Global Landscapes Forum

TECHNICAL DETAIL

BUILDING A FOREST-BASED ECONOMY IN THE AMAZON

HOW BIOECONOMY CAN SUPPORT CLIMATE RESILIENCE, ECONOMIC DEVELOPMENT AND BIODIVERSITY

AMAZON CONSERVATION

ACCA CONSERVACIÓN AMAZÓNICA

aceaa ASOCIACIÓN BOLIVIANA PARA LA INVESTIGACIÓN Y CONSERVACIÓN DE ECOSISTEMAS ANDINO-AMAZÓNICOS

WHITE PAPER

MAIN AUTHORS AND ORGANIZATIONS:

- **John Beavers, Meryl Cohen, Ana Folhadella –** Amazon Conservation (United States)
- **Conservación Amazónica –** ACEAA (Bolivia)
- **Conservación Amazónica –** ACCA (Peru)

© Ana Caroline de Lima

TRANSFORMING THE ECONOMIC STATUS QUO

The modern economy has – to date – been based on natural resource extraction and fossil fuel consumption. Widespread clearing of forests, increasing climate change impacts, and the water and biodiversity crises we face are all the direct results of driving our planet's resources to their limits and the Amazon rainforest ever closer to its tipping point. Scientists estimate that this tipping point will occur when deforestation hits 20–25 % [1], and current estimates put that rate at 17% already [2]. The Amazon's productive potential, as well as its biodiversity and ecosystem functionality, are at risk if we cannot transform our economic system to a sustainable path that recognizes the true value of intact, well-managed forests. Creating a true bioeconomy makes economic sense, supports the wellbeing of people who depend on forests for their livelihoods, and is a key solution to help prevent the world's greatest rainforest from reaching its tipping point [1].

Poor forest management, unmitigated threats like illegal logging and mining, and unbridled agricultural expansion, all drastically reduce the benefits that Amazon forests can provide, and erode the potential for their sustainable use.

Meanwhile, local communities are the worst impacted by climate change – through severe weather events like droughts and floods, and because opportunities to fully prosper from the Amazon's resources are reduced – exacerbated by these destructive practices.

Recent analysis has found that bold action on sustainable and climate-smart economic solutions could yield a direct gain of USD 26 trillion compared with the status quo [5]. In order to achieve this, transformational actions need to take place around the key nature-based solutions explored in this White Paper and during Amazon Conservation's GLF Amazonia session, to advance a bioeconomy approach:

1. **Strengthening the capacity of local people** to sustainably produce from the forest by optimizing production, and create better market connections that generate the income needed to prosper;
2. **Scaling locally-based sustainable production** to become a more significant part of the Amazonian economy by strengthening local producer associations, indigenous federations and product platforms that can support thousands of producers; and
3. **Building climate resilience and adaptation** measures into community forest management and production.


© Ana Caroline de Lima

WHAT IS THE ECONOMIC VALUE OF THE AMAZON?

- 70% of South America's GDP is produced in areas that receive rainfall or water from the Amazon. The Amazon influences rainfall patterns as far away as the United States [(4)].
- The Amazon contributes as much as USD 8.2 billion to Brazil's economy every year, USD 3 billion of which is generated from conservation and protected areas, sustainable use areas and indigenous territories combined [(3)].
- In some regions of the Amazon, the deforestation of just one hectare can lead to the loss of USD 40 in Brazil nut production for local producers, whereas if forests are kept standing, they can generate as much as USD 737 per hectare each year [(3)].

BUILDING A BIOECONOMY – ONE STRONG FOREST-BASED BUSINESS AT A TIME

Local forest producers are central to the long-term protection and sustainable use of the Amazon's natural resources. Investments that build their business capacities and market connections can optimize sustainable production and increase income from forest-friendly commodities, increasing local people's incomes and incentivizing them to keep forests healthy and standing.

