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Reducing Emissions from Deforestation and Carbon Credit

Indigenous peoples and incentives for forest
protection

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Abstract

The public/private LEAF (Lowering Emissions through Accelerated Forest Finance) Coalition has committed an initial \$1 billion to compensate jurisdictional-level reductions in tropical deforestation, verified through a rigorous, independent standard that fully incorporates the Cancun social and environmental safeguards. The Coalition's decision to pay for jurisdictional reductions in deforestation, which may include individual emissions reductions projects nested within jurisdictional programs, but not stand-alone projects marks a major market development favoring jurisdictional approaches, following policy decisions under the Paris Agreement, the aviation emissions reduction accord known as CORSIA, and the California cap-and-trade system. Jurisdictional approaches produce high-quality emissions reductions¹ while allowing benefits to flow to communities, such as Indigenous peoples, with low historical emissions as well as those with high historical emissions who successfully reduce.

The German Development Bank's REDD Early Movers (REM) Program in Acre and Mato Grosso states illustrates how equitable and effective jurisdictional emissions reductions programs have worked, and model how they can work elsewhere. In Acre, project resources for the Indigenous subprogram were roughly proportional to the area of the state occupied by Indigenous territories, and were allocated according the priorities defined by 20 Indigenous leaders, from most of the 36 Indigenous territories of the state. Acre innovated in developing its Incentive System for Environmental Services by clearly defining the beneficiaries of incentive payments (such as the REM) as the providers of the environmental service of reducing

¹ Schwartzman, Stephan, Ruben N Lubowski, Stephen W Pacala, Nathaniel O Keohane, Suzi Kerr, Michael Oppenheimer, and Steven P Hamburg. "Environmental Integrity of Emissions Reductions Depends on Scale and Systemic Changes, Not Sector of Origin." *Environmental Research Letters* 16, no. 9 (September 1, 2021): 091001. <https://doi.org/10.1088/1748-9326/ac18e8>.

deforestation – including Indigenous and traditional communities in the first instance – rather than owners of carbon rights stemming from asset ownership of land or forest carbon stocks. This formulation allows equitable and effective allocation of benefits while avoiding potentially astronomical transactions costs, intractable conflicts and indefinite delays in devising and awarding carbon rights based on land tenure, for example.

Mato Grosso's REM program included a highly participatory Indigenous Territories subprogram, formulated through the recently organized Mato Grosso Federation of Indigenous Peoples and Organizations (FEPOIMT), in consultation with 42 of the 43 Indigenous peoples of the state. The subprogram focused on strengthening FEPOIMT and the states Indigenous organizations, territorial management planning and support for Indigenous women and youth political mobilization, as well as an emergency COVID response project. An independent civil society evaluation found that donor mediation allowed unprecedented dialogue between state government and Indigenous organizations, and contributed greatly to the consolidation of FEPOIMT as a political actor.

Key Words

Forest carbon, Indigenous peoples, incentives.

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Reducing Emissions from Deforestation and Carbon Credit: Indigenous peoples and incentives for forest protection

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Introduction

The launch of the LEAF (Lowering Emissions through Accelerated Forest Finance) Coalition, with Norway, the US, the UK, Amazon, Salesforce, Nestle, Unilever and other corporations committing at least US\$ 1 billion to pay countries and states for verified reductions in tropical deforestation, has re-surfaced discussions of the potential risks and benefits of these kinds of transactions for forests and Indigenous peoples and local communities. Some of the issues surrounding the LEAF Coalition recall discussions in the United Nations Framework Convention on Climate Change (UNFCCC) over Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD+), the policy framework taken up by the UNFCCC in 2005, and definitively adopted in article 5 of the 2015 Paris Agreement. In recent years there have been important developments in incentive policies for reducing deforestation as well as several concrete examples of how the approach can be implemented on the ground that must be considered when assessing potential risks and benefits of the LEAF initiative. Acre state's Incentive System for Environmental Services (SISA) in particular developed a critical innovation, in determining that its beneficiaries are the providers of the environmental service of reducing deforestation – in the first instance, Indigenous peoples and traditional communities – rather than the owners of carbon rights based on ownership of land or forest carbon stocks.

