CARBON

Markets and REDD+

CREDITS

Authors: Pablo Pacheco and Melissa Panhol

Review: Nicia Coutinho, Carolina Santana, Debora Batista, Maria Barcellos, Suellen Mangueira and Tiana Marculino

Translation: Lorena Cordova

English revision: Aubrey Peterson

Design and illustrations: Lica Donaire

Production: Communities and Territorial Governance Initiative - Forest Trends

Team: Beto Borges, Marcio Halla, Nicia Coutinho, Maria Barcellos, Debora Batista, Suellen Mangueira, Melissa Panhol, Camilla Aleixo, Lorena Cordova

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CARBON Markets and REDD+

2025

BROCHURE 2

Carbon Markets and REDD+

This brochure aims to explain, in a simple and straightforward manner, what REDD+ is, how it works, and what role it plays in protecting forests and combating climate change. It will address the fundamentals of the REDD+ mechanism, its main elements, the challenges of its implementation, and the opportunities it offers to Indigenous Peoples and Local Communities (IPs & LCs) who live in and care for forests. The brochure also presents practical examples and analyzes the relationship between REDD+, carbon markets, and the rights of forest peoples.

This brochure is the second volume in the series "Understanding Climate Finance," produced by Forest Trends' Communities and Territorial Governance Initiative in collaboration with Greendata and with support from the Walmart Foundation. To access the other chapters, visit the Forest Trends website.

1

Carbon, markets, and forests

In the previous brochure, we saw how excess carbon dioxide in the atmosphere is accelerating climate change. We also learned that protecting forests is one of the most effective ways to prevent more carbon from being released into the atmosphere, while simultaneously maintaining the balance of nature.

But how can we encourage forest conservation in a world where deforestation often seems more lucrative? One answer is to **create ways to reward those who care for forests** by recognizing the value that forests provide for the planet, such as storing carbon, keeping water clean, and harboring immense biodiversity. **Carbon markets** were created for this purpose.

Carbon markets began in 1997 with the Kyoto Protocol, an international agreement to help countries meet their **emission reduction targets.** Voluntary markets emerged later, in which companies and institutions purchase carbon credits on their own initiative. Today, markets are growing and can help finance forest protection projects, even with additional rules following the signing of the global Paris Agreement treaty in 2015.

Carbon markets are like an **exchange system**: they make it possible to measure the amount of carbon that a person, company, or government has stopped emitting or has removed from the atmosphere, and convert this reduction into a carbon credit. This credit acts as if it were a "receipt" for their contribution to the climate, and they can be sold to companies or countries that want to offset part of their own environmental impact. In this way, those **who care for nature and contribute to reducing emissions are rewarded, while those who pollute have to pay for it, creating an incentive to protect the environment.**

There are two main types of carbon markets:

- **Regulated market**, created by laws and public policies. In this market, companies in certain sectors have an emissions limit and can buy credits if they need to exceed it.

- **Voluntary market,** in which companies and institutions purchase carbon credits on their own accord, often as part of environmental responsibility actions, without being obliged to do so.

Within these markets, so-called **forest credits** are gaining prominence. These are generated by projects that prevent deforestation, restore degraded areas, or manage forests sustainably. And this is where REDD+ comes in, as one of the best-known mechanisms for generating this type of credit while **strengthening the protection of forests and the communities that live in them.**

In this brochure, we will understand what REDD+ is, how it works, what challenges exist, and what can be done to ensure that it delivers real benefits to forests, the climate, and the people who protect them.

2

Introduction to REDD+

REDD+ is a **mechanism** designed to protect tropical forests while helping combat climate change. The acronym stands for **"Reducing Emissions from Deforestation and Forest Degradation"**, with conservation, sustainable management, and enhancement of carbon stocks.

This mechanism was officially presented in 2007 during the 13th United Nations Climate Change Conference (COP13) held in Bali, Indonesia. Since then, it has developed as a way to **financially reward** countries that care for their forests, offering an alternative to deforestation and other forms of degradation.

Tropical forests, such as the Amazon, store billions of tons of carbon and are key to maintaining a balanced climate. However, they are **under constant pressure** from expanding agriculture, logging, mining, and infrastructure projects. Deforestation and forest degradation together account for around 15 percent of global greenhouse gas emissions.

REDD+ aims to **change this reality**. Instead of losing the forest to make money in the short term, the goal is to show that **conserving it can be more valuable**, especially if there are **fair payment mechanisms** for results that directly benefit the communities that protect these territories.

