THE ROLE OF INDIGENOUS TERRITORIES IN FOREST CARBON CONSERVATION:

Challenges and opportunities

November, 2023

CIENCIA Y SABER INDÍGENA
POR LA AMAZONÍA

RAISG
AMAZONIAN NETWORK OF GEOREFERENCED SOCIO-ENVIRONMENTAL INFORMATION

COICA
COORDINATOR OF INDIGENOUS ORGANIZATIONS OF THE AMAZON BASIN

Woodwell Climate Research Center

NICFI
Norway's International Climate and Forest Initiative

Key messages:

- According to data produced by WCRC[1] and RAISG[2], the Amazon stores approximately 79 thousand MtC[3] of forest carbon. Of these, 58% are stored in Indigenous Territories and Protected Natural Areas.

- Carbon storage is a key ecosystem service to tackle climate change, since it represents a reduction in the concentration of CO_2 in the atmosphere, the excess of which is largely responsible for global warming. However, the regulatory frameworks in the Amazon countries do not provide the necessary protection of their forests to maintain their ecosystem services, nor to safeguard the territorial rights and lives of the indigenous peoples who inhabit and manage them.

- Forest carbon has become a commodity in the voluntary carbon credit markets for the mitigation or compensation of greenhouse gas emissions generated by different companies. However, the management of carbon credits and their commercialization are still not adequately regulated by national regulations or the international framework, which generates a perverse incentive for the negotiation of these credits with indigenous peoples in their ancestral territories, who - if participating - do so with limited information and in violation of their collective rights.

- Voluntary carbon credit markets call into question the effectiveness of this strategy within the framework of countries' compliance with their international climate commitments for the global reduction of greenhouse gas emissions (e.g., The Paris Agreement and the mitigation goals under the NDC[4]).

- The survival of indigenous peoples depends on the existence of forests. For centuries, they have used their resources applying ancestral knowledge and practices, which has led them to maintain their means and ways of life. Today, indigenous peoples ensure the integrity of their territories through surveillance and monitoring activities.

- The implementation of participation mechanisms for indigenous communities and protocols for free, prior, and informed consent are fundamental strategies for the effectiveness of efforts to protect the Amazon, which avoid the tipping point and situations that violate their rights. Examples include social safeguards, regulations, and enforcement within the framework of REDD+ that are not duly applied, illegal and illicit natural resource extraction, and land grabbing in their territories.

[1] Woodwell Climate Research Center.
[2] Amazon Network of Georeferenced Socio-Environmental Information.
[3] MtC: Millions of metric tons of carbon.
[4] Nationally Determined Contributions

01
INTRODUCTION

The Amazon has the largest continuous tropical forest on the planet and, therefore, international attention has been focused on this region to achieve climate and biodiversity protection goals, which contribute to the maintenance of life as we know it now. However, there are multiple human activities that are contributing to the loss of its forest biomass[5], its biological diversity, and the multiple resources and ecosystem services they provide.