Over the past few decades, governments have established concessions and protected areas that provide both a legal framework and grant user rights for community-based producers. However, in parallel to this, a lack of investment in business, forest management and other technical capacities has limited the potential for adequate income generation and growth for these sustainable enterprises. Successful forest management initiatives share some common attributes, including:

© Ana Caroline de Lima

- Increased business capacity among small-scale producers;
- Greater added value to harvested forest products generated *in situ* to yield higher profits; and
- Use of science and technology to generate the ecological and production data required to guarantee more sustainable management and the long-term production capacity of the forest.

SCALING A NEW BIOECONOMY PARADIGM FOR THE AMAZON

If we are to build a bioeconomy at a scale that can support the ecological and economic health of the Amazon, replicating and scaling these sustainable production activities is crucial, to ensure enough viable standing forest is available for future generations [(6)].

Public and private investment in three key areas will enable the scaling of a bioeconomy approach across the Amazon:

- Creating and strengthening producer associations that aggregate the efforts of small-scale producers and provide support for them to build their businesses;
- Building the business capacity of associations to scale operations while retaining a greater profit share locally; and
- Making capital available to community-based producers for investments in strengthening and growing their enterprises.

Taking this forest-based bioeconomy to scale means that forest-based production will provide income for local people, leading to the continued conservation of intact forests to ensure a long-term benefit flow that will establish the cycle of sustainability vital for the Amazon's survival.

> **A modern vision of the Amazon must include truly innovative elements to create profitable bioeconomies through, for example, sensible use of intact forests, the harnessing of power from its massive flowing rivers, or the sustainable harvesting of biological and biomimetic assets within Amazonian biodiversity.**
>
> Thomas Lovejoy and Carlos Nobre

© Ana Carolyne de Lima

BUILDING CLIMATE RESILIENCE

A true bioeconomy can help build the climate resilience of Amazonian communities and their forests [7]. However, the combination of measures needed to prevent some of the worst impacts of climate change requires both private and public sector actors to consider initiatives that not only reduce community vulnerability to the changing climate, but also help them withstand and recover from its inevitable impacts.

This means addressing core issues that affect forest health (like degradation) and local people's ability to harvest sufficient forest products in the long term – as well as survive from one season to the next – in order to prosper. Four of these core issues are:

- Reducing forest and community vulnerability to illegal activities that threaten the natural resource base, by ensuring forest monitoring and subsequent law enforcement;
- Diversifying forest products, to increase communities' capacity to adapt to climate change impacts;


© Gabby Salazar

- Using science and technology to forecast climate trends and provide early warnings, to inform forest production and protection; and
- Establishing a financial climate safety net for local producers, to aid them during periods of low or disrupted harvests.

