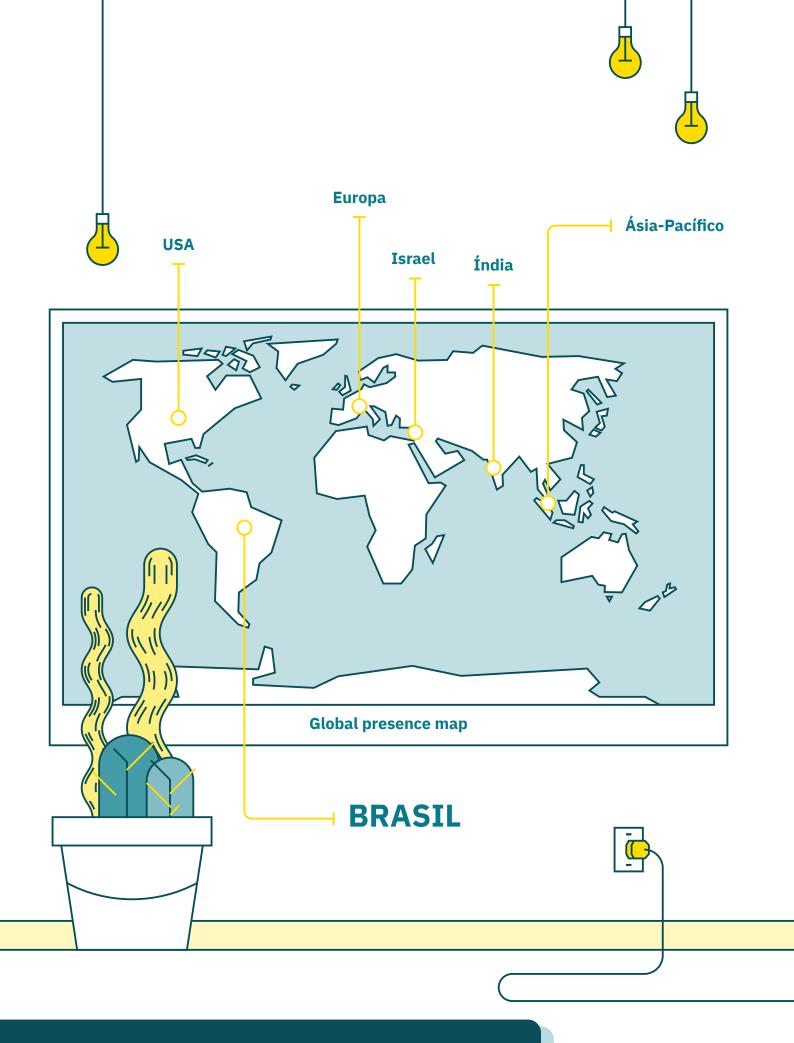


Year in Review Brazil
The Good Food Institute Triennial Report: 2018 - 2020



# Summary

1. The Good Food Institute: for a safer, more just, and more sustainable food production system	3
<b>2.</b> Brazil: the country of alternatives	10
<b>3.</b> We have a lot to celebrate, but this is just the beginning!	14
<b>4.</b> Fostering the alternative protein industry	15
<b>5.</b> Strengthening the alternative protein research ecosystem	21
<b>6.</b> Engaging to formulate public policies	25
7. Join us!	29



## 1. The Good Food Institute

We are a global non-profit organization working to transform the food supply chain. We have teams in the United States, Brazil, Israel, India, and countries in Europe and Asia-Pacific. We support the alternative protein sector to devel-

op meat, eggs, and dairy replacement products through different technologies (plant-based, cultivated, or fermentation) and organize our work in three programmatic areas:

#### **Corporate Engagement**



We support the food and ingredients industry, restaurants, and retailers in developing, improving, and distributing alternative protein products. We assist startups and investors in preparing business plans, financing, communication, marketing, and regulation. Additionally, we gather, analyze and release data and information relevant to the market.

#### Science and Technology



We work to develop, finance, and promote the scientific knowledge around the production process of meat, eggs, and dairy products made from plants, grown from cells, or obtained through fermentation. We promote the training of professionals and disseminate technical and scientific knowledge within the field of alternative proteins.

#### **Public Policy**



We work directly with government agents and policymakers. We also foster communication between the government and market agents to ensure that the current regulatory framework allows for the full development of Brazil's alternative protein sector.

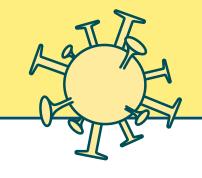
# We are working to solve four of the world's most significant challenges:



Feeding almost ten billion people in a safe, fair, and sustainable manner by 2050.



Mitigating the climate impacts resulting from the current food production system.



Reducing the role of the food sector in the emergence of new infectious diseases, some with pandemic potential.



Creating a food production chain that does not depend on animals.

## 1.1 GFI Brazil

We kicked off our work in Brazil in February 2017 and, since then, have established a broad network, engaging a wide range of actors across the alternative protein sector in Brazil.



We connect with the prominent managers, regulators, and supervisors in the Federal Government. At the regional level, our activities focus on the **Cerrado** and the **Amazon** biomes;

- > We monitor legislative activities to guarantee a **sustainable**, **fair**, **attractive**, **and competitive business environment**;
- > We map, connect and finance researchers in high-level scientific institutions;
- > We offer entrepreneurs and startups guidance materials as well as connections with investors
- > We have created a **positive and productive relationship** with the alternative protein departments within large corporations, including the largest animal protein companies in the country;
- > We have established a forum with regular meetings involving the **largest companies** in different businesses in the industry.
- > Finally, we conduct **original research** on the Brazilian consumer and the market.and share this research with our audiences.

## 1.2 Our History

How did the country of barbecue and feijoada become a powerhouse in the vegetable protein field? That is a story that we are going to tell in this document. It is not limited to a market report or figures about the sector: we are here to talk about the Good Food Institute. Our institute began operating in the United States in February 2016, just over five years ago, and GFI Brazil was founded exactly one year later. A coincidence, I swear! We are still relatively young as an organization, but undoubtedly very impactful. I feel confident in saying that our work has influenced the Brazilian market positively and accelerated the pace of development of this industry, which now conquers the world through the hands of our talented partners. We started at the beginning. In our case, this meant promoting the sector.

