AGRICULTURAL POLICIES IN DEBATE

Payment for Environmental Services in Brazil

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IPAM Amazônia

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ABOUT THIS STUDY

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INTRODUCTORY NOTE

This document has been drafted by the Amazon Environmental Research Institute (IPAM) team with the goal of fostering discussions on the theme of Payment for Environmental Services in the framework of the Agricultural Policy Dialogue Brazil-Germany – APD, based on an overview of Brazilian legislation, regional initiatives, among other aspects. In meeting such a demand, IPAM's goal is to contribute to the strengthening of the role that the Agricultural Policy Dialogue Brazil-Germany seeks to play in order to broaden the understanding by public policy makers, experts and administrators on the main agri-political and environmental issues in both countries.

The Amazon Environmental Research Institute (IPAM) is a Brazilian non-governmental, non-partisan and non-profit scientific organization which has been working for the sustainable development of the Amazon since 1995. Our purpose is to consolidate the Amazon tropical development model by 2035 through the production of knowledge, implementation of local initiatives and influence on public policies, in order to impact economic development, social equality and the preservation of the environment. Our mission is to promote science, education and innovation for an environmentally healthy, economically prosperous and socially just Amazon.

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Introduction

The Payment for Environmental Services (PES) is an economic incentive aimed at environmental conservation based on a change in behavior generated by the valuation of a (environmental) service which was previously perceived and treated as a free good (Sant' Anna & Nogueira, 2012). In Brazil, the theme has gained prominence in the last years, recently culminating in the establishment of a National Policy of Payment for Environmental Services (Law 14.119 of January 13, 2021).

Although we have only achieved a legal framework at the national level this year, challenges related to the implementation of payment for environmental services schemes were already being addressed through other subnational public policies, programs and initiatives. It is worth mentioning that the theme gained ground at the federal level in 1997, based on the enforcement of Law No. 9.433 establishing the National Water Resources Policy, where the charging for water usage becomes an instrument for obtaining financial resources aimed at the recovery of watershed areas, water security and regional development (Atanazio, 2019).

Since 2007, a bill aimed at establishing a National Policy of Payment for Environmental Services was being discussed by the Brazilian House of Representatives (PL 792/2007), but was not approved. However, a specific reference to the PES emerged only in 2012 when the new Forest Code was discussed and approved (Law 12.651/2012). In Article 41, the Code authorized *"the government to establish a program to support and encourage the conservation of the environment and sustainable rural production"* through a market for environmental services.

To address regional and local challenges, several states and municipalities have taken initiative in passing their own laws in recent years. PES initiatives involving public and private bodies have also been promoted in the country, such as the Oasis Project by the Boticario Group Foundation (see more details in the following sections). These experiences have supported debates on the PES at the National Congress and have been responsible for many improvements in the text of the PES law mentioned earlier, passed in 2021.

In this context, IPAM has been one of the key institutions in qualifying discussions on the subject at national and regional levels, as well as in technical support for the adoption of robust public policies to encourage conservation and implementation of initiatives aimed at valuing environmental services with a focus on rural areas. Based on IPAM's previous experience with the theme, we have prepared this brief document as a contribution to discussions to be promoted under the initiative entitled "Agropolitical Dialogue Brazil-Germany". We also hope that the information presented here will serve future efforts to integrate environmental conservation and sustainable cattle and agricultural production strategies.

1. Threats to environmental services offered by the Amazon

By 2020, the Legal Amazon area had already lost 20% of its original forest cover, about 82 million hectares of forests (TerraBrasilis/INPE, 2020). Despite this vast already deforested area, in large proportion for extensive livestock use, and of which about 10-15 million hectares are abandoned or underutilized, another 15 million hectares can still be legally deforested in the coming years (Forest Code Thermometer[1]).

The advance of Amazon deforestation has important implications of great complexity and breadth. For instance, these relate to global and regional climate change, food production and threats to constituted rights, in particular to land rights of indigenous peoples and traditional communities.

