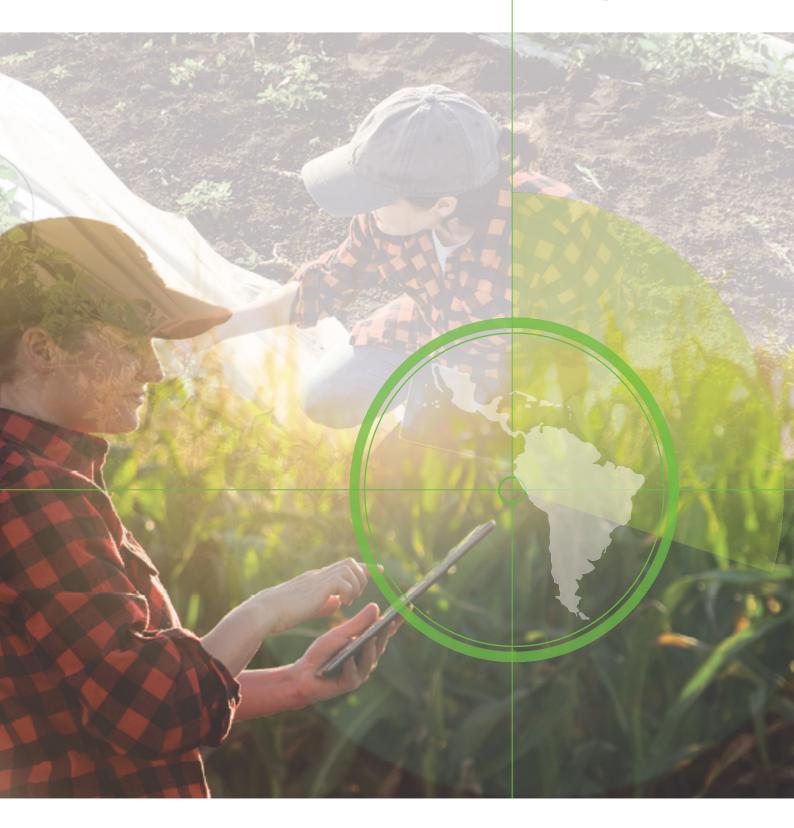


# RADAR AGTECH

MAP OF THE BRASILIAN STARTAPS OF THE AGRICULTURAL SECTOR

# BRAZIL 2022









Brazilian Agricultural Research Corporation Embrapa, Innovation and Business Division Ministry of Agriculture, Livestock and Food Supply

> SP Ventures Homo Ludens Inovação e Conhecimento



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MAP OF THE BRASILIAN STARTAPS
OF THE AGRICULTURAL SECTOR

BRAZIL 2022

> **Embrapa** Brasília, DF 2023

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Parque Estação Biológica Av. W3 Norte 70770-901, Brasília, DF, Brazil www.embrapa.br www.embrapa.br/fale-conosco/sac/

### Responsible for contents

Embrapa, , Business Division Embrapa Digital Agriculture Embrapa Instrumentation SP Ventures Homo Ludens

## Responsible for edition

Embrapa, Business Division

## **Editorial coordination**

Cleidson Nogueira Dias

Text revision

Mariana Zambon

## Graphic design and cover

Cristiane Coletti

### **Publishing**

Raquel Serafim

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# Presentation

When it comes to food production, Brazil is one of the major powers in the world, next to China, India and the United States. In the last few decades, the country has increased its participation in the global market, by expanding its agricultural borders and increasing field productivity. Consequently, we ceased to import a vast amount of items and became strategic exporters, ensuring the supply of various products needed for the consumption of the world's population, such as proteins and grains.

The last two decades were marked in the Brazilian economy by the extraordinary increase in agriculture and livestock productivity. While other industries remain with relatively low indexes, if compared to other countries, agribusiness has stood out in terms of productivity, which generates positive impacts in job creation, industry growth, reduction of poverty and sustainability<sup>1</sup>.

There are, however, several socioeconomic and environmental obstacles to tackle, which require from the industry even more productive innovation and capacity to reinvent itself. The expectation for the Brazilian agriculture is that it can be even more fast-paced, sustainable and productive.

This transformation goes through a long journey of building technical expertise and can be credited, largely, to the cooperation between the private sector, science and technology institutions, as well as to the strategic role of the State's ministries and agencies.

Among other players, the role of the technology entrepreneurship focused on agribusiness stand out, the agribusiness startups – referred to as agtechs – which are the main allies of food producers in the journey towards the digitalization of Brazilian agriculture and livestock industry. Many of such companies have already been mapped, which makes the Brazilian agtechs ecosystem a global reference for the agribusiness.

In this context, it is worth noting that additionally to the favorable weather and land conditions, Brazil benefited directly from policies that result in the development of new technologies, increasing our productive capacity and the quality of our product. This leap, not coincidently, started 50 years ago, with the establishment of two of the most important Brazilian institutions for support and development of the Brazilian agribusiness: Brazilian Agricultural Research Corporation (Embrapa) and Brazilian Micro and Small Business Support Service (Sebrae).

Once again, these two major partners join forces to perform a pivotal project for the country: mapping the startups of the Brazilian agribusiness. We are aware that we must make a new productivity leap to respond to the increasing demand and requirements of the international market for environmentally sustainable production. Thus, we know that the answer to this challenge lies in the development and propagation of innovative technologies focused on the needs of rural producers.

For the 2022 edition of Radar Agtech, Sebrae focused its efforts, along with Embrapa, SP Ventures and Homo Ludens, to – primarily – broaden the scope of this research. With this purpose, the institution used its database that gathers information on thousands of startups from various fields of activity across all Brazilian states. The second step was to enrich mapping with qualitative data covering aspects such as company size, quantity and gender of members, enrollment in the National Classification of Economic Activities (CNAE), and others.

<sup>1</sup> Agriculture Productivity Growth in Brazil | World Bank

The next step consisted in deep diagnosis using the database of startups mapped, from surveys seeing to get to know better the profile and needs of such businesses. Also, the research was supported by another relevant innovation company, Distrito.

Thus, the Brazilian agtech ecosystem shows it is in process of development, which means, on one hand, that this is a great opportunity to invest and generate value and, on the other hand, that we have just started to observe the impact of these new technologies in the industry.

With this spirit, we launched the map of agtechs. Through the partnership between Embrapa, SP Ventures, Homo Ludens, supported by Sebrae and Distrito, we sought to follow and document what, in our perspective, is a pivotal moment for the Brazilian agriculture: the consolidation of the agtech ecosystem, which will bring increased productivity, quality of life and sustainability for the Brazilian population.

The information provided by the map will be a fundamental tool to build public policies and to increase the synergy between the State and private initiatives, aiming at the development of the Brazilian agribusiness' innovation ecosystem. Knowing and supporting the startups identified in Radar Agtech is one of the fastest and most efficient ways to achieve the goal of leveraging producers, not only the large ones, but mostly small rural properties, to reach the global reference levels of sustainability, productivity, innovation and digitalization.

Consequently, we believe we will achieve our goal of providing Brazil with tools to face the need to produce more food without increasing farming area, facing the responsibility of being environmentally and socially inclusive in a scenario marked by deep climate changes.

President of Sebrae Nacional Carlos do Carmo Andrade Melles

Technical Director of Sebrae Nacional Bruno Quick Lourenço de Lima Gustavo Araújo Co-founder & CRO of Distrito

# Introduction

# **Context of Radar Agtech**

In the last decades, Brazil has taken on major protagonism in the food production. Sustainability and productivity have become trademarks of our agriculture, and science and innovation have been its fundamental pillars, allowing our producers to obtain a competitive edge. The national agricultural innovation ecosystem is increasingly complex and wide, leveraged by the significant participation of startups (agtechs) and investors.

Brazil remains one of the most relevant food producers in the world. Slowly, the country gains strength as a major storehouse for new technologies for the agribusiness.

The Brazilian tropical agriculture brings the need to think differently, requiring specific techniques and technologies. Our climate allows two to three harvests per year, but also significantly increases the occurrence of plagues and diseases. Our territorial extension and the size of productive farms represent agriculture of a different scale. Therefore, differences are even stronger in the variability of soils and infrastructure in the field. Due to these specific characteristics, it is not effective to import technologies and innovations, which strengthens the local development of solutions.

Brazilian and Latin American enterprise ecosystems are increasingly mature. The major global goal of increasing the food production in a setting of climate change with unstable economy has become more and more challenging, however there are numerous talents dedicated to this tireless battle. Thus, the mission of the Venture Capital industry is to support major entrepreneurs throughout this journey, in order to overcome such challenges, through technology, in a sustainable and efficient manner.

Radar Agtech shows the significant progress of Brazilian agribusiness entrepreneurship. New companies emerge each month, seeking to solve the industry's new and old problems. Additionally, initiatives that emerged in the past make new investment rounds to potentialize their impact and solve the producers' daily problems. Brazilian Venture Capital market established as the most vigorous in Latin America. The capital flow, even with economic instabilities of the last few years, grows every year, with investment in technologies for agribusiness gaining protagonism for national and international investors. The entrepreneurs remain as the heroes of our times, turning adversity into opportunities.

# **About Radar Agtech 2022**

Radar Agtech Brasil, elaborated in partnership with Embrapa, SP Ventures and Homo Ludens since 2019 has the purpose of providing knowledge to support entrepreneurs, public policy managers, investors, researchers and organizations interested in collaborating with startups in their decision-making process. It is the main source of information about technology-based companies in the industry. The 2022 edition was supported by Distrito and Sebrae.

Radar Agtech Brasil 2022 once again shines a light on startups that are the future of agribusiness and seeks to assist these heroes in their long work journeys towards a more productive, sustainable and innovative agribusiness. Additionally to the map that presents the profile, area and location of Brazilian agtechs, a quantitative research was carried out, looking deeper into some aspects of the agtechs, such as funding sources, business models and their perceptions regarding the impact in the Sustainable Development Goals (SDG), challenges for the business, as well as trends and improvements desired in the agtechs ecosystem. Results from the map and research show a resilient ecosystem, even in a challenging economic setting, both internally and externally, as well as the dynamics of technology and market changes and demands of the environmental sustainability and governance (ESG) agenda, which is gaining pace.

# Radar Agtech and its Makers

Embrapa is a partner who develops and provides solutions for all steps of the productive chain - from the rural producer to the financial system. In addition to contributing with solutions, our company supports the elaboration and execution of public policies and articulation in the industry. Radar Agtech is a reference for Embrapa's actions to promote and incentive entrepreneurship and innovation, stimulating partnerships between startups, academic and research institutions and investors.

With 10+ years of experience and 40 investments made, SP Ventures is the largest AgFoodTech Venture Capital fund in Latin America, with great interest in Brazil. SP Ventures is proud to share the ecosystem growth, and its participation as an author of this report is more than appropriate. The elaboration of this study is relevant to generate knowledge and develop the technological entrepreneurship ecosystem for the agribusiness.

Homo Ludens contributes with its knowledge and experience in innovation and entrepreneurship ecosystems (agtech, fintech, games, internet, etc.), built throughout nearly 10 years of research, education and curation projects and attendance in events, business development and consultancy for public and private actors. Radar Agtech is crucial in its development strategies for ecosystems and innovative and sustainable organizations.

# **Challenges faced by Brazilian Agtechs**

Many important challenges faced by agtechs are also faced by innovative companies from other industries, such as culture change, value perception and skilled personnel. This emphasizes the need to understand agtechs in a broader context of innovation and to dive deeper into the knowledge of specific characteristics of implementing new technologies in the agribusiness.

Considering the evolution of the agtech ecosystem throughout the editions of Radar Agtech, we believe the ecosystem is capable of gaining strength by adopting agtech solutions in various steps of the value chains in which they act, which must follow the attraction of more investments from funds and companies in agtechs. Radar Agtech shall continue to improve and increase its scope, with the purpose of evolving along with the ecosystem.

Brazilian agriculture is moved by science and faces challenges such as the incorporation of digital technologies, climate changes and new solutions required by demanding customers. We hope the information contained in this edition can provide a contribution for the Brazilian agribusiness to face such challenges.

Celso Luiz Moretti, President of Embrapa
Tiago Toledo Ferreira, Executive Board of Business at Embrapa
Felipe Guth, Member of SP Ventures
Francisco Jardim, Co-founder and managing director at SP Ventures
Luiz Ojima Sakuda, Co-founder and member of Homo Ludens
Ivelise Fortim, Co-founder and member of Homo Ludens

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# Introduction

In the 1990's, due to the increased international competition and the extrapolation of the national market, Brazilian agriculture and livestock companies saw the need to obtain competitive edge (Zylbersztajn; Neves, 2005). Such advantage arises from diversification, value-added (Roest et al., 2018) and economies of scale and scope (Reardon et al., 2018), which create innovation that increase value-added for the companies (Anderson et al., 2004; Kyrgidou; Spyropoulou, 2013) in a context of smart farming. Thus, currently, Brazilian agribusiness is at the forefront of agriculture digitalization (Ferreira et al., 2022).

Smart farming is an agricultural management approach that uses "4.0 technologies" to maximize economic return and ensure the conservation of resources, protecting the environment. These technologies include: artificial intelligence, big data analysis, cloud computing, cyber-physical systems (computer-based algorithms), information and communication technology, internet of things (Annosi et al., 2019), augmented reality, robotics, sensors, 3D print, systems integration, ubiquous connectivity, digital twins and blockchain (Klerkx et al., 2019). Agriculture 4.0 also brings technologies such as synthetic protein, cellular agriculture, gene-editing technology, nanotechnology, and others (Klerkx; Rose, 2020).

Thus, the Brazilian innovation and entrepreneurship ecosystem has rapidly changed in the last few years, especially due to stronger joint initiatives between private companies, startups, investors, funding agencies and asset management companies, and others. Therefore, we emphasize that innovation is fundamentally important for the companies' knowledge and profitability, as well as to ensure their survival.

Hence, the innovation process in the agricultural industry receives strong contribution from agtechs and investments in this industry. Also, it refers to the conversion of knowledge in new products, services or processes (or the introduction of significant changes in those that already exists) to be introduced in the market (Amabile et al., 1996). The generation of innovative products and processes is a necessary aspect in the context of the organizations within the innovation ecosystem, mainly for companies that work with research, development and innovation, since this innovative capacity allows for improved organizational performance (Ali et al., 2016).

Radar Agtech Brasil 2022 was developed and updated in this context, and resulted in this document organized as follows: after this introduction, there is a context of the research, with Chapter 1 - Overview of the Brazilian agricultural innovation ecosystem; Chapter 2 - Latin America's potential as a leader in food production leveraged by the innovation ecosystem and venture capital; and Chapter 3 - Female protagonism in the agriculture and livestock industry: from agriscience to agtech entrepreneurship. Next, there are chapters concerning the research: Chapter 4 - Methodology; Chapter 5 - Analysis of the agtech map; and Chapter 6 - Detailed profile of the agtechs. Following these, agtechs are mapped by segment, category, state and city, with a link for each of them.

In the Final Remarks, there is a summary of the results and reflections on the expectations of Radar Agtech Brasil and the Brazilian agtech ecosystem. Certainly, there will be a need to generate and adopt innovative technologies in order to increase sustainability in the agribusiness in this scenario of "4.0 revolution" that, leveraged by digitalization, is leading

companies to deep changes in their business models.

Finally, a note on the various terms used to refer to agribusiness startups: agTech and agriTech, acronyms of "agriculture technology", in general more related to the segments before and inside the farm; foodtech, acronym of "technology applied to food", usually more connected to the segments after the farm; and agrifoodtech, acronym that emphasizes the inclusion of the entire chain.

Radar Agtech Brazil 2022 maintains the standard of the previous editions, using only the term agtech, with the same scope of agrifoodtech: startups of the agribusiness acting in all categories before, inside and after the farm.

# Overview of the Brazilian agricultural innovation ecosystem

# The Brazilian agriculture and livestock innovation ecosystem and its players

The concept of ecosystem is an important and traditional concept in the field of ecology, coined in the decade of 1930 (Tansley et al., 2009). The term refers to a system formed by various components: plants, animals and the environment surrounding them, such as land and climate, interacting and organizing in order to gradually reach a state of dynamic balance.

This concept was incorporated by other scientific and market fields, since the metaphor of the ecosystem is appropriate to understand the interactions between the elements of a system. In the decade of 1990, a debate arose about the concept of "business ecosystem" (Moore, 1993), in which companies acted cooperatively and competitively to develop and sustain new products, satisfy customers' needs and, finally, incorporate a new round of innovations in its activities.

The metaphor also makes sense in relation to Brazilian agriculture and livestock industry. Thus, based on the concept of agricultural innovation ecosystem is possible to map and understand the national agriculture and livestock industry as a large network of interactions between various categories of players, in cooperation, competition, supplementation and orchestration processes.

The concept of open innovation (Chesbrough, 2003) is strongly associated with such dynamics, stating that, additionally to internal sources, companies may use external sources of ideas to advance their technologies and products, jointly creating and capturing value (Cavallo et al., 2019). In this perspective, the organizational borders become more blurred, forming cooperative arrangements and new business models - innovation in the business model has predominated over innovation in products or services, for example (Autio et al., 2018; Gomes et al., 2018).

Different authors have devoted their efforts to understanding the dynamics existing between the players that make up the Brazilian agricultural ecosystem. Bambini (2021Falta referência) proposes an understanding of this complex ecosystem, establishing the interaction based on knowledge, government and business.

Picture 1 presents a representation of the agricultural innovation ecosystem, considering the Brazilian case. It is possible to identify three large dimensions involving knowledge, business and government.



Picture 1. Brazilian agricultural innovation ecosystem.

VC = venture capital; IT = information technology; S&T = science & technology.

Source: Adapted from Bambini (2021).

Agriculture and livestock production involves a wide range of categories of players involved in the innovation dynamics, from the most traditional players to the most recent ones, interested in the process of farm digitalization. The traditional players in the segment include teaching and research institutions, large raw material and equipment suppliers, technical assistance, associations and cooperatives, as well as the producers.

The new wave of digital revolution and bioeconomics has been attracting new companies, referred to as agtechs or agrifoodtechs. Capturing value in digital economies brings different challenges than those of the industrial economy, especially in a context where interoperability has been widely used to generate new businesses and connect different solutions from various suppliers (Teece, 2018).

The role of recent digitalization has been visible in many segments, creating new opportunities to be explored, whether in the triad value creation-proposition-capture or in new opportunities of interaction and partnerships (Rachinger et al., 2018). The growth of digital businesses has been leveraged mainly by three factors: first, the increase in assistive technologies (e.g speech recognition and big data). The second factor is the increased competitiveness generated by these new technologies, leading companies to reinvent themselves faster; and, finally, the third factor is the change in consumers' behavior, led by new possibilities offered by the technology (Verhoef et al., 2021).

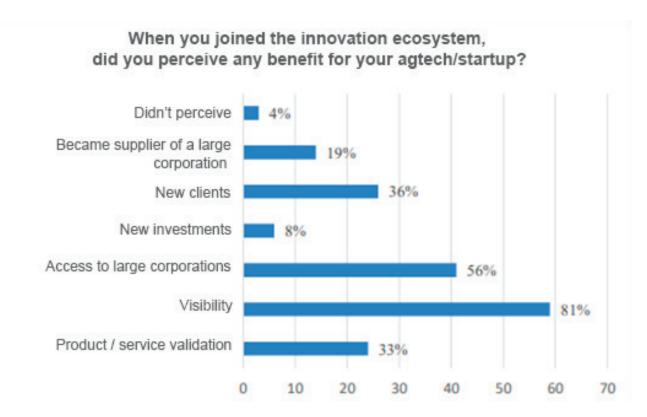
The concept of innovation in business model comes from three dimensions working together: innovation in value creation, innovation in value proposition and innovation in value capture (Clauss, 2017). Thus, innovation in business model stands out as pivotal, because, as important as developing new technologies, it has the strongest potential to make a new product or service be adopted in greater or smaller intensity. In other words, the correct business model is needed to create and capture value (Gassmann et al., 2020).

# Importance of regional ecosystems for agricultural innovation

Therefore, the Brazilian agriculture and livestock innovation ecosystem can be seen as a network of institutions working for innovation in the industry. These institutions often inhabit agricultural innovation environments, establishing stronger bonds and direct cooperation. Another way of organizing players that make up the Brazilian agribusiness, including the innovation environments, refers to regional ecosystems.

Some regional ecosystems have already been internationally recognized, such as Agtech Valley or Valley of Piracicaba (Piracicaba, SP), covering innovation environments such as Agtech Garage and Pulse, as well as many other players that make up a highly enterprising ecosystem, such as universities and Embrapa. Other most recent examples can also be seen in Brazil, such as Agro Valley, located in Londrina, PR and which seeks to create conditions to attract and strengthen actors of the local ecosystem, recognized by the Ministry of Agriculture, Livestock and Food Supply (MAPA) as an agricultural innovation hub.

It is important to note that regional ecosystems are created precisely to leverage the enterprising reality of the region. Several studies show the importance of such spaces and benefits for the players involved, as evidenced by the research conducted by Almeida (2022 **Falta referência**), focused on Agtech Valley (Picture 2).



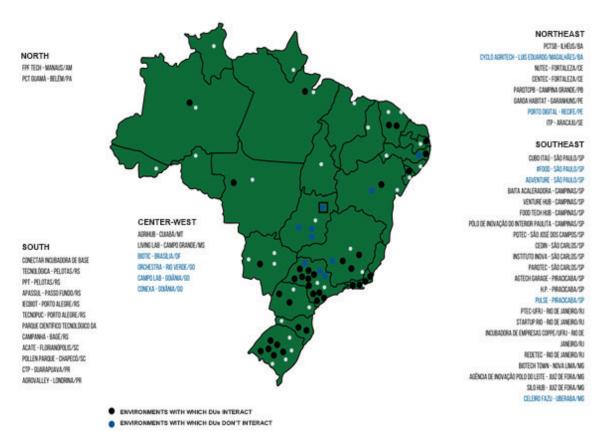
Picture 2. Benefits perceived by startups linked to Agtech Valley.

Source: Almeida (2022Falta referência).

As shown, players participating in the Agtech Valley have important benefits, such as visibility (81%), facilitated access to large corporations (56%), acquisition of new clients (36%) and the actual power to validate a new product or service (33%). Other studies emphasize specific steps in the development of startups, such as the *scale-up* moment, when being part of an

ecosystems allows access to incubation, mentoring and acceleration (Brown; Mawson, 2013Falta referência; Monteiro, 2019Falta referência), as well as access to investments and learning new techniques (Ramos; Pedroso, 2022Falta referência).