# Our objective in this first phase was to create something, albeit incipient, to serve as an example for the market and prove that it was not only possible but replicable and profitable.

We tried bringing in international companies, supported the formation of import groups and license technologies, and several other routes that proved to be insufficient to create a solid case for the market.

There was still a lot of resistance from the traditional industry, little encouragement from ingredient suppliers, and almost no technology to address the field's specific demands. However, there were some vegetarian enterprises in the picture, alongside plant-based milk and dairy start-ups, which opened several doors to establish regional markets. We were also supported by NGOs that were already operating in the country as well as some professionals interested in the field.

It was only a matter of time before the first projects started to take shape once we began to connect to the local industrial ecosystem. Our partners' first products started to launch right about two years after our arrival. This movement quickly caught the attention of key actors on different fronts, and since then, the market has accelerated at a pace we could never have anticipated.

Then, our second phase began. It was time to engage: we were bringing in as many partners as possible, while structuring our own team. At that time, our three strategic programs were up and running: Corporate Engagement, Science and Technology, and Policy.

The first program focuses on the private sector. We started offering support to all companies interested in developing products through open-access data, P&D ideas, connections with suppliers, solutions to technical barriers, among other activities. The ingredients, machinery, and additives were soon involved, offering a much-anticipated advantage to the country's alternative protein supply chain. We have supported retailers in introducing these products to their portfolios by matching them with strategic

producers and advised on sales efficiency and relationships with targeted audiences. Investors and startups were not left behind: our database kept growing, and we were able to connect several projects to entrepreneurs eager to invest. We have also launched practical guides to support entrepreneurs and have organized a series of events to promote connections that have boosted the market.

In Science and Technology, GFI worked to advance the academic field in Brazil. We managed to raise funds for local research and made great partnerships with those who had already been leading this sector in Brazil, such as Embrapa, Ital, and high-level universities. GFI launched the first graduate course on cellular zootechnics in the country through a partnership with the Federal University of Paraná.

# Yes, it is already possible to learn how to make meat from cells inside Brazil!

As our engagement strategy does not just target companies, we have managed to attract dozens of researchers to our databases, ensuring their knowledge is accessible to industry and other scientists. Brazilian scientists are already the second leading recipient of GFI's Competitive Research Grant funding for alternative proteins research and the most present in GFI's global scientist database.

In the Public Policy arena, we have also made several advances. Back in 2018, we promoted the first governmental event to discuss cultivated meat, heldin Portuguese. It was organized in partnership with the Brazilian Agency for Industrial Development (ABDI) and took place in Brasília. Shortly after that, we organized the alternative protein industry into a workgroup affiliated with the Brazilian Bioinnovation Association (ABBI). We are currently working with the Ministry of Economy on alternative protein tax issues, and with the Ministry of Agriculture, Livestock and Supply on developing regulatory processes for vegetable proteins. We are also working with agencies such as ANVISA to discuss cultivated meat regulations, and with SENACON, the primary consumer rights agency in Brazil. Another key institution is the Ministry of Science, Technology, and Innovation, which works to advance Brazil's technological field.

With the success of this endeavor, the regulatory process in Brazil has already started!

I should also mention our communication work, which has spread our message to the most diverse audiences. We were honored to organize a segment in Fantástico, a Sunday tv show with an estimated audience of around 50 million people live. We dove into the kitchen to prepare a hamburger (plant-based!) with the journalist André Trigueiro from GloboNews. We participated in several programs in the TV Channels Record, Band, specialized media outlets, including tv channels, magazines, and newspapers. Over the past four years, we have delivered the message of the promise of alternative proteins to millions of people

Our work has always been based on building bridges instead of walls. It may be tempting to see animal food producers as adversaries to our mission, but that has never been our approach. We have reached out, opened

up arenas of dialogue, and created positive relationships with all stakeholders in the Brazilian agribusiness sector. Our message is clear: we are not a threat but an opportunity. The alternative protein industry keeps growing and there is room for everyone to collaborate. The largest meat, eggs, milk, and food companies entering the sector are living proof of this statement. Our policy is: open doors for everyone who wants to develop a more just, safe and sustainable food supply chain

We are a young organization. This Is just the beginning! We believe our growth to be unstoppable as new possibilities for the sector keep emerging. GFI will continue to perform its usual work for this year. However, we are starting to focus on new possibilities, such as biodiversity, which will promote native Brazilian ingredients in the alternative protein industry. You can definitely expect greater public awareness of the importance of supporting scientific research on alternative proteins!!

The time to intensify our work with farmers has come, as we want to ensure that our sector will grow while leaving no one behind, but by actually serving as a new source of income for Brazilian food producers. It is also time to push the work on cultivated meat and fermentation forward - two technologies that promise to transform the world of alternative proteins.

Our team is composed of 12 passionate professionals driven to transform how we make food. So if you work or want to work in this field, you can count on our support.

Lastly, one question remains unanswered, the one with which I started this text: "How did the country of barbecue and feijoada become a powerhouse in the vegetable protein field?" The answer is simple: Brazil has become a powerhouse in alternative proteins, already exporting to more than 15 countries because we have everything we need for that!

We have entrepreneurs full of determination, strategic investors, the increasing collaboration with the most relevant meat and food companies, a favorable climate, strong plant production, and unique biodiversity, not to mention some of the world's best scientists. There is no doubt that the country of meat will be vital in leading the world in making the meat of the future! We are already leaders in the global agribusiness picture, and the odds are in our favor, as Brazil will continue to invest in developing new products and technologies. Wherever you are reading this text, in any country, region, or city, get ready! You should definitely give the Brazilian meat a try: whether it is made from plants, cultivated cells, or through fermentation.

Estadão
The pandemic
reveals one
of the biggest
challenges of
humanity: how
are we going to
feed 10 billion
people by 2050?