Projects and Jurisdictions

In recent years all major international policy forums have chosen to accept emissions reductions from deforestation at jurisdictional – state or national – levels, but not stand-alone project levels. The UNFCCC Paris Agreement article 5 (REDD+), the International Civil Aviation Organization's Carbon Offsetting and Reduction System for International Aviation (CORSA),

and the California Tropical Forest Standard (TFS) allow carbon crediting for state or national-level emissions reductions from deforestation, but not for stand-alone projects. That the ART/TREES standard exclusively used by the LEAF coalition accepts only jurisdictional emissions reductions from deforestation is thus consistent with all of the major compliance, or regulated, market policy frameworks. This has extremely important consequences for the environmental and social quality of emissions reductions.

Stand-alone projects, regardless of the sector of origin of the emissions, are necessarily based on projecting a baseline scenario detailing what would have happened had the project not been done. Describing such a “business-as-usual” scenario may in some cases be relatively simple (e.g., methane emissions from a sanitary landfill), but may be much more complex and uncertain when projecting e.g. future deforestation in a given 1,000 – or 1,000,000 - hectares of forest. Project developers are also likely to voluntarily opt-in to places where baselines offer compelling economic returns. By contrast, jurisdictional approaches encompass all actors within a large region, reducing opportunities for self-selection. Furthermore, jurisdictional emissions reductions systems generally quantify emissions reductions relative to a historical baseline, which is further required to decline over time. This eliminates the need to construct counterfactual scenarios for future emissions, ensures absolute reductions in emissions at large scales, and builds in growing ambition over time to ensure deforestation keeps declining.

The jurisdictional approach has particularly important implications for Indigenous peoples and local communities. Stand-alone projects, in any sector, invariably favor historically high emitters, because they have more scope to reduce their emissions (or greater “additionality”). Since Indigenous peoples and local communities often have low or no historical deforestation they are usually eligible for relatively little credit. But a jurisdictional approach, which achieves state- or nation-wide emissions reductions can divide benefits as the jurisdiction, or stakeholders, see fit in order to achieve ongoing emissions reductions goals, including through benefits for Indigenous peoples. Examples from the KfW/GIZ REDD Early Movers Program (REM) demonstrate how this has worked in practice.² Donors and/or private buyers and

² “REDD+ in the State of Acre, Brazil: Rewarding a pioneer in forest protection and sustainable livelihood development.” KfW Development Bank. January 2017. <https://www.kfw-entwicklungsbank.de/PDF/Entwicklungsfinanzierung/Themen-NEU/REDD-Early-Movers-Acre-Fact-Sheet.pdf>

investors in jurisdictional programs can help ensure that Indigenous peoples and local communities are included in planning and in benefit sharing.

REDD Early Movers Program – Jurisdictional REDD+ in Practice

Acre

The REM Program was launched in 2011 at the Rio+ 20 international environmental conference, by the German Federal Ministry for Economic Cooperation and Development (BMZ) with the goal of rewarding countries or states that had taken action to reduce deforestation. The state of Acre, a sustainable development pioneer in the Amazon, had since 1998 been developing and implementing sustainable low-carbon development policies, including the 2010 state Incentive System for Environmental Services (SISA). Between 2005 and 2015, Acre reduced its deforestation by about 60%, reducing its emissions by almost 40 million tCO₂e, while increasing GDP, GDP per capita, and agricultural production. German Development Assistance agencies KfW and GIZ and the Acre government agreed on a deforestation baseline of the 2001 – 2010 average deforestation rate and on compensation at USD5/tCO₂ for part of the emissions reductions achieved between 2011 and 2015 (about 16.5% of reductions below the baseline). Acre in fact reduced emissions far more than it was compensated for. Overall, Acre received USD 30.44 million from 2012 – 2017, in two contracts. Between 10% and 30% of the resources went to strengthen administration of the SISA, while between 70% and 90% went to on-the-ground beneficiaries (Figure 1)³

³ Röper, Monika., Camargo, Marisa., Brandão, Sâmia Milena. “Conceptual bases, results and lessons learned of REDD+: the implementation of the first phase of the REDD early movers programme in Acre.” 2018. KfW and the Instituto de Mudança Climática do Acre.