With the purpose of carrying out and strengthening connections between Embrapa and innovation ecosystems, the main innovative environments in which Embrapa is inserted were mapped, across the entire national territory. In Picture 3 is possible to identify, in Brazil, where the Decentralized Units (DUs) of Embrapa are located, as well as the main innovative environments with which DUs interact, as well as a few environments with which DUs still don't interact, making a total of 42 innovation hubs aimed at the Brazilian agribusiness. The purpose is to potentialize and expand Embrapa's innovative initiatives.



**Picture 3.** Map of Embrapa's innovation environments.

Innovation hubs are pivotal for making connections to sensitize producers about the benefits of digital technologies, developing the innovation culture, providing for continuous learning and improvement of technological solutions in farms and companies. The use of practical tools – easily adopted by the producer, such as selective pulverization, effective use of seeds, and mainly biotechnology – should grow significantly, allowing for a lower environmental impact.

Amongst the main actions to support and strengthen the regional agricultural innovation systems in Brazil, the program Agro Hub Brasil stands out. The program was developed by MAPA, through its Secretariat of Innovation, Sustainable Development and Irrigation (SDI).

This initiative, formed by Ordinance no. 461 of July 26, 2022 (Brasil, 2022) aims at stimulating and promoting the creation and growth of startups through innovation initiatives for

the agriculture and livestock industry, such as support to events and challenges, and offering opportunities for public and private funding, both nationally and internationally. Another aspect of this program is to include rural producers in agricultural innovation environments, in order to bring technology developers closer to their potential users, fomenting the adoption of new technological solutions, improving the quality of agricultural processes and products, reducing costs and expanding agribusiness income.

Additionally, the expectation is to stimulate the interaction and partnerships between public and private institutions, enabling resource transfer, according to the law. Various players of the Brazilian agricultural innovation ecosystem, such as research institutions, universities, rural producers, private companies, startups and investors may carry out projects, develop studies, organize events and promote actions to strengthen regional ecosystems and innovation networks.

Amongst the agricultural innovation ecosystems across the Brazilian territory, many stand out, as highlighted in Picture 4.



**Picture 4.** Ecosystems working jointly with the Ministry of Agriculture, Livestock and Food Supply to elaborate and strengthen agendas in favor of agriculture and livestock innovation.

Source: AgroHub Brasil (2022).

The virtual environment Agro Hub Brasil (Picture 5) concentrates relevant information about the Brazilian agriculture and livestock innovation ecosystem and the main initiatives in place in the country, according to Picture 4.



Picture 5. Portal Agro Hub Brasil.

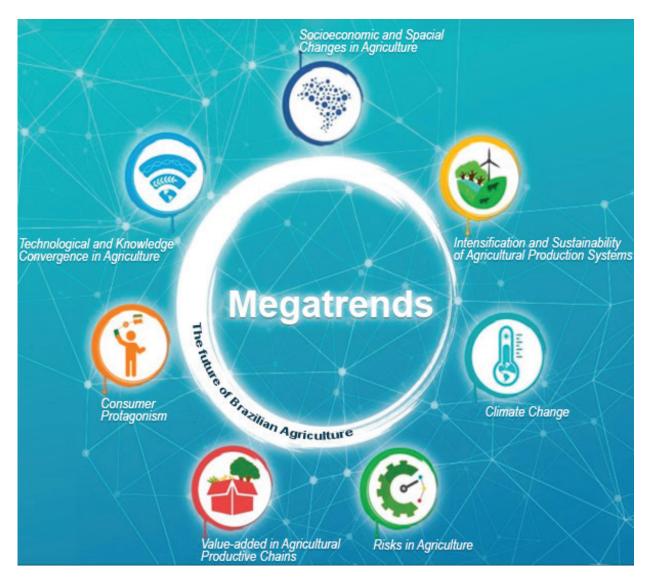
Source: AgroHub Brasil (2022).

# Technological innovation trends in agriculture and livestock

Agribusiness has stood out amongst the best results in the Brazilian economy, representing 27.4% of the national Gross Domestic Product (GDP) in 2021, which gave Brazil renown as a global agriculture and livestock power. This occurs largely due to the innovative effort of Brazilian research institutions, including Embrapa. To keep this pace, it is necessary to get ready for the future and embrace new ideas both in the academic setting and with the market.

Taking advantage of a strong innovation ecosystem, the Brazilian agriculture and agribusiness can stay competitive and ahead of the growing demand for food. Additionally, new concerns arise regarding the agricultural and livestock productive system, such as the need for change required from the Sustainable Development Goals (SDG) proposed by the United Nations (UN).

In this regard, Embrapa published the document *Visão 2030: o Futuro da Agricultura Brasileira* (Vision 2030: The Future of Brazilian Agriculture), which sought to define new strategic actions in science, technology and innovation (ST&I) for agricultural development. The document identified seven megatrends to guide research and innovation strategies for the Brazilian agriculture, as follows: Socioeconomic and Spatial Changes in Agriculture; Intensification and Sustainability of Agricultural Production Systems; Climate Change; Risks in Agriculture; Value-Added in Agricultural Productive Chains; Consumer Protagonism; Technology and Knowledge Convergence in Agriculture (Picture 6).



Picture 6. Megatrends presented in the document Visão 2030: o Futuro da Agricultura Brasileira.

Each of these megatrends arise from new challenges posed to the global and Brazilian agriculture and livestock industry, such as increased water, energy and food consumption; availability of labor in the field; requirements and commitments regarding sustainable development. In order to prepare for these trends, innovative actions are required, both by the government and by the private sector, promoting the development of new technologies that respond to these trends.

Another event that had a significant impact in the Brazilian and global agricultural innovation ecosystem was the Covid-19 pandemic, started in 2020. From the beginning, studies shown there would be a concentrated effort to create new technologies related to vertical and indoor agriculture (Lowenberg-DeBoer et al., 2020 Falta referência), agriculture digitalization focused on improvements in the productive processes, and efficiency (Finger et al., 2020 Falta referência). This results in increased offering of technologies based on artificial intelligence, blockchain, internet of things (IoT), sensors and cloud-based information management (Foscarini, 2020). It also intensifies transfer and technology update (Ambali et al., 2020Falta referência) through the use of digital education and technology transfer platforms (Rose et al., 2020Falta referência) and new solutions that must be created considering the consumers' con-

cern regarding sustainability and increased demand about the origin of food, with relevant themes such as approximation between producers and consumers, traceability, quality and safety (Foscarini, 2020).

# Overview of investments in agtechs

Initially, we will present the analysis of global investments in venture capital (VC), then an overview of investments made in agtechs in Brazil. The purpose is to cover the main market trends in the net years, such as: biological raw materials, agfintechs, marketplace for agribusiness and the new climatechs.

The second quarter of 2022 was troublesome for the venture capital market, marked by a significant downturn after 2020. According to a report published by Crunchbase (Teare, 2022), US\$ 120 billion were invested in startups – a 26% decrease compared to the first quarter and 27% against the same period of 2021.

Due to a more instable economic setting, with higher interest rates, investors prefer safer investments (fixed income, savings etc.) over the riskier ones, such as venture capital. Even in this scenario, agrifoodtechs showed resilience – as in the beginning of the Covid-19 pandemic – and enjoyed an increase in investments of 85% when compared to 2020, according to Agfunder.

In first place, regarding subsegments of agtechs, once again the e-grocery segment was the most predominant – with a year-by-year growth of 188% – and a round of more than 10 digits (Xingsheng Furong in China). It is also worth mentioning that this category is expanding its presence in the new consumption habits of the post-pandemic modern society.

The second place includes startups of the "innovative foods" sector, which obtained 9.3% of the industry's investments. Established companies in this segment performed great rounds, such as occurred with Impossible Foods (US\$ 500 million), Nature's Fynd (US\$ 350 million), Perfect Day (US\$ 350 million), Future Meat (US\$ 347 million) e Not Company (US\$ 235 million), which demonstrates the maturity stage of the companies in the industry.

The third place went to the startups related to logistics, distribution and traceability – called midstream – which held 12.2% of investments and have been directly contributing to create a robust supply chain and increased food safety. Agricultural management software companies were responsible for 9.6% of the number of rounds – a 29% increase compared to 2020 – but received only 2.3% of the capital. Finally, it is evident that the categories Novel Farming System and Restaurant Marketplaces presented less deals, but both showed a 45% higher volume of investments, if compared to 2020.

According to AgFunder, in 2021, the top 5 countries that received more capital include the United States, which received an amount of US\$ 21 billion in 1.062 businesses, followed by China (US\$ 7,3 billion in 123 businesses), India (US\$ billion in 164 businesses), Germany (US\$ 3 billion in 100 businesses) and Great-Britain (US\$ 1,3 billion in 188 businesses). Table 1 shows the 15 main countries in the ecosystem, with Brazil occupying the sixth position, with 102 businesses and a total of US\$ 1.3 billion in funding.

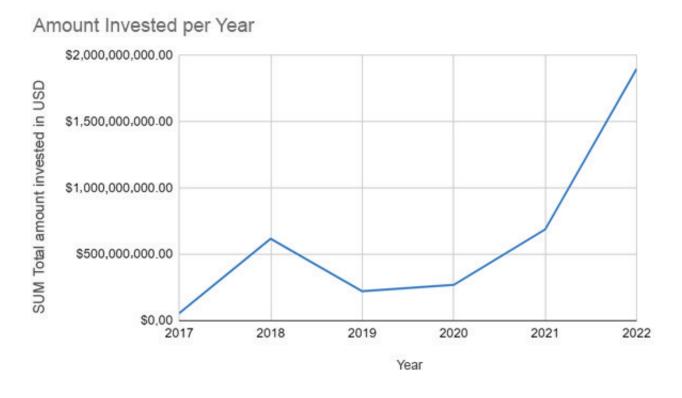
Table 1. Investments in agtechs by country

| Position | Country                  | Volume<br>(millions of US\$) | Business |
|----------|--------------------------|------------------------------|----------|
| 1        | United States of America | 21,000                       | 1,062    |
| 2        | China                    | 7,300                        | 123      |
| 3        | India                    | 4,000                        | 257      |
| 4        | Germany                  | 3,000                        | 100      |
| 5        | United Kingdom           | 1,300                        | 188      |
| 6        | Brazil                   | 1,300                        | 102      |
| 7        | Israel                   | 1,200                        | 71       |
| 8        | France                   | 1,100                        | 69       |
| 9        | Turkey                   | 1,000                        | 29       |
| 10       | Singapore                | 1,000                        | 54       |
| 11       | Netherlands              | 900                          | 44       |
| 12       | Spain                    | 700                          | 59       |
| 13       | Colombia                 | 700                          | 19       |
| 14       | Finland                  | 700                          | 22       |
| 15       | United Arab Emirates     | 600                          | 22       |

- Agfintechs startups that develop digital financial products for the agribusiness, both in the B2B and B2C models (in this case, farmers). Through the use of technology, these startups can deliver financial solutions to the producer in a fast, non-bureaucratic way and often at more accessible rates. According to Graze, during the year of 2021, this class received an amount equivalent to US\$ 1.59 billion, with Compound Annual Growth Rate (CAGR) of 47% between 2016 and 2021. Within the category, the most relevant rounds were: Produce Pay (Series C; US\$ 43 million), Growers Edge (Series B; US\$ 40 million), Jai Kisan (Series A; US\$ 30 million), Oxbury Bank (Series C; US\$ 21 million) and Traive (Series A; US\$ 17 million).
- **Biological raw materials** agbiotechs are companies that produce and sell biological products virus, fungi or bacteria, and microbiological, such as wasps and mites that contribute to increase productivity and provide biological balance to combat plagues. In 2021, according to AgFunder, this category raised US\$ 2.6 billion, more than 30% growth in the volume invested compared to the previous year. Amongst the main rounds, the following stand out: Pivot Bio (U\$ 430 million), Inari (US\$ 208 million), DNA Script (US\$ 165 million), Inscripta Inc. (US\$ 150 million) e Mojia Bioscience (US\$ 120 million).
- Marketplace marketplaces are understood as digital environment in which the purchase and sale of products occur. This thesis gained a lot of strength in the foodtech environment, with significant rounds, as seen with Ifood (Series F; US\$ 500 million) and Rappi (Series F; US\$ 500 million). Concerning agribusiness, this class has been

- demonstrating traction through time. In this aspect, even with only a slight increase of US\$ 100 million in the amount of investments from 2020 to 2021, the number of rounds went from 89 to 110, according to the AgFunder. Amongst the five main rounds, the following stand out: Farmer Business Network (US\$ 300 million), DeHaat (US\$ 115 million), Agrostar (US\$ 70 million), TaniHub (US\$ 66 million) e Frubana (US\$ 65 million).
- Climatechs companies that, using technology, act directly to reduce greenhouse gas (GHG) and/or reduce impacts of global warming. In terms of trends, we see that consumers are gaining awareness regarding sustainability which reflects in the purchase decisions they make. Thus, our society, little by little, is changing its mindset. This movement will foment investments in solutions centered in traceability, water management and carbon neutrality. These companies may act in different segments, such as: mobility and transportation; energy; agriculture and land use; manufacturing industry; civil construction; and financial services. The volume of investments in this category is growing at an extraordinary rate. According to PitchBook (Falta referência), in 2021 a total estimated amount of US\$ 30.8 billion may have been invested. Analyzing since 2010, the category presents CAGR of approximately 28%. Within the "Ag" categories, the following companies stand out as reference in the industry: Indigo Agriculture, Eat Just, Perfect Day, Plenty and Bowery.

These four theses are present in Brazil as new startups, arising to develop the various challenges that exist in each segment. Observing the history of risk investments in Brazilian agtechs (Picture 7), a series of milestones are perceived that greatly help us understand the development of the technology industry for agribusiness in Brazil and the increasingly relevant role of technology.



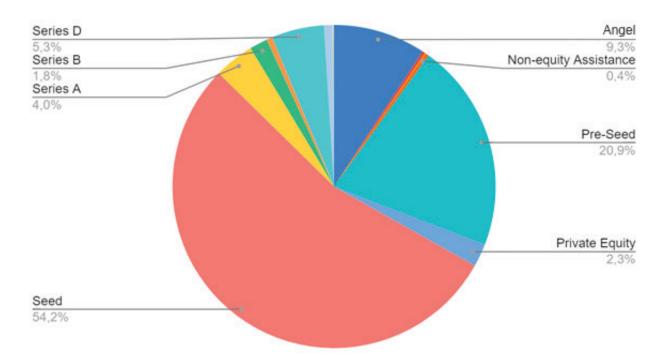
Picture 7. Amount invested per year in agtechs in Brazil.

The first highlight is the relative inconstancy: as opposed to what is seen in more established industries, the amount of venture capital (VC) investment in agtechs has significantly varied in the last years, with high volumes of investments followed by moderate years, however always with positive trend.

This variation is typical of industries under development, which still makes VC investors act more cautiously and less systematically in their investments. It is also an ecosystem with great difference in size between the players, with some large startups rising as late-stages while the market under development is mostly made up of companies still in seed and angel investment stages.

Analyzing the last 5 years, the industry shows acceleration in terms of investments, which may be the beginning of a more steady investment curve. The volume of investments made in 2002 in agreehs is also worth noting: despite there are still three months remaining in the calendar, it is already the most prosperous year in the historical series for startups in the industry.

Observing the division of investments by stage and nature (Picture 8), what first gets our attention is the large volume of investments in seed and pre-seed categories, dedicated to provide the first breath for innovative business to develop their products for the markets here they perform.



Picture 8. Division of investments (in American dollars) by stage and nature.

As a rule, having a large volume of deals in early stages is a sign of health and vitality for the ecosystem. It means that investors are willing to foment new cases in early stages, which ends up increasing the number of startups that live through their first years, and also gives more visibility to the industry as a whole.

Some companies already begin to surpass the breaking point of the initial years, A and B

series of rounds become more frequent in the segment, even in a challenging year. The growing number of early-stages indicates this expansion. It must also be emphasized the investments made by specialized VCs, as well as by generalist houses that began to see the industry as part of their theses, showing maturity of the assets and the industry.

Late-stages, which are the investments from series C onward, are very frequent in the ecosystem, but still have not reached the numbers observed in larger industries such as fintech or retail, both with billion-dollar investments when it comes to the consumer world. However, the significant increase in early-stage investments shows that soon these levels can be reached.

Finally, despite the busy setting of investments, the low number of acquisitions in the ecosystem still stands out. There are two hypotheses for this scenario: distancing between traditional agroindustry sectors and technology and innovation companies, and the possibility that startups are maturing their products and solutions and, therefore, there are still little mergers in the ecosystem. In the next few years, given the increased capital flow, the mergers and acquisitions (M&A) movement is expected to be more expressive, thus closing the investment cycle and showing the consolidation and maturity of the agtechs segment.

# Ranking of the startup ecosystem in the world

The Global Startup Ecosystem Index Report 2022 (Startupblink, 2022)<sup>1</sup> ranked the city of São Paulo as the 16<sup>th</sup> startup ecosystem in the world. Additionally, The Global Startup Ecosystems Report (Startup Genome<sup>2</sup>, 2022a ou 2022b?) ranked São Paulo in the 28<sup>th</sup> position. The city of São Paulo has climbed two positions compared to the 2021 ranking in both reports and remains as the only Latin American city ranked amongst the 30 most relevant ecosystems in the world.

The analysis of the cities that ranked higher amongst those with the largest startup ecosystems in the world, the research made by Startup Genome (2022a ou 2022b?) and Startup-Blink (2022) show the ranking presented in Table 2.

| Table 2 Bankin  | a of cities with the I | argest startus   | occavatama in 2022 | ton 20 cities  |
|-----------------|------------------------|------------------|--------------------|----------------|
| lable 2. Rankin | a of cities with the i | ardest startub ( | ecosystems in 2022 | top 20 cities. |

| Position | Startup Genome | StartupBlink                       |
|----------|----------------|------------------------------------|
| 1        | Silicon Valley | San Francisco Bay (Silicon Valley) |
| 2        | New York City  | New York                           |
| 3        | London         | London                             |
| 4        | Boston         | Los Angeles Area                   |
| 5        | Beijing        | Boston Area                        |
| 6        | Los Angeles    | Beijing                            |
| 7        | Tel Aviv       | Shanghai                           |

<sup>1</sup> StartupBlink considers amount of startups, quality of the ecosystem and business environment.

<sup>2</sup> Startup Genome considers performance, financing, resource attraction, market, connectivity, experience, talent, founder/entrepreneur and connection with the location.

| Position | Startup Genome   | StartupBlink         |
|----------|------------------|----------------------|
| 8        | Shanghai         | Bangalore            |
| 9        | Seattle          | Tel Aviv Area        |
| 10       | Seoul            | Paris                |
| 11       | Washington DC.   | Seattle              |
| 12       | Tokyo            | Berlin               |
| 13       | San Diego        | New Delhi            |
| 14       | Amsterdam-Delta  | Chicago              |
| 15       | Paris            | Tokyo-Yokohama Area  |
| 16       | Berlin           | São Paulo            |
| 17       | Toronto-Waterloo | Mumbai               |
| 18       | Singapore        | Shenzhen             |
| 19       | Chicago          | Washington D.C. Area |
| 20       | Sidney           | Austin               |

Source: Startup Genome (2022a ou 2022b?) and StartupBlink (2022).

In the 2019 StartupBlink report, San Francisco (Silicon Valley) had a total score five times higher than the score received by New York. In 2022, the difference in score between the two locations is only 2.5 times. Thus, there is a trend for San Francisco to remain on top of the global ecosystem in a near future, but it shall keep losing its relative power (Startupblink, 2022).

The United States stand out in international rankings with various relevant regional ecosystems, with four amongst the five largest ecosystems. This relevance is also observed in agribusiness, according to The Global Startup Ecosystem Report (GSER): Agtech & New Food Edition <sup>3</sup> (Startup Genome, 2022a ou 2022b?) – Table 3. On a global scale, Brazil is a power in agribusiness, and the ecosystem in the city of São Paulo focused on innovation for agriculture and livestock ranked in 18<sup>th</sup> position, ten positions above the overall ranking of the city of São Paulo (28<sup>th</sup> position).

The criteria used in the The Global Startup Ecosystem Report (GSER): Agtech & New Food Edition are performance, funding, expertise, knowledge, talent and focus.

Table 3. Global ranking of agtech and new food startups ecosystems, top 20 cities in agribusiness.

| Position | Startup Genome     |
|----------|--------------------|
| 1        | Silicon Valley     |
| 2        | New York City      |
| 3        | London             |
| 4        | Tel Aviv-Jerusalem |
| 5        | Denver-Boulder     |
| 6        | Los Angeles        |
| 7        | Boston             |
| 8        | Beijing            |
| 9        | Vancouver          |
| 10       | Research Triangle  |
| 11       | Toronto-Waterloo   |
| 12       | Seattle            |
| 13       | Bangalore          |
| 14       | Amsterdam-Delta    |
| 15       | Stockholm          |
| 16       | Shanghai           |
| 17       | Chicago            |
| 18       | São Paulo          |
| 19       | Singapore          |
| 20       | San Diego          |

In Table 3, additionally to the highlight given to Tel Aviv-Jerusalem, Denver-Boulder, Bangalore and São Paulo concerning the strength of the agtech and new food startups ecosystem, compared to Table 2, a few cities such as Shanghai, Seoul and Washington D.C. are far from the spotlight positions.

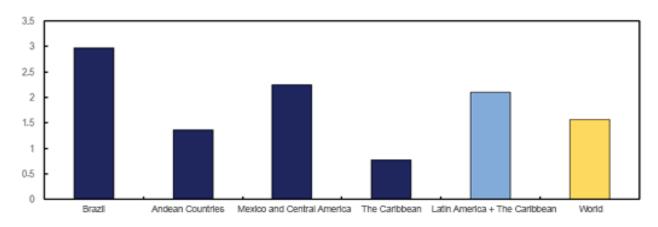
# Latin America's potential as a leader in food production leveraged by the innovation ecosystem and venture capital

# Venture capital investments in agfoodtechs in Latin America

With only 30% of connectivity in rural areas, and more than 25% of the economy centered in agribusiness, innovation is a protagonist in the agfoodtech sector in Latin America, which doubled its size in the last year. There are currently 665 million people in the region and a GDP of more than US\$ 5 trillion, of which Brazil, Mexico, Argentina, Chile and Colombia account for more than 80%. A relevant fact that potentializes technology development is that Latin Americans are connected in a fast pace, and internet presents already reaches 78% of the population, surpassing ChinaFalta referência.