The "+" in the name REDD+ shows that the mechanism goes beyond simply reducing deforestation. It also includes:

- The conservation of existing forests;
- The sustainable management of forest resources;
- And, increasing carbon stocks through the restoration of degraded areas.

R REDUCING

E EMISSIONS FROM

D DEFORESTATION AND

D DEGRADATION OF FORESTS

+

- conservation efforts
- sustainable management
- enhancement of carbon stocks

Another important feature of REDD+ is that it recognizes the **fundamental role of Indigenous Peoples and Local Communities (IPs & LCs)** in protecting forests. For this reason, it includes safeguards, which are guidelines that serve to ensure respect for rights, informed participation, and fair distribution of benefits.

REDD+ is currently being tested in more than 50 countries, with projects in regions such as the Amazon, the Congo Basin, and Southeast Asia. Despite significant progress, challenges remain, including a **lack of financial resources, governance difficulties, and the need for reliable monitoring systems.**

In the following pages, we will gain a better understanding of how REDD+ works, its fundamentals, financial sources, implementation methods, challenges, and what it can mean for forest peoples.

3

Fundamentals of REDD+

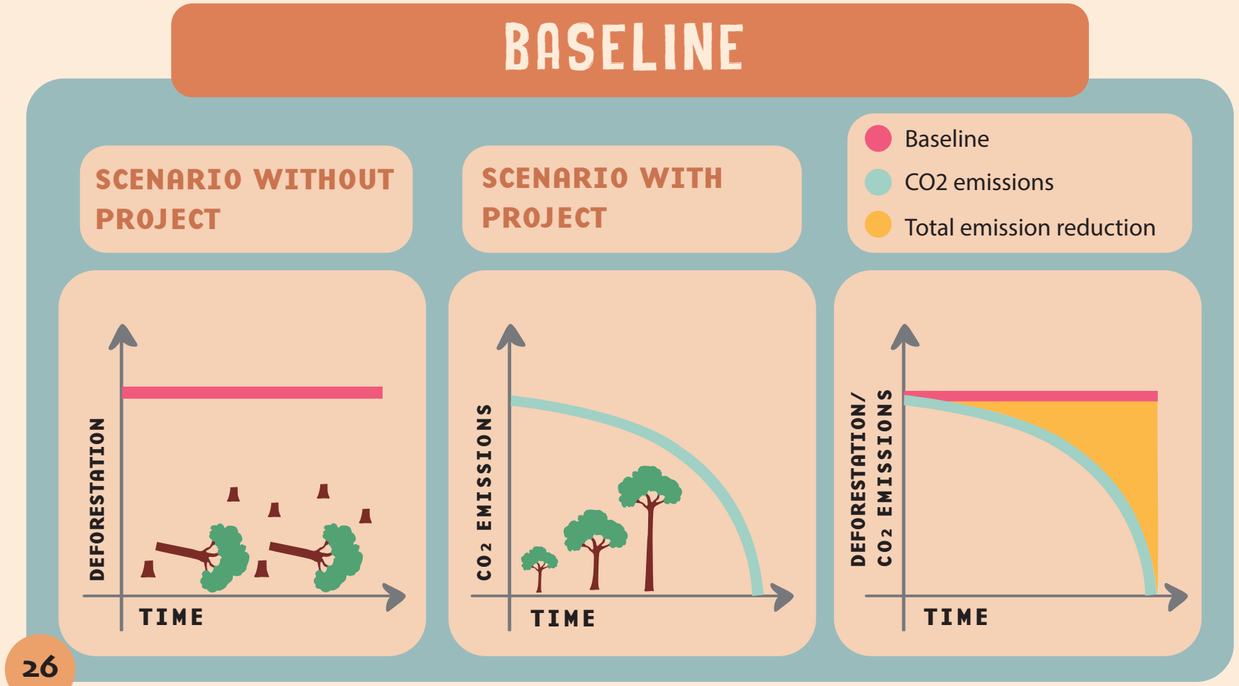
REDD+ is based on five main activities that help protect forests and combat climate change:

1. Reducing deforestation;
2. Reducing forest degradation;
3. Conservation of forest carbon stocks;
4. Sustainable forest management;
5. Increasing forest carbon stocks through the restoration of degraded areas.