Results in synthesis

REDD-Early-Movers-Program (Acre 2012-2017)

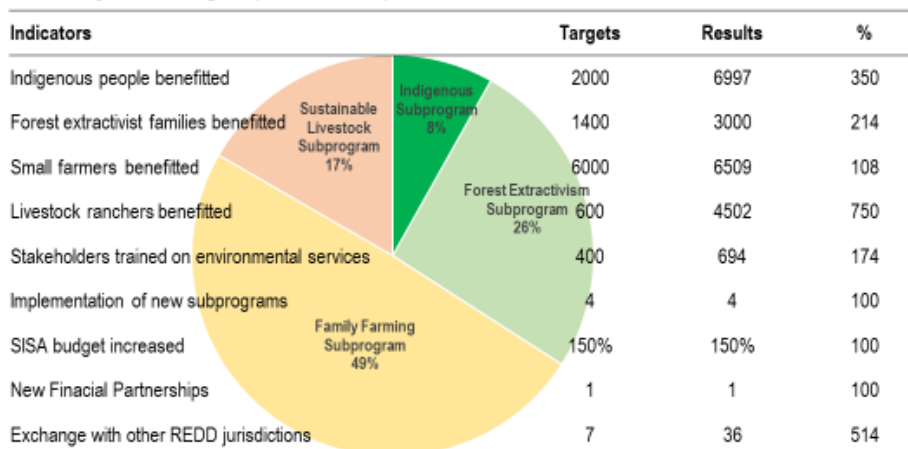


Figure 1. REM Acre results, 2012 -2017 (phase 1)

In most categories, SISA over-achieved its targets. The Indigenous Subprogram target for example was to benefit 2000 people but actually benefitted an estimated 6997(Figure 1). In the second phase of Acre REM, signed in 2017, Germany and the United Kingdom pledged about USD37 million for further emissions reductions, scheduled to run through 2022.⁴

Indigenous Subprogram

There are 15 Indigenous peoples in 37 Indigenous territories, of about 2.4 million hectares, with 23,248 people in Acre, as well as three isolated groups. Indigenous territories cover about 14% of the state, while the Indigenous population represents about 2.7% of the state population, or nearly 10% of the rural population⁵. Indigenous peoples in Acre thus reflect the situation of Indigenous peoples in the Amazon more broadly. Indigenous territories are the least deforested category of lands in the state.

There is no single representative organization of the Indigenous peoples of Acre, meaning that consultation with Indigenous peoples on the state Incentive System for Environmental Services (SISA), the object of the REM program involved discussions with multiple Indigenous leaders and organizations, as well as civil society organizations with long-term relations with Indigenous

⁴ "Programa para pioneiros em REDD+ (REM)" Instituto de Mudancas Climáticas e Regulacao de Servicos Ambientais. 2020. <http://imc.ac.gov.br/programa-para-pioneiros-em-redd-rem/>

⁵ Op cit, 3.

peoples. Similarly to other Amazon states, most of the Indigenous territories are located in or near the upper headwaters of the rivers that crosscut the state and access is almost entirely by river. Consultation with Indigenous peoples in Acre is even more inherently logistically challenging than in many other regions of the Amazon.

Indigenous participation in the REM phase I was initially through the State Commission Monitoring and Validation of the SISA (SEVA). One of a number of mixed civil society/government sectoral commissions created to increase participation and allow public participation in the formulation and monitoring of policy, SEVA established an indigenous working group including three government agencies and 20 Indigenous leaders and civil society organizations to monitor and validate the Indigenous Sub-program of the SISA. While there was no statewide representative Indigenous peoples' organization, SISA supported the Association of the Movement of Indigenous Agroforestry Agents of Acre (AMAIAAC) to work with local communities to develop Indigenous Environmental Territorial Management Plans (PGATI) in 28 of the 37 Indigenous territories of the state, with stipends for 150 Indigenous Agroforestry Agents. The Agroforestry Agents provided training and technical assistance in the communities for diversifying production, improved resource management and collective land-use planning. AMAIAAC, although not a representative organization per se, is present and active in the large preponderance of Indigenous territories and peoples of the state. Training Indigenous Agroforestry agents was a pioneering approach in the Amazon, and was the model for elaborating the National Indigenous Environmental Territorial Management Policy (PNGATI), which launched similar initiatives across the region.