Increases in greenhouse gas (GHG) emissions, in particular CO^2 resulting from Amazon deforestation, pose real threats to the global and regional climate balance. The region's forests store the equivalent of a decade of global CO^2. This is a volume which, if released into the atmosphere via deforestation, could jeopardize the "health" of the planet. Expected impacts will also be of regional or continental proportions (Moutinho & Schwartzman, 2005). According to Machado Filho et al. (2016), the increase in temperature in the Amazon (which could reach up to 8 oC by the end of the century), combined with increased variability in regional rainfall patterns, will lead to a reduction in rainfall volume, greatly impacting agricultural productivity and, consequently, the country's food security and, by connection, the world's.

1 For more details on the thermometer tool, access the Forest Code Observatory and download the app: https://observatorioflorestal.org.br/termometro-do-codigo-florestal-coloca-a-transparencia-nas-maos-do-cidadao/

Under this future scenario, the European Union already considers that the growing emission brought about by deforestation and forest fires in Brazil could place mitigation efforts achieved by the EU at risk (RAJAO et al., 2020).

In this context of forest destruction, numerous ecosystem services may no longer be provided by the Amazon. Among them, (1) GHG storage and sink mechanisms; (2) maintenance of a stable rainfall pattern; (3) preservation of 10-20% of the planet's biological diversity, much of which is unknown to science; among other services. A rupture in the provision of such services through continued deforestation has immediate implications to Brazil. Among them, those resulting from the reduction of food, water, energy and economic security (Joly et al., 2019). Economic losses resulting from the loss of ecosystem services through deforestation, for example, can reach US$ 737 per hectare, according to a study led by Federal University of Minas Gerais researchers in partnership with the World Bank (Jon Strand et al., 2018).

Historically, much of the federal government's efforts in controlling and combating deforestation has taken place through command-and-control actions. Such a strategy was not enough to curb the massive degradation of natural resources, mainly because punitive actions against illegal loggers seem more efficient if interspersed with positive incentive actions for those who preserve the forest. In this sense, the degradation of ecosystems can be seen as the result of a market failure in not being able to recognize and internalize the value of environmental services responsible for human well-being (Altmann, 2010). Thus, the option to conserve has not been as attractive as the option of degrading it in favor of the establishment of income-generating economic activities. Economic incentives, therefore, have the potential to help reversing this scenario.

In the Brazilian Amazon, payment for environmental services can be a means of contributing to the reduction of deforestation in the region and helping to avoid the potentially drastic consequences of historical development patterns over the environment and the livelihoods of the population (Hall, 2008). A recent study on the relationship between deforestation, rainfall and agricultural profitability focused on the Southern Brazilian Amazon estimated that reducing deforestation can prevent annual loss of US$ 1 billion in agriculture production in the region (Leite-Filho et al., 2021).

2. Advancements in policies to encourage payment for environmental services in Brazil

In 1997, having water usage charges as an instrument provided for in the National Water Resources Policy (Law 9.433/1997) signalizes the importance of promoting incentive policies to complement command and control efforts in the country. In this context, water usage charges were perceived as an effective public policy strategy for water security and regional development (Atanazio, 2019). After 10 years, the first bill (PL 792/2007) seeking the establishment of a National Policy of Payment for Environmental Services was drafted by Deputy Anselmo de Jesus and submitted to National Congress.

In the course of its proceedings within the House of Representatives, this bill sparked several discussions on the subject with the participation of organized civil society. It is worth mentioning that one of the motivations for the proposal of a National Policy of Payment for Environmental Services was related to a broader discussion involving social movements throughout the Amazon in the context of the construction of a Socio-environmental Development Program for Family Farmers called *ProAmbiente*.

ProAmbiente was introduced to the federal government by social movements with technical support by IPAM and other civil society organizations, being adopted as public policy in 2004. ProAmbiente aimed to promote agri-ecological transition, environmental conservation and the provision of environmental services in one single strategy (Mattos et al., 2010). However, due to the lack of a legal framework in the country acknowledging the valuation of environmental services, among other reasons, Proambiente was not effectively consolidated (Stella et al., 2012).