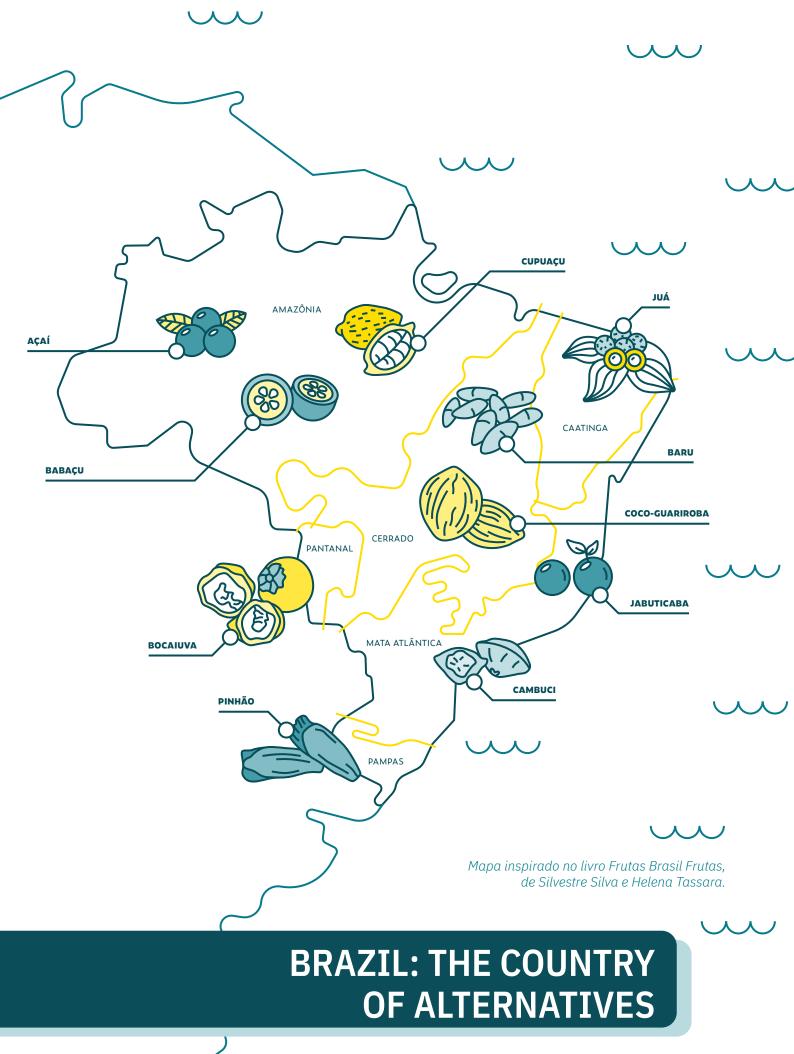
#### Gustavo Guadagnini

Managing Director
The Good Food Institute Brazil

"The revolution on your plate"

"25 people that might change the world by GQ Magazine"





Brazil is a pivotal country for the global food industry, especially when it comes to the commercialization and exportation of animal protein. According to data from Rabobank consultancy, in 2020, Brazil produced around 10 million tons of meat and exported around 2.4 million of that. Meaning that, in addition to being a major supplier, the country's consumer market does also play a remarkable role, since around 80% of meat production serves the domestic market. According to the OECD-FAO, we are the second largest producer, behind the United States, and the third largest consumer of beef - around 25.2 kg per year -, shortly behind the USA and China. However, this data does not contemplate chicken consumption (40.3 kg year) and pork (12.8 kg year).

These numbers keep rising. Rabobank estimates that, in 2021, 10.3 million tons of beef will be produced and 2.6 million tons exported. On the other hand, the flexitarian movement is beginning to strengthen worldwide, reducing the consumption of animal products but not interrupting it completely. Health concerns are one of the main reasons why flexitarians reduce their consumption of animal products, as a study by Our World in Data from the United Nations Food and Agriculture Organization (FAO) confirms. According to the FAO, the consumption of cooked red meat should not exceed 300g per week (42.8g per day); otherwise, overconsumption can lead to the development of some types of cancer, such as intestinal cancer (colon and rectum). Still, 80% of Brazilians consume more than twice that recommendation, around 88g per day.

With new demands comes the food industry's need to actively contribute to the food transition of flexitarians. Developing food products made from alternative proteins, be it plant-based, cultivated, or obtained by fermentation to replace and/or mimic the sensorial experience of eating animal foods, should then take local cultural habits and traditions into consideration.



Foods made out of vegetables (also known as plant-based), as the name implies, are produced only with raw material of plant sources. Within this segment, there is a line of protein products aiming to mimic animal products' sensory characteristics such as color, flavor, aroma, and texture. Food processing technologies such as extrusion, emulsification, mixing, cooking, drying, cooling and freezing are used to obtain analogue products of meat, milk, eggs, and fish.

Cultivated meat is obtained through a technology named cell culture, which enables meat to be produced by multiplying cells so that it is possible to make meat without raising or slaughtering animals. This process involves removing a cell from a live animal, multiplying the cells in a nutrient medium, and structuring the tissues through bioreactors under controlled parameters.

**Fermentation** uses fungi, bacteria, mycelium, microalgae, and other microorganisms as a **bioproduction platform.** This is the technology used to make beer and fermented bread, for example.

#### HIGHLIGHTS

#### The New York Times

Brazil Is Famous for Its Meat. But Vegetarianism Is Soaring

### Flexitarianism in Brazil

The number of flexitarians has also risen in Brazil. According to GFI Brazil, in two years, the increase was 73%, up from 29% in 2018 and 50% in 2020. Following the global trend, the main reason for that was health concerns, cited by 59% of people in the survey.

Health concerns drive what consumers look for in plant-based products. The amount of protein (35%), less fat (37%), and vitamins such as calcium and zinc (37%) are the most relevant nutritional characteristics for Brazilian consumers in their purchasing decisions. In addition to that, sensorial characteristics also play a big part. Flavor, aroma, and texture equal to or better than the equivalent animal product (58%), and the product being as natural as possible (62%) are the top priorities for consumers, closely followed by the nutritional value equivalent or superior to the traditional product (59%) (GFI Brazil, 2020).

The flexitarian profile is composed mainly of women (58%) and people under 35.(47%). Most replace animal protein only with vegetables (47%), indicating plenty of room for the plant-based analogues market to grow. 59% of respondents stated that they consume vegetable alternatives to replace animals at least once a week. The preference is to consume when cooking at home (62%), at home for delivery (44%), or in restaurants and bars (34%).

