



Sustainable Superfood Value Chains: Potential Opportunities in the Amazon



SUSTAINABLE AND INCLUSIVE DEVELOPMENT OF THE AMAZON

The Amazon Basin supports the world's largest tropical rainforest, spreading across eight South American countries.⁹ It is abundant in natural resources and plays a fundamental role in regulating the global climate. It is also a culturally diverse region, home to more than 30 million people, about a quarter of whom are from indigenous and afro-descendent communities.

- **Fostering the sustainable and inclusive development of the Amazon** is critical for the social, economic, and environmental benefit of the region and the world.
- **Promoting sustainable value chains can help drive both economic growth and the well-being** of local populations and promote productivity in harmony with environmental goals.
- **Local communities have deep knowledge of the region's rich food resources**, including "superfoods" with high-value market potential.
- **The development of superfood value chains in Andean countries located in the Amazon basin** highlights the importance of traceability systems and quality certifications, supporting producers' access to specialized agricultural inputs, services, and markets, and diversifying supply with higher value-added processes.
- **Reaping the benefits of sustainable value chains entails a holistic, medium-term approach** that recognizes local context, culture, and stakeholder priorities, and builds private sector capacity to work in a sustainable, inclusive way.

Economic activity in the Amazon region has mainly been based on extraction-oriented primary production, characterized by high informality and low productivity. Prevailing unsustainable environmental practices and deforestation contribute to climate change and threaten biodiversity and the ecosystem goods and services that are vital for human well-being and long-term economic development. This unsustainable path is largely due to the implementation of regional development models and technologies unsuited to local social and environmental conditions, which are exacerbated by illegal activities.³

All of this threatens the traditional ways of life of indigenous groups in the region who live in harmony with nature.⁴

Fostering the sustainable and inclusive development of the Amazon is therefore critical for the social, economic, and environmental benefit of the region and beyond. It is also integral to the implementation of the national and regional climate action plans of the Amazonian countries and their ability to comply with their Nationally Determined Contributions as part of the Paris Agreement. Similarly, as zero-deforestation regulations advance on the global stage (e.g., the European Union's new "deforestation-free" regulation starts in December 2024), ensuring sustainability is imperative for Amazonian countries to maintain access to global markets.

All of this entails accelerating collaboration across the public and private sectors. For instance, the IDB Group's [Amazonia Forever](#) Program aims to scale up financing, share strategic knowledge for decision-makers, and enhance regional coordination to accelerate the sustainable, inclusive, and resilient development of the Amazon region.

SUSTAINABLE AGRICULTURE AND VALUE CHAINS

Forest conservation, reforestation, and afforestation lie at the heart of achieving net-zero deforestation in the Amazon. And achieving this goal is closely linked to making agricultural production and value chains more sustainable.

The private sector, in coordination with governments, academia, and other local stakeholders has a fundamental role to play in this regard. For instance, companies can contribute to the restoration of degraded land and invest in the transformation to low-carbon agricultural and livestock production. They can adopt models that increase productivity without expanding agricultural land. The private sector can also support the adoption of more sustainable production practices across the value chain, building on the knowledge of local people whose livelihoods have depended on sustainable production for generations.

Promoting sustainable and inclusive agriculture and value chains can help drive both economic growth and the well-being of local populations by creating jobs, developing different segments of the production chain, and promoting productivity in harmony with environmental goals.

CHALLENGES

Despite the potential benefits of promoting sustainable value chains in the Amazon region, there are many challenges. Small-scale producers lack access to financing and other resources tailored to their needs.⁵ A fragmented production base that limits technical capacities and economies of scale has led to low productivity,⁶ resulting in insufficient outputs or short lifespans for certain products, limiting export viability. Vulnerability to climate change including extreme weather, plagues, and diseases is another major constraint.⁷

In addition, limited adoption of agricultural technologies and access to training, technical assistance, agricultural inputs, machinery, and equipment are all persistent bottlenecks. Basic public services such as energy, irrigation, and roads are also lacking in the region. Finally, cumbersome processes to obtain certifications and the insufficient capacity of institutions responsible for food safety, phytosanitary controls, and quality inspection services is an ongoing challenge.⁸



1. Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela.
 2. IDB (2021). [Strategic Seed Program for the Amazon](#).
 3. Ibid.
 4. For example, the Apiwtxa community in the western Amazon basin in Brazil has regenerated the forest, restored endangered species, enhanced food security through agroforestry and shifting cultivation, and supported neighboring communities. Schneider, C., 2021. [Designing for Life](#). Scientific American Magazine.
 5. Hanusch, Marek, ed (2023). [A Balancing Act for Brazil's Amazonian States: An Economic Memorandum](#). World Bank.
 6. For example, 9 out of 10 businesses in the Andean region's cocoa industry are small producers or low-productivity family farms. Also, about 90% of arabica coffee producers in Venezuela are small farmers.
 7. Science Panel for the Amazon (2021). [Amazon Assessment Report 2021](#), Chapter 27.



At the same time, international markets are increasingly demanding product certifications and traceability systems for production chains, posing an additional hurdle. The industrial segments of the value chains for many products also face high transaction costs and concentration in many markets. Land insecurity and criminal violence compound these challenges.⁹

SUPERFOODS: AN EMERGING MARKET NICHE

Against this backdrop, there is a high value market niche that the Amazon region seems well-positioned to leverage: superfoods.