In this context, according to the World Bank, in 2021, agriculture, forestry and fishing activities correspond to an average of 7% of these countries' GDP, with agriculture alone being responsible for creating 14% of jobs in the area. Furthermore, according to Americas Quarterly, 72% of all exports in the area, in 2021, came from commodities, compared to 62% in Africa, 51% in Middle East, 37% in European economies and 25% in Asia.

It is worth mentioning that the industry has shown great resilience. According to The Food and Agriculture Organization (FAO) of the United Nations (2021Falta reference), agriculture in Latin American and the Caribbean has grown, in the last decades, an average of 2.7% per year (in American dollars of 2010, including forestry and fishing), an amount slightly higher than the average GDP growth of these countries (2.1%) (World BankFalta referência). In fact, the industry's productivity was higher if compared to the global average, as observed in Picture 9.



Picture 9. Productivity comparison in agriculture industry.

Moreover, agribusiness in Latin America presents peculiar conditions, which may be considered unique. With this in mind, foreign technologies usually cannot be replicated or need great effort to be tropicalized. These conditions include:

- Biannual or triannual harvests.
- Accelerated land erosion, due to higher levels of rainfall.
- Integration between crop, agriculture and livestock.
- Major land variations.
- Seasons which are not well defined.
- Microclimate diversity and variables.

In light of such conditions, to achieve the aforementioned productivity, it was necessary to develop specific technologies for the region. In the last few years, such knowledge was developed mainly within large universities, such as Universidade Estadual de Campinas (Unicamp), Universidade de São Paulo (USP), Universidad de Buenos Aires (UBA) and large research centers, such as The Brazilian Agricultural Research Corporation (Embrapa) in Brazil.

However, when it comes to innovation in Latin America and other countries around the world, the amount of capital invested in the region is significantly low. While Israel invests 4.9%, South Korea invests 4.5% and the United States 2.8% of their annual GDP in research and new product development, the average investment of Latin American countries in R&D is only 0.6%, according to the World Bank (2019**Falta referência**). This fact shows there is great opportunity for technology development in the industry.

In order to address the lack of balance in the investment, to follow the demand for food in the planet, such technologies must come, mostly, from agfoodtech startups, which, in general, are financed by venture capital. Various startups originated in academic projects which, potentialized by enterprising capital, became great instruments of development in the region.

In 2021, venture capital in Latin America reached the mark of US\$ 15.7 billion. This is a record amount in the Atlantic, and it was three times higher than the amount invested in 2020 (US\$ 4.2 billion). Additionally, the number of unicorns (private companies with market value of more than US\$ 1 billion) also increased significantly, reaching 26 companies in Latin America. However, in 2022, there was a market downfall. If compared the last quarter of 2021 against the 2<sup>nd</sup> quarter of 2022, a decreased of 39% is noted in the investments in Latin America.

The good news is that agtech and foodtech segments have shown resilience and a growth in most countries, both in terms of numbers of new investments rounds and in amounts invested. Table 4 shows the growth/decrease of rounds in the main Latin American countries in 2021. The conclusion is that, for this industry, capital became a pragmatic agenda in investment houses; thus, despite the momentary low in 2022, the industry has been receiving more and more capital and, consequently, new technologies are being launched.

Table 4. Growth/decrease of investment rounds in the main Latin American countries in 2021.

| Country  | Total No. of Deals | Total Capital Invested (USDm) |
|----------|--------------------|-------------------------------|
| Brazil   | 25%                | 152%                          |
| Chile    | 86%                | 219%                          |
| Colombia | -14%               | 75%                           |

| Country   | Total No. of Deals | Total Capital Invested (USDm) |
|-----------|--------------------|-------------------------------|
| Argentina | 200%               | 1000%                         |
| Mexico    | 200%               | -11%                          |

Source: ????

To contextualize how strong the agfoodtech segment is in Latin America, in addition to Brazil, we provide a brief overview of three investment funds in venture capital in the region: Glocal, in Argentina; Matter Scale A, in Colombia; and Amplifica Capital, in Mexico. This clarifies the scenario in which Brazil is inserted in the region, as well as potential opportunities and synergies within the industry for startups that intend to internationalize their operations.

# Venture capital investment funds in Latin America

# Glocal, Argentina

In Argentina, agroindustrial chains present a great relevance for the country. In 2022, the agribusiness represented about 25.6% of the GDP, and right in the first quarter of the year the industry was responsible for 62.6% of exports (a sum of oilseeds, cereals, bovine cattle, fruit production and vegetables). According to Fundación Agropecuaria para el Desarrollo de Argentina (Fada), considering the average since 2004, historically the agricultural industry in Argentina represents about 22.9% of the GDP.

Additionally, the venture capital market just lived its best moment in 2021, with record of investments both in terms of amount and number of deals. In turn, 2022 seems a bit more challenging due to adverse circumstances in the global setting and in Argentina. However, it can be said that, according to Asociación Argentina de Capital Privado, Emprendedor y Semilla (Arcap), in the first semester of the year, the number of transactions and capital invested are aligned with the average of the 5 previous years. In our opinion, Argentina has the possibility to contribute as a country of reference in agtech innovation in Latin America. The "enterprising" profile of rural producers, predisposition to adopt new technologies, productive efficiency and relevance of the industry in the economy are factors that allows us to consider that the country has much to offer in terms of startup creation in agriculture and food industries.

At Glocal, in our role as accelerator and venture capital focused on agtechs and foodtechs, with investments throughout Latin America, we see that in every country there are extremely engaged startups, focused on solving local issues, and whose matrix can be replicated in other regions. Agrofy, Puna Bio and ZooMagri are examples of startups in Argentina. Implementing solutions in both sides of the border for similar problems, and with increasingly demanding consumers, is possible by strengthening even more the bonds already existing between both countries, especially in the agtechs and foodtechs ecosystem.

# Matter Scale, Colombia

Colombia is the third largest economy in Latin America, falling only behind Brazil and Mexico. In 2022, the country is expected to stand out as the largest GDP growth amongst Latin

American countries. As for the market, Colombia became a fast-paced enterprising ecosystem and highly attractive for technology startups. The quality of human talent and its enterprising nature, as well as market size and geographic location, are some of the factors that placed Brazil as an attractive destination for building and growing new companies.

Rappi has also been a reference for this transformation. The company was established in 2015 and 3 years later become the first Colombian startup to earn unicorn status. It received funding of US\$ 2.3 billion and was evaluated in US\$ 5.2 billion, becoming an inspiring model for a new generation of entrepreneurs. Simón Borrero, Sebastián Mejía and Felipe Villamarín, founders of Rappi, have strongly contributed for the development of new businesses in Colombia, through investment and support to the employees. As a result, the founders had a significant role in creating an ecosystem of more than 100 Latin American companies in less than 7 years, some of which raised significant investment rounds, such as Frubana, Chipper, Tul, Truora, Morado, Seeri, Muncher and others.

The GDP of Colombia's agribusiness reaches US\$ 21.8 billion per year, which represents 7.39% of the GDP, with approximately 2.7 million agricultural producers. In contrast to Brazil and Argentina, rural producers in Colombia are mostly small in size: 70% of farms have less than 5 ha and 24% more than 20 ha. Most productive units (around 86%) are not mechanized and only 15% receives technical assistance. The industry is still far behind countries such as Brazil and Argentina in terms of use of new technologies, which represents a great opportunity.

There are many synergies between Colombia and Brazil. Colombian startups don't see a barrier to expand and work to be present in the Brazilian market (Rappi, Frubana, Robin-Food). In particular, we see business opportunities in the agtech industry in Brazil, where the market is more mature and is geographically close to Colombia. It is a matter of changing the current paradigm of remaining in the Brazilian market and finding new opportunities and fertile markets outside the country. Another relevant fact is that there are few venture capital funds in Colombia, especially those focused on agtechs and foodtechs. Thus, there is a good opportunity for experienced funds in the market, such as SP Ventures, to act in the Colombian market and seek relationship with local investors and venture capital.

# Amplifica Capital, Mexico

According to the latest report of the Transactional Track RecordNos, Mexico recorded 85 venture capital operations, assessed in more than US\$ 2.4 billion in the two first quarters of 2022. The country occupies the 12<sup>th</sup> position in the global food production and export and is one of the relevant players in Latin American agribusiness, with 32.4 million hectares dedicated to agriculture and 2.5% of the GDP represented by the industry. In Mexico, there are more than 130 agreechs that seek to assist agricultural producers through technology optimizing processes across the productive chain, through biotechnology and biofuels, big data and precision agriculture, genetics and crop protection, logistics distribution, automation and others.

Considering the impact of climate change risk, technology integration and smart use of data in the field not only allow maximizing water consumption in a country such as Mexico, which suffers greatly from draught in its territory, but may also optimize the consumption of other resources, such as energy and fertilizers, additionally to enable detection of plagues and diseases, enabling farmers to get to know better their own production practices, in order to maximize the productive potential of crops and create higher value.

Mexico and Brazil have worked together to strengthen programs and actions that can expand the commerce of agrifood products. Latin America strongly relies on natural resources and, thus, will suffer a great impact from climate change. This creates a great opportunity for cooperation between Brazil and Mexico to fight these effects by developing innovative solutions in the agtech industry.

The growth of the world's agricultural production in the next decade must be sufficient to address the increased global demand and to keep prices relatively steady. This means that the future of agriculture will face great challenges, thus the synergy between private and public capital, talent and infrastructure are vital to develop innovative solutions and trigger off a sustainable and competitive ecosystem.

In short, all investors see a constant and growth movement concerning investments in agfoodtech startups. Brazil is in the center of this movement in the region, with an agribusiness market strongly represented in the economy, added to a relevant production of academic knowledge that leverages the development of technology for agribusiness.

Additionally to the context of investment in Latin America, with carefully selected cases from Argentina, Brazil, Colombia and Mexico, interests emerge regarding other funding initiatives for entrepreneurship and innovation in the Latin American continent, focused on agriculture startups. Some of the actions of which Embrapa takes part will be debated in the next topic.

# **Ecosystems and initiatives for innovation in Latin America**

In this scenario of knowledge generation, it is interesting to mention an increasingly bigger decentralization movement. Thus, concentration in large urban centers is decreasing in the entire region and new productive hubs have emerged in the last few years, transforming regions and causing a new generation of entrepreneurs to emerge.

As startups evolve, they can naturally change their location due to many reasons, considering the tax, marketing or business determiners. Thus, it is surprising to see some remarkable startups and unicorns at unexpected locations (Startupblink, 2022Falta referência).

Thus, many regions have shown growth in investment attraction, ecosystem performance and excellence in protagonism in their regional challenges. It is the case of Latin America (Table 5), which, by comprehending the stronger startup ecosystems, serves as a guidance for the development of innovation and an alert for leaders to develop less instinctive and more ecosystemic strategies, based on evidence-based analysis contained in the six factors measured in each ecosystem, which were used to create the 2022 ranking, namely: a) performance; b) financing; c) market reach; d) talent and expertise; e) connectivity; f) knowledge (Startup Genome, 2022Falta referência).

Table 5. Ranking of startup ecosystems in Latin America.

| Position | Best performance     | Top regional challenges |
|----------|----------------------|-------------------------|
| 1        | São Paulo (Brazil)   | Bogota (Colombia)       |
| 2        | Mexico City (Mexico) | Curitiba (Brazil)       |

| Position | Best performance         | Top regional challenges |
|----------|--------------------------|-------------------------|
| 3        | Buenos Aires (Argentina) | Belo Horizonte (Brazil) |
| 4        | Santiago (Chile)         | Guadalajara (Mexico)    |
| 5        | Rio de Janeiro (Brazil)  | Porto Alegre (Brazil)   |

Source: Startup Genome (2022Falta referência).

As occurred in a large part of the world, the Covid-9 pandemic catalyzed the decentralization of startup ecosystems in Latin America. While São Paulo remains as the main region of the hub, there are growing numbers of startups with significant activity across Brazil and other places in Latin America, which have been emerging in Curitiba, Porto Alegre, Belo Horizonte, Santiago and Guadalajara (Startup Genome, 2022**Falta referência**).

In order to foment new opportunities of innovative solutions for agriculture and livestock in Latin America, Embrapa cooperates with StartOut Brasil, a free internationalization program that supports the insertion of Brazilian startups in the most promising innovation ecosystems in the world.

Since its creation in 207, the StartOut Program, brought by the Ministry of Economy, Ministry of Foreign Affairs, Apex Brasil, Brazilian Micro and Small Business Support Service (Sebrae) and National Association of Entities Promoting Innovative Enterprises (Anprotec), has held 12 internationalization cycles in 9 different countries and provided support to more than 221 startups, with experienced professionals in the countries of destination, in order to ensure the best experience for the entrepreneurs. The program provides (StartOut, 2022Falta referência):

- *Pitch* International pitch training.
- **Investment** Access to international investors.
- **Training** Training in internationalization.
- **Business** Business schedules supported by a local matchmaker.
- **Mentoring** Technical and business mentoring with experts.
- **Supporting institutions** Access to government institutions, accelerators and technological parks.

In the scope of Tech-Mentorship, Embrapa's support occurred through specialized mentoring for Latin America missions, both in Colombia, in 2020, and in Chile, in 2022.

Mission Colombia 2020 (Bogota and Medellin) – Colombia was the destination of another StartOut Brasil cycle, because it is one of the fastest-growing countries in Latin America, partly due to several government initiatives to attract international investment. With new resources, since 2018 the region has been developing its technological potential and stimulating the growth of startups, such as Rappi, a unicorn with great presence also in Brazil. Currently, Colombia has been in the spotlight because of its technological centers, located in Bogota – strategically located to promote relationships across its borders – and in Medellin, where the risk capital companies are located.

**Mission Chile 2022 (Santiago)** – Due to the high potential of the Chilean company to absorb innovating businesses, Santiago was chosen again as the destination in South America

for another StartOut program. Referred to as the best country in Latin America to make business by the Global Entrepreneurship Index 2019 of the Global Entrepreneurship Development Institute, Chile is ranked in the 19<sup>th</sup> position of the overall ranking, which takes into consideration a series of factors to assess the enterprising ecosystem, such as infrastructure, resources and public and private initiatives that stimulate innovating businesses. The cycle started on February 8<sup>th</sup>, 2022, with the selection of 40 startups from different areas, such as Artificial Intelligence, Corporate Solutions, Agriculture and Food, Clean Technologies and Mobility, to take part on the Virtual Mission.

Tech-Mentorship is a virtual activity dedicated to provide technical mentoring across business sectors for innovative enterprises. Coordinated by Anprotec, Tech-Mentorship invites and connects professionals that are reference in various fields of innovative technology, with the purpose of providing feedback on the technological solution of startups for the market (Anprotec, 2022Falta referência).

It is worth mentioning the other global innovation ecosystems that were destinations of the StartOut Program up to the present, from 2017 to 2022: Buenos Aires (Argentina) and Paris (France), in 2017; Berlin (Germany), Miami (United States) and Lisbon (Portugal), in 2018; Santiago (Chile), Toronto (Canada), Boston (United States) and Shanghai (China), in 2019; New York (United States), Lisbon (Portugal), in 2021; and Chicago (United States) in 2022.

Additionally, another example of innovation initiative focused on Latin American startups, in which Embrapa took part, is Latam Challenge, held through a cooperation agreement with North American company Thrive by SVG Ventures. The judges of the Latam Challenge that selected the ten first local startups ere important players in the Latin American innovation ecosystem: 1) founding member of SP Ventures, in Brazil; 2) founder & CEO of Startup Mexico, in Mexico; 3) founder and managing member of Glocal, in Argentina; 4) chief of Innovation and Business of Embrapa, in Brazil; and 5) chief of Agricultural Affairs and Sustainability for Latin America, in Bayer Crop Science (multinational).

With the agreement coordinated by its office in the United Stated (Labex USA), Embrapa was invited, in December 2021, to take part in the Latam Challenge as headline partner. The priorities in technological solutions were in the fields of biotechnology, food safety, software, robotics and automation, internet of things, big data and predictive analysis, protected crops, farm and supply chain management and traceability, animal health and livestock production. Other regional innovation initiatives were also held, such as Thrive Australian Challenge, Canada Challenge and Africa Challenge, in 2020, and Europe Challenge, in 2021.

Thrive/SVG Ventures is an agrifood innovation and investment platform located at Silicon Valley, in San Francisco Bay, California. Therefore, through the Thrive platform, SVG is responsible for promoting challenges for young entrepreneurs, in a regional context. Thus, the 2021 Latin American edition of the innovation initiative, Latam Challenge, sought to create partnerships and stimulate startups that are contributing with sustainable and efficient alternatives for the global food system. Those who won the first positions awarded the startups that attended the challenge with brand exposure, access to innovation ecosystems in other countries such as the United States and Brazil, and a place at the pitch finals of Acceleration Programs in 2022. Additionally, they were called to connect with programs focused on the ecosystem maintained by Embrapa's Units, with three major productive chains in the Brazilian agribusiness, aiming at the development of high-impact technological solutions for soybean, milk, swine cattle and poultry chains.

And, finally, about the agtechs that won the prize, the startups that were selected are:

three from Brazil; two from Argentina; two from Mexico; and one from Colombia, Nicaragua and Peru. Technologies contained in the selected startups bring digital innovation through platforms for agricultural management, logistics and traceability, connection between job offer and demand, agricultural insurance and carbon credit sustainability. This is aligned with the analysis made by the Startup Geonome Report for Latin America (Startup Genome, 2022Falta referência), in which fintechs, transportation and logistics and e-commerce startups are partly leveraging the growth of investments in the continent.

Embrapa, through one of its Units in the Northeast region of Brazil, Embrapa Agroin-dústria Tropical, in Ceará, works to support the development of new agroindustrial technology-based companies, in the most diverse themes across the agricultural chains, especially fruit production. The interactions occur regarding agricultural production areas, concerning technologies for soil management, growth, cultural treatment and plant nutrition, plague and disease monitoring and control, harvest, post-harvest, food and non-food processes, green chemistry, as well as solutions for agroindustrial waste. In this context, the work is done both within the national and international scope. Internationally, one of the actions that stand out concerns closer work with Colombia.

This work done by Embrapa, through its Research Center in Tropical Agroindustry, has three main targets: increased productivity in the field; value-added to raw materials, adding value and redistributing value across the entire productive chain, or as much as possible; and waste reduction in agroindustrial chains, especially those linked to vegetables and fruit production. The expectation is to benefit as much as possible from raw materials, as well as to elaborate co-products or substitutes to the products already existing in the market, but from a renewable source, from a vegetable source and meeting the various demands from the society. In order to achieve these results, Embrapa has been acting by stimulating the creation of new agroindustrial companies, as well as to strengthen the existing institutions.

Colombia is a South American country with very similar characteristics to Brazil, in many aspects, and also with a strong agricultural base. The country is also focused on developing their agricultural base, but not in a self-centered way. In addition to raw materials, there is an interest in agroindustries, to produce value-added products, aiming at supplying both the internal and external markets. For the internal market, the idea is to reduce import of food products, becoming their own producer of consumer goods for their population. For the external market, the focus is on reaching new markets, increasing profit and creating value for local products within the international public, which causes increased income for the country's population, also improving socioeconomic indicators.

Embrapa Agroindústria Tropical has worked closely with Colombian institutions, such as Corporación Colombiana de Investigación Agropecuaria (Agrosavia), Servicio Nacional de Aprendizaje (Sena), Asociación Colombiana de las Micro, Pequeñas y Medianas Empresas (Acopi), as well as with state government departments and universities. Across these actions, the purpose is to share knowledge, create institutional interactions and to work jointly in order to use the Brazilian experience regarding agroindustry as an example for similar opportunities in Colombia. Regarding Agrosavia and the universities, Embrapa has worked to develop research and development partnerships to exchange knowledge and develop joint solutions, as well as to exchange genetic materials to create the most appropriate solutions to each biome and interest. Concerning the institutions that act more directly with companies, such as Acopi and Sena, Embrapa has worked with the purpose of showing how getting closer to companies, associations, societies, industry representatives, federations, funding institutions, government

institutions and others, can bring benefits to the economic, social and environmental development.

The intention is to show how this model can serve as an inspiration and incentive also for other countries, increasingly seeking the development of agroindustry through the technology applied to actual situations and demands, bringing solutions to the society and showing that is possible to advance in agroindustry with environmental responsibility, socially just and economically feasible actions. Thus, the focus is to expand sustainable agricultural productions, as well as new value-added products, that often meet the custom-made solutions for each society and culture in which we are working. There are often solutions that are applied to a country and cannot be adopted by another in the same way as in the country of origin, for a series of environmental, climate, social, economic and cultural reasons. Consequently, countries also need to develop their own solutions and reduce the poverty levels, improving economic and social development indicators, in order to create a society with smaller distance between social classes and to turn agribusiness into a tool to assist in society's advance.

Finally, in addition to the relationships across institutions between Embrapa and Colombia, it is worth mentioning specifically that Embrapa Agroindústria Tropical has attended events with Colombian institutions, such as forums, seminars and others. Some of these events include: technical visit from Acopi to Embrapa Agroindústria Tropical, in 2017; technical visit from Agrosavia to Embrapa Agroindústria Tropical, in 2018; *V Encuentro Agroindustrial del Caribe* – Barranquilla, in 2018; *Primer Congreso Nacional del Marañon* – Puerto Carreño, in 2019; *Foro Caribe Alimentario* – Barranquilla, em 2022; and 67° *Congreso Nacional Colombia: MiPymes competitivas* – Barranquilla, in 2022. All of these events which Embrapa Agroindústria Tropical has attended are focused on sharing positive experiences from the Unit within the institutional context, through its expertise in interaction with companies. The Unit is also seen, internationally, as an important player to spread this model in South American countries, becoming a proper path for technological and social development, aiming at the growth of economies and the society as a whole.

# Female protagonism in the agriculture and livestock industry: from agriscience to agtech entrepreneurship

# A bit of history

Although claims and discussions related to gender equality have started in the 17<sup>th</sup> century, the first generation of achievements related to human rights¹ of the female condition only came in the 20<sup>th</sup> century. Some milestones in the evolution of the women's rights in Brazil stand out (Tavares et al., 2020): In 1827, girls started to attend elementary school; in 1879, women began to attend higher education institutions; despite the universal suffrage² occurred in England in 1918, Brazilian women conquered the right to vote and be voted for only in 1932³.

To this day, even though women represent more than 50% of the Brazilian population, they are still underrepresented in politics. The percentage of female representatives in the congress in 2020 was 14.8%, the lowest amongst South American countries. This inequality repeats in the municipal council (city councilors), as well as in ministries (IBGE, 2021).

