workers. Conversely, in rural regions, women experience heightened food insecurity due to traditional gender roles that disadvantage them in terms of education, income, and social status compared to men (Romanello et al., 2021). Governments can address inequalities in climate change adaptations by integrating gender considerations into sectoral policy and planning (WHO, 2018). An initial step involves identifying gender disparities by enhancing the availability of health data disaggregated by gender (Romanello et al., 2021).

Moreover, climate change exacerbates health risks for women and diverse populations in the Amazon, including indigenous communities. Reduced access to healthcare services during extreme weather events increases the incidence of injuries, diseases, and maternal deaths (UNFPA, 2019[47]). Displacement caused by climate-induced disasters exposes indigenous women and diverse populations to heightened risks of exploitation, human trafficking, and gender-based violence as they struggle to rebuild their lives in unfamiliar and often precarious environments (UNHCR, 2020[48]).

Climate change also worsens mental health among indigenous peoples, as noted in Talbot-Wright's book (op.cit.). Extreme weather events, displacement, food insecurity, water scarcity, loss of livelihoods, biodiversity loss, and social unrest can cause a range of mental issues, including anxiety, depression, grief, post-traumatic stress disorder, suicidal tendencies, aggression, and intimate partner violence, often against women (IPCC, 2022).

In the face of these multifaceted challenges, it is imperative to recognize the invaluable knowledge and resilience of indigenous women and diverse populations in the Amazon. Empowering these communities through inclusive decision-making processes, access to resources, and support for sustainable adaptation strategies is crucial for building resilience and fostering equitable outcomes in the face of climate change. By centering on the voices and experiences of those most affected, we can work towards a more just and sustainable future for all inhabitants of the Amazon basin.

[47] UNFPA. (2019). State of World Population 2019. United Nations Population Fund.

[48] UNHCR. (2020). Global Trends: Forced Displacement in 2020. United Nations High Commissioner for Refugees.

Gender Action Plan

Programme Title:
Improving Climate Resilience by Increasing Water Security in the Amazon Basin

Countries:
Bolivia, Brazil, Colombia, Ecuador, Peru, Suriname

Gender and Diversity Action Plan

The Gender and Diversity Action Plan provides a gender and social inclusion-specific and time-bound framework to operationalize relevant gender and diversity activities based on the findings from the gender assessment. The Gender and Diversity Action Plan articulates complementary activities with targets on gender and inclusion of Indigenous Peoples (IP), Afro descendants (AD), People with Disabilities (PwD) and peasant communities of the Amazon.

These activities will primarily focus on integrating gender and diversity considerations throughout the fund's activities and outputs. However, to effectively achieve this, it is crucial to include specific initiatives dedicated to mainstreaming gender and diversity. The activities will be concentrated within the scope of the fund across the countries of the Amazon biome. To ensure the success of these activities, the Inter-American Development Bank (IDB) will first conduct an assessment study, scheduled for completion at the project's outset. This study will examine: (a) the challenges and barriers faced by women, LGBTQ+, indigenous peoples, Afro-descendants, persons with disabilities, and peasant communities regarding climate change impacts on water security, and (b) gender-based violence experienced by women in water-related roles such as collection, operation, and maintenance.

Furthermore, grant funds and general resources will be allocated to incorporate a mainstreaming approach. The IDB will undertake: (i) Gender analysis studies for each project, providing insights to effectively integrate gender considerations into project activities, and (ii) Specific studies within relevant activities to ensure the gender and diversity approach.

Moreover, efforts will be made to ensure the active participation of women and indigenous, Afro-descendant, LGBTQ+, and persons with disabilities populations in all training activities whenever feasible[1]. Additionally, all necessary materials will be translated into indigenous languages, previously identified, to reach these communities effectively. Collaborative efforts with representative organizations of diverse groups will be pursued to ensure the proper implementation of these activities. Lastly, all infrastructure developed will be adapted to accommodate persons with disabilities and the beneficiary population groups as Indigenous and Afro descendant communities, incorporating cultural adaptations as necessary.

[1] Some of the specific actions that will be considered to ensure women have access to capacity building activities are (i) encouraging women's attendance highlighting the importance of their participation; (ii) selecting venues in safe locations in accessible and local areas and schedule workshops during daylight hours; (ii) offering capacity building activities in various times to accommodate different schedules and provide when possible virtual workshops to allow women to participate from home. When feasible, family-friendly spaces will be created where children can stay with their mothers during workshops and capacity building activities; (iii) ensuring that activities are relevant and accessible to women from different backgrounds and skill levels and provide materials and facilitators who can communicate in local languages, considering also different formats such as visual, audio, among others; (iv) collecting feedback from women's participants to further understand their needs and challenges and using the feedback to improve the design and delivery of activities to become more inclusive and accessible.

