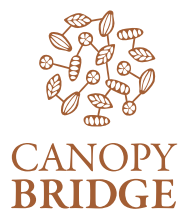


# CUMARI

RAINFOREST TO TABLE



A Food Movement for Conservation and Sustainable Development of the Amazon



āmaZ



# Cumari: Rainforest to Table

**Cumari is an exciting new food movement as well as a model for sustainable development and conservation of the Amazon rainforest.**

Cumari is born out of unusual partnerships between chefs, conservationists, indigenous communities, and entrepreneurs with a shared passion for the boundless diversity of the Amazon rainforest—and the need to save it.

The word “Cumari” comes from the Tupi language of the Brazilian Amazon and is the name of a native Amazonian chili pepper. It means the “joy of flavor,” a term that embodies this new, positive approach to rainforest conservation.

Sharing the spirit of healthy food movements gaining strength around the world—from farm-to-table to foraging to organic, and local—Cumari partners work across the vast Amazon basin to discover and promote healthy, nutrient-rich foods from the rainforest, marketed and consumed in ways that sustain producers and nature.

By connecting diverse partners and disciplines, Cumari creates powerful synergies to reach new constituencies for conservation, bring innovative food products to market, and ensure sustainability.

Cumari was launched in 2015 and is coordinated by Canopy Bridge, Forest Trends, and Restaurante amaZ, working with an array of allies from the worlds of food, environment, social justice, and business.







# Food and the Fate of the Amazon

- Just 30 species comprise 95% of the world's food intake.
- The Amazon contains over 40,000 species of plants, many of which have been consumed for generations by over 400 indigenous cultures.
- Over 6,000 square kilometers of Amazon rainforest fall each year—the majority to make room for three products: beef, soybeans, and palm oil.
- Indigenous peoples are stewards of nearly 30% of the Amazon's remaining rainforest. Virtually all of them are looking for sustainable alternatives to improve their livelihoods.
- A flourishing Latin American food scene is revaluing local products and traditions, and proving to be a powerful engine of economic development.
- Nine of Latin America's 50 Best restaurants are now run by chefs who prominently feature rainforest ingredients on their menus.
- Peru is an outstanding example of the power of gastronomy to change economies and culture. The country has become a foodie mecca, with 75,000 people a year visiting Lima just for its food and restaurants alone—now accounting for 3% of GDP.



# Eating the Amazon—Threat and Opportunity

**Food will help to determine the fate of the Amazon forest.  
And the relationship between food and the rainforest is complicated.**

The world's largest rainforest produces 20% of the world's oxygen and serves as a bulwark against global climate change. It holds more than 40,000 species of plants, at least 3,000 species of fish, and 3,000 kinds of fruit. A few products with Amazonian origins are valued worldwide—cocoa, vanilla, chili peppers and cassava—and a few have emerged in recent years in global consumer markets, like açai berries and guayusa. But the region still holds the world's largest undiscovered cornucopia of new foods, waiting to be shared.

Meanwhile, commercial agriculture and ranching are the biggest drivers of deforestation across the Amazon basin. Production of beef, soy, and—to a lesser but growing extent—oil palm, causes most deforestation in the Amazon, driven by global demand for these commodities.

One of the richest ecosystems on earth is being transformed to produce commodity calories. This is one way of producing food from the rainforest.

But there are other ways. In Peru, an Awajun indigenous farmer tends her farm in the rainforest. There are over 200 species of edible plants recognized by her community, a diversity of foods that have nourished them for generations. And, like the Awajun, nearly 400 other different indigenous peoples of the Amazon have developed an incredibly sophisticated understanding of the uses of rainforest plants to nourish and to heal, though the knowledge is at risk of getting lost as new generations adopt Western tastes and consumption patterns.









# A New Food Movement From and For the Amazon

## Latin America's thriving food scene—and the world—discover the Amazon.

Seemingly a world away from the rainforest, in an upscale neighborhood of Lima, Pedro Miguel Schiaffino's celebrated restaurant, amaZ, serves up an array of Amazonian ingredients, including sustainable freshwater fish, exotic seasonal fruits and aji negro, a rich manioc-based sauce brewed by a Bora indigenous community in the Peruvian jungle. In the last few years, Latin American gastronomy has burst onto the world stage. The boom in food culture has been nothing short of astounding, with new restaurants, organic markets, and demand for local and novel ingredients thriving. Latin American chefs are international celebrities. Cities like Lima and São

like Mitsuharu Tsumura (Maido), Virgilio Martínez (Central), and Alex Atala (D.O.M.). These chefs and restaurants are at the vanguard, educating their visitors dish by dish, making the Amazon's biodiversity and extraordinary potential palpable.