Indicators in the labor market reveal significant gender inequality, showing that women struggle harder to enter the job market. In 2019, 54.5% of women and 73.7% of men were integrated into the job market. It is worth noting that this difference in percentage was maintained in terms of racial inequality<sup>4</sup>.

Regarding wage, women were paid 77.7% of what men were paid. Inequality is even bigger in high-income jobs, such as directors and science professionals, in which women were paid slightly more than 60% of men's income. These percentages vary according to the region, but the lowest inequality rates are in North and Northeast regions, where average income are lower for both genders.

Gender inequality in the job market cannot be assigned to the educational level of the female population which, in average, is more educated than men. This occurs in younger generations, since women over 65 years of age have, in average, a slightly lower level of education than men, as a result of restricted access to education suffered by the female population in past decades.

These rights refer to: civil or individual rights against the abuse of power or any other form of state arbitrary act (exemplified by freedom of speech, right to due legal process, presumption of innocence, protection to private life, and freedom of movement); political rights (right to vote, right to be voted for, right to occupy and remain in political positions/functions); and citizenship rights (party affiliation, voting enrollment and alternance of power).

<sup>2</sup> Universal suffrage means the right to vote given to all citizens of a country, without restrictions derived from conditions of birth, wealth and special capacity. (Silva, 2014).

<sup>3</sup> Available at: https://www.tse.jus.br/eleitor/glossario/termos/voto-da-mulher.

<sup>4</sup> Some of the factors that influce this process are gender inequalities concerning responsibilities with housework and family care, usually assigned to women, as well as low income of the household (the lower the income, the more housework and family care activities are assumed by women).

In this context, the work of the American chemist and biologist Mary Engle Pennington (1872–1952) stands out (Nobre et al., 2017). Despite having received a proficiency certificate instead of a college degree, due to being a woman, she earned a doctoral degree at only 22. Her work defined patterns for beef processing and preventing food contamination, and she was a pioneer in the study of cooling systems. She was chief of a laboratory within the Food and Drug Administration (FDA), linked to the American government.

Another case from that time refers to the American rural entrepreneur Harriet Strong (1844–1926), who, after becoming a widow, started managing her family's lands. After going through a severe drought, she implemented innovative irrigation techniques that were largely adopted in other American properties, increasing the country's agricultural potential. Harriet was one of the rare female names in her time to appear in her country's hall of fame of inventors.

In Brazil, the contributions of researcher Johanna Döbereiner stand out. As an immigrant from Czechoslovakia, she was naturalized as Brazilian in the 1950's and was responsible for creating the technique of biological fixation of nutrients in the soil – her biography will be presented in detail ahead.

## Women's presence in the rural context

The Map of Rural women in Latin America and the Caribbean highlights that the rural population of this region is 21%, and nearly half are women. The female rural population is very diverse in terms of age profile, location where they perform their activities (fields, woods, forests and near rivers), social profile (farm women, quilombolas, indigenous women and African descent) and form of occupation (farmers, land owners, fishing, extraction or wage workers, as well as artisans).

According to this document, there are common elements that link this diverse contingent of women. These include: work overload, since the professional activities are added to the family care; low access to means of production, such as land, water, seeds and raw materials; economic insecurity, due to low coverage of social protection government programs; and small participation in politics and decision-making processes due to patriarchal culture.

In the Brazilian case, the status of residency – whether urban or rural – is a very significant aspect in the analysis of gender inequalities. Considering the country's continental size, marked by a great participation of the agricultural industry in the economy, about 15% of the Brazilian population lives in the countryside, which means more than 31 million people (Hora et al., 2021).

The 2017 Census of Agriculture has identified 5.07 million agricultural establishments, of which only 18.7% are under female management – as a producer, direct owner, couple (co-management), producer and owner through a person in charge or related to her, manager, producers (community exploitation). Stratifying the data, 19.7% of the family farming companies were run by women, while in non-family enterprises this occurred only in 15.2% of the properties. Female management of rural enterprises occurs more in the Northeast (23.2% of the total properties) and North (19.4% of the total properties).

Data from the 2017 Agro Census indicate that establishments run by women have lower access to machinery, equipment, technical assistance, credit and water. A recent study emphasizes the payment of smaller wages to women, struggle to access financing and technologies,

as well as specific training for their activity (although women had relatively higher access to formal education than in 2018) (Elas..., 2021).

Gender equality is an essential element to build a fair, prosperous, socially inclusive and sustainable world, according to Agenda 2030<sup>5</sup>. However, there is still a significant inequality between men and women in food and agriculture. Female rural producers face more obstacles than men in access to productive resources and services, technology, market information and financial assets. Women are underrepresented in local institutions and governance mechanisms. Food consumers tend to face less food safety than men in their region.

The United Nations (UN), which is the institution promoting the Agenda 2030, develops initiatives to empower women, specifically focused on reaching gender equality. The main initiative is the creation of the Commission on the Status of Women (CSW), in 1946, that evolved for what we currently known as UN Women<sup>6</sup>.

Gender Parity Accelerators, an initiative promoted by the World Economic Forum, focused on the acceleration of equal rights and opportunities for men and women, stands out for accelerating the progress within the nations, based on reducing gender inequality in the work environment. These accelerators work in 12 countries in Latin America and the Caribbean, Middle East, Northern Africa and Asia-Pacific regions, implementing public-private partnerships to develop female empowerment in the context of economy and labor force, through equal payment and female representation in leadership positions.

# Women in agtech entrepreneurship

In the last few years, some companies have contributed to end patriarchal structures and negative and harmful gender stereotypes that dominate over women. Nevertheless, research shows that there is still a long path to thread towards equal opportunities. Numerous barriers that guide previously established and rooted concepts must be overcome.

In order to incentive diversity promotion and increased female presence in the corporate environment, it is necessary to raise awareness of private and public companies concerning the value of a heterogeneous labor force. Thus must occur from concrete actions to stimulate the start and progress of women's careers in various positions, in order to create a more just and inclusive society.

Currently, big corporations largely recognize that applying affirmative policies is a positive practice for their businesses. To expand diversity implies in increased productivity, creativity and innovation, and also contributes to improve the climate in the corporate environment and leverage market competitiveness.

Innovation ecosystems have also increased their strength from diversity, involving a set of players from different categories and the existence of many spaces of interaction in physical and virtual environments, in order to generate innovations in a cooperative manner, involving startups, knowledge centers, large companies and government policies, as well as other orga-

<sup>5</sup> Refers to a commitment established by the United Nations (UN) in 2015, based on 17 Sustainable Development Goals (SDG) and 169 interconnected global goals, to be reached until 2030.

<sup>6</sup> CSW was created with the mission of ensuring women equality and promoting political, economic, civil, social and educational rights for women. Today, it is called UN Women and established the grounds to carry out statistical analysis from disaggregated variables by sex, giving rise to a vast academic literature proposing methodologies to measure gender inequalities.

#### nizations.

Focused on the Brazilian situation regarding startups, Startupbase mapped 22,347 startups organized in 78 communities, in 787 cities. Only 16.9% of these were established by women. Analyzing the agtech universe, that provides solutions for the agribusiness industry, this number falls to 5.1%

Women that are leading new businesses face additional challenges, such as work overload (juggling housework and caring for children and other family members), which results in a higher abandonment rate for female entrepreneurs. The average time women spend in housework, per week, was 21.3 hours, which is about twice the time men spend in such tasks (10.9 hours) (Greco, 2019).

In addition to the aforementioned data, women also face other challenges to create a startup, such as disrespectful treatment, with practices such as manterrupting (continuous interruptions made by men) and mansplaining (obvious explanations made by men, questioning women's intelligence), which causes negative impact on networking, customer and resource attraction. There is also lack of support from friends and family members, lack of representation and the fact that the female entrepreneur has to deal with impostor syndrome.

Women, in general, become entrepreneurs due to necessity, to increase family income, and soon abandon their activities when life conditions become more favorable. It is worth noting that the estimated number of female entrepreneurs in Brazil, in 2019, was 25.8 million, close to the 28.7 million male entrepreneurs.

In general, creating a startup involves a spirit of opportunity instead of necessity entrepreneurship. However, females have been conquering space in this segment, identifying opportunities, market gaps and with new entrepreneurs in the technology-based entrepreneurship field. From data obtained by the Brazilian Micro and Small Business Support Service (Sebrae), in partnership with Radar Agtech 2002, it was possible to identify that, from the total agtechs, 28.7% have at least one woman in its corporate structure, meaning there are 520 startups with female members. Table 6 shows the amount of female members in these enterprises, and Table 7 shows the analysis of company composition of these agtechs.

Table 6. Number of female members in 520 agtechs analyzed.

| Quantity of female members | Number of agtechs | Participation of agtechs in (%) |
|----------------------------|-------------------|---------------------------------|
| 3 or more members          | 20                | 4                               |
| 2 members                  | 93                | 18                              |
| 1 member                   | 407               | 78                              |

**Table 7.** Analysis of company composition in 520 agtechs analyzed.

| Type of company     | Number of agtechs | Participation of agtechs in (%) |
|---------------------|-------------------|---------------------------------|
| Only women founders | 56                | 11                              |
| Only one founder    | 59                | 11                              |

<sup>7</sup> Available at: https://startupbase.com.br/home.

| Type of company                | Number of agtechs | Participation of agtechs in (%) |
|--------------------------------|-------------------|---------------------------------|
| One female and one male member | 211               | 41                              |
| Other compositions             | 194               | 37                              |

The quantitative analysis of agtechs performance with female participation regarding the links in the productive chain (before, inside and after the farm) is shown on Table 8.

**Table 8.** Participation of the 520 agreechs with female members in relation to the segments of the productive chain.

| Segment of productive chain | Number of agtechs | Participation of agtechs in (%) |
|-----------------------------|-------------------|---------------------------------|
| Before the farm             | 81                | 16                              |
| Inside the farm             | 175               | 34                              |
| After the farm              | 260               | 50                              |

Data emphasize the power of leadership, innovation and bottom-line of companies established by women: a research carried out by Sebrae, in partnership with Fundação Getúlio Vargas (FGV), shows that 11% of entrepreneurs innovated in their businesses during crisis, against 7% of men. UN<sup>8</sup>, companies with female leaders have up to 20% better results and higher potential to generate profit for their investors, since startups with female entrepreneurs have generated 78 cents for each dollar invested, while startups established by men generated less than half of it, according to the BCG consulting<sup>9</sup>. Based on such data, a few initiatives decided to focus on providing support for women.

# Investments in startups with women

The most effective way to change this scenario is by investing in female-led startups. However, we found only a few investment funds or risk capital focused on that, including initiatives held by Microsoft<sup>10</sup>, We Ventures<sup>11</sup>, EB Capital<sup>12</sup>, Mubius<sup>13</sup> and angles investment groups focused on female-led startups, such as Sororitê.

In short, entrepreneurs are still underrepresented in Latin America and across the world. In the United States of America, women occupy only 15% of the main member positions in startups, and most companies don't have female members – in other asset markets, it is difficult to find reliable data for comparison.

<sup>8</sup> Available at: http://www.onumulheres.org.br/wp-content/uploads/2021/09/WEPs\_Startups\_Toolkit\_POR\_BRA\_2021\_WinWin.pdf

<sup>9</sup> Available at: https://www.bcg.com/publications/2018/why-women-owned-startups-are-better-bet?linkId=52657137&redir=true.

<sup>10</sup> Available at: https://forbes.com.br/forbes-mulher/2022/08/microsoft-preve-levantar-r-100-milhoes-parastartups-de-mulheres/.

<sup>11</sup> Available at: https://www.we.ventures/.

<sup>12</sup> Available at: https://www.ebcapital.com.br/.

<sup>13</sup> Available at: https://mubius.ventures.

As part of an effort to increase female visibility, the Association for Private Capital Investment in Latin America (Lavca)<sup>14</sup> published, in 2021, a list of the Top Women Investing in Latin American Tech and the fourth annual edition of Emerging Women Investors in Latin American Tech. Another relevant initiative is WeInvest, a community that already has more than 220 investors, aiming at gathering women with the power to invest in innovative opportunities, and also providing space to improve, educate and inspire one another.

# Women in agricultural science research

The presence of women in agricultural science courses, such as agronomy, veterinary medicine, zootechnics and agricultural engineering has been increasing in the last few years. The number of new students, in 2019<sup>15</sup>, in the graduate courses of Universidade de São Paulo (USP), for example, shows that 48% of vacancies of the seven courses offered by the university were occupied by women, and, in many cases, such as in forest engineering, women are the majority. Another example comes from Universidade Federal de Lavras (Ufla), which received its first female student in the 1940's and in 2011 had 53% of female students<sup>16</sup>.

The presence of women in research institutions focused on agriculture has also increased. Data from the agency Agência Paulista de Tecnologia dos Agronegócios (Apta)<sup>17</sup> indicate that 48% of its total employees are female, of which 52% are scientists. At the Brazilian Agricultural Research Corporation (Embrapa), from a total of a little over 8 thousand employees, 32% are women. From the total number of researchers (2.471), 843 (34%) are women, and from the total number of managers, 36.6% are women. Amongst the company's researchers, Dr. Johanna Döbereiner stands out. She has contributed to science with her work on biological nitrogen fixation (BNF), for which she was nominated to the Nobel Prize of Chemistry, in 1997<sup>18</sup>. Johanna made an important contribution in BNF research, enabling the replacement of chemical nitrogen-based fertilizers, with economic and environmental advantages for both the producer and the society. She signed over 500 scientific papers, leaving a great legacy.

Also working in BNF research, Mariangela Hungria da Cunha joined Embrapa in 1982. As an agronomic engineer, researcher at Embrapa Soja and college professor, Mariangela received the award as Commander of the National Order of Scientific Merit, in 2008 and 2018. She is also a member of the Brazilian Academy of Science. Johanna and Mariangela faced many challenges and had to work hard to be accepted in a predominantly masculine environment. The example of these two Embrapa researchers (Picture 10) serves as an inspiration for many female researchers. Diverse teams are essential to face the challenges related to the knowledge frontier, and they benefit the entire society.

<sup>14</sup> Available at: https://lavca.org/vc/women-investing-latin-american-vc-decision-makers/.

<sup>15</sup> Available at: https://www.esalq.usp.br/banco-de-noticias/ingressantes-da-esalq-ampliam-diversidade-no-campus.

<sup>16</sup> Available at: https://ufla.br/arquivo-de-noticias/9260-mulheres-na-ufla-a-historia-de-uma-evolucao.

<sup>17</sup> Available at: http://www.apta.sp.gov.br/destaques/mulheres-na-ci%C3%AAncia.

<sup>18</sup> Available at: https://www.embrapa.br/en/johanna-dobereiner.



Johanna Liesbeth Kubelka Döbereiner (1924–2000) Agronomy engineer, researcher

Performed research in biological Nitrogen fixation (BNF) and bacteria capable of performing this process by collecting the Nitrogen in the air and transforming it in an element that can be assimilated by plants. Awards: nominated for the Nobel Prize in Chemistry (1997), Frederico Menezzes Veiga Prize (1976) and National Order of Merit (1989).



Mariangela Hungria da Cunha (1958– ) Agronomy engineer, researcher and university professor

Expert in Agronomy, with emphasis in Soil Biotechnology. Awards: Member of The World Academy of Sciences (2021), List of the most influential scientists of the world (Stanford, 2019, 2021) and Forbes List of the most powerful women in the Agribusiness (2021).

Picture 10. Embrapa researchers, examples of successful women in the research field in Brazil.

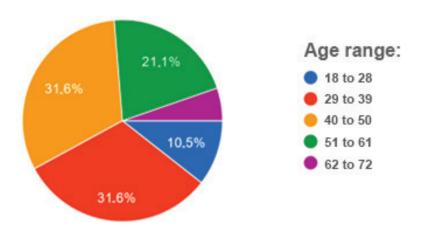
# Female voices in agricultural science research and agtech entrepreneurship

In order to understand the performance, challenges and inspirations of agtech female entrepreneurs and female scientists working in agricultural science, a study was carried out, in 2022, with some of the Brazilian references that match this profile. Be it noted that the sample is not representative in statistical terms, but provides only the perspective of the women interviewed on the subjects addressed. The participants of the study represented organizations that acted as partners of Radar Agtech 2022, as well as women from the list of top 20 innovating women in agtechs, published by Forbes<sup>19</sup>, making up a total of 19 respondents.

# Profile of female entrepreneurs and scientists

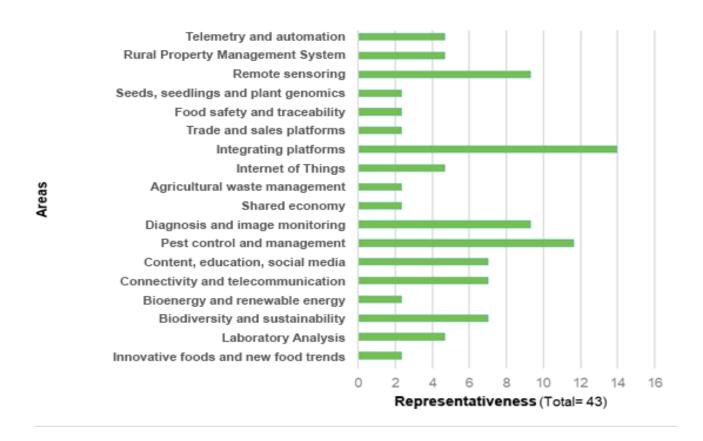
Amongst the participants of the interview, 9 worked in startups, 4 in research institutions, 3 in education institutions and 3 in national companies. Three of them occupy higher positions in the hierarchy of their organizations – senior researchers, associate professors, founders and co-founders, directors and chief executive officers of the companies. All of the respondents have completed higher education, and 17 of them are specialized with post-graduation courses. In Picture 11, there is information on their age range.

<sup>19</sup> Available at: https://forbes.com.br/forbesagro/2022/03/forbes-20-mulheres-inovadoras-nas-agtechs/.



Picture 11. Age of female entrepreneurs and scientists in agricultural science.

Most organizations in which these women work are located in São Paulo (13), followed by Paraná and Santa Catarina (2 each) and Mato Grosso and Rio Grande do Sul (1 each). The main areas of activity of the respondents, who were allowed to choose more than 1 alternative, are concentrated in five segments: Integrating platform for systems, solutions and data (6); Biological control and integrated pest management (5); Biodiversity and sustainability (3); Connectivity and telecommunication (3); Content, education, social media (3), chosen 3 times each. Picture 12 shows the data.



Picture 12. Field of activity of female entrepreneurs and scientists in agricultural science.

The main challenges faced by women, inherent to their condition and gender and which affect their performance in agribusiness are, in order of predominance: work overload (caring for business and domestic and family life), for 13 respondents; lack of confidence in their competence, for 10 respondents, regarding the physical work environment, that is, inadequacy of the work environment, such as absence of female restrooms, for example; and gender stereotype, impacted by lack of female representation in a few segments.

# Women that inspire other women in agribusiness

When they were questioned about who are the women that serve as reference in their careers, the respondents mentioned many other women, including personalities from the scientific world, agribusiness, and leaders of companies related to the agribusiness. We listed these personalities in alphabetical order, highlighting some who were mentioned more frequently. There is a brief description of the position held by these women, limited to their main current position. However, many were mentioned due to the role they play in organizations promoting the agribusiness, especially those supporting women in the field, and those who promote important agendas, such as sustainability, female empowerment and representation, digitalization and modernization of agricultural practices, research aimed at improving the genetics and cultivation of products with high impact in the Brazilian export agenda, such as soybeans. Demonstrating the level of interaction and acknowledgment between the women that work in the industry, many respondents mentioned their contemporary colleagues, especially within the startup setting.

Overall, 30 women were mentioned as inspiring, with Mariana Vasconcelos and Mariangela Hungria da Cunha being mentioned three times each and Mariana Caetano, Teresa (Teka) Vendramini and Tereza Cristina Corrêa da Costa Dias mentioned twice each.

| Women mentioned as reference in the field of agricultural sciences                     |  |  |
|--|--|--|
| <b>Ana Rita Nogueira</b> – researcher at Embrapa<br>Pecuária Sudeste                   | Maria Iraclézia de Araújo – president of the Rural<br>Society of Maringá, PR               |  |
| Andrea Mesquita – founder of blog? Território da Carne                                 | Mariana Bonora – co-founder of Bart Digital  |  |
| Tatiane Fiuza - head of innovation at Cocriagro  | Mariana Caetano - CEO Partner of Santos Lab  |  |
| Aureliana Rodrigues Luz - president of<br>Organização das Cooperativas do Brasil       | Raquel Ghini (in memoriam) - researcher at<br>Embrapa Meio Ambiente                        |  |
| <b>Cecília de Mello Falavigna</b> - soybean producer at Floraí, PR                     | Mariangela Hungria da Cunha – researcher at<br>Embrapa Soja                                |  |
| Christiane Paiva – researcher at Embrapa Milho e<br>Sorgo                              | Nancy Thame – secretary of the Department of Agriculture and Food Supply at Piracicaba, SP |  |
| <b>Elena Gil Lizasoain</b> – global product and operations director at Telefônica Tech | Patrícia Nogueira – CEO at Red Lychee<br>Agronegócios                                      |  |

| Women mentioned as reference in the field of agricultural sciences                                  |   |  |
|---|---|--|
| Holly King - Canadian artist  | Mariana Vasconcelos – founder of Agrosmart  |  |
| <b>Johanna Döbereiner</b> (in memoriam) – researcher at Embrapa Agrobiologia                        | Sarita Junqueira Rodas – CEO at Grupo Junqueira<br>Rodas  |  |
| <b>Leila Dinardo-Miranda</b> – scientist and director at Instituto Agronômico de Campinas (IAC)     | Silvia Maria Fonseca Silveira Massruhá – researcher at Embrapa Agricultura Digital  |  |
| Luciana Abeid Ribeiro Dalmagro – poultry farmer and manager of family-owned rural properties        | Ani Sanders - rural producer and co-founder and manager at Grupo Progresso  |  |
| Luciana Alvim Santos Romani – researcher at<br>Embrapa Agricultura Digital                          | <b>Teresa (Teka) Vendramini</b> – livestock producer and president at the Brazilian Rural Society   |  |
| Maria Leonor Ribeiro Casimiro Lopes Assad - retired professor at Universidade Federal de São Carlos | Tereza Cristina Corrêa da Costa Dias –<br>entrepreneur and former ministry of the Ministry<br>of Agriculture, Livestock and Food Supply, Brazil |  |
| <b>Luciana Salton</b> chief executive officer at Vinícola Salton                                    | <b>Siu Mui Tsai</b> - professor of the Center for Nuclear<br>Power in Agriculture, at Universidade de São Paulo                                 |  |
| Malu Nachreiner – CEO at Bayer Brasil   |   |  |

Awareness regarding the contribution of interviewees for agribusiness was summarized by keywords presented in Picture 13. Women see themselves as working in activities of human resource training, especially tech-based, are sources of inspiration, mentoring and motivation for other women, producers and experts. They seek to contribute with the development of new business by creating innovation and stimulating entrepreneurship and the implementation of a more technologically developed and more sustainable agribusiness.