These activities must be well **measured, monitored, and tested.** That is why REDD+ requires countries to use a system called Monitoring, Reporting, and Verification (MRV). In this process, **monitoring** is carried out using satellite images, field data, and maps that show where the forest is being protected and where it is threatened. For example, platforms such as Global Forest Watch show in near real time where forest cover is declining. This information helps governments and communities **better control and plan their actions.**

Reporting consists of organizing this information into technical and official reports that show the obtained results. **Verification** is carried out by independent specialists, who review the data and confirm that everything has been done correctly, thus ensuring transparency and confidence in emissions reductions.

Another essential element of REDD+ is the **baseline.** This is an estimate of what would happen to the forest if no project were carried out, i.e., how much deforestation or degradation would occur in a normal scenario. Based on this reference, it is possible to calculate how much carbon has actually been avoided. The difference between the reference scenario and what actually happened is measured in tons of CO_2 equivalent (tCO_2e).



What does "EQUIVALENT TONS OF CO_2" mean?

When we talk about "equivalent tons of CO_2," or tCO_2e, we are referring to a way of measuring greenhouse gases, such as carbon dioxide (CO_2) and methane (CH_4).

Since there are different types of gases and each has a different impact on the climate, scientists use CO_2 as a reference. This way, even if a gas is different, it becomes a common measure known as the "CO_2 equivalent."

For example, one ton of methane causes much more warming than one ton of CO_2. So, that measure is counted as several tons of CO_2 equivalent.

This makes it easier to understand and compare how much each action helps or harms the climate; for instance, how much carbon a preserved forest has stopped emitting.

For these emission reductions to be recognized internationally, technical and environmental standards must be followed and data must be verified by independent institutions. This gives **countries and investors confidence that the results are real.**

In addition, REDD+ incorporates **social and environmental safeguards** designed to protect the rights of Indigenous Peoples, Local Communities, and biodiversity. A set of these safeguards, known as the Cancun Safeguards, were agreed upon by countries at the United Nations (UN) in 2010 and establish that:

- Projects must respect the rights of peoples and communities;
- Benefits must be shared equitably;
- There must be free, prior, and informed participation;
- And, ecosystems and their diversity must be protected.

The **Cancun Safeguards** were created to ensure that, **while protecting forests and reducing emissions, countries also respect the rights of Indigenous Peoples and Local Communities,** promote full and informed participation, conserve biodiversity, and avoid negative impacts. These safeguards act as an additional layer of protection, requiring that REDD+ projects and programs be implemented with **transparency, equity, and justice,** promoting not only climate outcomes but also **lasting social benefits.**

THE 7 CANCUN SAFEGUARDS

A Alignment with national forest policies and international agreements

B Transparent and effective forest governance

C Respect for the knowledge and rights of Indigenous Peoples and Local Communities

D Full and effective participation of all stakeholders

E Conservation of native forests, biodiversity, and promotion of social and environmental co-benefits

F Prevention of reversal (future carbon loss)

G Prevention of emissions displacement ("leakage")

The successful implementation of REDD+ depends on collaboration between governments, communities, civil society organizations, and, in some cases, the private sector. It is also essential to ensure technical training and autonomy so that communities themselves can understand, monitor, and participate in all stages.

4

REDD+ financial mechanisms

REDD+'s functionality depends on financial resources. These resources are used to support forest conservation actions and reward those who contribute to reducing carbon emissions, especially in the poorest countries, where the world's largest tropical forests are found.

There are different ways to finance REDD+. One is through international funds, such as:

- The Amazon Fund, created by Brazil and supported mainly by Norway, which has already allocated more than USD $1.2 billion to projects for monitoring, community strengthening, and forest protection;

- The UN-linked Green Climate Fund (GCF), which also supports countries with projects aimed at mitigating climate change.