Gender & Diversity Action Plan

ACTIVITIES	INDICATORS AND TARGETS	TIMELINE	RESPONSABILITIES	COST
Impact Statement: Contribute to increase climate resilience of vulnerable communities and key socio-ecological systems in the Amazon basin and ensure their continued supply of water, sanitation, and waste management. Empower women and diverse groups to actively participate and benefit from the Program. **Outcome statement:** Enhanced integration of gender and diversity considerations throughout the fund's activities, resulting in improved access to resources and opportunities for women, Indigenous people, Afro descendant, person with disabilities and LGBTQ+ groups in the Amazon region.				
Component 1: Strengthening the knowledge base and information systems on climate change impacts and water security to enhance preparedness and response to extreme climate and slow-onset events.				
1.1 Design a specific diagnosis, examining the circumstances and barriers faced by women, LGBTQ+, IP, AD, PwD and peasant communities in dealing with the impacts of climate change on water security. (GAP 1) Including a characterize the population socio-demographically, with disaggregation by gender, IP, AD, and PwD and a mapping of potential implementing organizations related to: • Women's organizations • LGBTQ+ communities • Vulnerable groups and populations including Indigenous People. • NGOs working on gender and diversity related issues. • Government officials • Community leaders	1.1 A gender and diversity diagnosis developed by sector and/or country regarding water and the impacts of climate change on women, LGBTQ+, IP, AD, PwD and peasant communities, including a mapping of potential implementing organizations.	Complete by year 1	IDB Executing agencies Local organizations	US$250,000

ACTIVITIES	INDICATORS AND TARGETS	TIMELINE	RESPONSABILITIES	COST
• Heads of households • Small farmers • Business owners				
1.2 Design of specific studies on gender-based violence experienced by women due to their roles in water collection, operation, and maintenance. (GAP 2)	1.2 Regional study on gender-based violence (GBV) gaps in women due to their roles in water collection and maintenance, including Actions to prevent gender-based violence (GBV) and support women victims of GBV.	Complete by year 1	IDB Executing agencies Local organizations	US$100,000
1.3 Incorporating a gender perspective in each project and sub-project that will be implemented. (GAP 3)	1.3 A study will be conducted to perform gender analysis for each project, providing insights to effectively integrate gender considerations into project activities.	Throughout the life cycle of the Programme	IDB Executing agencies	US$200,000 *(Additionally, to what is budgeted for the projects in the FP, this amount will be part of the grant funds, to provide additional support for the gender mainstreaming of these sub-projects)*
Output 1.1. Amazon basin-level water resources mapping and knowledge integration with climate modelling improved.				
1.1.1 Under activity 1.1.2 the project will conduct specific studies on the impacts of climate change on river dynamics, including the perspective of women and indigenous peoples on the use and management of water resources (GAP 4).	1.1.1 Specific studies on the impacts of climate change on river dynamics, including the perspective of women and indigenous peoples on the use and management of water resources.	Throughout the life cycle of the Programme	IDB Executing agencies Local organizations	US$150,000
1.1.2 Design and implement capacity building activities or workshops on the use and management of natural resources for Indigenous People, local communities, with participation of women and diverse population groups (GAP5).	1.1.2 Campaigns, material, and final report to ensure female and diverse populations participation and ensure the next indicators: • *At least 30% of female participants in each workshop/activity; at least 25% of participants from diverse population groups (LGTBQ+, AD, IP, PwD);*	Throughout the life cycle of the Programme	IDB Executing agencies	US$200,000

ACTIVITIES	INDICATORS AND TARGETS	TIMELINE	RESPONSABILITIES	COST
	percentage of women (50%) who report feeling empowered to actively participate in natural resource management decisions; and Percentage of diverse populations (50%) who report feeling empowered to actively participate in natural resource management decisions.			
Component 2: Catalyze climate investments for climate-resilient and low carbon water supply, sanitation, and waste (WSW) technologies and infrastructure.				
2.1 Design and implement sub-projects with innovative solutions for water management in indigenous People and Afro-descendant communities (Scalable projects such as rainwater harvesting for community use, among others) (GAP 7)	2.1 At least six sub-projects for water management in indigenous and Afro-descendant communities projects with innovative solutions developed.	Throughout the life cycle of the Programme	IDB Executing agencies	US$500,000 *(Additionally, to what is budgeted for the sub-projects in the FP, this amount will be part of the grant funds, to provide additional support for the structuring of these sub-projects)*
2.2 Specific programs within each sub-project aimed at strengthening female leadership in water management, incorporating workshops with men to develop soft skills and promote female leadership (GAP 8).	2.2 At least 5 programs with the sub-projects on enhancing female leadership in water management. These programs include workshops involving men to cultivate soft skills and advocate for female leadership	Throughout the life cycle of the Programme	IDB Executing agencies	US$350,000 *(Additionally, to what is budgeted for the sub-projects in the FP, this amount will be part of the grant funds, to provide additional support for the structuring of these sub-projects)*
2.3 Sociodemographic characterization by gender and diverse groups (GAP 6).	This activity is cross-cutting to all three Components, but with a stronger focus on the sub-projects of Component 2. At least two sub-projects per country with socio-demographic characterization by gender and diverse groups.	Throughout the life cycle of the Programme	IDB Executing agencies	US$200,000 *(Additionally, to what is budgeted for the sub-projects in the FP, this amount will be part of the grant funds, to provide additional support for the structuring of these sub-projects)*
Output 2.1. Sub-projects focused on community and ecosystem-based adaptation for small communities implemented.				