**Picture 13.** Contributions of female entrepreneurs and agricultural science scientists for the development of Brazilian agribusiness.

Respondents showed a positive and optimistic perspective for the future regarding women's work and contribution in the agriculture and livestock industry and in the spaces they will occupy, especially those related to entrepreneurship and environmental sustainability of Brazilian agricultural production. Some phrases derived from the interviewees' points of view show what they expect for the near future:

- Increased participation of women in research, development and innovation.
- Growth of digital agriculture, with increased opportunity of professional activities for women.
- Increased contribution of women in disseminating knowledge and sustainability in the industry, leaving as a legacy a strong culture of innovative and sustainable entrepreneurship.
- Reduced discrimination and sexism.
- Increased female protagonism and recognition in agribusiness.
- Increased female engagement in agribusiness activities, in fields related to agronomy, technology and sustainability.
- Increased participation of women in different roles in the agriculture and livestock innovation ecosystem, whether as entrepreneurs, researchers or investors.
- Increased female participation in leadership positions, with more equality in the work environment.
- More women leading agribusiness startups.
- Improved perception regarding the relevance of soft skills associated to women.
- Continuation of women's engagement in producing knowledge and new technologies in the field of Information Technology.

This future perspective viewed by the respondents could be object of a manifesto regarding their aspirations and contributions towards the consolidation of a more competitive, modern and sustainable agribusiness in Brazil. They also demonstrate a future when women have equal conditions to compete in the job market and to contribute to society's well-being.

# **Perspectives**

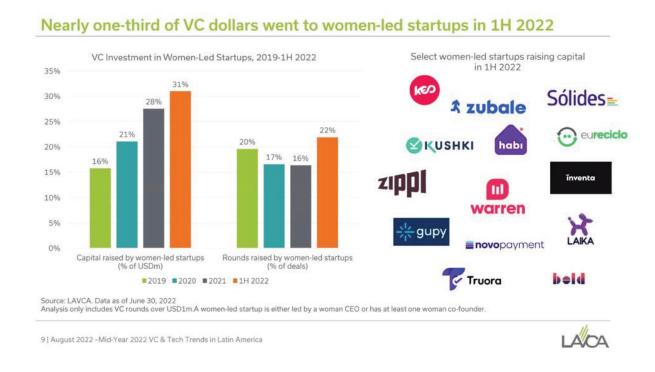
Increased female protagonism in agribusiness relies on the evolution of equal rights to women, implying in access to quality education, political or professional participation and the right to land ownership. These achievements, resulting from the fight of rural producers, scientists, entrepreneurs, babaçu breakers, artisans, are pivotal to build the present and an increasingly socially just and inclusive future.

This process stands out for being an alliance between past, current and future generations, rescuing the legacy of women who fought to build a prosperous and sustainable present. The process of acknowledging the value of women occurs through initiatives such as the award <sup>20</sup>Mulheres do Agro (Women in Agro), born of the global campaign of 2018 "Time is now: Rural and Urban Activists Transforming Women's Lives", which is also the main role of various groups focused on the valuation of women working in the field. These groups in-

<sup>20</sup> Available at: https://premiomulheresdoagro.com.br/.

clude: Agroligadas, with education and communication actions aimed at making a connection between the city and the countryside, understanding that women are the bridge to make such connection; the *National Conference of Women in Agribusiness*, in its 7th edition, aiming at supporting female protagonism and increasing visibility and representativeness of women in the industry; and some agroecological groups of rural workers who adopt agroecology, such as Mulheres Agroecologia em Rede<sup>21</sup>, responsible for creating the Caderneta Agroecológica (Agroecological Handbook), that helps monitor the agricultural production of women and gives visibility to their work in the field.

Thus, we understand that female entrepreneurs and investors experienced great achievements in the last few years. There is still a long way to run, but, according to Lavca, in the first semester of 2002, one third of the venture capital funding in Latin America was destined to companies led by women, such as Eu Reciclo, Zubale and Gupy – 100% increase if compared to 2019.



Increased diversity will allow the ecosystem to come up with better and more adequate technological solutions for the community, as well as more revenue for investors, with the development of solutions that benefit a more sustainable, socially just and inclusive tropical agriculture. For this purpose, it is necessary to keep evolving to build equal opportunities, with public policies stimulating entrepreneurial culture and education, as well as funding and supporting policies aimed at female entrepreneurs.

<sup>21</sup> Available at: https://fase.org.br/pt/noticias/mulheres-fortalecem-a-agroecologia-na-amazonia/.

# Methodology

This chapter describes the following themes: 1) the concept of mapping; 2) the collections for databases on agtechs, as well as on investments in agtechs that were made from the contributions of the 2019 and 2020–2021 editions; 3) the taxonomy and adjustments made in relation to the 2019 and 2020–2021 editions; and 4) the classification and validation of agtechs.

It is important to note that, due to changes in the method, it is not possible to directly compare the data for 2019, 2020–2021 and 2021–2022, as will be detailed in the next sections:

- Improvement of information related to agtechs.
- Increased data sources with databases from potential agtechs.
- Provision of a form to register the agtechs.
- Changes in the criteria for inclusion / removal of agtechs in the study.

These factors generated the following cases:

- Agtechs that already existed in 2019, 2020 or 2021, which had not been mapped in the 2020–2021 study, but were identified in the 2021–2022 study.
- Agtechs that already existed in 2019, 2020 or 2021, which had not been validated in the 2019 or 2020–2021 study, but were validated for the 2021–2022 study.
- Agtechs that were considered in the 2019 or 2020–2021 study but were not validated in the 2021–2022 study.

To enable the comparison of the data, it would be necessary to remake the classification of all the data from previous editions by the current method. Thus, the analysis prioritized relative comparisons between what each edition showed, as well as the identification of similarities and differences. Although the database has evolved, it still does not enable a longitudinal analysis.

# About the mapping

Agtech mapping has characteristics that differ from other studies, such as the census and the survey, which have additional objectives. In turn, a census seeks to understand a population based on data collected from the studied population. Thus, it relies on research instruments, such as questionnaires, to perform an active search. In addition, it depends on the willingness of the research subjects to provide answers. Since it does not work with sampling, but with the entire population, it is a process that requires big budget and extended collection time, except if the population is very small.

Mapping works with publicly available information and, therefore, does not depend on the availability of companies and individuals to respond to a survey, or on the authorization to use the identified information, since it is already publicly available. In turn, it does not include data that is too specific and detailed (available only through identified individuals and companies). The term "survey" refers to a type of research that mainly uses quantitative instruments to describe a population in greater depth, but without claiming to be a census survey. This type of research is quite common and is additional to the previous approaches.

In this edition, Radar Agtech relied on two data collection fronts, in the form of mapping and surveying, the results of which are presented in specific chapters.

#### **Data collection**

This section describes the methodology for building the database of startups operating in the agricultural industry and investments in agreehs, the criteria for inclusion and exclusion and the data fields included in each database.

## Agtechs database

The agreehs database in Radar Agreeh 2022 was built from update and qualification of the data collected in previous studies.

The qualification/update of the agtechs database included the following activities:

- 1) Verification of the list of agtechs presented in Agtech Radar 2020–2021 as active or inactive, from the following virtual identifiers, publicly accessible: active website, social media with updates and CNPJ (national registry of legal entities) status.
- 2) From this stage, the descriptive data of each startup, as well as its area of operation, were updated.
- 3) Several initiatives were undertaken to expand the database, including new agtechs, through professional contacts and the systematic monitoring of websites and news broadcast by the players of the agricultural innovation ecosystem (government agencies of agricultural research, state and federal research institutes, sources of funding for research, innovation and entrepreneurship, innovation *hubs*, incubators, accelerators and investors of entrepreneurial capital) and by the directors (Embrapa, SP Ventures and Homo Ludens), from the voluntary registration of startups on the website radaragtech.com.br and the voluntary registration of startups in a form to include companies in Radar Agtech 2022, which resulted from a joint effort by the press office of Embrapa (media disclosure) and the national Sebrae (among the agtechs supported by their programs).
- 4) Upon the identification of new agtechs, a new phase of data qualification was initiated, which included the following steps:
  - Verification of the activity/inactivity of the new agtechs, considering the following virtual and publicly available identifiers: active website, social media with updates and CNPJ status.
  - Search for automated information on CNPJ and social media from the name of agtech (with support from District).
  - Automated search for information from the CNPJ (with support from Sebrae).

5) A step of information consolidation was carried out, which involved merging data about the same company from different sources; excluding duplicate data; and deleting non-validated agtechs from digital identifiers.

From this process, about 2,100 agtechs operating in Brazil were mapped. However, according to the inclusion and exclusion criteria, which are presented below, 1,704 agtechs were validated.

#### Criteria for inclusion and removal from the agtechs database 2021–2022

As a mapping research, Radar Agtech relies on publicly available and open information to carry out its study. In applying the criteria listed below, the decision was to maintain the largest number of startups that met the inclusion criterion (sufficient condition), even when there was no information about the company that could be used to evaluate it regarding the removal criteria. Thus, upon subsequent analysis with new information, there may be some startups in this map that should have been removed. A new edition of the Radar is expected to contain the necessary adjustments.

The criteria to include agtechs in the database were the following: active digital presence (website and/or social media) associated with the availability of information about their location and their area of operation contained in the CNPJ data and/or in the digital presence. Startups whose markets are not related to the agribusiness chain were removed, even though they have been listed in other studies and directories of the industry.

Regarding the company's time of activity, it was decided not to use the criterion contained in the legal framework of startups (10 years), since, for many categories of agtechs, the cycles of technology development and its adoption are longer than the cycles of startups from other sectors of the economy. Thus, this study considered the period of up to 20 years of establishment.

The revenue indicator was not considered in the analysis of startups – a criterion for classification of startups within the legal framework of startups, which considers a revenue of less than 16 million reais –, since it was not possible to collect publicly available information on revenue for all mapped agtechs.

The study also excluded agtechs that were acquired by other larger companies, regardless of whether or not they continue as autonomous companies within the group of the purchasing company; companies that present themselves with different names, but have the same CNPJ; agtechs with CNPJ written off or unfit; as well as foreign agtechs that operate in Brazil.

#### Database of investments in agtechs T2

Database on investments in agtechs of Radar Agtech was built over databases from previous studies. For this purpose, the following activities were carried out:

- 1) Collection of information by the directors (Embrapa, SP Ventures and Homo Ludens) in relation to partnerships established with incubators, accelerators and investors.
- 2) Mapping of incubators, accelerators and investors.
- 3) Systematic monitoring of events, startup calls, incubation and acceleration programs.

- 4) Search on incubators', accelerators' and investors' websites, identifying agtechs mentioned by these organizations.
- 5) Automated search for information in investment information bases, carried out by District.

## **Taxonomy**

Since 2019, the analysis of agtechs insertion in the production chain has considered the traditional *agribusiness* approach to analyze the production system, from suppliers to the final consumer. This perspective considers segments upstream (before) and downstream (after) of the productive activity. Within each segment, non-exclusive categories add to the classification of agtechs.

Small adjustments were made to the taxonomy used by Radar Agtech Brasil 2020–2021 in relation to the 2019 edition, which are presented in the 2020–2021 edition. Therefore, it is impossible to make a longitudinal comparison of the behavior of the categories between the 2019 and 2020–2021 editions.

Since the 2022 edition of Radar Agtech maintained the taxonomy of the 2020–2021 edition, it is possible to make comparisons in terms of regions, segments (before, inside and after the farm) and by categories of operation. The categories of operation of agtechs included in Radar Agtech 2022 are described in Tables 9, 10 and 11.

**Table 9.** Description of the categories before the farm in Radar Agtech.

| Category   | Description  |
|--|--|
| Laboratory Analysis  | Startups that trade and/or develop new methods for laboratorial analysis related to nutrient levels, soil composition and development of plants and animals.   |
| Credit, swap, insurance, carbon credits and fiduciary analysis | Startups that provide financial services such as credit, barter, securitization and analysis and trade of carbon credits for rural producer and fiduciary analysis of rural properties.  |
| Fertilizers, inoculants and plant nutrition                    | Startups that trade and/or develop new fertilizers, inoculants and nutrients, in order to improve plant development, growth and immune system.   |
| Animal Genomics and Breeding                                   | Startups that work with applied genomics to increase cattle's productivity, weight gain and health, as well as to increase the efficiency in the insemination process, using genetic testing, genotyping and other techniques. |
| Marketplace of raw materials for agribusiness                  | Startups that develop and provide online platforms for the trade of productive raw materials, equipment and services aimed at agricultural and livestock production  |
| Animal nutrition and health                                    | Startups that trade and/or develop new foods, drugs and care in order to improve the development, weight gain and immune system of animals   |

| Category                            | Description  |
|-------------------------------------|--|
| Seeds, seedlings and plant genomics | Startups that trade and/or develop disruptive methods, processes and technologies in the variety of seeds and seedlings, as well as in multiplication, germination and distribution methods. This category also includes startups that trade and/or develop genetic improvement of plants, develop technology for scalable production of biological substances and define new uses for these substances. |

**Table 10.** Description of the categories inside the farm in Radar Agtech.

| Category  | Description  |
|---|--|
| Beekeeping and pollination  | Startups that develop beekeeping technologies, such as special foods and data-based management, offering pollination services, platforms to facilitate the connection between beekeepers and producers; and between producers and traders of honey and honey products.   |
| Connectivity and telecommunication  | Startups that trade and/or develop equipment and systems to take and ensure connectivity inside the farm.  |
| Content, education, social media  | Startups that develop and provide online platforms for dissemination of content, information and best agricultural, agronomic and cattle-raising practices, and that provide consulting with the purpose of empowering, training and bringing rural producers closer to each other.  |
| Biological control<br>and integrated pest<br>management                             | Startups that market and/or develop biochemical and biological variants (macroscopic or microscopic) aimed at combating pests and diseases, as well as startups that develop technologies for population control and for optimizing the use of raw materials, through agronomic intelligence, in order to carry out an effective and efficient control of pests and diseases |
| Drones, machinery and equipment   | Startups that develop and provide aerial vehicles, machinery and equipment for use in the farm.  |
| Shared Economy  | Startups that provide equipment and machinery for rent and promote their shared used among rural producers.  |
| Agricultural waste management   | Startups that trade and/or develop equipment, methods and processes to improve the waste management in the property.   |
| Internet of Things for<br>Agro: Detection of pests,<br>soil, climate and irrigation | Startups that develop and provide equipment and sensors capable of communicating with each other   |
| Meteorology and irrigation and water management                                     | Startups that develop and provide equipment, methods and processes to improve the predictability of rain levels, as well as those that enable better management and efficiency in the irrigation process, as well as higher efficiency in the farm's water management.   |
| Integrating platform for systems, solutions and data                                | Startups that offer integrated solutions for monitoring of agronomic variables and management or traceability of the production chain  |

| Category   | Description   |
|--|---|
| Remote sensoring, diagnosis and image monitoring | Startups that develop and provide online platforms that help the rural producer in controlling, knowing and delimitating the farm based on imagery, radars and algorithms to identify patterns. |
| Rural Property<br>Management System              | Startups that develop and provide online platforms to assist the management, organization and decision-making of rural producers  |
| Telemetry and automation                         | Startups that trade and/or develop equipment and algorithms for process collection, consolidation and automation  |

 Table 11. Description of the categories after the farm in Radar Agtech.

| · · · · · · · · · · · · · · · · · · ·  |   |  |
|--|---|--|
| Category   | Description   |  |
| Innovative foods and new food trends   | Startups that develop and provide foods with better nutritional levels, using replacement ingredients and creating new uses for existing ingredients  |  |
| Storage, infrastructure and logistics  | Startups that develop and provide new processes, methods and technologies for storage and transportation of commodities and food.   |  |
| Biodiversity and sustainability  | Startups that develop and provide new sustainable processes, methods and technologies and/or for protection and/or responsible use of the biodiversity.   |  |
| Bioenergy and renewable energy   | Startups that develop and provide new processes, methods and technologies for production of bioenergy and/or renewable energy.  |  |
| Cloud kitchen and ghost kitchen  | Startups that provide shared kitchens for the production of meals for delivery  |  |
| Food industry and processing 4.0   | Startups that develop and provide new processes, methods and technologies, with the purpose of increasing efficiency in the use of raw materials, energy, water etc. in the food industry.  |  |
| Marketplaces and trade<br>and sales platforms for<br>agriculture and livestock<br>products | Startups that develop and provide online platforms for trade of commodities and products produced by agribusiness in a large scale, focused on internationalization.  |  |
| Online grocery   | Startups that develop and provide online platforms for trade of unprepared food and products, offering the possibility of a monthly subscription, focused on the end consumer.  |  |
| Urban farming: plant factory and new ways of farming                                       | Startups that develop and provide new processes, methods and technologies for production of crops in urban or indoor areas.   |  |
| Online restaurants and meal kits   | Startups that develop and provide online platforms for trade of prepared products (meals, snacks, sweets) and foods which are ready for consumption or that only need heating, offering the possibility of a monthly subscription focused on the end consumer |  |

| Category  | Description  |
|---|--|
| Food safety and traceability                              | Startups that develop and provide technologies acting to increase the quality and durability of food, as well as to help with the traceability of ingredients used in companies within the productive chain. |
| Autonomous management system for food stores and services | Startups that develop and provide processes, methods and technologies for the automation of stores, as well as to assist retail management   |
| Packaging, environment and recycling systems              | Startups that develop and provide new processes, methods and technologies for packaging in order to mitigate negative impacts on the environment and facilitate recycling                                    |

# **Agtechs classification**

The classification of each agtech was performed by one person from the team and was reviewed in the following cases:

- When the first examiner suggested the removal of the agtech due to lack of data, another examiner would try to find data by other means.
- When the first examiner suggested the removal of the agtech due to inadequacy according to removal criteria, another examiner would confirm this decision.
- When the first examiner was in doubt regarding the main category.
- When there was no consensus between the first and the second examiner, and a third examiner also gave his or her opinion and the debate would go on until a consensus was reached.

In the questionnaire, we asked about the main category and about the existence of secondary category (ies) in which the agtech operates. The process of identifying any secondary categories of mapped agtechs has not been completed for all agtechs, so the data will not be published in this report.

# Analysis of the agtech map

This chapter presents two categories of analysis made in the map of Brazilian agtechs: 1) geographic and 2) by categories of operation and segments of the agricultural productive chain. The same analyses are available for interactive consultation at the website radaragtech. com.br.

Radar Agtech Brasil 2022 identified 1,703 active agtechs based in the national territory. This mapping evaluates both the mortality of agtechs, from one edition of the report to another, as well as the emergence of new startups operating in the agricultural sector, computing the difference between these movements.

# **Geographical distribution analysis**

This section analyzes the distribution of agtechs in the Brazilian territory considering the regions of the country, its federative units and, at the local level, in the municipalities.

The geographical analysis of agtechs can be considered an indicator of the degree of maturity of the state of agricultural innovation in different locations, showing local/regional development hubs and localities that may be the target of policies to promote entrepreneurship and innovation.

# By region and federative unit

The geographical distribution of agtechs in the context of a territory can be an important indicator of the maturity of local ecosystems of agricultural innovation. It is considered that the regions, states and localities with the greatest presence of technology-based startups working in agriculture, usually located close to universities and research institutes focused on agriculture and/or the productive sector, concentrate the most innovative initiatives in the generation of new knowledge, practices and technologies for the industry.

In this sense, Radar Agtech Brasil 2022 identified 1,703 agtechs (87% of the total mapped) concentrated mainly in the Southeast (61.4%) and South (25.6%) regions of the country. The federative unit with the highest number of agtechs is São Paulo, with 47.0% of the country's total. The Southeast region still holds the highest percentage of startup concentration, which remained with little decrease compared to last year.

Even though, globally, the amount of active agtechs mapped in 2022 is 7.5% higher than the value of the 2020–2021 edition of Radar Agtech Brasil, proportions showed little changes, but with a slight trend of decentralization from the Southeast and a proportionally greater advance in the Northeast region (Table 12).

Table 12. Amount of active agtechs mapped in the years 2019 to 2022.

| Region      | Agtechs in 2022   | Total in 2022 (%) | Total in 2020–2021 | Total em 2019 (%) |
|-------------|-------------------|-------------------|--------------------|-------------------|
| (%)         | Total in 2019 (%) | 61,4              | 62,5               | 65,7              |
| Southeast   | 1,046             | 61.4              | 62.5               | 65.7              |
| South       | 436               | 25.6              | 25.2               | 23.2              |
| Center-West | 106               | 6.2               | 6.0                | 6.2               |
| Northeast   | 89                | 5.2               | 4.6                | 3.5               |
| North       | 26                | 1.5               | 1.8                | 1.5               |
| Total       | 1,703             | 100.0             | 100.0              | 100.0             |

Picture 14 illustrates the distribution of agtechs by region and federative unit. To facilitate the analysis, the colors of the regions were maintained for the states and municipalities in all pictures of this edition of the Radar Agtech. For example, the state and municipality of São Paulo will always be red, from the Southeast region.



Picture 14. Distribution of agtechs by region and federative unit.

This distribution reflects the results of the mapping of the mechanisms for generating innovative enterprises in Brazil (Anprotec, 2019), especially with regard to incubators and startup accelerators, located mainly in the Southeast and South regions of the country. The existence of an infrastructure to support innovation, players focused on generating new knowledge and training personnel in technological fields, as well as the presence of a capital of established relationships for innovation are factors of attraction for the emergence of new companies.

Similarly, this type of structure and interrelationships could be articulated to promote regional and agricultural development in regions with less presence of agreehs and, in theory, with less maturity with regard to the generation of agricultural innovation. An action in this direction has been undertaken by the Agro Hub Brazil Platform, articulated by the Ministry of Agriculture, Livestock and Supply (Mapa), which aims to promote the exchange of information on the initiatives promoted in various regions and localities and on the existing players in the Brazilian agricultural innovation ecosystem.

Table 13 shows the distribution of agricultural establishments in the different Brazilian regions, as well as the area occupied by them, according to data from the Agricultural Census carried out in 2017.