. Benefits to Indigenous communities include:

- Stipends for 150 Indigenous agroforestry agents, who work with communities to plan and implement sustainable territorial management;
- Training of 50 new Indigenous agroforestry agents;
- Grants to Indigenous organizations for territorial environmental management plans and strengthening Indigenous cultural heritage;
- General support for 21 of the 36 Indigenous territories of the state
- Call for proposals directed at Indigenous communities
- Participatory development of Indigenous sub-program of SISA

Intensive discussion within the Indigenous Committee of the CEVA, deliberations over proposals from Indigenous peoples in response to the REM call for proposals and monitoring

their execution, as well as the actual expenditure of most resources by local communities meant that the Indigenous Subprogram was more participatory than others. But by the same token, the communities relative lack of experience meant delays in project implementation and reporting. Building management capacity in local Indigenous organizations was a principal recommendation of the independent evaluation of phase I of the REM in Acre⁶. The Indigenous subprogram of the REM in Acre focused on implementing Indigenous Territorial Environmental Management Plans, training and supporting Indigenous Agroforestry Agents, and differentiated intercultural Indigenous teacher training.



Figure 2: Forest people collecting Brazil nuts

Acre's SISA made an important, but relatively unheralded, innovation. Article 4 specifies who the providers of environmental services under the law are, and Article 5 defines what the environmental service providers must do to become beneficiaries of the SISA⁷. It has often been assumed, particularly in offset project methodologies, that allocation of carbon rights is central to an effective incentive system for reducing deforestation – and that legal determination of who the rights holders are is an indispensable prior step to creating such a system. In the SISA, providing the service of reducing emissions, i.e., taking actions that result in reducing emissions, is the operative principle, not ownership of particular carbon stocks or land areas. Conceptually this is perfectly consistent with emissions reductions crediting systems more broadly. A company that voluntarily chooses to generate an emission reduction credit by reducing its own emissions more than required or that produces renewable energy so as to lower the emissions

⁶ Op cit, 3.

⁷ "Sistema Estadual de Incentivos a Serviços Ambientais (SISA)," Law N. 2.308, October 22, 2010. Governor's Office, Acre, Brazil. <http://www.al.ac.leg.br/leis/wp-content/uploads/2014/09/Lei2308.pdf>

intensity of the broader power system is not transferring rights to coal or oil stocks. It is earning a carbon credit because it has acted to reduce its own or others' emissions beyond any legal obligation.

The conceptual recognition that what is at issue in reducing emissions from deforestation is not carbon rights based on ownership of carbon stocks or other assets, but rather based on the service or action of reducing emissions has several important practical consequences. Very few jurisdictions have legally defined carbon ownership rights, and creating and allocating them would in the best of circumstances be a lengthy and expensive proposition. In tropical forest regions where land tenure is often unclear, or subject to conflicting claims and conflicts, making the allocation of carbon rights a necessary pre-condition to creating incentives for reducing deforestation would mean putting off incentive systems until an indefinite, but distant, future. Understanding emissions reductions as a service or action – as emissions trading systems in general do – resolves these problems, as Acre's SISA has demonstrated.