Looking at this market, it is possible to see the results of increased demand for this type of product. Grupo Pão de Açúcar (GPA) reported that the vegetable hamburger segment accounted for one third of sales for the entire chain in 2020. In two years of existence, the alternative protein market has gone from zero to about 106 plant-based protein companies and startups operating in the country.



## Possible directions for the development of plant products are:

- > Deliver an experience similar to the conventional product
- > Sell at a competitive price in the category
- > Accessibility in the same establishments as analogues of animal origin
- > Deliver similar to or better nutritional aspects than the conventional product
- > Convenience and ease in adjusting into day-to-day home meals

## Growth potential

Human health is not the only aspect positively affected by these new consumption habits. According to a <u>study</u> carried out by the International Labor Organization,

the transition to a plant-based diet, with a significant decrease in animal products, is a fundamental step for Latin America and the Caribbean's progress towards a zero-carbon economy, and is also predicted to create a net gain in employment.

According to the ILO, the adoption of plantbased foods grown through sustainable agricultural methods can generate 19 million new job opportunities by 2030.

In the Brazilian context, developing the alternative protein sector means generating more jobs by diversifying economic activities. Innovative and economically viable production processes can significantly improve scale capabilities, and plant-based product processing can take advantage of traditional Brazilian protein production know-how. Both production processes combined can improve our chances of overcoming the challenge of sustainably feeding 10 billion people by 2050. Developing new products whilst exploring the rich Brazilian biodiversity and incorporating bioeconomics principles into the food production chain can mean supplying the national market, conquering the international trade arena with unique characteristics, while also contributing to environmental preservation and benefiting the local economy.

The Brazilian plant-based industry, albeit new, has been welcomed by consumers and is now booming. It is expected to continue rapidly evolving as there are great opportunities yet to be explored in the market.



# GFI BR HAS A LOT TO CELEBRATE, BUT THIS IS JUST THE BEGINNING!



**5** publications launched

**2179** publication downloads in the website

Representation
o30f companies
in the ABBI
Alternative
Proteins WG



**3** research projects on alternative proteins funded



**8** webinars on technical topics related to the alternative protein industry organized



Participation in over **145** events





More than **30** companies and **57** startups received support from GFI

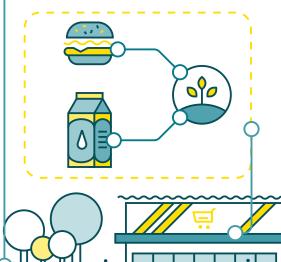


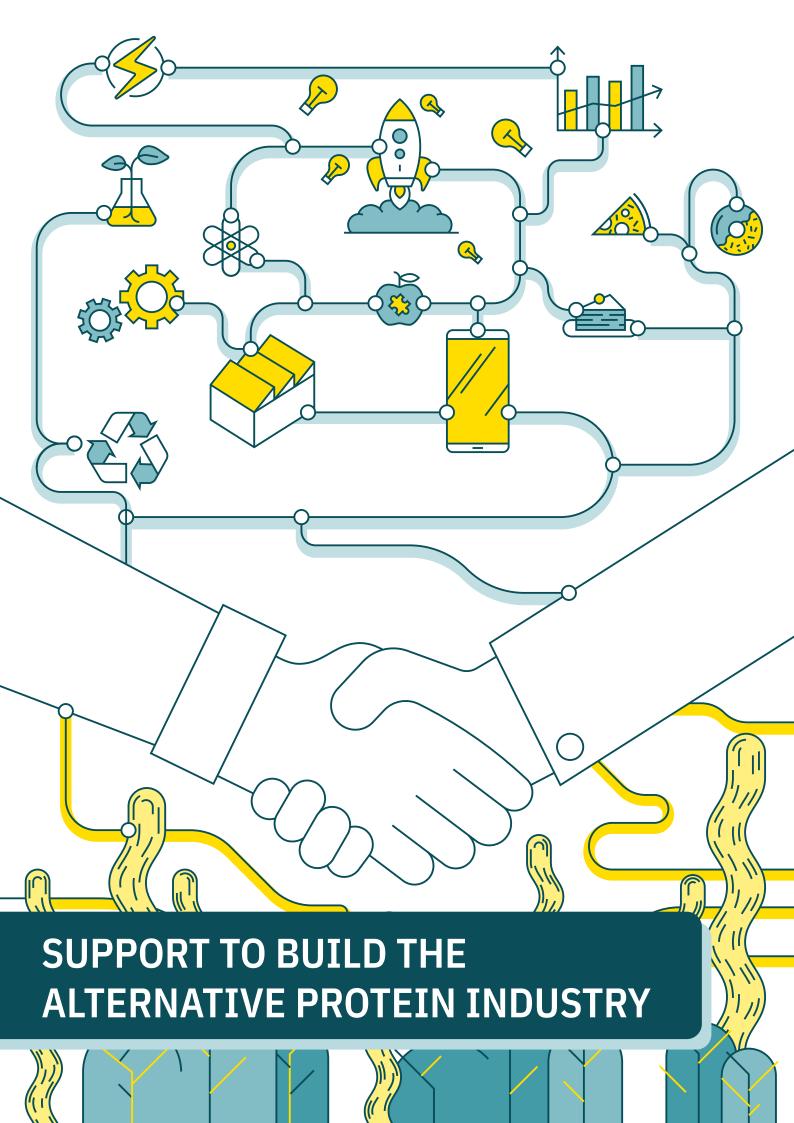
**497** insertions in national and international media; **R \$ 3,199,312.70** in media return











GFI's work with corporate partners has helped shape major transformations in the industry. We were the first entity to defend alternative proteins in a country that has always relied on animal products as its primary protein source. Today, most of the relevant products launched in the country are due to this pioneering work.

Since the beginning, we have worked in partnership with the largest food companies in the country, such as ADM, BRF, Carrefour, Danone, Givaudan, GPA, Griffith Foods, IFF, Ingredion, JBS, Marfrig, Nestlé, R & S BLUMOS, Unilever, among others. We support these companies with key data and information related to the market, consumer, trends and opportunities. All of our work is confidential, but some public projects can be mentioned.