Nine of Latin America's 50 Best Restaurants now prominently feature rainforest ingredients. This is more than just the latest food fad. Around the world, people are taking a critical look at how we eat and produce our foods and are finding that unhealthy diets are intimately and tragically connected to mistreatment of the land, water, animals and people.

## Nine of Latin America's 50 Best Restaurants now prominently feature rainforest ingredients.

Paolo have become globally significant fine-dining destinations worth the trip. And a surging regional middle class has created new markets both for restaurants and for healthy, sustainable food products once perceived as only being of interest for export to niche markets in the United States and Europe.

The Amazon is beginning to come into its own as part of these food trends. In Bolivia, sustainably harvested caiman meat and wild cacao, sourced direct from the Amazon, are highlighted at Gustu, the celebrated brainchild of Claus Meyer, co-founder of Noma (Copenhagen) and Agern (New York). Across the region's cosmopolitan capitals, chefs and eaters are waking up to the novel riches of the Amazon, championed by these and other world-famous chefs

In the face of that challenge, chefs, conscious consumers, businesses, and activists are looking to reimagine food systems and relationships. Farm-to-table, organic, foraging, community-supported agriculture, and other approaches are linking food consumption to healthy ecosystems and rural communities. This is a global movement, and it is as vital in the developing world as it is in the world's richer economies.

In their multiple roles as researchers, creators and public personalities, chefs are at the cutting edge, introducing the Amazon rainforest to the world in a whole new way and building bridges that can help remote communities get their products in to new, high-value markets.





# The Start of a Movement

For three days in mid-November of 2015, Michael Jenkins of the U.S.-based nonprofit Forest Trends, renowned Peruvian chef Pedro Miguel Schiaffino, Jacob Olander and Marta Echavarria of Quito-based Canopy Bridge, together with food writer Ignacio Medina, helped to convene a group on a journey through the Amazon with an ambitious purpose: to connect the worlds of food, environmentalism, and community development with the goal to make gastronomy a force for change in the Amazon.

The group navigated the river, alternating intense strategy sessions with explorations of how food, community, forests, and farms are connected. Visits to the pulsing jungle market of Belen in Iquitos (Peru) brought home the potential of new products and ingredients waiting to be shared with the broader world. An afternoon at a fish farm that produces the undisputed king of the Amazon's waters, the 2+-meter-long paiche (*Arapaima gigas*), sparked thinking about how emblematic species can serve as an umbrella, protecting whole ecosystems. A day with Bora and Huitoto indigenous cooks and farmers revealed the sophisticated culinary knowledge of these masters of farm-to-table.

This meeting brought together an atypical combination of perspectives and backgrounds—cuisine, activism, business and science—that don't usually seek each other out. The very fact of the meeting is testimony to the power of food to bring people together and create new bonds.

The inaugural meeting of the new food movement Cumari generated a list of products of interest from the Amazon and an ambitious strategy to promote the potential of Amazon foods and incubate new enterprises to realize their potential.

## PARTICIPANTS:

*Pedro Miguel Schiaffino (Chef) Malabar/Amaz, Peru*  
*Mario Castrellon (Chef) Maito, Café Unido, Panama*  
*Paulo Machado (Chef) Instituto Paulo Machado, Brazil*  
*Eduardo Martínez (Chef) Mini Mal, Colombia*  
*Nelson Mendez (Chef) Instituto Culinario Amazonas, Venezuela*  
*Fernando Rivarola (Chef) El Baqueano, Argentina*  
*Mara Salles (Chef) Restaurante Tordesilhas, Brazil*  
*Kamilla Seidler (Chef) Restaurante Gustu, Bolivia*  
*Michael Jenkins, Forest Trends*  
*Jacob Olander and Marta Echavarria, Canopy Bridge*  
*Ignacio Medina, Writer, El País and others*  
*Ryan Black, SAMBAZON*  
*Zuzanna Buchwald, Tisane Balm*  
*Peggy Clark, Aspen Institute*  
*Nicholas Gill, writer, NewWorlder and other publications*  
*Lyndon Haviland and Gena Gammie, Forest Trends*  
*Yolanda Kakabadse, World Wildlife Fund*  
*Anna Koska, Food Illustrator*  
*Marc Koska, SafePoint*  
*Julie Kunen, Wildlife Conservation Society*  
*Dan MacCombie, Runa*  
*Josimar Melo, Writer, Folha de São Paulo and other publications*  
*Karina Pinasco and Miguel Tang, Amazónicos por la Amazonía*  
*Marleni Ramirez, Bioversity International*  
*Roberto Smeraldi, Instituto ATÁ*  
*Xandra and Tomás Uribe, Filmmakers*







# Cumari: A Partnership for Amazon Gastronomy as an Agent of Change

The Cumari partnership is a remarkable effort launched by Forest Trends, Canopy Bridge, and Pedro Miguel Schiaffino of amaZ, working with other renowned Latin American chefs, social entrepreneurs, journalists, environmentalists, and scientists from around the world.