After bill No. 792/2007 moved through the Committees of Agriculture, Livestock, Food Supply and Rural Development (CAPADR) and Environment and Sustainable Development (CMADS) within the House of Representatives, it remained practically stagnant.

In 2012, the theme of payment for environmental services was recognized at the federal level through the approval of the new Forest Code (Law 12.651/2012). The Article 41 of Brazilian Forest Code provided for a program to support and encourage the forest conservation and sustainable rural development.

Article 41 of Brazilian Forest Code. The federal government is authorized to institute, without prejudice to compliance with environmental legislation, a program to support and encourage the conservation of the environment, as well as for the adoption of technologies and good practices that reconcile agricultural and forestry productivity, with reduction of environmental impacts, as a way of promoting ecologically sustainable development, always observing the criteria of progression, contemplating the following categories and lines of action:

I - payment or incentive to environmental services as monetary or non-monetary remuneration to conservation activities and ecosystem improvement and which generate environmental services, such as, independently or jointly: a) sequestration, conservation, maintenance and increase of stock and reduction of carbon flow; b) the conservation of natural scenic beauty; (c) biodiversity conservation; (d) the conservation of water and water services; e) climate regulation; f) cultural valorization and traditional ecosystem knowledge; (g) soil conservation and improvement; h) the maintenance of Permanent Preservation Areas, Legal Reserves and Restricted Usage Areas.

The next step then would be the regulation of Article 41 of the New Forest Code. In this sense, several discussions in different spaces of dialogue have been held for the drafting of a proposal for regulation of Article 41 of the Forest Code. One of such spaces was the Brazilian Coalition on Climate[2], Forests and Agriculture established in 2015 as a multi-sectoral movement, composed of almost 300 entities which lead agribusiness in Brazil, the main civil organizations in the area of environment and climate, representatives of academia, sector associations and leading companies in the areas of wood, cosmetics, steel, pulp and paper, among others.

In 2018, the draft proposal built in a joint effort involving the Forum of State Secretaries of the Environment of the Legal Brazilian Amazon and, later, the Forum of Governors of the Legal Amazon was finally delivered to the Brazilian Ministry of Environment and the Ministry of Agriculture, Livestock and Food Supply. Despite all efforts, Article 41 has not been regulated to date.

2 The main role of the Brazilian Coalition on Climate, Forests and Agriculture is to articulate and facilitate actions for the country to promote a new model of economic development based on the low-carbon economy, thus responding to climate change challenges.

A new opportunity to establish a legal framework in the country on the subject emerged in the House of Representatives in September 2019. Draft law No. 312/2015, authored jointly by Representatives Rubens Bueno and Arnaldo Jordy and aiming at establishing a National PES Policy, was approved by a large majority in the House and was submitted to the Federal Senate, where it was acknowledged as PL 5.028/2019. The content of PL 312/2015 is inspired by PL 792/2007, the result of a broad debate process with civil society involvement, as previously said. The most significant difference in the new text was the withdrawal of the PES Federal Fund, with the justification that the creation of a specific fund to operationalize PES systems was unnecessary.

Despite its achievements, PL 5.028/2019 required adjustments to ensure a broader policy to accommodate the different PES schemes without prejudice regional public and private developing initiatives. It was in this sense that the Brazilian Coalition PES Task Force[3] (FT PES), which already monitored the topic at the National Congress focused on his efforts. Among FT PES's main contributions to the improvement of the text of the bill, it is worth mentioning:

PROPOSED CHANGES	JUSTIFICATION
Allow compensation for Legal Reserves (RL) and Permanent Preservation Areas (APP) with monetary public resources.	Article 41 of the Forest Code already recognizes environmental services provided in RL and APP and contemplates incentives for their maintenance and/or recovery. Furthermore, the experiences of Payment for Environmental Services already underway in the country[4], whether with public/private resources or both, has shown additionality in the results achieved since it promotes a change of behavior in favor of the provision and/or recovery of environmental services, which would be unfeasible in the absence of such economic incentive.
Ensure the presence of representatives of civil society working to defend the environment in the composition of the collegiate, as well as representatives of indigenous peoples and traditional communities, thus securing regional social diversity.	Governance and social participation instruments are aspects which are increasingly required by international funds and investors to ensure the proper implementation and impact of the agreed resources. The collegiate body provided for by law must therefore ensure the participation of those recognized by it as a priority target audience: indigenous peoples, traditional and family farming communities.
Recognition of environmental services generated in agroforestry and sustainable management systems, which contribute to carbon capture and retention and conservation of soil, water and biodiversity quality.	The adoption of low-impact production practices and the sustainable management should be fostered by the law through the promotion of a transition to a low-carbon economy and by increasing the resilience of rural areas to the impacts of climate change.
Recognition of Private Natural Heritage Reserves (RPPN)[5]	This is an opportunity to value the voluntary effort by owners engaged in environmental conservation and biodiversity protection.

3 The PES Task Force brings around 30 entities together, including institutions which have historically operated on the subject, such as: the Amazon Environmental Research Institute (IPAM), The Nature Conservancy (TNC), Grupo Boticario Nature Protection Foundation, The Business Council for Biodiversity and Sustainable Development (CEBDS), World Wildlife Fund (WWF), BVRio, World Resources Institute (WRI), Proactiva, National Confederation of Natural Heritage Private Reserves (CNRPPN), Natura, Suzano, Tropical Forest Alliance, among others.

4 Among the initiatives, it is worth mentioning: the Water Producer (National Water Agency), Oasis project (O Boticario Foundation), Conservative Water Project (Extrema Municipal Prefecture (ES) in partnership with TNC).

5 The Natural Heritage Individuals Reserve (RPPN) is a conservation unit (UC) of private domain, established in

The influence of the FT PES was fundamental to improve critical aspects in the text of the law and to promote debate through public hearings in the Federal Senate. At the end of 2020, the opinion of the rapporteur (Senator Fabiano Contratto) was voted and it contemplated much of the proposed enhancements. Thus, the text was voted in the House, approved and submitted for presidential sanction. In January 2021, President Jair Bolsonaro sanctioned Law 14.119/21 establishing the National Policy of Payment for Environmental Services (PNPES) and the Federal PES Program (PFPES). However, the approval was made with vetoes which threatened the effectiveness of the federal program provided for by law[6]. Once again, in a joint effort to overturn most of the vetoes and recover the robustness of the Federal PES Program in the text of Law 14.119/2021, the Brazilian Coalition PES Task Force, along with other partner entities and several parliamentarians historically committed to this agenda, have managed to rescue:

› *The Collegiate Body* – ensures social participation in the PFPES with representativeness to evaluate the program, propose priorities and criteria for the application of resources and monitoring the compliance of investments to be made in accordance with the objectives and guidelines of the PES policy.

› *The binding aspect of the PES in Conservation Units* – establishes that resources from the conservation of native vegetation in conservation units (UC) shall be applied by the competent environmental agency in activities related to land regularization, management plan, inspection, monitoring, sustainable management of biodiversity and other aspects regarding the unit itself.

› *National Register of Payments for Environmental Services* – the registration of PES contracts, including public or private bodies, ensures transparency, allows access to data on environmental services provided, methodologies used and other information.

› *Tax incentive* - the taxation of payments to service providers could be detrimental to the effective implementation of the PES National Policy, to the extent that it would reduce resources which shall eventually be passed on.