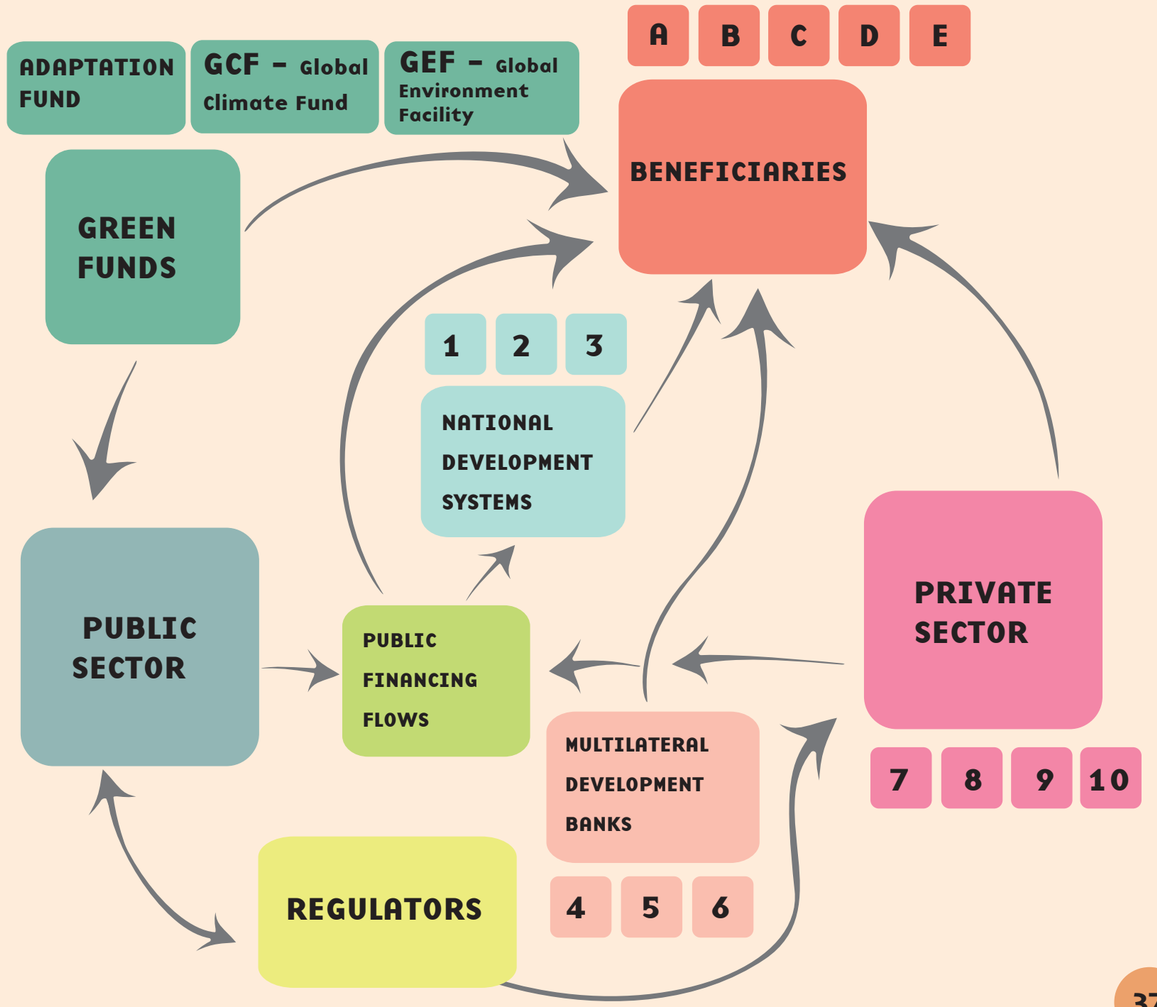
Another important form of financing is **payment for results.** In this model, the country or community only receives the money after demonstrating that it has succeeded in reducing deforestation and carbon emissions. These payments can come from both governments and companies interested in purchasing carbon credits.

These credits are usually traded on the voluntary carbon market, where organizations or companies buy credits to offset their own emissions. REDD+ projects that generate credits must follow **technical and social criteria** and generally undergo **certification** processes, such as those carried out by internationally recognized standards (like the Verified Carbon Standard, or VCS).

CLIMATE FINANCE FLOWS

1 Public banks
2 Regional banks
3 Development banks
4 IDB – Inter-American Development Bank
5 CAF – Development Bank of Latin America and the Caribbean
6 World Bank
7 Market
8 Philanthropy
9 External capital
10 Commercial banks

A IPs & LCs
B Projects
C States/Districts/Provinces
D National government
E Civil society