The region's vast endowment of natural resources has allowed local communities to develop deep knowledge of food resources, some of which are considered "superfoods". In other words, food that is considered highly nutritious and beneficial to health or well-being.¹⁰ Indigenous people in the Brazilian Amazon utilize up to 270 domestically-grown items in daily cooking and their diets include around 30 species of insects as sources of vitamins and iron.¹¹ Additionally, these superfoods enjoy other comparative advantages, either due to low production costs, high quality and recognized diversification, and even tariff preferences.

The development of superfood value chains in other areas of Latin America and the Caribbean, including in the Andean-Amazon,¹² offers useful insights, as discussed in the IDB publication, [New Horizons for Productive Transformation in the Andean Region: Embracing Agriculture to Achieve Productive Diversification](#). Some examples include the Amazon nut, peanut, quinoa, sesame, avocado, and cacao, which present opportunities to promote sustainable and inclusive regional development, reduce food insecurity, and diversify agricultural exports.

In many cases, they also have ecological attributes and productive benefits that foster the conservation of Amazon ecosystems. For example, the Amazon nut (Brazil nut) requires no pesticides, fertilizers or any other chemical compound. It is a wild product that cannot be cultivated and represents the most important development base in the northern Bolivian Amazon region, generating 75% of its income and employing 13,500 families. Bolivia is the world's leading exporter of this nut with 82% of total production.¹³

Another example is sesame, a crop that can even thrive in dry and infertile soil areas, requiring little investment and technology. In addition, many of these crops have an important socioeconomic impact in terms of job creation and income generation for indigenous and peasant communities, as well as various production sectors from small growers to large, consolidated companies.

In addition, global consumers are increasingly demanding that superfoods are sustainable, traceable, and have environmental certifications and fair-trade practices that effectively contribute to better quality of life for producers. At the same time, international markets face rapidly growing demand for affordable, nutritious foods. In fact, to meet global food demand in 2050, the world's agricultural output needs to increase by 60%.¹⁴ This is critical for Latin America and the Caribbean since about 38% of its population (approximately 248 million people) face moderate or severe food insecurity.¹⁵

LESSONS FROM ANDEAN SUPERFOOD PRODUCTION

The IDB publication also highlights various drivers of success in developing superfood value chains. For instance, product quality is paramount, as is offering value-added and differentiated items. To this end, implementing traceability systems and certification of quality attributes is important (e.g., green or environmental, designation of origin, sustainability and socio-biodiversity branding, fair trade). Similarly, ensuring that farmers and micro, small and medium-sized enterprises have access to agricultural inputs, services—including technical assistance, financing, and research and development support—and markets is key to success.

Additionally, effective synergies between governments and the private sector are critical. Governments play a key role in removing market distortions, encouraging sustainable foreign direct investment beyond primary commodities, and implementing and enforcing environmental safeguards linked to exports, among others.

Other lessons include the importance of alliances among producers and the diversification of supply with higher value-added processes beyond the original raw material. Higher-value processing tends to be linked to higher productivity, steady and improved salaries, and innovation. Similarly, spin-offs into new industries beyond food, such as pharmaceuticals, agrotourism, cosmetics, and nutraceuticals are another possibility. Spin-offs are generally associated with positive spillovers to other sectors of the economy, which translate into job opportunities and other benefits for local populations.

CONCLUSION

Reaping the benefits of sustainable value chains in the Amazon, including those with superfoods, entails a holistic, medium-term approach that recognizes local context, culture, and stakeholder priorities. This will require building the capacity of the private sector to develop Amazonia-focused products or services in a sustainable and inclusive way, as well as increasing the flow of financing and innovation toward the region. IDB Invest will continue working with the private sector to foster the sustainable development of the Amazon and create economic opportunities to improve people's quality of life.



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This DEBrief discusses the challenges and opportunities of developing sustainable superfood value chains in the Amazon region, summarizing key findings from the 2023 IDB publication, [New Horizons for Productive Transformation in the Andean Region: Embracing Agriculture to Achieve Productive Diversification](#).

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9. IDB (2023). [New Horizons for Productive Transformation in the Andean Region: Embracing Agriculture to Achieve Productive Diversification](#). (Chapter 6).

10. Inter-American Dialogue (2019). [Nearing the Tipping Point: Drivers of Deforestation in the Amazon Region](#).

11. Oxford English Dictionary (2024). [Superfood](#).

12. World Resources Institute (2023). [Ending deforestation in the Amazon can grow Brazil's GDP](#).

13. 40%-60% of the territory of Andean countries (Bolivia, Colombia, Ecuador, Peru, and Venezuela) are within the Amazon basin.

14. IDB (2023). [New Horizons for Productive Transformation in the Andean Region: Embracing Agriculture to Achieve Productive Diversification](#). (Chapter 6).

15. FAO (2015). [Climate change and food security: risks and responses](#).

16. FAO, IFAD, UNICEF, WFP, and WHO (2023). [The State of Food Security and Nutrition in the World 2023: Urbanization, agrifood systems transformation and healthy diets across the rural-urban continuum](#).