ACTIVITIES	INDICATORS AND TARGETS	TIMELINE	RESPONSABILITIES	COST
2.1.1 Under activity 2.1.1 in the implementation of the sub-projects, gender mainstreaming will be ensured, guaranteeing women's participation in project selection. Additionally, there will be at least 5 specific projects aimed at enhancing the quality of life for women in the water sector. These projects will include training programs to foster awareness and prevent sexual and gender-based violence among project employees and contractors GAP 9).	2.1.1 At least 5 specific sub-projects in small communities aimed at enhancing the quality of life for women in the water sector, improving their tasks.	Throughout the life cycle of the Programme	IDB Executing agencies	US$250,000
2.1.2 Develop a customized 'Amazonian Best Practices' training program incorporating practices of women and indigenous communities (GAP 10).	2.1.2.1. 1 Customized 'Amazonian Best Practices' training program incorporating practices of women and indigenous communities designed and delivered.	Throughout the life cycle of the Programme	IDB Executing agencies and local organizations	US$150,000
2.1.3 Ensure participation of women, indigenous people, and other diverse population groups.	2.1.3 Campaigns, materials, and final report to ensure female and diverse population participation to ensure the inclusion of a gender and diversity approach and the next indicator: • *30% of women and 25% of indigenous people, and other diverse population groups participating in pilot projects.*	Throughout the life cycle of the Programme	IDB Executing agencies Financial intermediaries	Anticipating no further expenses
2.1.6 Develop customized gender-sensitive-capacity-building programs for women and indigenous and afro descendant communities on climate adaptation water governance and leadership. This will include providing resources for women's cooperatives focused on sustainable water use	2.1.6 Gender-sensitive-capacity-building programs for women and indigenous and afro descendant communities on climate adaptation water governance and leadership	Throughout the life cycle of the Programme	IDB Executing agencies Financial intermediaries	Anticipating no further expenses.

ACTIVITIES	INDICATORS AND TARGETS	TIMELINE	RESPONSABILITIES	COST
Output 2.2. Sub-projects focused on community and ecosystem-based adaptation for medium to large communities implemented.				
2.2.1 Ensure participation of women, LGBTQ+, IP, AD, PwD and other diverse population groups.	2.2.1 Campaigns, materials, and final report to ensure female and diverse populations participation and ensure the next indicators: • 30% of women and 25% of indigenous people, and other diverse population groups participating in pilot projects.	Throughout the life cycle of the Programme	IDB Executing agencies Financial intermediaries	Anticipating no further expenses.
Output 2.3. Novel technologies and small-scale adaptation measures on WSW sectors supported, aimed to strengthen resilience of small vulnerable communities.				
2.3.1 Strengthen local financial intermediaries working in related areas (climate finance, WSS sectors, NBSs, etc.) supporting women-led businesses (GAP 11).	2.3.1 One study per country on local intermediaries to establish a baseline of their support for women-led businesses and the creation of an action plan to strengthen this aspect, to ensure the next indicators: • *30% increase in the number of local financial intermediaries providing support to women-led businesses in climate finance, water and sanitation sectors, and nature-based solutions.* • *35% of funding disbursed to women-led businesses by local financial intermediaries in targeted sectors.*	Complete by Year 1	IDB Executing agencies	US$250,000
Output 2.4. Support provided for the origination, design, and deployment of adaptation measures in the WSW public sector, emphasizing EbA.				
2.4.1 Include universal design for persons with disabilities and ethno-engineering (culture adaptation) for indigenous and afro descendant people (GAP 12).	2.4.1 A study and diagnosis for each infrastructure project to identify cultural adaptation needs, including an implementation plan for each infrastructure and a determination of funds needed.	Throughout the life cycle of the Programme	IDB Executing agencies	US$400.000