# Get to know some of these experiences

#### N.Ovo

Our team has worked with the largest egg producer in South America, Grupo Mantiqueira, to develop a plant-based analogue for its main product. N.Ovo, Brazil's first plant-based egg, arrived in the market in March 2019, and is an egg-replacement for recipes such as cakes and pasta.

N.ovo became an independent brand within the Mantiqueira Group in 2020 and launched two new products: mayonnaise and scrambled egg mix, both made 100% from plants. They are expected to reach markets across the country in the first half of 2021 and, before

that, they can be sampled exclusively at Le Manjue restaurant or purchased at the brand's website.

"GFI has been with Grupo Mantiqueira since the beginning of the project to develop a food tech arm in the company. They were an extremely relevant part of this process, especially regarding information about the market and connections with companies that had been operating in this segment for longer in other countries. The partnership between Grupo **Mantiqueira and GFI completes** 4years in 2021. It is very positive to count on professionals so qualified to expand such a promising market."

Amanda Pinto,
Marketing and Innovation
Manager and creator of N.Ovo

#### **Fazenda Futuro**

"My mission is to change the meat and dairy industry in Brazil, from using animals to using plants. GFI Brazil gave me invaluable insight and introduced me to companies and factories in the USA so I could analyze how their models could be adapted and applied in my country of origin.

Marcos Leta, founding partner of Fazenda Futuro.

Brazil is ready for a

revolution!"

profound plant-based

GFI was a key piece at the beginning of Fazenda Futuro, the most successful food startup in Brazil. Our work with the founders started helping with the decision to open the business and supporting all stages of the initial strategic plan. We chose to work with them based on their previous successful project in the premium beverages market, Sucos Do Bem.

After investments led by BTG Pactual, Turin MFO and ENFINI Investments, Monashees, and Go4it Capital, the startup's market value is R \$

715 million. With a line with five products (hamburger, ground beef, meatball, sausage, and chicken) the company exports to the United United Arab Emirates, South Africa, Chile, Uruguay, Paraguay, Colombia, Mexico, Australia, Netherlands, Germany, Portugal, Sweden and the United Kingdom.

fazenda futur©™

#### JBS

After consulting with GFI, two launches reached the market in 2020. JBS, through the Incrivel Seara line, launched plant-based fish bait and shredded shank.

"GFI collaboration has been crucial for Incrivel Lab, Seara's innovation hub, and unprecedented in the Brazilian plant-based segment. GFI's know-how confirms the innovations developed for the Incrivel Seara line. The partnership with GFI enabled an immersion in the market to reach this level and anticipate global trends. Scitech's data analysis and reporting work, Seara's involvement in research in the alternative protein sector, and the brand's connection with universities, researchers, scientists, and centers of technology are examples that help us in making decisions. It

is worth highlighting the support to strengthen
Seara's presence with the most diverse
stakeholders focused on plant-based
solutions."

Rafael Palmer,

FUTUR® BURGER

Director of Marketing for Industrialized Products for the Internal Market at JBS.

#### Unilever

Unilever brought to Brazil its line of products The Vegetarian Butchers, which made Brazil the first in country Latin America to market them

#### **Elo Program**

As we understand that rural producers are a fundamental part of the food production chain, we created a program to guarantee their access to another income source through the production of vegetable ingredients to supply the alternative protein market. The focus is on supporting animal breeders to enter the alternative protein market while respecting their properties' vocation and diversifying the products offered by farmers. We are currently mapping partners to implement the five phases of the program: culture definition, formulation, instrumentation, training and information, and distribution.

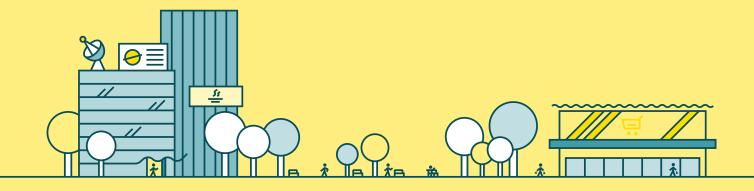
#### **Attracting Investors**

In addition to these initiatives, GFI was the first organization to involve investors in the sector, knowing that financial resources would be a crucial factor for startups' overall success. A significant achievement was our help in setting up ENFINI fund with PWR Group, which invested in companies such as Fazenda Futuro, Blue Nalu, Memphis Meats, and others. We also support many of the industry's most relevant startups with advice, organization of PitchDays for investors and retail, connection with the investment sector, and much more, which resulted in more than 35 investment groups now engaged in the alternative protein sector.

"GFI offers us valuable support in several ways, including retail market data and also foodservice. Countless work approach fronts allow us to understand the segment, the opportunities and prepare ourselves to meet the demands. Together we continue to take steps towards a real change in food. Our partnership is an excellent example of the power of collaboration through connecting companies and people who have a shared purpose."

Camille Lau, Regional Marketing Manager at Unilever





# Production of Knowledge

We believe in the production of knowledge and the wide distribution of information as powerful tools to advance the protein sector's growth as a whole. For this reason, we started partnerships with companies and research institutes to better understand the national industry, the Brazilian consumer, and how to help the market to develop products that meet current demands. In the past years, we have made the following publications:

#### Consumer research: alternative protein market in Brazil

First research to focus on the Brazilian consumers' perception on plant-based products as well as investigate their motivations. It is an initial panorama of the national market.





#### **Startup guide for The Good Food Institute:**

Resulted from our collaboration with Insper, one of the most prominent business schools in Latin America. This adaptation was made specifically for the Brazilian market, serving as an open-access guide for companies thinking about entering the alternative protein market.

#### **Alternative Protein Industry 2020**

The first report to analyze the alternative protein industry in Brazil (IPA). The document presents an updated overview of challenges and opportunities unexplored by the supply chain, highlighting opportunities that can lead the country to become the global leader in the sector. The report also analyzes consumer behavior, presents the leading players in companies, retail and restaurants, as well as the investment scenario.