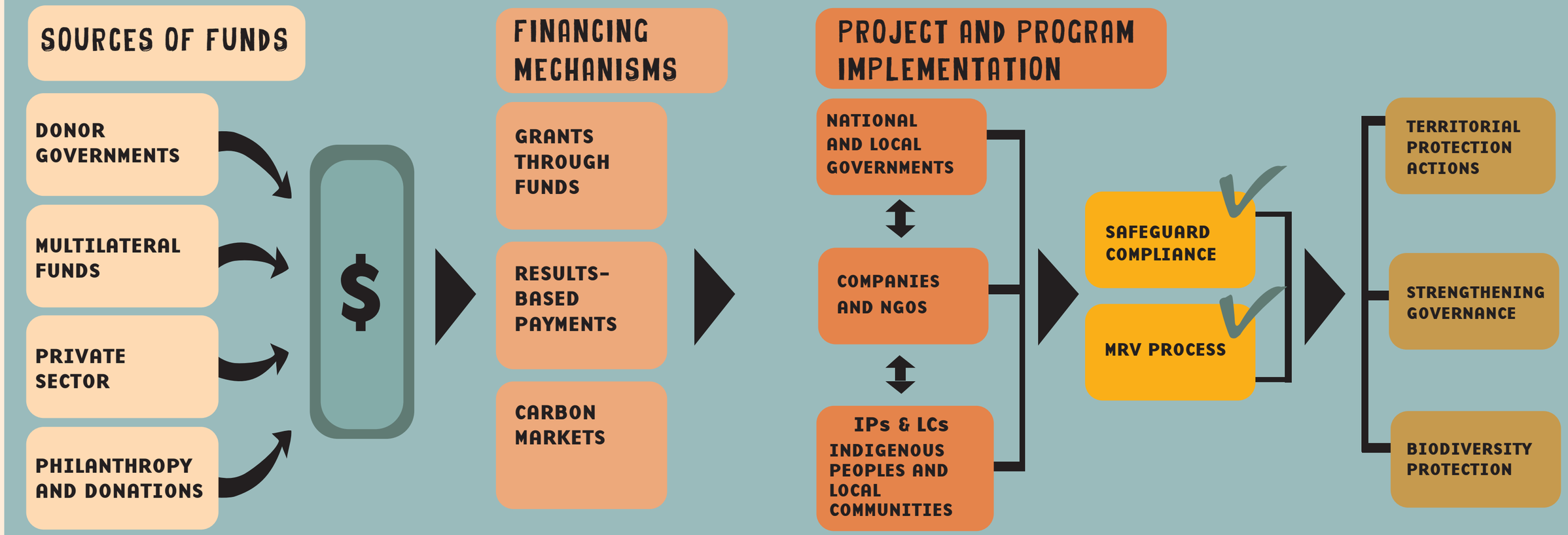


Still, REDD+ financing continues to face challenges. Available resources **are not always sufficient or stable.** Carbon credit prices, for example, can vary greatly, and many countries and communities continue to depend on international donations, making projects vulnerable to political or economic changes.

Another important issue is the **equitable distribution of benefits.** Communities living in forests and contributing directly to their protection often receive very little of the resources. This is why programs such as the Payment for Environmental Services (PES) program in Brazil are important, as they transfer part of the value directly to those living in the territory, such as family farmers and Indigenous Peoples.

For REDD+ to work well, it is essential that funding is integrated into national policies, like **sustainable development plans**, and that resources reach the communities involved in a clear, fair, and transparent manner.