ACTIVITIES	INDICATORS AND TARGETS	TIMELINE	RESPONSABILITIES	COST
2.4.2 Deliver capacity building activities for sectorial and finance public institutions on climate finance mechanisms for climate adaptation projects, including training on innovative project finance, project structuring and public-private participation. The training sessions will include a gender equality and diversity inclusion approach for development projects (GAP 13).	2.4.2.1 Campaigns, materials, and final report to ensure female and diverse populations participation and a gender and diversity approach in capacity building activities. 2.4.2.2 Train-the-Trainer' program for local water utilities to operate and maintain these systems for women and indigenous people	Throughout the life cycle of the Programme	IDB Executing agencies	US$150,000
Component 3: Promote capacity and develop an enabling environment for climate change planning and investment, regional exchange of data and information and transboundary cooperation mechanisms for water security.				
3.1. Deliver training sessions with representatives of women, LGTBQ+, IP, AD, PwD organizations to explore solutions for addressing climate change (GAP 14).	3.1 At least six training session with representatives of women, LGTBQ+, IP, AD, PwD organizations to explore solutions for addressing climate change to ensure the following indicator: • *6 training activities/workshops with active participation from diverse groups organizations to explore practical solutions to address climate change specifically tailored to women, indigenous and Afro-descendant communities.*	Complete by Year 2	IDB Executing agencies	US$150,000
3.2 Translate and adapt essential information for indigenous peoples and persons with disabilities within the program's framework. In every country, the spoken indigenous languages will undergo review and adaptation. Additionally, ensure accessibility for persons with disabilities, particularly those with visual, auditory, and tactile impairments (GAP 15).	3.2 Translate and adapt essential information for indigenous peoples and persons with disabilities (especially with visual, auditory, and tactile disabilities) within the program's framework.	Throughout the life cycle of the Programme	IDB Executing agencies Local organizations	US$150,000
Output 3.1. National and regional policies and institutional frameworks to foster an integrated approach to adaptation looking at the basin as a transboundary system enhanced.				

ACTIVITIES	INDICATORS AND TARGETS	TIMELINE	RESPONSABILITIES	COST
3.1.1. Obtain policy reform recommendations to enhance investments in climate adaptation projects including a gender-sensitive approach according to an analysis performed in each of the countries	3.1.1. Policy recommendations obtained in each of the 6 countries to ensure policy reforms promote gender equality in climate adaptation efforts	Complete by year 1	IDB Executing agencies	Anticipating no further expenses.
3.1.2 Implement a capacity building program with a gender-sensitive approach to ensure that women and diverse population groups are included in the planning and decision-making processes for climate-resilient projects	3.1.2 Campaigns, materials, and final report to ensure female and diverse populations participation and a gender and diversity approach in the capacity building program.	Throughout the life cycle of the Programme	IDB Executing agencies	Anticipating no further expenses.

Monitoring and Evaluation

The success of the Gender Action Plan within the Improving Climate Resilience by Increasing Water Security in the Amazon Basin Project hinges on a robust Monitoring and Evaluation (M&E) framework that systematically tracks progress, measures impacts, and identifies areas for improvement. The processes are designed to be dynamic, responsive, and participatory, ensuring that gender and social inclusivity remains a core focus throughout the project's lifecycle.

It is important to regularly assess the Gender Action Plan's progress through gender-sensitive indicators, stakeholder feedback, and periodic reviews and make adjustments based on lessons learned and emerging gender and diversity considerations to ensure the continued effectiveness of the plan. Specific actions may include:

1. *Gender sensitive indicators*: Analyze the gender sensitive indicators that are included in the gender action plan to gauge the effectiveness of gender mainstreaming efforts.
2. *Stakeholder feedback mechanisms*: Analyze feedback to identify specific challenges and opportunities for improvement.
3. *Periodic gender and diversity reviews*: Conduct periodic reviews specifically dedicated to assessing the gender and diversity dimensions of the project. These reviews should evaluate the implementation of gender-and diversity specific initiatives and the overall responsiveness of project activities to gender and diversity considerations. Integrate lessons learned from these reviews into adaptive management strategies.
4. *Adaptive management strategies*: Utilize findings to inform adaptive management strategies that respond to emerging gender and diversity considerations. Implement timely adjustments to project activities, policies, and interventions based on lessons learned and evolving gender dynamics. This adaptive approach ensures that the Gender Action Plan remains relevant, effective, and capable of addressing evolving challenges.
5. *Reporting and transparency*: Regularly report on the progress of gender and social inclusivity efforts through transparent and accessible channels. Disseminate information on gender and diversity-specific achievements, challenges, and future plans to keep stakeholders informed. Ensure that reporting mechanisms are tailored to reach diverse audiences, considering variations in literacy levels and communication preferences.

By intertwining gender and diversity sensitive indicators, stakeholder feedback mechanisms, periodic reviews, adaptive management strategies, and transparent reporting, the framework becomes a dynamic tool for ensuring the sustained success of the Gender Action Plan within the Improving Climate Resilience by Increasing Water Security in the Amazon Basin Project. This approach guarantees that gender and social inclusivity is not only a priority but a continually evolving and improving aspect of the project's impact on the community.