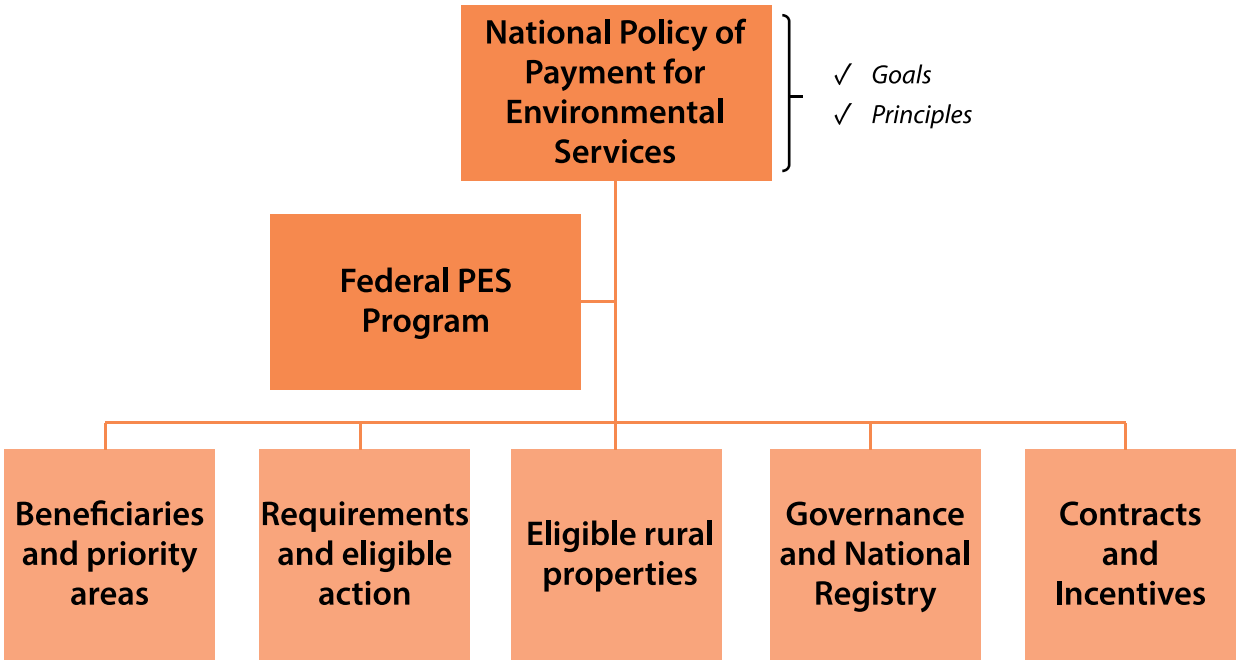
accordance with its by-laws, with the objective of preserving biological diversity. Individuals or legal entities owning rural or urban properties with potential for nature conservation may establish an RPPN. In it, they are allowed to conduct scientific research and visitation activities for tourist, recreational and educational purposes.

6 Technical note from the Brazil Coalition on vetoes to Law 14.119/21 available at: http://www.coalizaobr.com.br/home/index.php/posicionamentos/item/1179-nota-tecnica-da-coalizao-brasil- sobre-os-vetos-a-lei-n-14-119-de-13-de-janeiro-de-2021-que-institui-a-politica-nacional-de-pagamento-por- servicos-ambientais

Law 14.119/21 recognizes as actions eligible for PES:

I – the conservation and recovery of native vegetation and its biodiversity in rural areas;
II - the conservation of plant remnants in urban and peri-urban areas;
III - the conservation and improvement of the quantity and quality of water;
IV - the conservation of landscapes of great scenic beauty (e.g. national parks);
V – the recovery and reconstitution of native vegetation cover in degraded areas through the planting of native species or by agroforestry system;
VI – the sustainable management of agricultural and agroforestry systems;
VII – the maintenance of areas covered by native vegetation which may still be legally deforested.