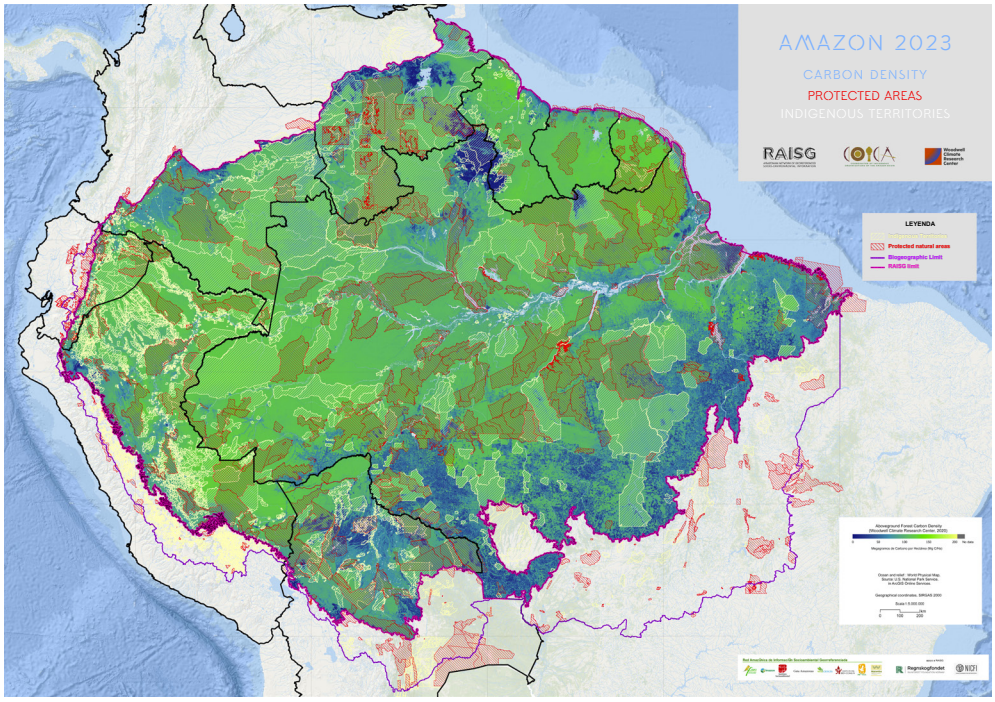
To better understand the dynamics of the Amazon region, the Amazon Network of Georeferenced Socio-Environmental Information (RAISG), made up of eight civil society organizations, analyzes the region as an integral organism, generating and disseminating knowledge about Indigenous Territories and Protected Natural Areas, changes in land use, pressures and threats, among others. Within the framework of its work, and in association with US-based research organization Woodwell Climate Research Center (WCRC) and the Coordinator of Indigenous Organizations of the Amazon Basin (COICA), the project "Science and Indigenous Knowledge for the Amazon" is being implemented, with funding from the Norwegian International Climate and Forest Initiative (NICFI) and the participation of other donors for the cases of Bolivia and Venezuela.

The project aims to generate knowledge about the dynamics of loss and gain of forest biomass in the Amazon between 2003 and 2020. In addition, pilot areas (PAL) have been established in indigenous territories of Brazil, Colombia, Ecuador, Peru, and Venezuela in order to validate the information generated, identify local causes of forest loss, and identify in situ forest conservation strategies that can be replicated in other indigenous territories of the Amazon.

Based on the previous work of RAISG and the preliminary results of this analysis, it is evident that the Indigenous Territories (ITs) and the Protected Natural Areas (PNAs) in the Amazon are the territorial units in which the forests are best conserved. The ITs and PNAs store 46 thousand MtC of carbon, i.e., 58% of the stock in the Amazon. With this evidence, the next objective of the project is to advocate for national, regional, and international public policies that include and recognize the contribution of indigenous peoples in the protection of the Amazon, for which it is imperative that they have legal security over their territories and mechanisms are deployed for their protection against the threats and pressures that exist in the Amazon.

[5] Organic matter of plant origin present in different forest ecosystems.

Figure 1. Carbon density in the Amazon, protected areas, and indigenous territories



Source: WCRC and RAISG, 2023

Within the framework of the negotiations and agreements of the United Nations Framework Convention on Climate Change (UNFCCC), tropical forests have taken a leading role as important natural carbon sinks. In this sense, within the framework of COP11, held in Montreal, the representatives of Costa Rica and Papua New Guinea, representing the Coalition for Rainforest Nations (CfRN), proposed the development of a mechanism to provide financial incentives for the conservation of their forests[6]. This proposal, initially entitled "Reducing emissions from deforestation in developing countries: approaches to stimulate action", gave rise to the REDD+[7] mechanism that seeks to generate results-based payments contingent on the reduction of deforestation and forest degradation, in addition to conservation, the maintenance of carbon stock, and forest management.

[6] https://rainforests.mongabay.com/redd/
[7] Initially REDD, "reducing emissions from deforestation and forest degradation in developing countries", with the (+) adding "sustainable management of forests and the conservation and enhancement of forest carbon stocks".