**Table 13.** Distribution of properties and occupied area by region.

| Region      | Number of Properties | Área ocupada (%) |
|-------------|----------------------|------------------|
| (%)         | Occupied area (%)    | 32               |
| Center-West | 7                    | 32               |
| North       | 11                   | 19               |
| Northeast   | 46                   | 20               |
| Southeast   | 36                   | 17               |
| South       | 17                   | 12               |

Source: IBGE (2017).

It is noticed that, although only 7% of the properties are located in the Center-West, they represent 32% of the country's occupied area. The Northeast region has the largest amount of properties, in a much smaller area, with a great diversity of economic activities, crops and creations, sowing dynamism both on the coast and in agricultural areas in the countryside2.

The analysis of agtechs by federative units showed a continuity in the first five positions since the 2019 edition. However, the states of Mato Grosso and Bahia increased their quantities and proportion of mapped agtechs, from 30 (1.9%) and 25 (1.6%) to 36 (2.1%) and 34 (2.0%), respectively, surpassing the state of Goiás in terms of quantity, which went from 30 to 32 agtechs and maintained its proportion of 1.9% of agtechs.

Tables 14, 15, 16, 17 and 18 show the distribution of agtechs in each region, by federative unit. In view of the continental dimensions of Brazil and the various patterns of occupation of this territory, with regard to natural conditions (relief, climate, water availability) and the

different productive, commercial, economic and even population movements (considering the waves of migration), each Brazilian region has its particular features regarding the development characteristics of its agricultural industry (Bambini et al., 2019).

Some regions present greater indexes of extensive agricultural enterprises, such as sugarcane, livestock, coffee and grains – especially in the Southeast, South and Center-West regions. However, the activities developed by family farmers are very relevant to the Brazilian economy and food security in the country.

Table 14 presents the data mapped in the Southeast region, which concentrates 61.4% of the 1,703 agreeds identified in this edition of Radar Agreed Brasil. In the context of this region, the highest concentration remains in the state of São Paulo (76.6%), followed by Minas Gerais (14.7%), Rio de Janeiro (6.6%) and Espírito Santo (2.1%).

| State          | 2021 | 2022  | State participation in the region in 2022 (%) | Startups mapped in 2021–2022 (%) |
|----------------|------|-------|---|----------------------------------|
| São Paulo      | 757  | 800   | 76.6  | 6                                |
| Minas Gerais   | 143  | 154   | 14.7  | 8                                |
| Rio de Janeiro | 63   | 69    | 6.6   | 10                               |
| Espírito Santo | 20   | 22    | 2.1   | 10                               |
| Total          | 983  | 1.045 | 100   | 6                                |

**Table 14** Agtechs mapped in the Southeast region, by state.

The difference between the 2021 and 2022 mapping in the region, in percentage, was 6%, lower than the global variation of 7.5%. The states of Rio de Janeiro and Espírito Santo had the highest percentage increases.

There are 436 agtechs located in the South region, representing 25.6% of the agtechs mapped in 2022. As shown in Table 15, in the state of Paraná there are 40.3%; in Rio Grande do Sul, 30.4%; and in Santa Catarina, 29.3%.

| Table 15. A | gtechs map | ped in the S | South region, | by state. |
|-------------|------------|--------------|---------------|-----------|
|             |            |              |               |           |

| State             | 2021 | 2022 | State participation in the region in 2022 (%) | Startups mapped in 2021–2022 (%) |
|-------------------|------|------|---|----------------------------------|
| Paraná            | 151  | 176  | 40.30   | 16.6                             |
| Rio Grande do Sul | 124  | 133  | 30.40   | 7.3                              |
| Santa Catarina    | 122  | 128  | 29.30   | 4.9                              |
| Total             | 397  | 437  | 100   | 10.1%                            |

As data shows, the number of mapped agtechs in the region, as a whole, increased more than the variation occurred at the national level. Paraná had the highest percentage increase (16.6%), which is compatible with the efforts to develop the agtech ecosystem in the state, in the North, West and Southwest regions, according to data from the Agro Hub Platform (Brasil, 2022b).

The participation of the North, Northeast and Center-West regions in the amount of mapped agreeds represents less than 10% each.

In the Center-West region (Table 16), the country's agricultural frontier with grain, fiber and livestock production, in large farms with a commercial and export focus, 6% of agtechs were identified. The number of agtechs mapped in 2022 in relation to the 2021 edition was 10.6% higher, with emphasis on the contributions of the Federal District and the state of Mato Grosso, in which the percentage of startups increased about 20%.

Table 16. Agtechs mapped in the Center-West region, by state.

| State              | 2021 | 2022 | State participation in the region in 2022 (%) | Startups mapped in 2021–2022<br>(%) |
|--------------------|------|------|---|-------------------------------------|
| Goiás              | 30   | 32   | 30.8  | 6.7                                 |
| Mato Grosso        | 30   | 36   | 34.6  | 20.0                                |
| Mato Grosso do Sul | 17   | 15   | 14.4  | -11.8                               |
| Distrito Federal   | 17   | 21   | 20.2  | 23.5                                |
| Total              | 94   | 104  | 100   | 10.6                                |

The Northeast region has 5.2% of the agtechs mapped in the national territory (89 agtechs). In the 2019 edition, the region had 2.5% of the agtechs mapped and, in the 2020–2021 edition, 3.5%. This reflects sustained growth in the period.

In the region, there was a 23.6% growth in the active agtechs mapped, compared to the 2021 edition, as shown in Table 17. Bahia maintained the highest percentage position in the region (38.2%), followed by Ceará and Pernambuco (19.1% each), Paraíba (7.9%), Rio Grande do Norte (6.7%), Piauí (5.6%), Sergipe (2.2%) and Maranhão (1.1%).

**Table 17.** Agtechs mapped in the Northeast region, by state.

| State               | 2021 | 2022 | State participation in the region in 2022 (%) | Startups mapped in 2021–2022<br>(%) |
|---------------------|------|------|---|-------------------------------------|
| Bahia               | 25   | 34   | 38.2  | 36.0                                |
| Ceará               | 13   | 17   | 19.1  | 30.8                                |
| Pernambuco          | 11   | 17   | 19.1  | 54.5                                |
| Paraíba             | 7    | 7    | 7.9   | 0.0                                 |
| Rio Grande do Norte | 9    | 6    | 6.7   | -33.3                               |
| Piauí               | 4    | 5    | 5.6   | 25.0                                |
| Sergipe             | 2    | 2    | 2.2   | 0.0                                 |
| Maranhão            | 1    | 1    | 1.1   | 0.0                                 |
| Total               | 72   | 89   | 99.9  | 23.6                                |

The largest increases in the number of startups mapped in 2022 occurred in Pernambuco (54.5%), Bahia (36.0%), Ceará (30.8%) and Piauí (25%). Considering that the mapping performed by Radar Agtech evaluates both the mortality of agtechs and their birth, computing the difference between these movements, in Rio Grande do Norte there was a decrease in the number of agtechs identified (-33.3%).

The Northeast region has an important number of teaching and research institutes, regional resources focused on the agricultural sector, as well as mechanisms that generate enterprises and startup communities. Over the past few years, the region has taken initiatives to promote an entrepreneurial and innovation culture, as well as to create installed capacity of company incubators and accelerators. Here are some examples of local entrepreneurial communities: All Saints Bay (Salvador, BA), Caju Valley (Aracaju, SE), Cajuína Valley (Teresina, PI), Carnaúba Valley (Parnaíba, PI), Carranca Valley (Petrolina, PE), Kariri Valley (Juazeiro do Norte, CE), Manguezal (Recife, PE), Rapadura Valley (Fortaleza, CE), Santana Valley (Feira de Santana, BA), Sete Colinas (Garanhuns, PE), SoLuíses (São Luís, MA), Starttropeiros (Campina Grande, PB) and Sururu Valley (Maceió, AL) (Startupbase, 2022). There are also other relevant actions that may be contributing to the sustained growth of the agtech movement in the region. The Agro-Nordeste Plan, implemented in 2019 in order to strengthen small and medium-sized producers, integrates actions and public policies for the region, as well as for the North of Minas Gerais and Espírito Santo (Brasil, 2022a), in partnership with several organizations, such as Embrapa and Sebrae. The newly implemented AgroNordeste Digital Program will also have an important role, seeking to expand access to rural connectivity, foster technology-based entrepreneurship and the structuring of agricultural innovation ecosystems in Northeastern Brazil. Actions are planned in the following locations: Vale do São Francisco (PB), Vale do Jaguaribe (CE), Vale do Açu (RN), Oeste Baiano (BA) and Cariri Paraibano (PB).

The region with the lowest representation in the agtech scenario is the North region, with decreased percentage share in relation to the previous year. With only 1.5% of the agtechs mapped so far, Pará (50%) continues to lead in the region, followed by Tocantins (25%), Amazonas (14.3%), Amapá (7.1%) and Roraima (3.6%), which has one agtech. Table 18 shows this distribution.

| <b>Table 18.</b> Agtechs mapped in the North | region. | by state. |
|--|---------|-----------|
|--|---------|-----------|

| State     | 2021 | 2022 | State participation in the region in 2022 (%) | Startups mapped in 2021–2022 (%) |
|-----------|------|------|---|----------------------------------|
| Pará      | 14   | 15   | 50.00   | 7.1                              |
| Tocantins | 7    | 8    | 25.00   | 14.3                             |
| Amazonas  | 4    | 4    | 14.30   | 0.0                              |
| Amapá     | 2    | 1    | 7.10  | -50.0                            |
| Roraima   | 1    | 0    | 3.60  | -100.0                           |
| Total     | 28   | 28   | 100   | 0.0                              |

The region as a whole did not show an increase in the number of agtechs mapped in relation to 2021. There was only a small increase in Pará and Amazonas, and a decrease in Amapá and Rondônia. It is understood that the North region has the potential to foster and de-

velop agtech entrepreneurship, given that there is an important knowledge structure installed, such as research centers, Embrapa Units, university and federal institutes, which are located mainly in the states of Amazonas, Pará and Tocantins. Entrepreneurial communities have also been developing in the region, among which are the following: 153 Valley (Gurupi, TO), Açaí Valley (Belém, PA), Aquiri Valley (Rio Branco, AC), Buruti Valley (Boa Vista, RR), Chambary Valley (Araguaína, TO), Ji-Paraná Community (Ji-Paraná, RO), Tambaki Valley (Porto Velho, RO), Tucuju Valley (Macapá, AP).

#### By municipality

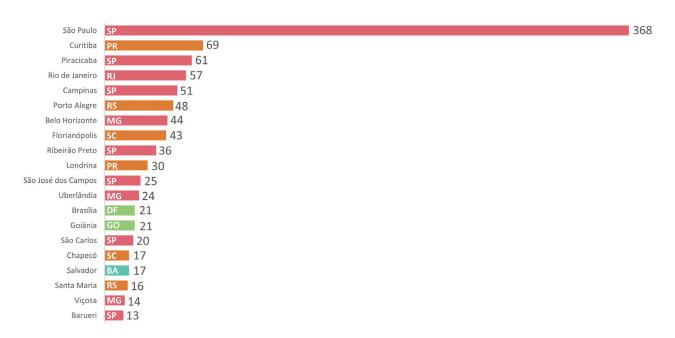
In 2022, from a universe of 349 municipalities, 26 were identified having 10 or more active agtechs, with an amount of 1,060 agtechs (62.2% of the total amount of this edition). Among the 26 municipalities, 14 are state capitals (Table 19).

Table 19. Municipalities with mapped agtechs.

| Position in 2022? | Municipality           | State | Number of agtechs | Percentage of agtechs (%) | Cumulative<br>(%) | Position in 2020–2021 | Agtechs in 2020–2021 |
|-------------------|------------------------|-------|-------------------|---------------------------|-------------------|-----------------------|----------------------|
| 1                 | São Paulo              | SP    | 368               | 21.6                      | 21.6              | 1                     | 347                  |
| 2                 | Curitiba               | PR    | 69                | 4.1                       | 25.7              | 3                     | 59                   |
| 3                 | Piracicaba             | SP    | 61                | 3.6                       | 29.2              | 2                     | 60                   |
| 4                 | Rio de<br>Janeiro      | RJ    | 57                | 3.3                       | 32.6              | 4                     | 55                   |
| 5                 | Campinas               | SP    | 51                | 3.0                       | 35.6              | 5                     | 48                   |
| 6                 | Porto Alegre           | RS    | 48                | 2.8                       | 38.4              | 6                     | 42                   |
| 7                 | Belo<br>Horizonte      | MG    | 44                | 2.6                       | 41.0              | 7                     | 40                   |
| 8                 | Florianópolis          | SC    | 43                | 2.5                       | 43.5              | 9                     | 36                   |
| 9                 | Ribeirão<br>Preto      | SP    | 36                | 2.1                       | 45.6              | 8                     | 39                   |
| 10                | Londrina               | PR    | 30                | 1.8                       | 47.4              | 10                    | 28                   |
| 11                | São José dos<br>Campos | SP    | 25                | 1.5                       | 48.9              | 12                    | 21                   |
| 12                | Uberlândia             | MG    | 24                | 1.4                       | 50.3              | 11                    | 26                   |
| 13                | Brasília               | DF    | 21                | 1.2                       | 51.5              | 16                    | 16                   |
| 13                | Goiânia                | 60    | 21                | 1.2                       | 52.7              | 12                    | 21                   |
| 15                | São Carlos             | SP    | 20                | 1.2                       | 53.9              | 12                    | 21                   |
| 16                | Salvador               | ВА    | 17                | 1.0                       | 55.9              | 17                    | 14                   |
| 16                | Chapecó                | SC    | 17                | 1.0                       | 54.9              | 15                    | 18                   |
| 18                | Santa Maria            | RS    | 16                | 0.9                       | 56.8              | 23                    | 11                   |

| Position in 2022? | Municipality    | State | Number of agtechs | Percentage of agtechs (%) | Cumulative (%) | Position in 2020–2021 | Agtechs in 2020–2021 |
|-------------------|-----------------|-------|-------------------|---------------------------|----------------|-----------------------|----------------------|
| 19                | Viçosa          | MG    | 14                | 0.8                       | 57.7           | 19                    | 12                   |
| 20                | Barueri         | SP    | 13                | 0.8                       | 58.4           | 24                    | 10                   |
| 21                | Vitória         | ES    | 12                | 0.7                       | 59.8           | 24                    | 10                   |
| 21                | Campo<br>Grande | MS    | 12                | 0.7                       | 59.1           | 17                    | 14                   |
| 23                | Recife          | PE    | 11                | 0.6                       | 60.5           | 34                    | 7                    |
| 24                | Cuiabá          | MT    | 10                | 0.6                       | 61.7           | 27                    | 9                    |
| 24                | Belém           | PA    | 10                | 0.6                       | 61.1           | 21                    | 11                   |
| 24                | Lages           | SC    | 10                | 0.6                       | 62.2           | 21                    | 11                   |

Among the municipalities that are not capitals, Piracicaba, SP, and Campinas, SP, are thosethat have a significant number of agtechs – 61 and 51 agtechs each, respectively (Picture 15).



Picture 15. Brazilian municipalities with the highest number of agtechs.

The comparison of 2022 data with the 2020–2021 edition shows that there are more municipalities with the presence of agtechs – from 315 to 349 – an increase of around 11%.

The 12 municipalities with the highest number of agtechs mapped continue to concentrate more than 50% of the total agtechs mapped (50.9% in 2020–2021 and 50.3% in 2022). The composition is very similar, with small variations due to the greater growth in the number of agtechs in some municipalities: Curitiba surpassed Piracicaba and Florianópolis surpassed Ribeirão Preto, for example. The number of municipalities with 10 or more agtechs remained stable in 26, with the inclusion of Recife and Cuiabá and the exclusion of Joinville and Pelotas.

São Paulo is the state with the largest number of municipalities (7), followed by Santa Catarina and Minas Gerais (3 each) and Paraná and Rio Grande do Sul (2 each). The 8 remaining states have only their capitals with more than 10 agrechs (BA, DF, ES, GO, MS, MT, PA, PE and RJ).

## Per inhabitant in regions, federative units and municipalities

An important indicator to be considered is the concentration of agtechs in relation to the number of inhabitants of a given location. Calculating the rate of agtechs per 100,000 inhabitants in federative units and municipalities provides deeper understanding on the relative importance of agtechs in the local ecosystem, adding to the information on the absolute number of agtechs mapped.<sup>1</sup>

The South and Southeast regions have a higher concentration than the Brazilian average (0.80). The South region has the highest index (1.43). The Northeast (0.15) and North (0.14) regions have the lowest indexes (Table 20).

| Region      | Agtechs | Percentage of agtechs (%) | Population  | Agtechs/100<br>thousand<br>inhabitants |
|-------------|---------|---------------------------|-------------|--|
| South       | 436     | 25.6                      | 30,402,587  | 1.43                                   |
| Southeast   | 1046    | 61.4                      | 89,632,912  | 1.17                                   |
| Center-West | 106     | 6.2                       | 16,707,336  | 0.63                                   |
| Northeast   | 89      | 5.2                       | 57,667,842  | 0.15                                   |
| North       | 26      | 1.5                       | 18,906,962  | 0.14                                   |
| Brazil      | 1,703   | 100.0                     | 213,317,639 | 0.80                                   |

Regarding the federative units, five states stand out with concentrations higher than the national average, which reflects their relative importance: Santa Catarina, São Paulo, Paraná, Rio Grande do Sul and Mato Grosso (Table 21).

Table 21. Concentration of agtechs by federative unit.

| State          | Agtechs/100<br>thousand<br>inhabitants | State            | Agtechs/100<br>thousand<br>inhabitants | State      | Agtechs/100<br>thousand<br>inhabitants |
|----------------|--|------------------|--|------------|--|
| Santa Catarina | 1.74                                   | Minas Gerais     | 0.72                                   | Ceará      | 0.18                                   |
| São Paulo      | 1.71                                   | Distrito Federal | 0.68                                   | Pernambuco | 0.18                                   |
| Paraná         | 1.52                                   | Center-West      | 0.63                                   | Paraíba    | 0.17                                   |

<sup>1</sup> The indexes considered the population estimated by the Brazilian Institute of Geography and Statistics (IBGE) for 2021, made available by the Directorate of Research (DPE), Coordination of Population and Social Indicators (Copis).

| State                | Agtechs/100<br>thousand<br>inhabitants | State                 | Agtechs/100<br>thousand<br>inhabitants | State                  | Agtechs/100<br>thousand<br>inhabitants |
|----------------------|--|-----------------------|--|------------------------|--|
| South                | 1.43                                   | Espírito Santo        | 0.54                                   | Rio Grande do<br>Norte | 0.17                                   |
| Southeast            | 1.17                                   | Mato Grosso do<br>Sul | 0.53                                   | Pará                   | 0.16                                   |
| Rio Grande do<br>Sul | 1.16                                   | Goiás                 | 0.44                                   | Northeast              | 0.15                                   |
| Mato Grosso          | 1.01                                   | Tocantins             | 0.44                                   | Roraima                | 0.15                                   |
| Brazil               | 0.80                                   | Rio de Janeiro        | 0.40                                   | Piauí                  | 0.15                                   |
|                      |  | Amapá                 | 0.23                                   | North                  | 0.14                                   |
|                      |  | Bahia                 | 0.23                                   | Amazonas               | 0.09                                   |
|                      |  |                       |  | Sergipe                | 0.09                                   |
|                      |  |                       |  | Maranhão               | 0.01                                   |

| Federative Unit     | Agtechs/100 thousand inhabitants |
|---------------------|----------------------------------|
| Santa Catarina      | 1.74                             |
| São Paulo           | 1.71                             |
| Paraná              | 1.52                             |
| Rio Grande do Sul   | 1.16                             |
| Mato Grosso         | 1.01                             |
| Minas Gerais        | 0.72                             |
| Distrito Federal    | 0.68                             |
| Espírito Santo      | 0.54                             |
| Mato Grosso do Sul  | 0.53                             |
| Goiás               | 0.44                             |
| Tocantins           | 0.44                             |
| Rio de Janeiro      | 0.40                             |
| Amapá               | 0.23                             |
| Bahia               | 0.23                             |
| Ceará               | 0.18                             |
| Pernambuco          | 0.18                             |
| Paraíba             | 0.17                             |
| Rio Grande do Norte | 0.17                             |

| Federative Unit | Agtechs/100 thousand inhabitants |
|-----------------|----------------------------------|
| Pará            | 0.16                             |
| Roraima         | 0.15                             |
| Piauí           | 0.15                             |
| Amazonas        | 0.09                             |
| Sergipe         | 0.09                             |
| Maranhão        | 0.01                             |

In relation to the 26 municipalities with 10 or more agtechs, it is clear that local agricultural innovation ecosystems are relevant for the generation and sustainable development of agtechs. Tables 22 and 23 present these data, by municipality and by region, respectively.

Table 22. Concentration of agtechs in municipalities with ten or more agtechs.

|                     | Agtechs/100 thousand |         |            |
|---------------------|----------------------|---------|------------|
| Municipality        | inhabitants          | Agtechs | Population |
| Viçosa              | 17.5                 | 14      | 79,910     |
| Piracicaba          | 14.9                 | 61      | 410,275    |
| Florianópolis       | 8.3                  | 43      | 516,524    |
| São Carlos          | 7.8                  | 20      | 256,915    |
| Chapecó             | 7.5                  | 17      | 227,587    |
| Lages               | 6.4                  | 10      | 157,158    |
| Santa Maria         | 5.6                  | 16      | 285,159    |
| Londrina            | 5.2                  | 30      | 580,870    |
| Ribeirão Preto      | 5.0                  | 36      | 720,116    |
| Barueri             | 4.6                  | 13      | 279,704    |
| Campinas            | 4.2                  | 51      | 1,223,237  |
| Curitiba            | 3.5                  | 69      | 1,963,726  |
| Uberlândia          | 3.4                  | 24      | 706,597    |
| São José dos Campos | 3.4                  | 25      | 737,310    |
| Vitória             | 3.2                  | 12      | 369,534    |
| Porto Alegre        | 3.2                  | 48      | 1,492,530  |
| São Paulo           | 3.0                  | 368     | 12,396,372 |
| Belo Horizonte      | 1.7                  | 44      | 2,530,701  |

| Municipality   | Agtechs/100 thousand inhabitants | Agtechs | Population |
|----------------|----------------------------------|---------|------------|
| Cuiabá         | 1.6                              | 10      | 623,614    |
| Goiânia        | 1.3                              | 21      | 1,555,626  |
| Campo Grande   | 1.3                              | 12      | 916,001    |
| Rio de Janeiro | 0.8                              | 57      | 6,775,561  |
| Brasília       | 0.7                              | 21      | 3,094,325  |
| Belém          | 0.7                              | 10      | 1,506,420  |
| Recife         | 0.7                              | 11      | 1,661,017  |
| Salvador       | 0.6                              | 17      | 2,900,319  |

**Table 23.** Concentration of agtechs by region, considering municipalities with ten or more agtechs.

| Region      | Agtechs/100 thousand inhabitants | Agtechs | Population  |
|-------------|----------------------------------|---------|-------------|
| South       | 1.43                             | 436     | 30,402,587  |
| Southeast   | 1.17                             | 1,046   | 89,632,912  |
| Center-West | 0.63                             | 106     | 16,707,336  |
| Northeast   | 0.15                             | 89      | 57,667,842  |
| North       | 0.14                             | 26      | 18,906,962  |
| Brazil      | 0.80                             | 1,703   | 213,317,639 |

The municipality of Viçosa, which is the only one on the list with less than 100,000 inhabitants, has the highest rate of agtechs per 100,000 inhabitants (17.5). Nine other municipalities in Table 22 have up to 1 million inhabitants, especially Piracicaba (14.9), the other with an index greater than 9. Among the cities with 1 million and 5 million inhabitants, Campinas (4.2) and Curitiba (3.5) stand out. Among the municipalities with more than 5 million inhabitants, São Paulo has an index (3.0) well above the average of the South region (1.43) and Brazil (0.8); while Rio de Janeiro (0.8) has an index within the same range as the national average.