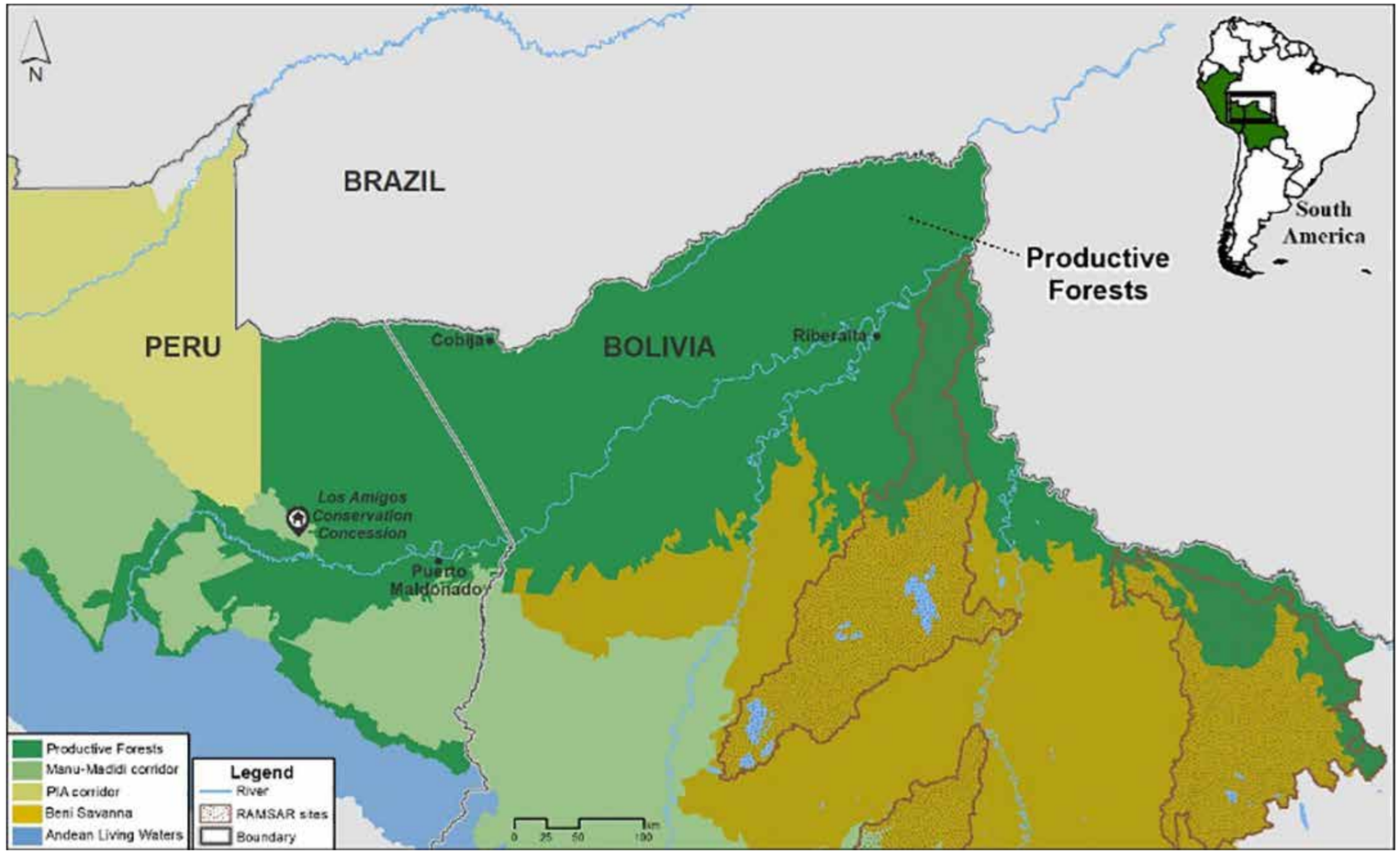
BIOECONOMY OPPORTUNITY IN THE SOUTHWEST AMAZON

The southwest Amazon, shared between Bolivia and Peru, has the potential to be one of the most productive landscapes in the entire region, and makes major contributions to the region's

economy, ecology and long-term wellbeing of its people. Covering more than 14 million hectares, this lowland tropical forest remains mostly intact, owing to centuries of sustainable use of forest resources by local communities and indigenous groups.

This area is known for its high-value timber (Shihuahuaco, Tornillo and Cedro) as well as non-timber forest resources like the Brazil nut and native palm fruits (açaí, palma real and majo) whose production potential is yet to be fully realized. Brazil nut harvesting is the region's main economic activity and plays an important role in the livelihoods of local groups, including a wide range of the region's Indigenous Peoples, like the Tacana, Yaminagua, Machineri, Ese'eja Shipibos and Harakbuk, among others.

Through this session, we will explore some of the strategies outlined in this White Paper, and discuss how best to generate replicable models for community-led sustainable enterprises, as needed to scale a bioeconomy approach across the Amazon.



Map by Amazon Conservation's Monitoring of the Andean Amazon Project (MAAP)

© Ana Caroline de Lima

2021 GLF AMAZONIA SESSION: BUILDING DIALOGUE AND INSPIRING ACTION

Organized around three interactive panel discussions, this GLF Amazonia session aims to:

1. Elevate the voices of local people and Indigenous Peoples, who are on the front line of forest management and production, and whose ancestral wisdom and practices are essential to preserving the land;
2. Share stories from local associations and Indigenous Peoples whose livelihoods depend on standing forests, on how to improve production capacity and scale community enterprises;
3. Understand how local producers are reacting to changes in climate and weather as well as anthropogenic threats, while seeking ways to incorporate technology into their traditional practices as a measure to reduce their vulnerability to climate change effects;
4. Explore the capacity-building strategies needed to scale community-based production; and
5. Provide valuable insights for policymakers, civil society and those investing in sustainable forest production, whose combined efforts can help build a true forest-friendly bioeconomy across the Amazon.