This coalition of unusual suspects is working together to create a new story of development that works for people and the planet. Cumari posits food as a tool for change and fosters positive alternatives to destruction of the Amazon.

## CUMARI WORKS TO:

- **Support conservation of the Amazon's biological diversity**, focusing on synergies between food, community, and high-priority protected areas and indigenous territories;
- **Promote economic opportunities for local communities** that act as a counterweight to the commodity agricultural and extractive industries threatening the rainforest;
- Contribute to a **sense of cultural pride and the conservation of traditional knowledge** throughout the region;
- **Improve nutrition, especially for rural women and children** by promoting the cultivation and use of healthy local ingredients.

## The Players

### CORE PARTICIPANTS & BENEFICIARIES









# The Cumari Approach

Cumari is reimagining Amazon food systems in ways that address the need for real economic alternatives, value the cultural heritage and meet the needs of indigenous and local peoples, contribute to conserving standing forests and raise awareness of the true value of the Amazon.

Cumari works at two levels to create the cultural shift and the practical experiences to make this happen:

## **Culture shift: Building a community and a movement for sustainable Amazon food systems.**

Ultimately, respect and support for the Amazon and its peoples implies a change in the culture and values that shape decisions about its development. Food, with the connections it makes, is a powerful vehicle to shift perceptions and relationships with the rainforest.

Through food, chefs and other partners are getting new audiences to fall in love with the Amazon and its diversity. The power of food and chefs in a media-driven age lies in no small measure in their ability to change culture and the

public imagination. Through events, media coverage, and social networks, Cumari aims to build new constituencies for the rainforest and excitement for the concept of a sustainable Amazon gastronomy. And by connecting currently far-flung initiatives of restaurants, consumers, producers, and other practitioners, who are the engines of the movement, Cumari provides a space to identify and disseminate knowledge about products, techniques, culture, historical approaches to sustainability and best practices.

## **Economic opportunities: Developing sustainable Amazon food businesses and projects.**

The communities that live in and depend on the forest are its most effective protectors, holding the line against deforestation, typically far from government support. While their forests, farms, and waters meet many of their needs, these Amazonian communities also increasingly need income to pay for basic necessities, education, transport, and medical care.

Community enterprises connected to outside markets and based in sustainable, responsible resource management can help these communities meet these needs while supporting local rainforest stewardship. Cumari partners develop and test supply chains and business models to

deliver results on the ground for conservation and local communities.

Chefs and restaurants act as unique incubators for scalable enterprises that can start with rainforest-to-table provision of fresh ingredients, introducing them to new audiences and beginning to tackle the challenges of quality and logistics – and then potentially scaling up to reach significant national or international consumer markets. Working with partners from the fields of conservation science, community development, and nutrition can help ensure that these new businesses support holistic local benefits.



# The Cumari Approach

## CULTURE SHIFT

- Forging a global community and a movement for sustainable Amazon food systems.
- Raising awareness, building a “brand,” and connecting stakeholders.
- Activating local nutritional solutions.

## ECONOMIC OPPORTUNITIES

- Discovering ingredients and developing business models that create new economic opportunities.
- Delivering results on the ground for conservation and local communities.



# Sustainable Amazon Foods: New Economies Based in Diversity

**A robust constellation of local enterprises built on diversity can be a key counterweight to the activities currently destroying the Amazon.**

The Amazon rainforest has been shaped for millennia by human occupation, but of a kind that is very different from the logging, razing, and plowing that we see today. Traditional Amazon systems have been based on diversity—taking advantage of a multitude of different crops and wild-harvested foods, drawing carefully on different forest types, cultivated areas, rivers and lakes, while maintaining the overall landscape fabric intact. New economies and enterprises need to mimic that successful strategy.

Each of the indigenous and local communities that control nearly 30% of the Amazon's remaining forests is a unique universe of cultural and biological diversity, and there is no single solution to the economic and ecological challenges. In fact, the single-solution economies of products like timber, beef, soybean, and palm oil lie at the root of the problem and are the antithesis of the complex ecological and cultural webs that have held the Amazon together.

The solutions lie precisely in that diversity and in developing local alternatives at the right scale to resolve the challenges these local conservation stewards face.