# **Analysis of categories**

This section presents the analysis of the agtechs in the Radar by their categories, high-lighting the distribution of agtechs between segments and categories, allowing an overview of the technological activity of the mapped startups, as well as the field of activity in three segments of the chain. This view also allows us to identify the main opportunities for insertion in the agricultural production chain.

# By category

Maintaining the complexity of the individual ecosystem in each federative unit, demonstrated in 2021, the presence or absence of agtechs by category maintained a similar distribution to that of previous years. Table 24 shows that São Paulo is the only federative unit to have the 33 categories of agtechs within the state. The other federative units that stand out are the following: Minas Gerais (31), Santa Catarina (30), Paraná (29) and Rio Grande do Sul (27).

Table 24. Categories of agtechs present in each federative unit.

| Federative Unit     | Categories |
|---------------------|------------|
| São Paulo           | 33         |
| Minas Gerais        | 31         |
| Santa Catarina      | 30         |
| Paraná              | 29         |
| Rio Grande do Sul   | 27         |
| Rio de Janeiro      | 23         |
| Goiás               | 14         |
| Bahia               | 13         |
| Mato Grosso         | 13         |
| Distrito Federal    | 12         |
| Ceará               | 11         |
| Espírito Santo      | 11         |
| Mato Grosso do Sul  | 10         |
| Pernambuco          | 10         |
| Pará                | 8          |
| Paraíba             | 6          |
| Rio Grande do Norte | 6          |
| Tocantins           | 6          |
| Amazonas            | 4          |
| Piauí               | 3          |
| Amapá               | 2          |
| Sergipe             | 2          |
| Maranhão            | 1          |
| Roraima             | 1          |

Regarding the municipalities, Table 25 shows that São Paulo has agtechs from 32 of the 33 categories. These figures corroborate those presented in 2021. The growth in the range of categories in the municipalities of Campinas (from 22 to 24), Curitiba (from 22 to 23), Ribeirão Preto (from 20 to 21), Florianópolis (from 19 to 23) and Belo Horizonte (from 18 to 21) also stand out. Additionally, Piracicaba decreased its range of categories from 23 to 22 categories. Other municipalities that stand out are those from Rio de Janeiro (21) and Londrina (17).

**Table 25.** Categories of agtechs present in the municipalities.

| Municipality        | Categories |
|---------------------|------------|
| São Paulo           | 32         |
| Campinas            | 24         |
| Curitiba            | 23         |
| Florianópolis       | 23         |
| Piracicaba          | 22         |
| Belo Horizonte      | 21         |
| Ribeirão Preto      | 21         |
| Rio de Janeiro      | 21         |
| Londrina            | 17         |
| Porto Alegre        | 16         |
| Uberlândia          | 13         |
| São José dos Campos | 12         |
| Goiânia             | 11         |
| Campo Grande        | 10         |

# By segment

Radar Agtech Brasil 2022 categorizes the startups mapped from the segment of the agricultural production chain in which it operates, considering the approach of Agribusiness (Davis; Goldberg, 1957), which includes three stages:

- 1) **Before the farm:** involves actions that an agricultural producer needs to take before starting the production, namely: acquiring credit or raw materials, such as seeds, seedlings, fertilizers, agrochemicals, tractors and implements, irrigation equipment, packaging, among others.
- 2) **Inside the farm:** includes the actual agricultural production activities and everything that needs to be done during production such as rural property management, water management, raw materials and planning commonly associated with production inside the farm.
- 3) **After the farm**: includes the activities developed once the product leaves the hands of the producer/farmer, such as: distribution, logistics, processing, packaging, whole-

sale and retail sales and consumption. Startups operating in the food segment (also mapped in Radar Agtech) are inserted in this segment.

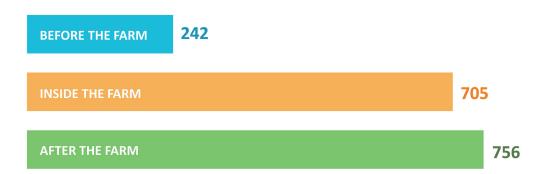
Picture 16 shows this perspective.



Picture 16. Agtechs segments and markets

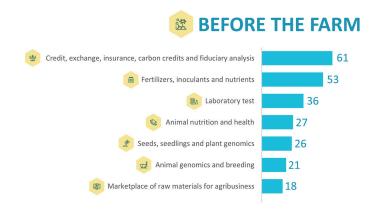
Source: Agfunder (2021 Falta referência).

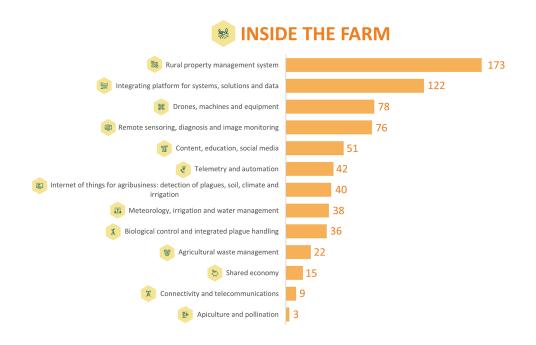
The study carried out by Radar Agtech Brasil 2022 identified 242 agtechs (14.2%) acting before the farm, 705 inside the farm (41.4%) and 756 agtechs after the farm (44.4%), as shown in Picture 17.

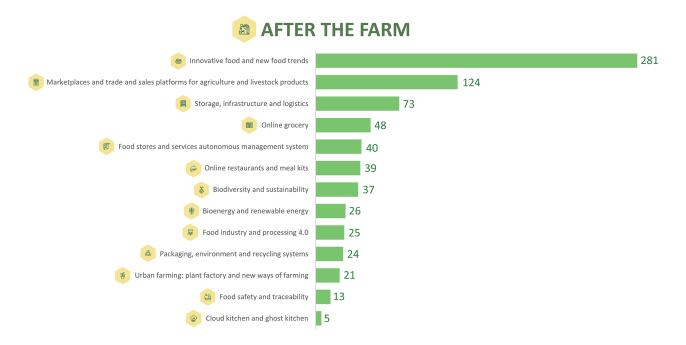


**Picture 17.** Distribution of agreechs by segment of the agricultural production chain (before, inside and after the farm).

In addition, the graphs in Picture 18 allow the visualization of the amount of categories of the agtechs mapped in each of the segments.







Picture 18. Distribution of agtechs by segment – before, inside and after the farm – and by category.

Table 26 shows the distribution of agtechs by segment of operation in relation to the total amount mapped, also bringing the data from the last two editions of Radar Agtech Brasil (2019 and 2020–2021).

Table 26. Participation of startups by segment (%).

| Segment | Year |             |       |
|---------|------|-------------|-------|
|         | 2019 | 2020 - 2021 | 2022  |
| Before  | 18   | 12.60       | 14.21 |
| Inside  | 35   | 41.70       | 41.40 |
| After   | 47   | 45.60       | 44.39 |

Table 26 shows decrease in the participation of segments "before the farm" (more pronounced) and "after the farm" (less pronounced) between 2019 and 2022. The segment "inside the farm", on the other hand, increased its percentage share in the period from 2019 to 2021, indicating a growth of agtechs working to solve "inside the farm" problems. The segments "inside" and "after the farm" continue to represent more than 85% of the startups found, and "after the farm" remains as the largest segment, even though its percentage difference is small in relation to "inside the farm".

Radar Agtech Brasil also ranks the startups mapped according to their category of operation, within each segment. The analysis by group of categories allows us to identify, in a more refined way, the segments in which the agtech operates with regard to its technological activity and the type of solution it offers to producers, cooperatives or other players in the industry.

# Categories of activity regarding market and area of activity

Tables 27, 28 and 29 show the distribution of agtechs mapped in 2022 in each segment, according to the 34 categories established in Radar Agtech Brasil. It is worth emphasizing that an agtech can act in more than one category; thus, the report considers the main activity of each startup for classification purposes<sup>2</sup>.

**Table 27.** Participation of agtechs in the segment "before the farm" by categories.

| Category   | Segment | Number of agtechs | Percentage participation (%) |
|--|---------|-------------------|------------------------------|
| Laboratory Analysis  | Before  | 36                | 15                           |
| Credit, swap, insurance, carbon credits and fiduciary analysis | Before  | 61                | 25                           |
| Fertilizers, inoculants and plant nutrition                    | Before  | 53                | 22                           |
| Animal Genomics and Breeding                                   | Before  | 21                | 9                            |
| Marketplace of raw materials for agribusiness                  | Before  | 18                | 7                            |
| Animal nutrition and health                                    | Before  | 27                | 11                           |
| Seeds, seedlings and plant genomics                            | Before  | 26                | 11                           |

<sup>2</sup> Section 1.3 details the strategy for classifying agtechs into categories.

Table 27 shows that the categories with the highest percentage of participation are: Credit, swap, insurance, carbon credits and fiduciary analysis, with 25%; Fertilizers, inoculants and plant nutrition, with 22%; and Laboratory analysis, with 15% of the startups in the segment. The categories with the lowest percentage of participation may indicate opportunities for entrepreneurs, especially related to the categories of Plant (11%) and Animal Genomics (9%) and Marketplace for raw materials (with 7%), in the latter case, considering the movement of digitization of the purchasing and quotation activities of agricultural producers in the post-Covid-19 pandemic context.

**Table 28.** Participation of agtechs in the segment "inside the farm" by categories.

| Category  | Segment | Number of agtechs | Percentage participation (%) |
|---|---------|-------------------|------------------------------|
| Rural Property Management System  | Inside  | 173               | 24.5                         |
| Integrating platform for systems, solutions and data                          | Inside  | 122               | 17.3                         |
| Drones, machinery and equipment   | Inside  | 78                | 11.1                         |
| Remote sensoring, diagnosis and image monitoring                              | Inside  | 76                | 10.8                         |
| Content, education, social media  | Inside  | 51                | 7.2                          |
| Telemetry and automation  | Inside  | 42                | 6.0                          |
| Internet of Things for Agro: Detection of pests, soil, climate and irrigation | Inside  | 40                | 5.7                          |
| Meteorology, irrigation and water management                                  | Inside  | 38                | 5.4                          |
| Biological control and integrated pest management                             | Inside  | 36                | 5.1                          |
| Agricultural waste management   | Inside  | 22                | 3.1                          |
| Shared Economy  | Inside  | 15                | 2.1                          |
| Connectivity and telecommunication  | Inside  | 9                 | 1.3                          |
| Beekeeping and pollination  | Inside  | 3                 | 0.4                          |

In Table 28, the categories with the highest percentage of representation in the context of the segment "inside the farm" are: Rural property management system (24.5%), Integrating platform for systems, solutions and data (17.3%), Drones, machinery and equipment (11.1%) and Remote sensoring, diagnosis and image monitoring (10.8%). There are 449 agtechs ranked in these four categories, representing 26.36% of the startups mapped in 2022.

This set of categories is characterized by the application of digital technologies to agricultural production, a technological field that has been strengthened in recent years, presenting higher adoption rates among producers according to recent research (Agricultura..., 2020; Ferreira et al., 2022). At the same time, it can be inferred that there is a group of agtechs gaining

strength in this sector, increasing the supply of products and services and, consequently, leveraging competition in these categories.

The categories with less presence of agtechs and, therefore, that can offer opportunities for new entrepreneurs in the sector are: Biological control and integrated pest management and beekeeping and pollination.

**Table 29.** Participation of agtechs in the segment "after the farm" by categories.

| Category  | Segment | Number of agtechs | Percentage participation (%) |
|---|---------|-------------------|------------------------------|
| Innovative foods and new food trends  | After   | 281               | 37                           |
| Marketplaces and trade and sales platforms for agriculture and livestock products | After   | 124               | 16                           |
| Storage, infrastructure and logistics   | After   | 73                | 10                           |
| Online grocery  | After   | 48                | 6                            |
| Autonomous management system for food stores and services                         | After   | 40                | 5                            |
| Online restaurants and meal kits  | After   | 39                | 5                            |
| Biodiversity and sustainability   | After   | 37                | 5                            |
| Bioenergy and renewable energy  | After   | 26                | 3                            |
| Food industry and processing 4.0  | After   | 25                | 3                            |
| Packaging, environment and recycling systems                                      | After   | 24                | 3                            |
| Urban farming: plant factory and new ways of farming                              | After   | 21                | 3                            |
| Food safety and traceability  | After   | 13                | 2                            |
| Cloud kitchen and ghost kitchen   | After   | 5                 | 1                            |

In the segment "after the farm" (Table 29), the Innovative foods and new food trends category stands out, with 281 agtechs, which represents 37% of the total agtechs in this segment. With the current trends in food consumption, with a lower amount of animal protein, greater search for healthy diets and certified and traceable foods, the alternatives that have been offered by startups in this category, generally also classified as foodtechs, stand out.

Categories with a focus on post-production, such as Marketplaces and trade and sales platforms for agricultural products (16%), Storage, infrastructure and logistics (10%) and Food security and traceability (2%), are also interesting markets for agreedhs. Gaining pace after the Covid-19 pandemic, the digitization of the agricultural sector expands opportunities for marketplaces and trading platforms. Similarly, adopting more advanced practices and technologies in logistics allows reducing transportation costs, deadlines and waste of food and other agricultural products.

Some of the categories associated with food retail, such as Online Grocery (6%), Autonomous Store and Food Service Management System (5%) and "Online Restaurants and Meal Kit" (5%), also presented growth during the pandemic, which remains in the "post-pandemic" scenario, due to the change in consumer habits regarding food orders by delivery and remote work, which continued in many companies.

The analysis of each category in relation to the overall amount of the three segments (before, inside and after the farm) is presented in Table 30, with the absolute amount of each category and the overall percentage of distribution.

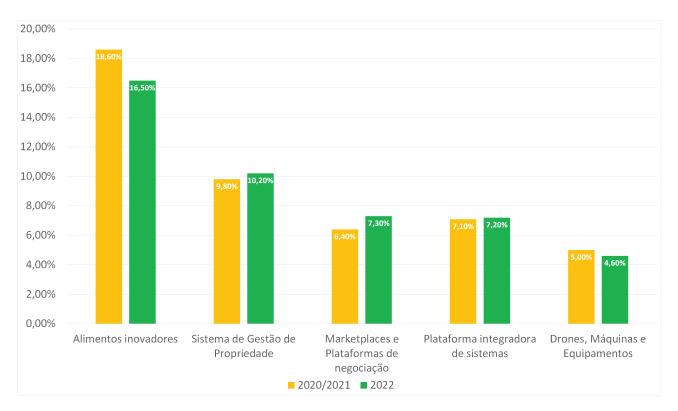
Table 30. Number and percentage of agtechs per frequency of categories of operation.

| Category  | Segment | Number of startups | Percentage of total startups (%) |
|---|---------|--------------------|----------------------------------|
| Innovative foods and new food trends  | After   | 281                | 16.5                             |
| Rural Property Management System  | Inside  | 173                | 10.2                             |
| Marketplaces and trade and sales platforms for agriculture and livestock products | After   | 124                | 7.3                              |
| Integrating platform for systems, solutions and data                              | Inside  | 122                | 7.2                              |
| Drones, machinery and equipment   | Inside  | 78                 | 4.6                              |
| Remote sensoring, diagnosis and image monitoring                                  | Inside  | 76                 | 4.5                              |
| Storage, infrastructure and logistics   | After   | 73                 | 4.3                              |
| Credit, swap, insurance, carbon credits and fiduciary analysis                    | Before  | 61                 | 3.6                              |
| Fertilizers, inoculants and plant nutrition                                       | Before  | 53                 | 3.1                              |
| Content, education, social media  | Inside  | 51                 | 3.0                              |
| Online grocery  | After   | 48                 | 2.8                              |
| Telemetry and automation  | Inside  | 42                 | 2.5                              |
| Internet of Things for Agro: Detection of pests, soil, climate and irrigation     | Inside  | 40                 | 2.3                              |
| Autonomous management system for food stores and services                         | After   | 40                 | 2.3                              |
| Online restaurants and meal kits  | After   | 39                 | 2.3                              |
| Meteorology, irrigation and water management                                      | Inside  | 38                 | 2.2                              |
| Biodiversity and sustainability   | After   | 37                 | 2.2                              |
| Laboratory Analysis   | Before  | 36                 | 2.1                              |

| Category   | Segment | Number of startups | Percentage of total startups (%) |
|--|---------|--------------------|----------------------------------|
| Biological control and integrated pest management    | Inside  | 36                 | 2.1                              |
| Animal nutrition and health                          | Before  | 27                 | 1.6                              |
| Seeds, seedlings and plant genomics                  | Before  | 26                 | 1.5                              |
| Bioenergy and renewable energy                       | After   | 26                 | 1.5                              |
| Food industry and processing 4.0                     | After   | 25                 | 1.5                              |
| Packaging, environment and recycling systems         | After   | 24                 | 1.4                              |
| Agricultural waste management                        | Inside  | 22                 | 1.3                              |
| Animal Genomics and Breeding                         | Before  | 21                 | 1.2                              |
| Urban farming: plant factory and new ways of farming | After   | 21                 | 1.2                              |
| Marketplace of raw materials for agribusiness        | Before  | 18                 | 1.1                              |
| Shared Economy                                       | Inside  | 15                 | 0.9                              |
| Food safety and traceability                         | After   | 13                 | 0.8                              |
| Connectivity and telecommunication                   | Inside  | 9                  | 0.5                              |
| Cloud kitchen and ghost kitchen                      | After   | 5                  | 0.3                              |
| Beekeeping and pollination                           | Inside  | 3                  | 0.2                              |
| Total  |         | 1,703              | 100                              |

The global analysis shows the important presence of the foodtechs sector in Brazilian agricultural entrepreneurship, with the category Innovative foods and new food trends representing 16.5% of the total startups mapped. In the three editions of the study, this category had the main percentage participation. However, there is a trend towards a sustained decline in percentage participation; the category has accounted for 21% of the total agtechs mapped in 2019 and now it represents 16.5%. This shows that other categories have been gaining more relevance within the agtech ecosystem.

Picture 19 shows the five main categories of Radar Agtech 2022, compared to the previous edition of the study. There is a trend of growth in the percentage participation of property management system, trading marketplaces and integrating platforms – aligned with the trends of digitization of the farm and platform economy (Silva Neto et al., 2019).



Picture 19. Five main categories of the Radar Agtech 2022 and Radar Agtech 2020–2021.

These five categories have represented almost 50% of the total startups of Brazilian agribusiness in the three editions of Radar Agtech Brasil. This means that, although there are different areas that can be commercially exploited by agtechs, the technological profile of the industry tends to lead entrepreneurs to these five categories. Four out of these five categories bring technologies focused on digital technologies, involving programming and development of software and related machinery and equipment.

In conclusion, based on the data presented, Brazil maintained the same pattern of distribution of startups among the categories defined by Radar Agtech Brasil. In other words, Radar Agtech shows a picture that indicates the reality experienced by Brazilian entrepreneurs.

# Detailed profile of the agtechs

In addition to the mapping, Radar Agtech Brasil provided a questionnaire so that agtechs could (re)register and answer a few questions. This chapter presents the characteristics of the sample, such as age, location, revenue and category, the performance of these agtechs, their sources of financing, business models, impact on the Sustainable Development Goals (SDGs), and their perceptions of challenges for agtechs, technological and market trends, and what could improve the ecosystem.

#### Sample profile

The sample consisted of 192 agtechs, corresponding to 11.3% of the 1,703 agtechs mapped.

#### Year of establishment

The sample profile includes agtechs younger than the mapped population of agtechs, according to Table 31: 70% were established from 2017, while, in the mapping, this percentage is 45.6%.

| Table 31. Year of establishment of agtechs from | n the sample and from the map. |
|---|--------------------------------|
|---|--------------------------------|

| Year of establishment | Sample | Sample (%) | Mapped | Mapped (%) |
|-----------------------|--------|------------|--------|------------|
| Up to 2011            | 25     | 13.0       | 372    | 23.8       |
| 2012–2016             | 33     | 17.2       | 478    | 30.6       |
| 2017–2019             | 66     | 34.4       | 485    | 31.0       |
| 2020–2022             | 69     | 35.4       | 228    | 14.6       |
| Total                 | 192    |            | 1,563  |            |

This characteristic may further reinforce the challenges of younger companies, but it does not undermine the goal of deepening the characteristics and perceptions of agtechs.

#### Location

Most of the agtechs in the sample and in the map are located in the Southeast (42.5% and 61.4%) and South (37.8% and 25.7%) regions. Although there are differences in terms of percentage, especially for the states of São Paulo (26.4% of the sample, lower than 47% of the mapped agtechs) and Rio Grande do Sul (15.5% of the sample, higher than 7.8% of the mapped agtechs), the overall composition is quite similar (Table 32).