Mato Grosso



Figure 3: Chapada dos Guimarães, Mato Grosso

In 2017 REM allocated about \$54 million to Mato Grosso, from the German Federal Ministry of Economic Cooperation and Development and the British Energy and Industry Strategy, for reductions in deforestation between 2015 – 2019, purchased between 2017 – 2020. The state

committed to maintain deforestation below 1,788km²/year, and succeeded in doing so over the life of the program. The program directed 40% of the resources to institutional strengthening of the state's system of incentives for environmental services, and 60% to three on-the-ground subprograms: family agriculture, traditional populations and communities in the Amazon forest, Cerrado (savanna), and Pantanal wetlands regions; Indigenous territories; sustainable agriculture and cattle raising by middle-sized rural producers⁸. About US\$7.13 million or 13% of total project funding, was allocated to the Indigenous territories component. The Indigenous territories sub-program was in some ways even more remarkable than Acre's Indigenous subprogram. Unlike other Amazon states, Acre has long had strong civil society support for Indigenous peoples, and state governments from 1998 – 2017 maintained dialogue with the state's Indigenous peoples, as well as investment in the sustainability of the Indigenous territories. Other Amazon states have historically regarded Indigenous peoples as, at best, the responsibility of the federal government, or often as impediments to economic development. It is consequently of particular interest that a principal result of the REM Indigenous territories subprogram was the strengthening of the recently organized state federation of Indigenous peoples – the Mato Grosso Federation of Indigenous Peoples and Organizations, FEPOIMT. This illustrates the powerful role that donors (or investors) can play in brokering dialogue and participatory project governance with Indigenous organizations even where little or none existed previously.

There are 43 Indigenous peoples in Mato Grosso, in 116 territories, covering 21.6 million hectares, or about 23% of the state⁹. FEPOIMT, created in 2016, faces many of the same challenges as other Indigenous organizations in the Amazon: precarious communications and transportation across enormous areas, limited infrastructure and technical capacity. It is notable that the design of the Indigenous territories subprogram of REM-MT focused on participatory governance based in free, prior and informed consent in conformance with ILO convention 169¹⁰. Priority goals of the subprogram included¹¹:

- Consolidation of FEPOIMT as a representative organization of the Indigenous peoples of Mato Grosso;

⁸ "Programa Global REDD para Pioneiros no estado do Mato Grosso." FUNBIO.

https://www.funbio.org.br/en/programas_e_projetos/rem-mato-grosso/

⁹ "Nota Técnica 2020." Instituto Centro de Vida. 2020 <https://www.icv.org.br/website/wp-content/uploads/2020/04/nota-tecnica-pl-17-2020-final-versanfro.pdf>

¹⁰ Alencar, Taiguara., Duchrow, Anselm., Sonntag, Ute. "Technical Cooperation for the REDD Early Movers (REM) Program -Mato Grosso and Acre -Brazil." September, 2018. German Society for International Cooperation. <https://www.giz.de/en/downloads/giz2019-en-rem-brasil.pdf>

¹¹ Miranda, C. "Programa REDD for Early Movers Mato Grosso: Avaliação Independente da Sociedade Civil." 2021. Curare Serviços Artísticos, Culturais e Socioambientais.

- Capacity building for Indigenous project management;
- Bringing grassroots Indigenous organizations into legal and accountability compliance;
- Amplifying political action of Indigenous women and youth;
- Supporting territorial and environmental management of the Indigenous territories.



Figure 4: Planning for Indigenous territories subprogram

REDD Early Movers, Mato Grosso

The subprogram design resulted from a series of eight workshops (one each in the seven regional subdivisions of FEPOIMT and a workshop on women, equity and youth), including 42 of the 43 Indigenous peoples of the state. The participatory governance model adopted under this subprogram required extensive consultation on policy proposals between FEPOIMT leaders and local organizations (16 local Indigenous organizations, as well as several municipal government agencies endorsed the November 2018 proposal for the Indigenous subprogram, jointly organized by the Center for Life Institute (ICV), FEPOIMT, GIZ and German

Development Assistance)¹². As noted above, this level of interaction between Indigenous organizations and state government was essentially entirely new.

The subprogram resulted in the allocation of R\$23 million for Indigenous projects developed and executed by the Indigenous organizations, as well as an emergency plan to combat the COVID pandemic, including health, communications, food security and fires. People interviewed for the independent evaluation concurred that without the emergency plan, the pandemic catastrophe would have been much worse. Project evaluators found that strengthening FEPOIMT and the local organizations was among the subprogram's most important achievements. The same factors operating to delay project implementation and reporting in Acre applied as well to Mato Grosso. Evaluators also found that government's documentation of and transparency regarding the REM program were weak points. The safeguards monitoring system had yet to begin by the time the evaluation took place¹³.