## Alternative proteins in Brazil: a naming study on plant-based and cultured meats

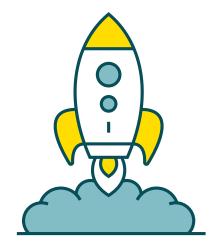
Resulted from our collaboration with the University of Bath (UK). This survey provides information on the Brazilian consumer's perception of how terms referring to alternative proteins are displayed and their role in their purchase decisions.

#### The Brazilian consumer and the plant-based market

Conceived by GFI Brazil, implemented by IBOPE, and sponsored by 11 companies in the sector, this is a consumer survey focused on the perception and acceptance of consumers concerning the alternative protein market in Brazil and details the growth of flexitarianism in the country.



In addition to publications, we also share knowledge through online seminars, such as the one held in partnership with BID Invest, the largest financing source for countries in Latin America and Caribbean, and its innovation laboratory. This webinar initiated conversations to establish a long-term partnership with them and include alternative proteins as one of the funding opportunities in the organization's sustainability area.

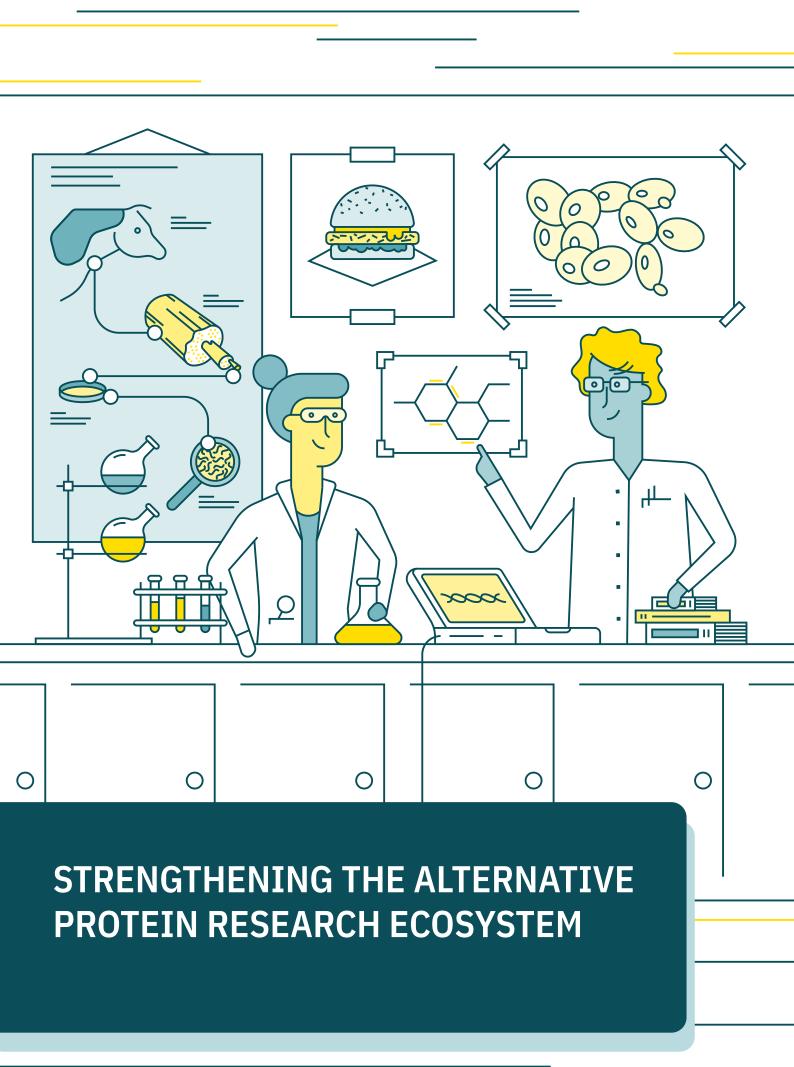


## Engaging the future

In a short time of operation, we were able to achieve impressive results, gaining the trust of industry players and consumers. There is still work to be done in the alternative protein sector. The opportunities are plentiful, and that motivates us to continue.

# **Map of the Alternative Protein Sector**

We are currently working on the Brazilian version of the Map of the Alternative Protein Sector. The map serves as a reference for the current ecosystem and aims to incentivize other brands to engage in the sector. Currently, more than 50 companies are involved.



Brazil has a robust scientific ecosystem focused on food research and development (R&D). We can count on EMBRAPA, an important research institution with worldwide recognition and with numerous other federal and state-level institutes. Their research focus involves the entire production chain, from the selection and genetic improvement of crops to the production of high-purity functional ingredients. Therefore, there are qualified professionals and infrastructure to advance research in the field of alternative proteins. As the technologies that permeate the spectrum of alternative proteins are broad, complex, and involve different scientific knowledge areas, it is necessary to mobilize different professionals from various scientific areas to work on projects in this sector.

## Research Incentive Program

GFI's annual Research Grant program finances high-quality studies that will build the scientific basis for cultivated, plant-based, and fermentation-derived meats in the future. The program, which is already in its third edition, receives submissions of proposals from all over the world. In 2020, Brazil received the second most grant awards, behind only the United States. Of the 34 Brazilian proposals, 3 projects from EMBRAPA and UNICAMP were selected.

Since its inception in 2018, the Competitive Research Grant program has awarded more than \$ 7 million to projects and subsidized 37 researchers worldwide. Financed entirely by a group of donors and philanthropic supporters, the research covers the field of alternative proteins, from improving crops and formulating products for plant-based meat, to developing cell lines and increasing the scale of bioprocesses for cultivated meat.

#### **HIGHLIGHTS**

Globo Rural
Program offers grants of up to
R \$ 1.3 million for research on
alternative proteins.

"We believe that the support of organizations like the GFI is fundamental, not only contributing with financial resources to assist in the execution of projects but

also in the aligning the pillars science - productive sector - society."

Dra. Caroline Mellinger, researcher at EMBRAPA.

"The importance of investing in scientific knowledge is related to the competitiveness and

insertion of value-added products in the commercial chain. Without investment, science moves slowly, and we have no time to wait ".

Dra. Ana Paula Dionisio researcher at EMBRAPA.