REDD+ FINANCING FLOWS



5

Implementation of REDD+

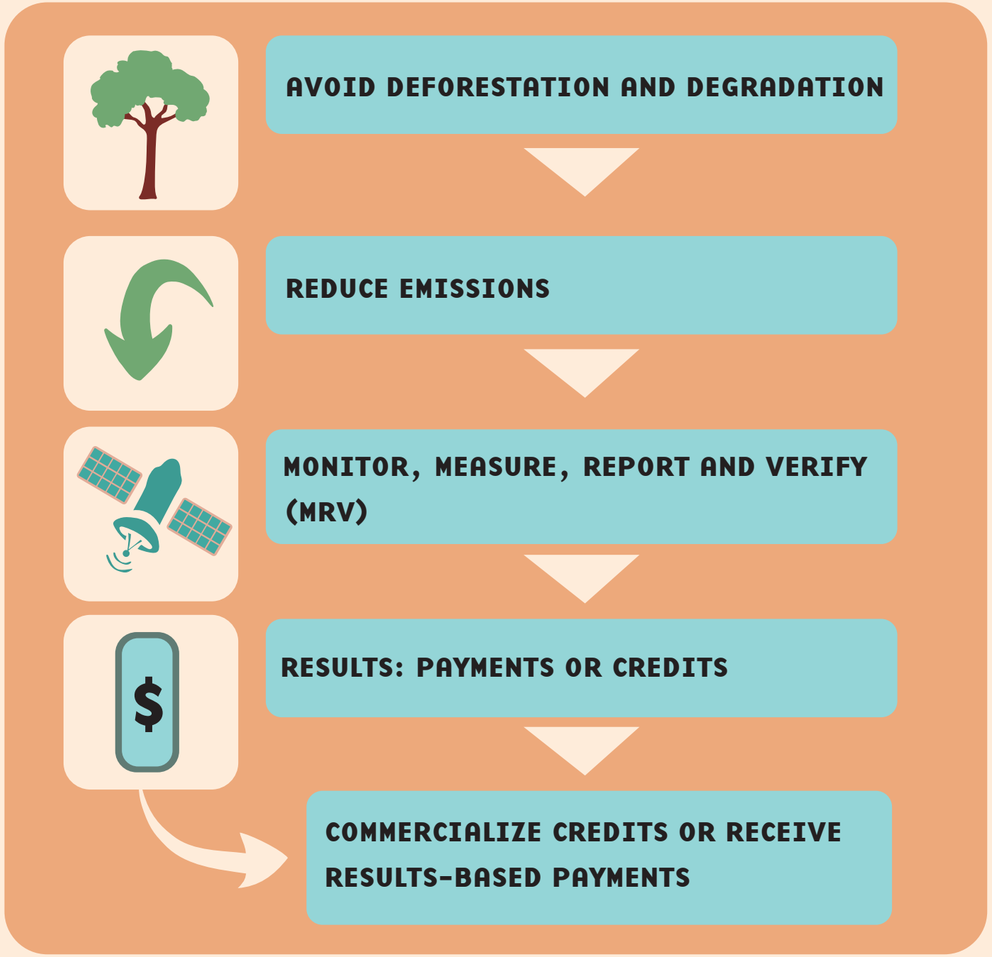
The practical application of REDD+ requires a series of well-organized steps and the participation of many actors. For the mechanism to work effectively, it is essential to have clear rules, well-structured public policies and, above all, the **active participation of local communities, who are the true protectors of the forest.**

The REDD+ mechanism can be applied in two ways:

- **Jurisdictional** (governments) - Involves entire states or countries.

- **Local projects** (volunteers) - Developed by NGOs, associations, cooperatives, or companies, often with international certification.

In practice, REDD+ works as follows:



One of the most important pillars for the success of REDD+ is **forest governance,** or how territories are protected, controlled, and managed. This includes everything from laws prohibiting illegal deforestation and measures to enforce the **respect for the rights of communities** living in the forest. A good example is the Amazon Deforestation Prevention and Control Plan (PPCDAm), a public policy created in 2004 that helped Brazil reduce deforestation by around 70 percent between 2004 and 2012, combining coercive measures, satellite monitoring, and economic incentives. However, the increase in deforestation in subsequent years shows that efforts must be sustained, updated, and reinforced.

Another essential element is the participation of Indigenous Peoples and Local Communities. When communities are involved from the outset, **projects are more likely to succeed,** as they are based on knowledge of the territory, respect for traditions, and the analysis of concrete benefits for those who care for the forest.

REDD+ initiatives must conduct a **Free, Prior, and Informed Consultation (FPIC),** as stipulated in the International Labour Organization (ILO) Convention 169, an international treaty created in 1989 that recognizes the rights of Indigenous Peoples and Local Communities. It establishes, among other things, that these peoples must be consulted in a free, prior, and informed manner whenever decisions, projects, or laws that affect their territories or their lives are made. This FPIC process allows the community itself to decide whether or not it wants to participate in REDD+.

The implementation of REDD+ also requires **technical training**, such as training in satellite monitoring, financial management, and report writing. This **strengthens the autonomy of communities** and enables them to participate actively in all stages.

However, there are also practical challenges. In many places, there are land conflicts, a lack of land regularization, and threats from external interests. It is also necessary to ensure that resources are managed transparently and that audit and social control mechanisms are in place to prevent misappropriation and strengthen trust.