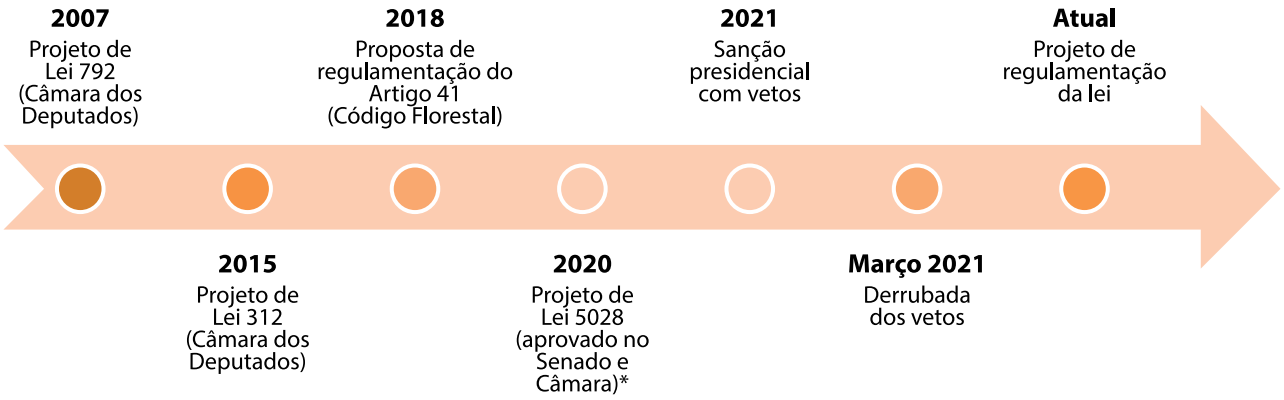
After vetoes were revoked, the final text of Law 14.119/21 was structured as follows:



In order for the actions foreseen in the recently approved National PES Policy to be implemented on a national scale, there is still a need for its regulation indicating the way in which its Federal PES Program is implemented, the institutional arrangements

for its functioning and governance, the criteria and indicators for monitoring actions, contract rules, among other measures. Through its PES and Carbon Market Task Forces, the Brazilian Coalition has been working to generate the necessary subsidies for this debate and recommendations for the regulation of this law, which is so important to the country and to different sectors of our economy.

A tramitação de PSA no Congresso Nacional



** A maioria dos aperceiçoamentos no texto proposto pela Força Tarefa PSA da Coalizão Brasil foram aceitas pelo relator (senador Fabiano Contaratto)*

3. Regional PES initiatives

At the regional level, Amazonian states have dedicated efforts in recent years to the establishment of incentive policies regarding forest conservation. The table below shows some of the legal frameworks already established in the Legal Amazon states from a survey recently conducted by IPAM (Pinto et al., 2021).

STATE	LEGAL INSTRUMENT	GOAL
ACRE	Law No. 2.308 of October 22, 2010	Creates the State-led Incentives System for Environmental Services - SISA, the Environmental Services Incentive program - ISA Carbono and other environmental services programs and ecosystem products of the state of Acre.
AMAPA	Decree No. 5.096 of August 27, 2013.	The decree establishes the Amapa Climate Change and Environmental Services Forum - FAMCSA.
AMAZONAS	Law No. 4.266 of December 1, 2015.	The law establishes the Amazon State Policy on Environmental Services and the Environmental Services Management System and the State Fund for Climate Change, Environmental Conservation and Environmental Services.
	Decree No. 42.368 of June 5, 2020.	Restructures the Amazon Climate Change, Biodiversity and Environmental Services Forum.
MARANHAO	State Decree no 34.916, of June 4, 2019.	Establishes an Inter-institutional Working Group for the drafting of the "Valuing Environmental Assets in Maranhão: Jurisdictional System for Reducing Emissions from Deforestation and Forest Degradation (REDD+)" project.
MATO GROSSO	Complementary Law No. 582/2017.	Establishes the State Climate Change Policy (ECMW), promoting measures to reduce anthropogenic emissions of greenhouse gases and the strengthening of carbon sinks.
PARA	Law 9.048 of April 29, 2020.	Establishing the Climate Change Policy of the State of Para.
RONDONIA	Law No. 4.437 of 17 December 2018	Establishes the State Policy for Climate Governance and Environmental Services (PGSA).
RORAIMA	Decree No. 29710-E, of 9 December 2020	Establishes the State Policy for Low Greenhouse Gas Emissions Economic-Environmental Development
TOCANTINS	Law 1.917 of 17 April, 2008.	Establishing the State Policy on Climate Change, Environmental Conservation and Sustainable Development in Tocantins.