"A large part of the production of cassava in Brazil comes from small producers. In this way, the motivation for the project goes beyond assessing the viability of a sustainable protein source, and it has also a social role in

helping small farmers to increase their profitability. "

Dra. Ana Carla K. Sato, researcher at UNICAMP.

"The first edition of the course was a remarkable positive experience, especially for the quality of the participants, who brought together the vision of the academy, the food industry, and important

research institute."

Dra. Carla Molento, professor at UFPR.

"Realizing the motivation of the participants and great demand, the course was extended (more hours and days in duration), creating more spaces for the exchange of knowledge, ideas, expectations, and visions. In addition to us, different actors that make up the ecosystem of cultivated meat, from startups to venture capital specialists, taught classes (as guest lecturers/ speakers). The proposal was that the course meets the expectations of professionals with different backgrounds; we understand that this transdisciplinary perspective will be key to the configuration of the new chain, the formation of new business models, and to bring the cultivated meat to the consumer in the coming years ".



# 'Science & Technology' online

The series of webinars, "Alternative Proteins: Science and Technology", presented current relevant issues for developing the alternative protein sector. There were six webinars and more than 20 conversation circles, with approximately 2,500 participants. Of these, 60% were part of the scientific community, 33% were professionals in the field, and the rest were entrepreneurs and professionals linked to government institutions such as MAPA and ANVISA.

# Introduction to Animal Cellular Science

In partnership with GFI Brazil, the Federal University of Paraná (UFPR) offered the first discipline in a postgraduate program focused on the cultivation of cells for meat production. "Introduction to Cellular Animal Science" was attended by 46 people, including students, researchers, and professionals from the market in the discipline offered by the Graduate Program in Veterinary Sciences.

# Marie Claire Alternative protein: created in laboratory, promises health for the body and the

HIGHLIGHTS O

planet

# Collaborative Researcher Directory

We have organized a directory to connect researchers in the field of alternative proteins from around the world. The platform makes it easy for scientists to find collaborators with complementary skills so that together they can accelerate their lines of research and develop solutions to the challenges of producing alternative proteins. Currently, we have over 100 registered researchers.

# Partnership with EMBRAPA

We developed a wide range of activities over the course of a year with EMBRAPA, the largest agricultural research institution in Brazil. GFI organized several workshops to connect EMBRAPA to the alternative protein sector and support its research. We visited units across the country to get support and engagement in the area, including units: Beef Cattle (Campo Grande - MS), Milk Cattle (Juiz de Fora - MG), Vegetables (Brasília, DF), Food Agroindustry (Rio de Janeiro - RJ) and Tropical Agroindustry (Fortaleza - CE).

"I felt honored to be part of the first class of the discipline and to participate in discussions about new technologies, mapping out possibilities for innovating, developing new foods that will guarantee the population's food in the coming years. The cultivation of meat, an entirely new area of science, opens up an immense range of opportunities for everyone, but it certainly still has a long way to go. That is the best part: we will continue to work together, collaboratively and with empathy,

Anna Paula Viana Graziadio Pinto, R&D director of the Mantiqueira group

representing everyone to find a solution ".





GFI is recognized today as a focal point by various government areas in the discussion around alternative proteins. This legitimacy is supported by signatory companies of the Manifesto in Support of the Alternative Proteins Sector. This Manifesto, signed by over 20 representatives of the private sector, recognizes GFI as an "institution involved in this segment, developing research or carrying out investments" and declares their "interest in following GFI's initiatives, supporting them when appropriate.

We believe that this is the opportune moment for this sector's development, which should be on the agenda of all parties involved: government, companies, scientific and technological institutions, rural producers, and other agents linked to food."

Supported by this kind of strong endorsement from industry, we maintain an intense and productive two-way communication with the Executive Branch agents responsible for the creation, management, and inspection of the different businesses in the alternative protein sector. We believe in the necessary integration between agricultural, economic, industrial, environmental, and consumer law policies. For this reason, we maintain an intense network of relationships with different ministries.

In the area of Science and Technology, we directly contribute to the Ministry of Science Technology and Inovation's (MCTI) bioeconomy agenda, where we are active collaborators. We participated in the ODBio project - Bioeconomy Opportunities and Challenges, contributing to the alternative protein sector being recognized as an arena of high added value in the new bioeconomy agenda. We have ongoing activities within the Bioeconomy Productive Chains Program, focused on overcoming research gaps to economically explore the production of ingredients made out of the protein fraction in existing production chains, today a by-product in the production of some vegetable oils.

In October 2019, Bruce Friedrich (GFI global managing director) and Gustavo Guadagnini (GFI Brazil managing director) were the keynote speakers at the National Science and Technology Week opening, with Minister Marcos Pontes representing the partnership between GFI and MCTI.



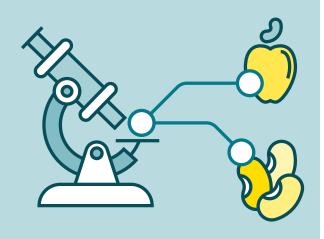
In the field of agriculture, the speed of growth of the sector in Brazil has led to the coexistence of a regulatory agenda and an innovation agenda, where we work with technicians from the Ministry of Agriculture, Livestock, and Supply (MAPA). In the regulatory agenda, we seek to promote a sustainable, attractive, and competitive business environment through a regulatory framework that promotes investment and facilitates innovation. For this, we promote the revision of the current milestones to include products made from plants and ingredients obtained by fermentation. Today, these are still regulated by standards designed for a reality that did not foresee the high degree of innovation of new products. We also work toward a regulatory framework for cultivated meat as a way to stimulate domestic and foreign industrial investments in the country. For these regulatory reviews to be carried out, ensuring high food safety standards, GFI contracted with ITAL to conduct a specific regulatory study for the Brazilian market, focusing on each of the three technologies involved.

We also collaborated with the innovation team of the Ministry of Agriculture and Supply, reflecting on how to stimulate the alternative protein sector to be identified within the environmental actions of food techs in the country.

Also, we have a long and fruitful relationship with Embrapa, from senior management to the research units involved in the alternative protein sector, and now through the financing of two projects within Embrapa thanks to GFI's Research Grant.