(Miranda, C. 2021. Programa REDD for Early Movers Mato Grosso: avaliação independente da sociedade civil. Curare Serviços Artísticos, Culturais e Socioambientais. Brasília, DF). The cultural gaps around administrative expectations between German and Mato Grosso governments are significant; still more between German government and Indigenous organizations. Results to date indicate considerable effort and investment on all sides. Results of the DETER remote sensing system for deforestation indicate that Mato Grosso's efforts to control deforestation are having an effect: deforestation in the state decreased over 20% from 2020 – 2021¹⁴.

Conclusions

The jurisdictional approach to emissions reductions adopted by the LEAF coalition is based in the key realization that an effective, large-scale emissions reductions system must reward both those who choose not to emit even though they legally could, and those who have historically protected carbon stocks and continue to do so, as well as government agencies that prevent illegal emissions. Both the actors who reduce emissions flows and those who protect stocks take action to reduce CO₂ emissions to the atmosphere. In the case of emissions from deforestation,

¹² "Proposta de Subprograma 'Territórios Indígenas'." Federação dos Povos e Organizações Indígenas de Mato Grosso. November 2018. https://www.icv.org.br/drop/wp-content/uploads/2018/12/Resumo_SubprogramaTerritoriosIndigenas-REM-MT_vf4-1.pdf

¹³ Op cit, 11.

¹⁴"Terrabrazilis Database-DETER" Instituto Nacional de Pesquisas Espaciais. September 3, 2021. <http://terrabrazilis.dpi.inpe.br/app/dashboard/alerts/legal/amazon/aggregated/>

Indigenous peoples struggles for the recognition and defense of their territories contribute directly to reducing deforestation. We have only to look at the remote sensing data from the Amazon to see that where Indigenous territories and protected areas (usually occupied by traditional communities) start is where the deforestation frontier stops. When respect for the law and law enforcement waver, as we have seen in Brazil in 2019, 2020 and 2021 invasions of and emissions from Indigenous territories and protected areas increase, indicating that the threat to the integrity of these areas and their carbon stocks is real. Hence, credit for both those reducing flows and those protecting stocks within a landscape delivers ongoing benefits.

The experiences of the REDD Early Movers program in Acre and Mato Grosso demonstrate that inclusive benefit sharing, that directly supports Indigenous and local communities is fully feasible – even though project execution, monitoring and accounting may not always meet government and international timelines and standards. Delays in safeguards monitoring systems in Mato Grosso are a case in point.

The issue of who should benefit from incentive systems for reducing deforestation remains under active debate. Different jurisdictions have proposed diverse answers. A few have allocated carbon rights to private property owners, while in others, providers of the environmental service of reducing deforestation are entitled to benefit¹⁵. Acre's SISA created a strategic legal precedent in establishing that the providers of the environmental service of reducing deforestation – Indigenous and traditional peoples in the first instance – rather than owners of carbon rights based on asset ownership, are the legitimate beneficiaries of incentive payments. Germany's REDD Early Movers Program has validated the potential of this approach.

Both the Acre and Mato Grosso programs suggest that capacity building for project management in Indigenous organizations is probably warranted. Evaluations have not discussed the extent to which project management and accounting criteria for Indigenous projects may be arbitrary and unsuited for inter-cultural initiatives. One of the most important conclusions of the civil society evaluation of Mato Grosso REM is that the presence and participation of donor agencies (e.g., GIZ) helps to enable dialogue between Indigenous peoples and state governments. This observation has very broad applicability, and applies as well to investors as to donors. The positive role that donors and investors can play in mediating dialogue between Indigenous and local communities and organizations and governments in jurisdictional emissions reductions systems, and the understanding that Indigenous peoples and traditional communities are the

¹⁵ Streck, Charlotte. "Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance." *Forests* 11, no. 9 (September 2020): 959. <https://doi.org/10.3390/f11090959>.

providers of critical environmental services, including reducing deforestation, hold huge potential to catalyze the at-scale forest protection with socio-environmental integrity sought by companies and communities alike.