ACTORS INVOLVED IN THE CARBON CHAIN

LAND STEWARDS

WHO

- Local governments
- Landowners
- Cooperatives
- Indigenous Peoples and Local Communities (IPs & LCs)

WHAT THEY DO

- Decide on land use and forest protection
- Implement and monitor local actions

PROJECT DEVELOPERS

WHO

- Companies
- Civil society
- Associations
- Consultants

WHAT THEY DO

- Design and implement carbon/ REDD+ projects

METHODOLOGY DEVELOPERS

WHO

- Standards (Verra, Gold Standard) and their representative organizations
- Research institution

WHAT THEY DO

- Create methodologies and technical rules for projects

CERTIFIERS

WHO

- Independent auditors

WHAT THEY DO

- Validate and verify projects

INTERMEDIARIES

WHO

- Brokers
- Traders
- Sales platforms

WHAT THEY DO

Connect projects to buyers

- *Brokers:* act as the bridge between projects and buyers
- *Traders:* buy and resell credits in the market

CLIENTS

WHO

- Companies
- Individuals
- Governments

WHAT THEY DO

- Purchase credits to offset their emissions/carbon footprint

GOVERNMENTS AND MULTILATERALS

WHO

- National/subnational governments
- UN
- GCF

WHAT THEY DO

- Create policies, funds, and jurisdictional programs

6

Challenges for REDD+

Although REDD+ offers important ways to protect forests and tackle climate change, its implementation still faces numerous technical, financial, political, and social challenges.

One of the main challenges is the **creation of reliable baselines,** which are used to calculate how much carbon will actually be prevented. This requires detailed historical data and models that take into account various factors, such as economic pressure, population growth, and land use. Many countries do not yet have the technical structure to do this.

Another difficult issue is **real-time monitoring,** which relies on technologies such as satellites, remote sensors, and high-quality internet. Such resources are not always available in the most vulnerable forest regions, and the cost of maintaining these systems is high.

In addition, there are risks of **poor governance,** such as corruption, lack of transparency, and concentration of benefits. Land conflicts between communities, governments, and private companies can also hinder implementation or even exacerbate existing tensions.

From a financial standpoint, REDD+ remains heavily dependent on international donations and the volatility of carbon markets. Carbon credit prices can vary greatly, making it difficult to plan long-term actions. And even when resources do arrive, **forest-dependent communities often receive only a small share of the benefits.**

Another challenge lies in how climate compensation mechanisms like REDD+ are linked to other technological solutions, like carbon capture and storage (CCUS). Although CCUS is promoted as a promising technology for reducing industrial emissions, it currently accounts for less than 0.1 percent of global emissions avoided and still faces high costs and environmental risks.

It is therefore essential to ensure that REDD+ is not used as an excuse to continue polluting, but as a a real alternative for polluting countries to adapt, reduce their emissions, and, at the same time, **justly and effectively promote the valorization of territories, traditional ways of life, and nature.** This will only be possible if territorial rights, FPIC, and fair benefit sharing are respected.

REDD+ must also be integrated with other policies, such as agriculture, energy, and infrastructure, so that there are no contradictions that jeopardize conservation efforts. **Coordination between sectors and different levels of government** is essential for REDD+ to function as a state policy and not merely as a temporary project.

7

Future prospects for REDD+

REDD+ can play an important role in combating the climate crisis, but its future depends on decisions taken now, by governments, territories, and international forums.

On the one hand, new technologies are being developed to improve forest monitoring, such as the use of drones, mobile phone applications, and artificial intelligence. These tools can **help reduce costs, increase data accuracy, and strengthen community control over the territory.**

On the other hand, carbon markets should continue to grow, especially with the regulation of **Article 6 of the Paris Agreement**, which allows cooperation between countries to achieve their climate goals. This could open up new financing opportunities for REDD+ projects, but it also raises concerns about climate justice, transparency, and respect for the rights of forest peoples.

What is ARTICLE 6 OF THE PARIS AGREEMENT?

Article 6 is part of the Paris Agreement, which was created to encourage countries to cooperate with each other in the fight against climate change. It deals with ways of exchanging or sharing the results of emission reductions, such as carbon credits.

This Article paves the way for countries that exceed their climate targets to sell part of these reductions to other countries that cannot meet their targets on their own. But this can only happen if it is guaranteed that:

- The carbon reductions are real and proven (the same reduction cannot be counted more than once);
- There is transparency and oversight, with clear rules and reliable measurement systems;
- Projects respect human rights and the rights of Indigenous Peoples and Local Communities.

To learn more about the Paris Agreement, see Brochure 1 in this series.