To implement this mechanism at the national level, countries had to implement regulatory and institutional arrangements, as well as ensure the creation of specific systems and tools for the planning of REDD+ activities and the monitoring, reporting, and verification of results (MRV). However, countries that embarked on the national implementation of REDD+ have had to go a long way to meet the requirements and access payment for results in reducing forest carbon emissions. Partly for this reason, international standards were established and led to the emergence of a voluntary forest carbon credit market to negotiate emission reduction units, mainly, between private institutions.

This scenario of flexibility and regulatory gaps in the regulation of forest carbon and the negotiation of emission reduction units or bonds, has also promoted the emergence of companies that, according to existing evidence in countries like Colombia, reach communities and indigenous territories to negotiate - in many cases with divergent information - the sale of emission reduction units from the conservation of the Amazon forests within the ITs. These companies do not comply with environmental, social, and governance safeguards, which is why they are colloquially called “carbon cowboys” in the Amazon region.

Reports of cases of violations of the rights of indigenous peoples related to the activities of these companies have revived the conversation at the national and international level about carbon markets related to REDD+, their technical requirements, effective results, and, especially, the urgency of applying social safeguards in the implementation of these activities within the ITs[8].

[6] https://www.gaiaamazonas.org/uploads/uploads/books/pdf/2023_REDD_policy_paper_web_compressed-1.pdf

02
CHALLENGES

From the analyzes carried out in Brazil, Colombia, Peru and Venezuela with respect to forest carbon, three important challenges that we will address in this document emerge:

- There are still gaps in the regulatory framework and in its implementation with respect to the protection of forests and the legal security of ITs. The loss of biomass, and therefore carbon, in the PNAs and the ITs, for the period 2003 - 2020 has been lower compared to the rest of the Amazon.

- Social safeguards, regulations, and enforcement within the framework of REDD+ that are not duly applied can generate greater violations of the rights of indigenous peoples, in addition to those caused in their territory by land grabbing and other illegal and illicit natural resource extraction activities.

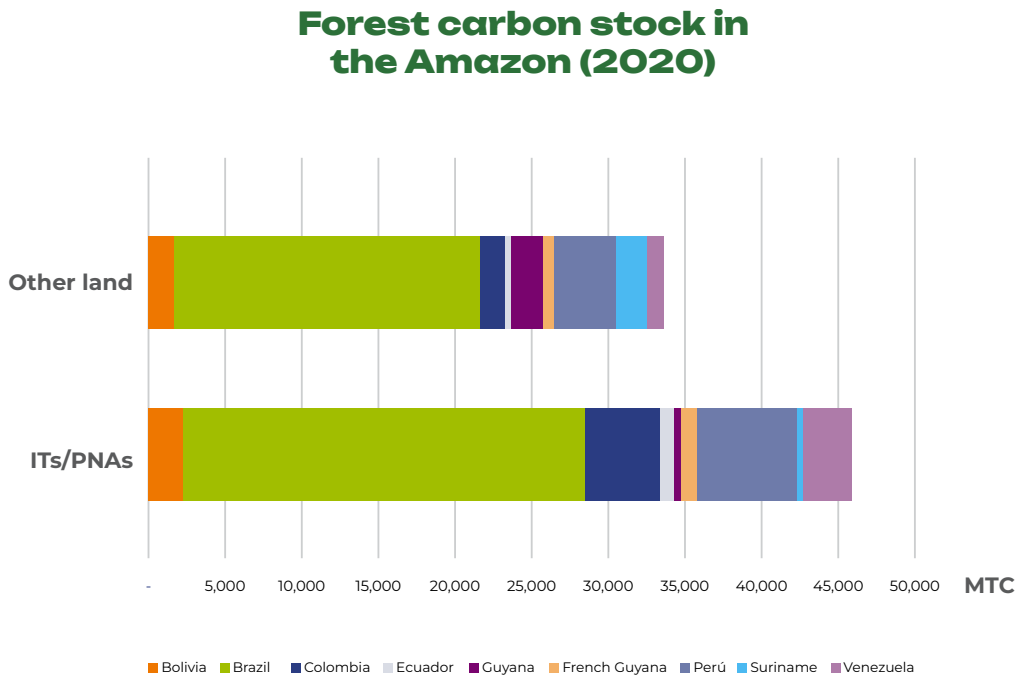
- There is still a need to recognize, promote, and provide direct incentives with respect to the work carried out by indigenous peoples in the monitoring and surveillance of their territories for the protection of their forests. Also ensuring their physical integrity in the development of this work.