Small enterprises working with high-value local products can make an outsize difference for conservation because small populations often control (and depend on) very large areas. The 1,250 indigenous Boras, Huitotos, and Ocainas of the Ampiyacu in Peru act as gatekeepers on a key flank of conservation areas that total nearly 2 million hectares. The 16 ethnic groups totaling 6,000 people of the Xingu National Park in Brazil safeguard 2.6 million hectares. The 1,200 Cofan of Ecuador control over 400,000 hectares, to mention just a few examples. Targeting support to

communities with big positive conservation footprints can create enterprises where even modest revenues can make the difference for very large landscapes.

Alliances with the gourmet food sector create ideal gateways for that to happen, with chefs and businesses willing to engage in the patient work of identifying and promoting new ingredients, building logistical supply chains, ensuring safeguards, and creating high-value niche markets with potential for growth. They allow producers to start small and grow from there.

The Amazon and its peoples need new economic alternatives and businesses to survive and thrive. A variety of enterprises of very different sizes will need to be part of the mix.

Some Amazonian products have shown the potential to expand into larger global businesses. Runa, the energy drink company based in the US has annual sales over \$5 million. Runa is built on guayusa, an Amazonian tea, which it now purchases from over 2,500 farmers. Sambazon, which brought the superfruit açai to the US consumer market now has over \$50 million in annual revenues.

Many, many others have the potential to become self-sustaining micro-enterprises and small community-run businesses that support conservation efforts. Canopy Bridge recently identified 126 indigenous enterprises in the Amazon. Contributing to the conservation of over 120 million hectares of conservation areas, the great majority of these projects still need support to overcome challenges of market access, training, and access to capital.



# Building Success at Appropriate Scales



## Export or mainstream markets

Medium to large enterprises. Sustainable rainforest product goes mainstream or accesses premium export market.

*Examples: Brazil nuts, guayusa, açai*



## SMEs for local and national niche markets

For gourmet markets (wholesale to retail outlets).

*Examples: Bottled aji negro, smoked paiche from Peru*



## Rainforest-to-table—Community supply to restaurants and chefs

Small-volume, personalized direct sales of unique rainforest product goes mainstream or accesses premium export market.

*Examples: Caiman meat from Bolivia, fresh produce from Ecuador*





## EXAMPLE: Transforming Sustainable Wild Paiche Fisheries in Peru

### It starts with rainforest communities and exceptional biodiversity.

Fisher communities in Peru are guardians of their Amazon waters and help protect the 2.4 million hectares of the Pacaya Samiria Reserve. Paiche, a beautiful giant river fish, had been exploited nearly to the point of extinction. Through vigilance and careful management, fisher organizations have brought paiche back to the point where they can safely and carefully catch it for sale.

### Supported by conservation partners from NGOs, government and scientists.

Working with local organizations like Pronaturaleza, the national park service (SERNANP), and the regional government (Loreto), fisher groups organized and developed rigorous monitoring techniques to ensure sustainable fisheries management.

### But economic benefits and market opportunities can be the missing link.

Critically low paiche populations managed by these groups rebounded more than 10-fold to healthy levels in five years. But despite creating a solid conservation success, the majority of the sustainable catch was still sold as low-quality product through aggressive middlemen at rock-bottom prices. Years of effort and good stewardship were failing to create new economic opportunities.

### Connecting with chefs experimenting with new ingredients opens up new opportunities.

Pedro Miguel Schiaffino started bringing paiche direct from producers of the Yarina Lake in Pacaya Samiria to his award-winning restaurants in Lima, introducing this premium freshwater fish to a new urban audience willing to pay far better prices.





► **And lay the groundwork for building sustainable supply chains.**

With annual purchases of around 1,000 kilograms of paiche just for his restaurants, Schiaffino figured out how to get highly perishable fish from deep in the jungle, hundreds of miles downstream and then out by air to Lima, refining the processing and cold-chain solutions to make it work.

► **Improving the capacities and local producers to get quality products to market and ensure sustainable management.**

Fisher communities of Pacaya Samiria have the expertise to develop their own management plans for government approval, process and transport their fish, and engage with new clients. They are now even asked to advise other budding enterprises.

► **These rainforest-restaurant partnerships can boost local incomes.**

In 2017, the fisheries groups of Yarina added other premium customers and sold 44% of their catch to gourmet restaurants and tourism operators, at prices 3-5 times higher than those offered by local middlemen.

► **And can be a launch pad for growth to larger markets and replication.**

Successful management means that Yarina's catch quota is growing—and more than half is still not capturing the prices it could. Together, Canopy Bridge and Schiaffino have developed a smoked paiche product for launch in Lima supermarkets and delis, and are building a business to process high-quality fresh and frozen fish for sale.