In the industrial policy area, we work with the Ministry of Economy (ME) to create the appropriate tax classifications for plant-based products currently on the market, guaranteeing the basis for managing tax rates on these products.

Together with the Legislative Branch, we monitor the legislative agenda of bills related to the sector. Today we have a reactive plan (projects to which we are against approval in the format in which they were proposed) and an assortment of bills to monitor (projects that indirectly affect the sector). We hope to have a proactive plan soon (projects in favor of the sector arising from the regulatory framework review processes).



## Regulatory Framework

The Ministry of Agriculture, Livestock and Supply (MAPA) took the first steps towards regulating plant-based products. In a workshop held in December 2020 and organized in partnership with Embrapa, key concepts and research in development in the alternative protein market were discussed. This was an initial conversation to pave the way for more in-depth discussions, which will lead to a review of the current regulatory framework in light of the demands for innovation in the alternative protein sector. That is an essential step in supporting industry development as it sets safety standards for both industry and consumers. Watch the recording here.

# Bioinnovation and alternative proteins

We became members of the Brazilian Association for Bioinnovation (ABBI), an industry association focused on advanced bioeconomics, currently mostly comprised of biofuels and renewable chemistry companies. Our work expanded ABBI's scope to include the theme of alternative proteins; a topic discussed at monthly meetings in the Alternative Proteins Work Group maintained by the entity. This working group, currently formed by 30 companies, is where debates and consensus building occur for the sector's agenda with the government, whether in the Legislative, Executive, or Regulatory branch. ABBI also plays the role of Executive Secretary of the Parliamentary Front for Bioeconomics, which brings the Work Group closer to more effective actions within the Legislative Branch scope.

GFI signed a cooperation agreement with the government of the State of Amazonas to promote alternative proteins within the state's bioeconomy agenda as a sustainable economic alternative use of the forest's biodiversity. We have ongoing actions to make economical use of local production chains. In one of the Parliamentary Front events, we had the opportunity to present our ideas to the Vice President of Brazil, Gen. Hamilton Mourão, who is also Coordinator of the National Council for the Legal Amazon. We discussed the possibilities of the alternative protein sector to the new bioeconomy agenda of the Amazon biome.

Check out the Amazon webinar: challenges and opportunities for innovation

#### **HIGHLIGHTS**

Câmara dos Deputados
Hamilton Mourão wants
to present sustainable
development proposal for
the Amazon

#### **HIGHLIGHTS**

#### **Globo Rural**

Government defends transparency and dialogue to define rules for the plantbased market in Brazil



All of our work at GFI is offered free of charge to society and we can only do it because we have the support of our family of donors.

We act to maximize donations from our community of supporters, always seeking the greatest efficiency in the use of resources. We have recently been recognized, for the fifth consecutive year, as one of the most efficient organizations in the world in our sector and have been awarded the Top Charity seal by Animal Charity Evaluators (ACE).

To obtain this certification, the GFI was carefully evaluated on aspects such as the use of resources, our actions' effectiveness to pursue our goals, space for more donations, history and financial sustainability, expense planning, expense effectiveness, culture and leadership strategy and adaptability.

GFI also received the maximum transparency certification from GuideStar, considered the largest database of non-profit organizations globally. The Platinum Seal was awarded to a select group of organizations that openly demonstrate information about finances, mission, and impact of the work developed. Of the 2.8 million registered organizations, only 1% received this seal.

Such recognitions reflect our efforts to ensure that our work is done in a strategic, efficient, and transparent manner. GFI Brazil goes through the audit process annually, where all of our expenses are audited by an external consultancy.



"Dreaming of a sustainable, accessible, and ethical food system makes my eyes shine. And GFI makes this dream come true in an articulated set of highly effective strategies and actions that are rewriting the history of how we eat. The focus on effectiveness, passion for making it happen and the systemic vision that GFI brings to this great food challenge of our lives is what distinguishes the organization and makes me believe in its real power of transformation and impact "

Vinícius Picanço Rodrigues

Assistant Professor of Operations and Sustainability at Insper.



"I am very motivated to work with GFI. Our purposes are aligned. We know that emerging technologies must promote strong transformations in the food and agribusiness sectors, with impactful implications for the animal protein industry. Our project, called Project H, aims to allow these implications to be seen through the lens of opportunities, and thus promoting a positive impact on society. And, together, we are working to make GFI Brazil an example of organizational effectiveness, enhancing the fulfillment of its noble purpose."

#### Mário Antônio Porto Fonseca

author of the book SuperFoco - Promoting the Effectiveness of People and Organizations and Senior Fellow of the ALI-Advanced Leadership Initiative at Harvard University.



"It is with great satisfaction and pride that TozziniFreire has maintained a partnership with The Good Food Institute since 2018 for its establishment in Brazil. Driven by our purpose of making law a tool for inclusion, **GFI** is an important pro bono partner in promoting socioenvironmental sustainability, impacting the environment, changing consumer culture, and different sectors of society. GFI's transformative potential was clear to us from the beginning and has been confirmed by the quality of the work done, the commitment to diversity, transparency, absolute quality, and innovation. That is why it is a joy to have strengthened our ties over the years, with several new fronts for consultation and pro bono legal support. Sharing the same hunger for socioenvironmental impact, GFI is a partner of great value. "

> Clara Serva, Business & Human Rights Leader and Pro Bono Coordinator.



"GFI Brazil's work is essential because one of the main ways to reduce the suffering of animals exploited for food is through the emergence of vegetable alternatives that are similar in taste and appearance to meat, milk, eggs, and derived products. GFI Brazil is successful in this mission and the results of its work are showing, as companies in the food sector are promoting launches of vegetable versions of traditional foods."

Marcel Fiorelli Fernandes supporter of GFI Brazil.



# Sustainability and financial independence

Currently, a large part of our resources come from international donors, mostly from the United States. However, we seek to build our network of Brazilian supporters to ensure our financial independence.

To find out how you can be part of this transformative work, contact GFI Brazil's Development Manager, Ana Carolina Rossettini - anar@gfi.org. You can also visit our website (gfi.org.br) and click on the "FAÇA A SUA DOAÇÃO" button in the upper right corner of the page.

Help build a safer, fairer, and more sustainable food chain.

## Technical specifications





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