03
FINDINGS

The data generated within the framework of the project "Science and Indigenous Knowledge in the Amazon" provide a comparative historical analysis of the forest carbon stored in the Amazon countries. By 2020, the entire Amazon region reached a stock of 79,038 MtC. As seen in Figure 2, the majority of forest carbon is stored within IT and PNA, 58% of the region, i.e., the equivalent of 46,043 MtC. On the other hand, the other categories of land - which do not have any form of protection or conservation - store 32,995 MtC.

When compared between countries, Brazil has the largest forest carbon stock (46,145 MtC, 57% in ITs/PNAs), followed by Peru (10,432 MtC, 61% in ITs/PNAs) and Colombia (6,050 MtC, 77% in ITs/PNAs), as seen in figure 2

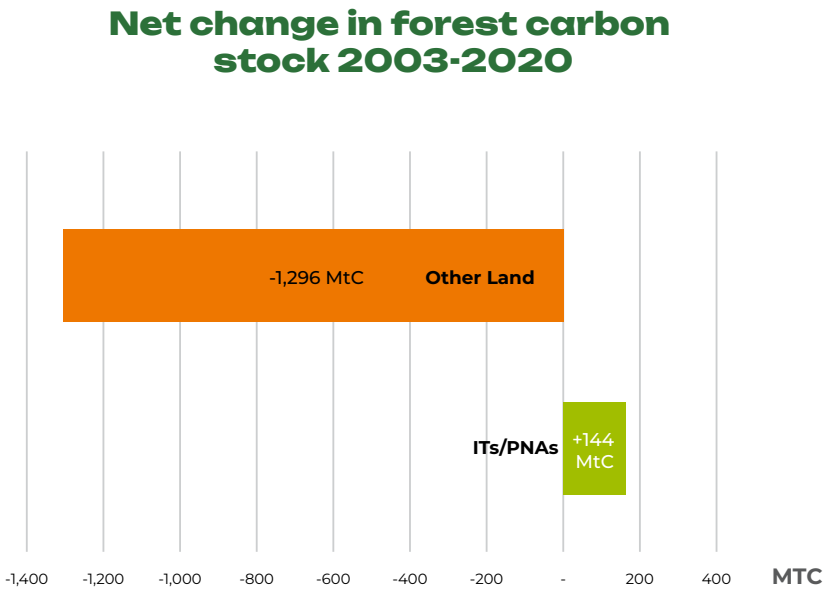
Figure 2. Forest carbon stock in the Amazon (2020)



Source: WCRC and RAISG, 2023

In terms of gain and loss, between 2003 and 2020, the net amount of forest carbon stored in the region decreased by 1,152 MtC, going from 80,190 MtC in 2003 to 79,038 MtC in 2020. This loss corresponds to the release of carbon that occurred outside of ITs and PNAs; while within the ITs and PNAs an additional 144 MtC of carbon accumulated during the analysis period (Figure 3).

Figure 3. Forest carbon gains and losses in the Amazon



Source: WCRC and RAISG, 2023

In contrast to this evidence, the policies of most recent governments in South America have or are promoting regulatory frameworks that weaken the legal security of ITs and conservation in PNAs. For example, in Brazil, despite the commitments assumed as part of the UNFCCC, the deforestation control policies that were in force between 2004 and 2012, and weakened until 2018, suffered a setback starting in 2019, when the federal government paralyzed the Plan for the Prevention and Control of Deforestation in the Amazon (PPCDAm).

Along these lines, environmental agencies, such as Ibama and ICMBio, were weakened, social control was repressed, and attempts were made to make environmental laws more flexible (Werneck et al., 2021). Consequently, in 2020, 99% of deforestation was due to illegal activities (Azevedo et al., 2021).