Paiche used to be found over a huge portion of the northern Peruvian Amazon—building a successful business for sustainable fishers can be the vehicle for bringing back paiche across much of its historical range, and for incentivizing sustainable fisheries of other threatened species.





# A World of Possibilities

Similar models of sustainable business built on collaborations between chefs and rainforest communities are taking shape across the Amazon.

## RAINFOREST-TO-TABLE SUPPLY

In Ecuador, **Canopy Bridge**, has built a rainforest-to-table supply business, providing weekly deliveries of fresh Amazonian ingredients to over a dozen of the best-restaurants in Quito, working with Kichwa and Cofan indigenous farmers, creating a market for these ingredients in the city where virtually none existed before. Now they're working to ramp up **macambo**, delicious high-protein seed closely related to cacao, using their restaurant network as a testing ground.

## JUNGLE ICE CREAM

**Selva Nevada** is a Colombian ice cream company co-founded by Antonuela Ariza, one of the chefs behind Bogota's **Min-Mal Restaurant**. Selva Nevada provides a unique lifeline for producer groups deep in the Amazon by buying exotic fruits like camu camu, açai, cupuazu and bringing them to urban consumers. Selva Nevada is now scaling for growth with a national-level roll out.

## TUCUPI NEGRO — DEEP FLAVOR FROM THE RAINFOREST

Pedro Miguel Schiaffino, and his non-profit **Despensa Amazonica**, has been developing new markets for aji negro—a traditional condiment of the Bora indigenous people. First bringing this ancient ancestral ingredient derived from manioc to his restaurants, this savory sauce has captured the attention of chefs and in-the-know foodies. Now, together with Canopy Bridge, they are collaborating with a Bora women producers to launch a bottled product for the national market and export.







### RAINFOREST MUSHROOMS

The Yanomami hunter-gatherer people of northwestern Brazil have an unrivaled knowledge of local flora and fauna, including edible mushrooms previously unfamiliar to scientists. Working in partnership with partners Instituto ATA and Instituto Sociambiental, they created a dried mix of ten flavorful species which are sold in gourmet markets and on fine restaurant menus in Brazil, providing income that helps maintain their community and counterbalance threats to their 10-million hectare territory.

### WILD AMAZON HONEY

Instituto Socioambiental (ISA) and Associação Terra Indígena Xingu (ATIX) have brought to market a rare honey, produced by Kisêdjê, Yudjá, and Kawaiwetê indigenous communities from native species of Amazonian bees. Drawing on the deep ecological knowledge of the indigenous peoples, this delicious honey has seduced star chefs like Alex Atala, while contributing to the conservation of the 27,000 km<sup>2</sup> Xingu Indigenous Territory.

### CAIMAN AND MORE

**Gustu Restaurant** in Bolivia is an award-winning project of Danish chef Claus Meyer (Noma in Copenhagen, Agern in New York) using high cuisine to affect social change. Working closely with the scientists and community development specialists of the **Wildlife Conservation Society (WCS)**, Gustu has been bringing sustainably managed caiman meat from the Tacana people of the Amazon to fine dining in La Paz—purchases that are vital to sustaining communities' motivation and investment in conservation management. Building on work with caiman WCS and Gustu are actively collaborating to identify new wild products and supplies where food and biodiversity conservation align.



# Join Us

**Cumari is expanding and replicating this model to unlock more of the powerful potential at the intersection of food, conservation, and community development.**

**Chefs, foodies, entrepreneurs, and conservation partners** are the engines of the movement, developing new products, identifying the sustainable business opportunities, and communicating the excitement to new audiences.

**Researchers, students, and academics** can help build the knowledge base about novel food products, sustainable management, social impacts, culture, and history.

**Writers, filmmakers, artists, and creatives** help share the excitement with new audiences and can contribute to building opportunities for community enterprises and startups.

**Donors and investors.** This unique approach calls for a combination of different financing types. Philanthropy contributes to jump-start projects, strengthen community development, support research and build a network. While investment—from microfinance to impact investing—is needed to fuel enterprises' growth.

**Cumari is an open network, dedicated to fomenting collaboration. Contact us and become part of the community.**

➤ **[rainforesttotable.com](http://rainforesttotable.com)**

✉ **[cumari@canopybridge.com](mailto:cumari@canopybridge.com)**

f **Cumari – De la Selva a la Mesa**

YouTube **De la Selva a la Mesa: Comida Amazónica Sostenible**

**SPECIAL THANKS TO THE DONORS WHO HAVE MADE CUMARI POSSIBLE SO FAR**