PARTNERS

The session is organized by Amazon Conservation's alliance of organizations:

- Amazon Conservation Association (Washington DC)
- Conservación Amazónica - ACEAA (Bolivia)
- Conservación Amazónica - ACCA (Peru)

REFERENCES

(1) Bucaram-Villacís S, Trabacchi C, Netto de AC Schneider M and Watson G. 15 October 2020. *A call for an integrated framework for the bioeconomy in Latin America and The Caribbean region*. Inter-American Development Bank. https://blogs.iadb.org/sostenibilidad/en/a-call-for-an-integrated-framework-for-the-bioeconomy-in-latin-america-and-the-caribbean-region/

(2) Juniper T and Marent T. 2018. *Rainforest: Dispatches from the earth's most vital frontlines*. Island Press.

(3) Lovejoy TE and Nobre C. 2019. Amazon tipping point: Last chance for action. *Science Advances* 5(12). https://doi.org/10.1126/sciadv.aba2949

(4) Moloney A. 7 April 2021. *Amazon deforestation rose 17% in 'dire' 2020, data shows*. Thompson Reuters. https://www.reuters.com/article/us-latam-deforestation-climate-change-tr/amazon-deforestation-rose-17-in-dire-2020-data-shows-idUSKBN2BU2O8" https://www.reuters.com/article/us-latam-deforestation-climate-change-tr/amazon-deforestation-rose-17-in-dire-2020-data-shows-idUSKBN2BU2O8

(5) New Climate Economy. 2018. *The 2018 Report of the Global Commission on the Economy and Climate*. http://newclimateeconomy.report/2018/executive-summary/

(6) OECD (Organisation for Economic Co-operation and Development). 2009. *The Bioeconomy to 2030: Designing a policy agenda*. Paris: OECD Publishing. https://doi.org/10.1787/9789264056886-en

(7) Strand J, Soares-Filho B, Costa MH, Ubirajara O, Carvalho Ribeiro S, Ferreira Pires G, Oliveira A, Rajão R, May P, van der Hoff R, Siikamäki J, Seroa da Motta R and Toman M. 2018. Spatially explicit valuation of the Brazilian Amazon Forest's Ecosystem Services. *Nature Sustainability* 1:657–664. https://doi.org/10.1038/s41893-018-0175-0

USEFUL WEBSITES

- amazonconservation.org
- MAAProject.org
- conservacionamazonica.org.bo
- acca.org.pe

© Gabby Salazar

GLOBAL LANDSCAPES FORUM

The Global Landscapes Forum (GLF) is the world's largest knowledge-led platform on integrated land use, dedicated to achieving the Sustainable Development Goals and Paris Climate Agreement. The Forum takes a holistic approach to create sustainable landscapes that are productive, prosperous, equitable and resilient and considers five cohesive themes of food and livelihood, landscape restoration, rights, finance and measuring progress. It is led by the Center for International Forestry Research (CIFOR), in collaboration with its co-founders UN Environment Programme and the World Bank and Charter Members.

Charter Members: CIAT, CIFOR, CIRAD, Climate Focus, Conservation International, Crop Trust, EcoAgriculture Partners, EFI, Evergreen Agriculture, FSC, GEF, GIZ, ICIMOD, IFOAM - Organics International, ILRI, INBAR, IPMG, IUFRO, Rainforest Alliance, Rare, RRI, SAN, UN Environment Programme, Wageningen Centre for Development Innovation, part of Wageningen Research, WFO, World Agroforestry, World Bank Group, WRI, WWF International, Youth in Landscapes Initiative

TIPPING POINT

Solutions from the Inside Out 21-23 September 2021 #GLFAmazonia

Funding partners

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Federal Ministry for Economic Cooperation and Development

THE GOVERNMENT OF THE GRAND DUCHY OF LUXEMBOURG

FOLUR Food · Land Use · Restoration

globallandscapesforum.org