Currently, 40.5% of Brazilian forests are protected under the national system of protected areas: indigenous lands, quilombola territories, and conservation units (Oviedo; Doblas, 2022). In the case of protected areas with the presence of indigenous peoples and traditional populations, they protect 30.5%, which represents a third of Brazil's forests. On the other hand, indigenous lands alone are responsible for protecting 20.3% of Brazil's forests. In the Amazon, protected areas concentrate 56.3% of the carbon stored in the forest cover.

In the case of Colombia, 69% of the Amazon area is represented by PNAs and TIs. In 2020, the Colombian Amazon registered a net change of -17 MtC. This means that for the period between 2003 and 2020 the gains and losses balance is negative, which indicates that this region is currently a net source of carbon emissions. However, it is important to analyze the results in detail, since in the case of ITs reports show a net gain of +22.6 MtC, i.e., more is stored in them than is lost. This figure is important if we also consider that the ITs cover 53% of the Colombian Amazon.

Therefore, as has been demonstrated through the data generated by RAISG on the Amazon, one of the most effective strategies to protect the forest and sensitive ecosystems has been the creation of protected areas. In the case of Brazil, Soares-Filho et al. (2006) evaluated the impact of protected areas in the Brazilian Amazon through the reduction of emissions from deforestation and found, for the period between 1997 and 2008, an inhibitory effect in three different types of protected areas: ITs, full-protection PNAs, and sustainable use PNAs. Furthermore, the authors state that the expansion of protected areas that occurred in the early 2000s was responsible for 37% of the reduction in deforestation observed between 2004 and 2006.

Additionally, as we see in Figure 2, in the case of Peru, by 2020, the carbon stored in IT forests and in PNAs is equivalent to 60% of the 10.4 thousand MtC stored in the country's Amazon forests. Again, these

two categories have been more efficient in conserving the Amazon forests. In that sense, less than 23% of carbon losses in the Peruvian Amazon occurred within ITs between 2003 and 2020 (317 MtC in total). Thus, the forest carbon gain recorded in these figures for the aforementioned period offsets the carbon losses that occurred within these same areas, with a net gain of 0.5%. On the other hand, the greatest carbon loss in ITs and PNAs is due to forest degradation or disturbance, since deforestation only represents 19%. In contrast, in areas outside ITs and PNAs the carbon loss due to deforestation is equivalent to 47.5% of the total estimated loss.

The conservation of forests and low carbon loss within the ITs is not a product of chance, but of the forest management capacity of the indigenous peoples who inhabit them. This is due to the deep knowledge of the environment since ancient times, which allows them to use the forest sustainable, which also protects and guarantees their ways and means of life.

In the region, indigenous peoples have self-organized in different ways to monitor and guard their territories. In Peru, indigenous efforts seek to implement community oversight committees (veedurías), which develop forest cover monitoring efforts reported to the Ministry of the Environment (Minam) within the climate change framework. Likewise, they coordinate these control and surveillance activities at a local and regional level with the entities that make up the National Forestry and Wildlife Control and Surveillance System coordinated by the National Forestry and Wildlife Service (Serfor), under the Ministry of Agrarian Development and Irrigation (Minagri).

Both the forest monitoring front and the forest control and surveillance front are linked because they are led by the same actors and their forests, but they suffer the consequences of state sectoralization which, despite efforts of the Peruvian government, to date are not enough to guarantee indigenous territorial rights and more effective conservation of forests in communal territories[9]. Thus, an early warning of deforestation can be reported to be registered in Minam's Geobosques[10], but the response from entities of the Forest and Wildlife Control and Surveillance System (Regional Government, National Police, Port Captaincy Directorate, Public Prosecutor's Office, etc.) is usually not timely or does not have the expected breadth. This situation leaves indigenous forest guardians at the mercy of the

[9] Communities in Peru face deforestation with technology. Extracted from: https://dialogochino.net/es/clima-y-energia-es/45997-comunidades-nativas-en-peru-se-enfrentan-a-la-deforestacion-con-tecnologia/

[10] Platform for monitoring changes in forest cover. Extracted from: https://geobosques.minam.gob.pe/geobosque/view/index.php

impacts of environmental crimes linked to deforestation and forest degradation, as well as of threats and attacks by third parties.