Article 6 is still being discussed among countries to define how these exchanges will work in practice, including the involvement of voluntary markets and public mechanisms. It may represent **new financing opportunities** for those who protect forests, but it also requires attention and care so that it does not cause injustices or allow countries to continue polluting instead of changing their habits. At the same time, the value of nature-based solutions, such as sustainable management, ecosystem restoration, and the bioeconomy, is growing. These approaches combine **environmental protection with income generation and the strengthening of the culture of Indigenous Peoples and Local Communities.**

For REDD+ to truly contribute to building a just and sustainable future, it will be necessary to ensure:

- **Participatory governance,** with the effective presence of communities in decision making;
- **Guaranteed land rights,** respecting traditional ways of life and knowledge;
- **Fair distribution of benefits,** so that resources go directly to those who protect the forest;
- **Training and autonomy,** so that the peoples themselves can monitor, manage, and defend their territories; and
- **Transparency in all processes**, from carbon measurement to resource allocation.

REDD+ is not a silver bullet and does not replace other necessary measures, such as **reducing fossil fuel use or addressing the structural causes of deforestation.** But it can be a useful tool if used responsibly, fairly, and respectfully toward the forest and its inhabitants. The purchase of carbon credits must have a significant cost for polluting countries and companies, so that **offsetting** their emissions is more expensive than investing in real change, such as replacing fossil fuels with renewable energies. In other words, credits must serve as an economic incentive for structural transformation, and not to facilitate the maintenance of the polluting production model. The true role of REDD+ is to **value those who protect the forest,** while putting financial pressure on those who continue to depend on the destruction of the environment.

TIMELINE OF INNOVATIONS

NEW COMMITMENTS ON TRANSPARENCY AND IMPLEMENTATION (FUTURE)

1997
COP3 (KYOTO)
CREATION OF THE FIRST CARBON MARKET MECHANISMS (KYOTO PROTOCOL)

2005
THE KYOTO PROTOCOL TAKES EFFECT
INTERNATIONAL CARBON MARKETS BEGIN TO OPERATE

2007
COP13 (BALI)
REDD IS PRESENTED AS A GLOBAL PROPOSAL TO REDUCE EMISSIONS FROM DEFORESTATION

2010
COP16 (CANCUN)
- REDD+ BEGINS, WHICH INCLUDES CONSERVATION, SUSTAINABLE MANAGEMENT, AND FOREST RESTORATION
- CREATION OF THE CANCÚN SAFEGUARDS

2013
COP19 (WARSAW)
RULES ARE DEFINED FOR MEASUREMENT, MONITORING, REPORTING AND VERIFICATION (MRV) AND RESULTS-BASED PAYMENTS

2015
PARIS AGREEMENT PROPOSAL
- GLOBAL TARGETS TO LIMIT WARMING
- CREATION OF ARTICLE 6 FOR COOPERATION AND CARBON MARKETS

2016
THE PARIS AGREEMENT TAKES EFFECT
INTERNATIONAL COMPENSATION PROGRAMS BEGIN

2021
COP26 (GLASGOW)
FINAL REGULATION OF ARTICLE 6 WITH GLOBAL RULES FOR COOPERATION AND CREDIT TRADING

2022
JURISDICTIONAL MILESTONE
FIRST NATIONAL-SCALE REDD+ CREDITS ISSUED BY GUYANA

2023
COP28 (DUBAI)
- LAUNCH OF THE JURISDICTIONAL TECHNICAL ASSISTANCE ALLIANCE TO SUPPORT FOREST COUNTRIES
- ANNOUNCEMENT OF THE TROPICAL FORESTS FOREVER FUND (TFFF)

2024
COP29 (BAKU)
STRENGTHENING THE ROLE OF REDD+ IN CLIMATE FINANCE AND CARBON MARKETS

2025
COP30 (BELÉM) - EXPECTATIONS
- LAUNCH OF THE TROPICAL FORESTS FOREVER FUND (TFFF)
- INCREASED DIRECT CLIMATE FINANCE COMMITMENTS FOR IPLCS
- GREATER TRANSPARENCY AND INTEGRATION OF REDD+ IN NDCS

2030
GLOBAL TARGETS
- HALT AND REVERSE DEFORESTATION
- PROTECT 30% OF LAND AND OCEANS (30×30 TARGET)
- REDUCE GLOBAL EMISSIONS BY 43% TO LIMIT WARMING TO 1.5 °C

2050
GLOBAL GOALS
NET ZERO EMISSIONS TO STABILIZE THE CLIMATE

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