In 2015, over 2,000 public, private and community-based PES initiatives at different stages of development were registered in Brazil (Forest Trends, 2015). Among them, it is worth mentioning:

3.1. Conservative Water Project (Municipality of Extrema - Minas Gerais State)

This is a pioneering Brazilian project in payments for environmental services (PES) by promoting the environmental adequacy of rural properties and maintaining the quality of riverheads in Extrema municipality. It has won several awards for the preservation and improvement in environmental quality in the State of Minas Gerais. In 2018, it reached the amount of 1.6 million seedlings sowed and 6,849 hectares protected.

3.2. Reforestation Program (Espírito Santo State)

The Reforestation Program is an initiative implemented by the Espírito Santo State Government and it is aimed at promoting the Payment for Environmental Services (PES) in recognition of benefits generated by the conserved or in-recovery native forest by rural landowners (priority for rural smallholders). The transfer of resources is made by the signing of a contract between the rural producer and the Secretariat of State for Environment and Water Resources (SEAMA). In 2018, the program promoted the recovery, natural regeneration, management and adoption of best practices for land usage in about 17,000 hectares.

3.3. Projeto Oasis (São Paulo, Paraná, Santa Catarina and Minas Gerais States)

Projeto Oasis aims at strengthening the protection of forest remnants, rewarding those who have historically promoted conservation actions in maintaining or improving water quality through payment for environmental services. Projeto Oasis has different sources of funding, public and private, and technical support from the Grupo Boticário Foundation for Nature Protection.

In the period between 2013 and 2017, IPAM has also implemented a PES Program involving rural smallholders of the Amazon under the scope of the project called "Sustainable Settlements in the Amazon", financially supported by the Amazon Fund. In general, the project benefited more than 2,000 families in the western region of the state of Para and became a reference in the integration of strategies capable of bringing sustainability to rural territories of Amazon. In 2020, it was acknowledged by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) as one of the most transformational experiences under the Big Push for Sustainability in Brazil, in the Socio-biodiversity & Sustainable Territories categories. The project was able to promote the reduction of deforestation in small rural properties and, at the same time, improve family income generation based on investments in the productivity of areas of operation, support to environmental regularization, qualified rural technical assistance, among other benefits. Among the approximately 300 families who received such benefits plus payment for environmental services, results achieved have proven to be even more ambitious. On average, there was a 177% increase in gross income generated from rural production and a 75% reduction in the annual deforestation rate compared to a 10-year historical baseline. Thus, the project demonstrated that it is possible to reconcile forest cover conservation and income generation (Pinto et al., 2020). As lessons learned from this PES experience, it is worth mentioning:

- establishment of contractual ties with clear rules for full understanding by PES providers;

- adoption of participatory processes from the elaboration of the project to the establishment of the PES criteria, valuation methodology, monitoring strategies, consequences in cases of non-compliance with rules, among others;

- the provision of qualified rural technical assistance for the transition from conventional production practices to low-impact models, such as the adoption of agroforestry systems, among others;

- establishment of criteria related both to the conservation of forest remnants and to the improvement of agricultural production in open areas, ensuring a change in the land use patterns. The expectation is to establish new dynamics where economic prosperity does not require the deforestation of new areas, thus increasing the chances of sustainability of results achieved beyond the end of the project;

- participatory monitoring system towards compliance with commitments made with involvement of community leaders.

The REDD+ mechanism

REDD+ is the recognized acronym under the United Nations Framework Convention on Climate Change(UNFCCC) which means Reducing Emissions from Deforestation and Forest Degradation, plus:

- conservation of forest carbon stocks;
- sustainable forest management; and
- increase in forest carbon stocks.

It is a mechanism where developing countries holding rainforests can receive incentives or financial compensation for efforts aimed at reducing GHG emissions resulting from deforestation in their territories (Moutinho et al., 2012). Therefore, it is a form of payment for environmental services.