In this regard, it is worth mentioning that, between April 2020 and April 2022, 22 forest guardians were murdered or disappeared in Peru while fighting to defend their rights. Of that total, 10 were murdered during 2020, 7 in 2021, and 5 in 2022. Twenty incidents occurred in the Amazon, especially in the central forest belt and 19 of these victims were indigenous.

Indigenous peoples put their lives at risk to protect their territories because their forests are intrinsically related to their ways of life, their economy, their worldview, and ancestral practices. Furthermore, they are in a constant struggle for the acknowledgement and legal security of their territories, which leaves them vulnerable to different pressures and threats within their territory, from illegal and illicit activities to legal activities promoted by governments that can directly or indirectly generate loss of their forests.

For example, Fundación Gaia Amazonas in Colombia has identified in the Amazon that REDD+, initially thought of as an opportunity to recognize efforts to mitigate climate change, reduce deforestation, and promote forest conservation, can have negative effects and impacts on the self-determination, self-government, and legal security of indigenous peoples and their territories.

In Colombia, two types of initiatives have been developed in the Amazon to implement REDD+: a state program and private projects within the voluntary market. In relation to the first, in 2015, together with the governments of Germany, Norway, and the United Kingdom, the country subscribed to the results-based payment mechanism known as the Visión Amazonía Program, which is currently in operation (Ministry of Environment, 2019). For its part, compared to REDD+ projects in the voluntary market, a recent study by the Sinchi Institute indicates that as of July 2022, 51 projects had been registered, 33 of which are located in indigenous reservations (Sinchi, 2023).

Since its inception in the global scenario of the UNFCCC, this results-based payment mechanism was conceived as a financial formula to connect economic development with climate change mitigation. Through valuing nature, REDD+ has sought to encourage

the conservation and restoration of forests by financing local mitigation initiatives. In this way, industrialized countries finance the reduction of greenhouse gas (GHG) emissions in countries of the global south with considerable areas of forest that store large amounts of carbon (Bayrak & Marafa, 2016).

Recent studies on the subject have found that REDD+ is a new mechanism that creates renewed forms of authority over forests (Dehm, 2021), as it establishes forms of control through the financing of "green" and "sustainable" projects that contain obligations on the territories and that do not necessarily respond to the perspectives of their inhabitants. Furthermore, REDD+ represents additional challenges for indigenous communities that must learn new technical and intergovernmental languages to participate effectively in the negotiations, regulations, and implementation of this mechanism at the national level or within their territories.

In Colombia, the recent study carried out by the Sinchi Institute found different recurring problems in the projects carried out in ITs in the Amazon: (1) disruption of indigenous organizational processes and effects on cultural survival as a result of the implementation of the projects and the execution of money coming from a mechanism that commodifies nature; (2) absence of clear and timely access to project information, its description, and the distribution of benefits; (3) flaws in the substantial and effective participation of communities in decisions on the construction, feasibility, and development of projects; (4) surge of accounted areas and multiple projects in the same territory, which implies risks of double carbon accounting; among others, (Sinchi, 2023).

All this takes place whilst the Colombian government struggles with a shortfall of regulations, similar to what other Amazon countries face. Brazil has been developing a national policy for REDD+ since 2013, but has yet to complete it. Nowadays REDD+ works, mainly, as a matter between private parties, through the self-regulation of the participating actors who are interested in the economic returns that can be generated with the sale of carbon credits, such as developers, verification and validation organizations, certifiers, and brokers.

The problems exposed regarding the implementation of REDD+ in local contexts are observed in the case of the Pirá Paraná IT[11] against

[11] Territory located in the department of Vaupés in Colombia, one of the best-preserved regions of the Amazon in the country.

the Corporation for the Sustainable Management of Forests (Masbosques)[12], and others, following the formulation, development, and commercialization of a project that was not authorized by the indigenous government of the territory, and that contains commitments contrary to the food sovereignty and knowledge system of the territory that threaten the physical and cultural survival of the indigenous peoples.

When the Indigenous Council learned of the existence of this project, multiple requests were sent to Masbosques and the other participants demanding that they put an end to the project, its commercialization, and all activities in the territory. Despite this, the company has ignored the requests and, on the contrary, has intensified the violation of rights[13].

The situation above invites us to a discussion about the right of indigenous peoples to manage their territories, particularly in those aspects that affect their ways of life, their rights, and the application of their ancestral knowledge and wisdom. This becomes more important when the concepts and regulatory frameworks related to forest carbon are subject to different interpretations in the countries of the Amazon region.

[12] The most recent assessment by the Sinchi Institute on REDD+ projects in the Amazon found that Masbosques is one of the development companies with the most projects in the region, with a total of 6. The other two companies are Walderttung SAS, with 13 projects, and Permian, with 6.

[13] To delve deeper into the REDD+ situation in Colombia and in the case of Pirá Paraná, see: Fundación Gaia Amazonas (2023). Problemas y oportunidades de REDD+. Una mirada desde los territorios indígenas de la Amazonía. Available at: https://www.gaiaamazonas.org/uploads/uploads/books/pdf/2023_REDD_policy_paper_web_compressed-1.pdf

04
CONCLUSIONS

- The forests in indigenous territories are the best preserved. Therefore, they are highly attractive for carbon markets, given their high level of conservation and, therefore, carbon storage. Within the framework of the implementation of REDD+ and forest carbon markets, companies have been proposing forest carbon credit projects in indigenous territories appeared without transparent information and safeguard measures.

- However, if what we want is to create ideal conditions for the protection of the Amazon, we must listen to and support the interests, demands, and needs of the indigenous peoples, who have managed and continue to manage the lands on which they live ancestrally.

- Therefore, the main constitutional challenge regarding carbon markets is for indigenous peoples to be central interlocutors in decision-making regarding their territories, with the understanding that they are collective subjects with free determination and self-government that cannot be ignored, much less when their knowledge systems and ancestral practices have demonstrated a relationship of respect and harmony with their territory.

- Finally, the role of governments is key to establish, with effective participation of indigenous peoples, policies and regulations that 1) recognize the contribution of ITs in the conservation of the Amazon, and where 2) safeguards needed to confront the threats and pressures on their territories and lives are respected and implemented.

05

OPPORTUNITIES AND RECOMMENDATIONS

- Establish policies and implement efforts that guarantee recognition and legal security for ITs and indigenous peoples.

- Recognize and coordinate the efforts of indigenous peoples to monitor, control, and guard of the integrity of the forests in their territories with the measures and actions led by the different levels of government for the protection of forests. Furthermore, what is reported from indigenous populations must be institutionalized within the framework of state forest control and surveillance efforts, as part of their participation against crimes that involve deforestation and forest degradation, with comprehensive and timely responses, to guarantee their rights and protection of their forests.

- Identify or create other payment mechanisms for conservation, alternative to REDD+, that generate economic incentives for the benefit of indigenous peoples and subsidize their efforts to guard and protect their territories, with clear monitoring policies and rules that avoid the distortion of their objectives.

- Effective protection must be provided to indigenous peoples against the emergence of illegal activities in their territories.

- Governments - and other relevant actors - must promote, develop, and implement sustainable forest activities that create synergies between scientific knowledge and the ancestral knowledge of indigenous peoples.

- Create and implement national and regional policies that are capable of avoiding the tipping point in a broader and more structured way, as promised by the Belém Declaration, signed at the Amazon Summit - IV Meeting of Presidents of State Parties to the Amazon Cooperation Treaty (ACT) carried out in August 2023.

- It is fundamental to create or reactivate permanent multilevel participation mechanisms that can institutionalize direct and frequent dialogue between indigenous peoples, traditional, and Afro-descendant communities, and civil society, with the different governments, organizations, and agencies of the region in order to ensure the effectiveness of actions to protect the Amazon that avoid the tipping point.

- Mitigation measures in forests must acknowledge the constitutional limits derived from the international human rights framework, with emphasis on cases related to carbon markets, such as REDD+, and the need to integrate standards to protect and safeguard the individual and collective rights of indigenous peoples. For example, implementation of free, prior, and informed consultation protocols and ensuring other rights such as the equitable distribution of benefits with due respect for their cultures and worldview are respected.