The concept originated in 2003 during the Conference of the Parties (COP 9) held in Milan when a group of researchers coordinated by IPAM launched the proposal entitled "Compensated Reduction for Deforestation" (Moutinho and Schwartzman, 2005). In 2015, Brazil launched its National Strategy for REDD+ (ENREDD) aimed at contributing to mitigating climate change by eliminating illegal deforestation, conservation and recuperation of forest ecosystems and the development of a sustainable low-carbon forest economy, generating economic, social and environmental benefits1. The responsibility for coordination, follow-up and monitoring of the National REDD+ Strategy lies on the National Redd+ Commission (CONAREDD+) established by Decree No. 8.576 of 20151. Since then, numerous REDD+ initiatives have been built at the state level, dubbed REDD+ Jurisdiction, that is, they follow the guidelines within programs and policies of a government (Moutinho et al. 2012).

In Brazil, states have moved ahead and adopted their own legislation to regulate REDD+ mechanisms (Moutinho & Guerra, 2017). The states of Amazonas and Acre are pioneers in the design and implementation of REDD+ Jurisdictional Programs with resources from domestic sources (Federal and State Governments; Private Sector and Amazon Fund) and international (World Bank, Inter-American Bank and German Bank KFW) (da Silva et al, 2017). The achievements in the REDD+ agenda have allowed the participation of some Amazonian states, such as Mato Grosso and Acre, in the REDD+ for Early Movers Program (REM), coordinated by KFW. More recently, the states of Roraima and Maranhão have prepared a proposal for the implementation of a State Judicial System of Environmental Services and REDD+ with technical support by IPAM and other entities.

At the federal level, it is worth mentioning the launch of the Forest+ Program, which is being implemented with the support of the Green Climate Fund (GCF) and which aims to accelerate market initiatives, including REDD+, voluntary markets, among others (Costa et al., 2020).

4. Conclusions

Law 14.119/2021 is a great achievement in creating legal certainty and a more favorable environment for PES initiatives in the country. However, it does not solve all our problems. It is necessary to analyze the opportunities in this new global scenario and, from this more favorable legal environment, attract investments to scale up initiatives. Therefore, the process of regulating the law is fundamental to pave the way in the right direction. It should be noted that many PES initiatives still rely on philanthropy resources, public resources, state funds, among others. Generally, such initiatives are unable to meet the demands of market mechanisms or are seen as high risk due to various factors (e.g. issues related to land regularization, among others). By ensuring priority to this target audience composed mainly by family farmers, extractive communities and indigenous peoples, the national PES law brings the challenge of seeking a solution capable of attracting investments to territories occupied by them. It is worth remembering that although responsible for much of the conservation of forest remnants in the Amazon region, indigenous peoples and extractive communities are also among the most vulnerable population from the socioeconomic and climate points of view.

It is necessary to foster PES initiatives with reliable and fair valuation methodologies, with guaranteed rights to the communities providing such services, with robust and low-cost monitoring systems. It's not an easy task to connect environmental service providers and payers. However, the regulation of Law 14.119/21 can create important subsidies for us to achieve it in a robust, efficient and transparent way. This is a fundamental strategy to turn forest conservation and restoration into an attractive business for environmental service providers and civil society as a whole. There is a huge volume of national and international resources which may be channeled through the Federal Payment for Environmental Services Program (PFPES). The Global Environment Fund, for example, is mobilizing $4.1 billion to support global environmental issues and national sustainable development initiatives in its seventh edition. Another example is the Inter-American Development Bank, which allocates about US$2.5 billion a year for sustainable development actions. The PES also represents opportunities for the private sector, as an increasing number of companies have aligned their commitments with the ESG 14 (Environmental, Social and Corporate Governance) agenda. Thus, opportunities to establish partnerships and projects which ensure the provision of environmental services can reverse the current scenario of setbacks in the national socio-environmental agenda with the increasingly strengthened participation of the productive sector.

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