**Table 32.** Federative Units of the agtechs - sample and map.

| Federative Unit        | Sample | Sample (%) | Mapped | Mapped (%) |
|------------------------|--------|------------|--------|------------|
| São Paulo              | 51     | 26.4       | 800    | 47.0       |
| Rio Grande do Sul      | 30     | 15.5       | 133    | 7.8        |
| Minas Gerais           | 24     | 12.4       | 154    | 9.0        |
| Paraná                 | 23     | 11.9       | 176    | 10.3       |
| Santa Catarina         | 20     | 10.4       | 128    | 7.5        |
| Pernambuco             | 8      | 4.1        | 17     | 1.0        |
| Bahia                  | 7      | 3.6        | 34     | 2.0        |
| Goiás                  | 6      | 3.1        | 32     | 1.9        |
| Ceará                  | 4      | 2.1        | 17     | 1.0        |
| Mato Grosso do<br>Sul  | 4      | 2.1        | 15     | 0.9        |
| Mato Grosso            | 4      | 2.1        | 36     | 2.1        |
| Rio de Janeiro         | 4      | 2.1        | 69     | 4.1        |
| Espírito Santo         | 3      | 1.6        | 22     | 1.3        |
| Distrito Federal       | 2      | 1.0        | 21     | 1.2        |
| Amazonas               | 1      | 0.5        | 4      | 0.2        |
| Amapá                  | 1      | 0.5        | 2      | 0.1        |
| Piauí                  | 1      | 0.5        | 5      | 0.3        |
| Pará                   |        |            | 14     | 0.8        |
| Paraíba                |        |            | 7      | 0.4        |
| Tocantins              |        |            | 7      | 0.4        |
| Rio Grande do<br>Norte |        |            | 6      | 0.4        |
| Sergipe                |        |            | 2      | 0.1        |
| Maranhão               |        |            | 1      | 0.1        |
| Roraima                |        |            | 1      | 0.1        |
| Total                  | 193    |            | 1,703  |            |

The main municipalities that make up the sample are also included in the mapping ranking. The differences can be explained by the greater or lesser effectiveness and engagement in each location, which reinforces the importance of having additional methods to understand the ecosystem (Table 33).

**Table 33.** Cities that host the most frequent agtechs in the sample.

| Municipality           | Agtechs | Agtechs (%) |
|------------------------|---------|-------------|
| São Paulo              | 17      | 9.0         |
| Porto Alegre           | 9       | 5.0         |
| Florianópolis          | 9       | 5.0         |
| Piracicaba             | 8       | 4.0         |
| Curitiba               | 6       | 3.0         |
| Santa Maria            | 6       | 3.0         |
| Luís Eduardo Magalhães | 5       | 3           |
| Belo Horizonte         | 5       | 3           |
| Uberlândia             | 5       | 3           |
| São José dos Campos    | 5       | 3           |

#### Revenue and Inova Simples

In relation to revenue (Table 34), the profile of startups, with low revenues, is very frequent: 43.45% of 168 respondents declared a revenue of up to R\$81 thousand and 62.5% of up to R\$360 thousand. There were 16.7% with revenue from R\$720,000 to 16 million; and no agtech in the sample declared revenues of more than 16 million.

**Table 34.** Revenue of agtechs from the sample.

| Revenue                                   | Agtech | Agtech (%) |
|---|--------|------------|
| Up to R\$81 thousand                      | 73     | 43.5       |
| From R\$81.1 thousand to R\$130 thousand  | 12     | 7.1        |
| From R\$130.1 thousand to R\$180 thousand | 6      | 3.6        |
| From R\$180.1 thousand to R\$360 thousand | 14     | 8.3        |
| From R\$360.1 thousand to R\$720 thousand | 11     | 6.6        |
| From R\$720.1 thousand to R\$1.8 million  | 24     | 14.3       |
| From R\$1.81 million to R\$3.6 million    | 15     | 9.0        |
| From R\$3.61 million to R\$4.8 million    | 4      | 2.4        |
| From R\$4.81 million to R\$16 million     | 9      | 5.4        |

Regarding Inova Simples, 114 (65.9%) of companies do not use the Inova Simples model, while 46 (26.6%) use the model, and the remaining respondents declared that they did not use this model, but stated, in their articles of association, the use of innovative business models. Given the specificity of the question, the percentage of 26.6% is quite significant.

#### Segment of agtechs from the sample

Regarding the category of Radar Agtech that best describes agtech (Table 35), the segment with the highest amount of mentions was Inside the farm (59.7%), followed by Before the farm (24.3%) and After the farm (15.9%). This characteristic is significantly different from the general profile of the mapped agtechs, where the segment After the Farm is the largest. This can be explained by the greater knowledge and engagement of the study among the more traditional sectors of agtech, linked to the segments before and inside the farm. In order to improve such results, previous editions of the study considered changing the name to Radar Agfoodtech.

**Table 35.** Main categories mentioned in the agtechs sample.

| Segment/Category  | Agtech(%) |
|---|-----------|
| Inside – Rural Property Management System   | 14        |
| Inside – Remote sensoring, diagnosis and image monitoring                                 | 12        |
| Inside – Internet of Things for Agro: Detection of pests, soil, climate and irrigation    | 7         |
| Inside – Integrating platform for systems, solutions and data                             | 7         |
| Before – Credit, swap, insurance, carbon credits and fiduciary analysis                   | 6         |
| After – Marketplaces and trade and sales platforms for agriculture and livestock products | 6         |
| Before – Marketplace of raw materials for agribusiness                                    | 5         |
| Inside – Telemetry and automation   | 5         |
| Inside –Biological control and integrated pest management                                 | 4         |
| Before – Seeds, seedlings and plant genomics  | 4         |

Since many agtechs have more than one category of activity, they were asked if there was another secondary category that would also be eligible, and 73.9% of respondents pointed to an additional category. This shows the importance of deepening the interconnections between the categories. The most common secondary categories were: Before the farm, "Marketplace of raw materials for agribusiness" and "Credit, swap, insurance, carbon credits and fiduciary analysis"; Inside the farm, "Integrating platform form systems, solutions and data" and "Remote sensoring, diagnosis and imaging monitoring"; and After the farm, "Food safety and traceability" and "Biodiversity and sustainability."

In a survey with 188 respondents, it was found that, in general, the main activities of the companies (Table 36) are livestock (45.2%), aquaculture (21.3%) and the cultivation of grains (59.0%), fruits (43.1%) and other vegetables (43.6%). In detailed survey, sugarcane (10%) and coffee (4.3%) were mentioned the most. There was also 5% mention to totalities (all, all crops, all vegetables, the entire fruit and vegetable chain, etc.).

**Table 36.** Segment of agtechs from the sample.

| Area of Operation | Agtech | Agtech (%) |
|-------------------|--------|------------|
| Livestock         | 85     | 45.2       |
| Aquaculture       | 40     | 21.3       |
| Swine Farming     | 35     | 18.6       |
| Poultries         | 35     | 18.6       |
| Other animals     | 23     | 12.2       |
| Horticulture      | 61     | 32.4       |
| Grains            | 111    | 59.0       |
| Fruits            | 81     | 43.1       |
| Other vegetables  | 82     | 43.6       |

The companies' most common business models are Business to Business (B2B), Business to Consumer (B2C) and Business to Business to Consumer (B2B2C), respectively amounting to 75%, 43% and 33% of the focus in companies' business models, indicating a prevalence with business aimed at other companies before reaching the consumer, although direct work with the consumer is not significantly rare (Table 37).

**Table 37.** Business models of agtechs from the sample.

| Model                                    | Agtech | Agtech (%) |
|--|--------|------------|
| Business to Business – B2B               | 132    | 75         |
| Business to Consumer – B2C               | 76     | 43         |
| Business to Business to Consumer – B2B2C | 58     | 33         |
| Business to Government – B2G             | 7      | 4          |
| Direct to Consumer – D2C                 | 7      | 4          |
| Business to Employee – B2E               | 2      | 1          |
| Consumer to Consumer – C2C               | 2      | 1          |
| Total                                    | 175    | 100        |

#### **Financing**

Regarding sources of financing, it is noted that, in relation to private financing (Table 38), the most common forms of funding still remain in family and community social units, with the founders themselves, family, friends and other individuals responsible for 65% of private investments. Next, angel investing (24%), national accelerators (18%) and entrepreneurial capital (venture capital, 12%) stand out.

**Table 38.** Private sources of financing of agtechs from the sample.

| Private source                                  | Agtech | Agtech (%) |
|---|--------|------------|
| Founders, family, friends and other individuals | 113    | 65         |
| Angel investing                                 | 41     | 24         |
| National accelerator                            | 32     | 18         |
| Entrepreneurial capital (venture capital)       | 21     | 12         |
| Private announcements                           | 18     | 10         |
| Loans   | 18     | 10         |
| National company                                | 8      | 5          |
| International accelerator                       | 6      | 3          |
| Virtual crowdfunding                            | 6      | 3          |
| International Company                           | 6      | 3          |
| Other private sources                           | 7      | 4          |
| No private source                               | 30     | 17         |
| Total   | 174    | 100        |

Considering public funding (Table 39), what stands out is that most companies do not use public funding (56%), those that do generally seek to use public announcements (29%), non-reimbursable research resources (19%) and business incubators (10%).

**Table 39.** Public sources of financing of agtechs from the sample.

| Public Source                             | Agtech | Agtech (%) |
|---|--------|------------|
| Public announcements                      | 48     | 29         |
| Non-refundable research resources         | 31     | 19         |
| Business Incubator                        | 16     | 10         |
| Loans                                     | 5      | 3          |
| Entrepreneurial capital (venture capital) | 4      | 2          |
| Tax incentives                            | 3      | 2          |
| Other public sources                      | 5      | 3          |
| No public source                          | 92     | 56         |
| Total                                     | 163    | 100        |

#### Impact of agtechs on the Sustainable Development Goals

The research sought to identify whether agtechs see themselves as part of the solution to achieve the Sustainable Development Goals (SDGs). The four SDGs with more than 50% of agtechs that identified themselves are "Zero hunger and sustainable agriculture", "Impact on the use and management of raw materials", "Responsible consumption and production" and "Impact on food production and deforestation pressure". Approximately 15.2% of respondents do not consider that their agtech has an environmental impact.

When considering the way companies are committed to achieving the Sustainable Development Goals indicated by the United Nations (UN), there is a greater commitment to those that directly involve the consumption of raw materials, agriculture, hunger and the innovation necessary to achieve these goals. In a survey with 165 respondents, "Zero hunger and sustainable agriculture" (59.4%), "Impact on the use and management of raw materials" (58.8%), "Responsible consumption and production" (53.9%), "Impact on food production and deforestation pressure" (52.1%) and "Industry, innovation and infrastructure" (44.2%) stood out (Table 40).

**Table 40**. Engagement of 165 agtechs to achieve the Sustainable Development Goals.

| Sustainable Development Goals                        | Agtech | Agtech (%) |
|--|--------|------------|
| Zero Hunger and sustainable agriculture              | 98     | 59.4%      |
| Impact on the use and management of raw materials    | 97     | 58.8%      |
| Responsible Consumption and Production               | 89     | 53.9%      |
| Impact on food production and deforestation pressure | 86     | 52.1 %     |
| Industry, Innovation and Infrastructure              | 73     | 44.2%      |
| Impact on land use and management                    | 67     | 40.6%      |
| Impact on chemical use and pollutant emission        | 61     | 37.0%      |
| Impact on healthy living and well-being              | 54     | 32.7%      |
| Decent work and economic growth                      | 51     | 30.9%      |
| Impact on water use and management                   | 51     | 30.9%      |
| Impact on greenhouse gas emissions                   | 48     | 29.1%      |
| Action against global climate change                 | 46     | 27.9%      |
| Health and Wellbeing                                 | 38     | 23.0%      |
| Impact on energy use and management                  | 31     | 18.8%      |
| Sustainable Cities and Communities                   | 30     | 18.2%      |
| Clean water and sanitation                           | 26     | 15.8%      |
| Reduced Inequalities                                 | 26     | 15.8%      |
| Partnerships and Means of Implementation             | 24     | 14.5%      |
| Gender Equality                                      | 23     | 13.9%      |

| Sustainable Development Goals          | Agtech | Agtech (%) |
|--|--------|------------|
| Life on land                           | 21     | 12.7%      |
| No Poverty                             | 19     | 11.5%      |
| Affordable and Clean Energy            | 19     | 11.5%      |
| Life Below Water                       | 19     | 11.5%      |
| Quality Education                      | 17     | 10.3%      |
| Peace, justice and strong institutions | 8      | 4.8%       |
| Startup has no environmental impact    | 25     | 15.2%      |

#### Key challenges for the business

As observed in the word cloud (Picture 20), the major challenges for agtechs are quite diverse, with emphasis on struggle to access capital, especially in the early stages and scaling the business, in addition to the perception of the need to change the mindset for the effective insertion of products or services in the market. This is actually related to the struggle in showing the value existing in what is offered by agtechs.



Picture 20. Word cloud of key business challenges.

Another aspect that deserves attention is related to the challenge of finding properly qualified professionals to work in agtechs. In this sense, taking into account the word cloud (Picture 20), it is observed that agtechs understand that the insertion of cutting-edge technologies is a trend in the sector, which certainly demands professionals with high levels of training.

#### Technological and market trends Q1

With regard to major technological and market trends, agtechs point out to the intensification in the use of more complex technologies. Some of them stand out: artificial intelligence, IoT (internet of things), automation, digitization, machine learning, increased connectivity and the use of sensors (Picture 21).



Picture 21. Word cloud of technological and market trends.

Linking this question to the previous one, considering the difficulty of showing the value of a technology and the necessary change of mindset, there is possibly a mismatch between how some agtechs view the scenario and the reality of the market. Despite understanding that cutting-edge technologies will probably shape the future of agriculture, there are still major limitations in Brazil, such as an insufficient telephone network in the countryside and the slow-paced installation of the 5G network in the country.

Another point that appears as a strong trend and deserves special attention is the intensified use of sustainable technologies. Thus, agtechs believe that biological raw materials, the circular economy itself and other approaches linked to sustainability should be strengthened in the near future.

#### Desired improvements in the agtech ecosystem T1

As for what could be improved in the agtech ecosystem, the main highlight is access to finance, from both private and public source. In this sense, it is also interesting to observe the importance given to the state by agtechs for the advancement of the ecosystem, indicating the need for supportive legislation, state subsidy and the efficiency of the service that it provides (Picture 22).



Picture 22. Word cloud of desired ecosystem improvements.

Despite the existence of several innovation environments in Brazil, agtechs stated that they believe that the connections between the different players could be more frequent and effective. Also, there is a need for demonstrative events, the existence of validation fields, which are obstacles mainly for agtechs in the early stage, in addition to training professionals on more complex topics related to entrepreneurship.

# Chapter Agtechs Role in the Before, Inside and After the Farm Segment

This chapter provides the directories of agtechs organized by segment and category, region, Federative Unit, city and their respective URLs and LinkedIn.

#### 1 Directory of Agtechs in the Segment Before the Farm

#### 1.1 Laboratory test

| Company                           | URL   | LinkedIn  | City          | State | Region           |
|-----------------------------------|---|---|---------------|-------|------------------|
| OnSite Genomicsg                  | • onsitegenomics.com                                | ● 0   | Brasília      | DF    | Centro-<br>Oeste |
| Macofren tecnologias              |   | /company/ macofrentecnologias/  | Brasília      | DF    | Centro-<br>Oeste |
| ECO Diagnóstica                   | <ul><li>ecodiagnosticavet.com.</li><li>br</li></ul> | <ul><li>/company/eco-<br/>diagnostico-veterinario/</li></ul>                              | Nova Lima     | MG    | Sudeste          |
| Ivare                             | ● ivare.com.br                                      |   | Uberlândia    | MG    | Sudeste          |
| Intecso                           | <ul><li>● intecso.com.br</li></ul>                  |   | Curitiba      | PR    | Sul              |
| MS Bioscience                     | • msbioscience.com.br                               |   | Maringá       | PR    | Sul              |
| Zeit                              | <ul><li>zeitbr.com.br</li></ul>                     | • /company/<br>zeitportabilidade/   | Santa Maria   | RS    | Sul              |
| Auftek Serviços de<br>Tecnologia  | <ul><li>auftek.com.br</li></ul>                     | https://www.linkedin.     com/companyaufteksm   | Santa Maria   | RS    | Sul              |
| Bionexus                          | <ul><li>bionexus.com.br</li></ul>                   |   | Chapecó       | SC    | Sul              |
| Nanoscoping                       | nanoscoping.com.br                                  |   | Florianópolis | SC    | Sul              |
| Neoprospecta                      | <ul><li>neoprospecta.com</li></ul>                  | <ul><li>/company/neoprospecta-<br/>food/</li></ul>  | Florianópolis | SC    | Sul              |
| Acquaplant                        | acquaplant.com.br                                   | <ul><li>/company/acquaplantqu%</li><li>C3% ADmicadobrasil/</li></ul>                      | Joinville     | SC    | Sul              |
| Bioagrocert Soluções<br>Agrícolas |   | <ul><li>/company/bioagrocert-<br/>solu% C3% A7% C3% B5es-<br/>agr% C3% ADcolas/</li></ul> | Barretos      | SP    | Sudeste          |
| Crop                              |   |   | Botucatu      | SP    | Sudeste          |
| Microbióticos                     |   | <ul><li>/company/microbioticos-<br/>analises-laboratoriais-s-<br/>cltda/</li></ul>        | Campinas      | SP    | Sudeste          |
| Nanocore                          | nanocore.com.br                                     | /company/nanocore-<br>biotecnologia-s.a./   | Campinas      | SP    | Sudeste          |

| Company                       | URL  | LinkedIn  | City                     | State | Region   |
|-------------------------------|--|---|--------------------------|-------|----------|
| Vikings Hopyard               | <ul><li>facebook.com/<br/>VikingHopyard</li></ul>            | NE  | Holambra                 | SP    | Sudeste  |
| Herbae                        | herbae.com.br  | <ul><li>/company/herbae<br/>consultoria-em-projetos-<br/>agricolas/</li></ul>     | Jaboticabal              | SP    | Sudeste  |
| PrevetSanidadeAquícola        | • prevet.com.br  | <ul><li>/company/prevet-<br/>sanidade-aqu-cola/</li></ul>                         | Jaboticabal              | SP    | Sudeste  |
| C4 Biotecnologia              |  | <ul><li>● /company/<br/>c4biotecnologia/</li></ul>                                | Lençóis Paulista         | SP    | Sudeste  |
| Merkato                       | merkatobrasil.com  | /company/merkato-<br>comercial/   | Limeira                  | SP    | Sudeste  |
| PanDNA                        | <ul><li>● /in/ana-durvalina-<br/>bomtorin-71127783</li></ul> | ● /in/ana-durvalina-<br>bomtorin-71127783/  | Piracicaba               | SP    | Sudeste  |
| Tecnicontrol                  |  | <ul><li>/company/tecnicontrol-<br/>equipamentos-para-<br/>computadores/</li></ul> | Piracicaba               | SP    | Sudeste  |
| OnFarm                        | ● onfarm.com.br  |   | Pirassununga             | SP    | Sudeste  |
| Alsukkar                      | <ul><li>● alsukkar.com.br</li></ul>                          | NE  | Ribeirão Preto           | SP    | Sudeste  |
| DGLab                         | ø dglab.com.br   |   | Ribeirão Preto           | SP    | Sudeste  |
| Agrosafety                    | agrosafety.com.br  |   | Santa Bárbara<br>d'Oeste | SP    | Sudeste  |
| Agrorobótica                  | ● agrorobotica.com.br  |   | São Carlos               | SP    | Sudeste  |
| Cellco Biotec                 |  |   | São Carlos               | SP    | Sudeste  |
| Fine Instrument<br>Technology | ● fitinstrument.com  | ● /company/fitinstrument/%<br>20  | São Carlos               | SP    | Sudeste  |
| Biolinker                     | ● biolinker.tech/  |   | São Paulo                | SP    | Sudeste  |
| Myrtus Plant Biotech          | myrtus.com.br  |   | São Paulo                | SP    | Sudeste  |
| Scheme Lab                    |  |   | São Paulo                | SP    | Sudeste  |
| Tecam                         |  | NE  | São Paulo                | SP    | Sudeste  |
| SpecLab                       | speclab.com.br   |   | Sumaré                   | SP    | Sudeste  |
| Monitoragua                   | <ul><li>saadrodrigues.wixsite.<br/>com/website</li></ul>     |   | Tremembé                 | SP    | Sudeste  |
| FastBio                       | ● fastbio.com.br   |   | Ribeirão Preto           | SP    | Sudeste  |
| Alfakit                       | • alfakit.com.br   |   | Florianópolis            | SC    | Sul      |
| Farmacore                     | ● farmacore.com.br   |   | Ribeirão Preto           | SP    | Sudeste  |
| Image Pesquisas               |  | <ul><li>/in/image-pesquisas-<br/>sementes-e-plantas-<br/>b160b4197/</li></ul>     | Fortaleza                | CE    | Nordeste |
| Pragas.Com                    | ● pragas.com.vc  |   | Piracicaba               | SP    | Sudeste  |

| Company            | URL                  | LinkedIn  | City                    | State | Region  |
|--------------------|----------------------|---|-------------------------|-------|---------|
| Oga                | ● ogawabiocycles.com | /company/ogawa- biocycles/  | São Paulo               | SP    | Sudeste |
| BIA Tecnologia     | ● bia.ind.br/        |   | São Francisco<br>do Sul | SC    | Sul     |
| Altamar            | altamar.com.br       | <ul><li>/company/altamar-<br/>sistemas-aquaticos/</li></ul>                               | Santos                  | SP    | Sudeste |
| DropScope (SprayX) |                      |   | São Carlos              | SP    | Sudeste |
| Linax              | ● linax.com.br       | • /company/linax-oleos-<br>essenciais/  | Votuporanga             | SP    | Sudeste |
| EcoBiotech         | ecobiotech.com.br    | <ul><li>● /company/ecobiotech-<br/>biotecnologia-e-automa%<br/>C3% A7% C3% A3o/</li></ul> | Ribeirão Preto          | SP    | Sudeste |
| Liamarinha         |                      |   | Viçosa                  | MG    | Sudeste |
| Fitovision         | • fitovision.com.br  |   | Londrina                | PR    | Sul     |
| Cosnatech          | cosnatech.com.br     |   | Campinas                | SP    | Sudeste |

## 1.2 Credit, exchange, insurance, carbon credits and fiduciary analysis

| Company                            | URL                                     | LinkedIn  | City           | State | Region           |
|------------------------------------|---|---|----------------|-------|------------------|
| Moeda                              | <ul><li>moedaseeds.com</li></ul>        |   | Brasília       | DF    | Centro-<br>Oeste |
| Radix Florestal                    | radixflorestal.com.br                   |   | Brasília       | DF    | Centro-<br>Oeste |
| Wiz Corporate                      | wizcorporate.com.br/     agronegocio    |   | Brasília       | DF    | Centro-<br>Oeste |
| Inspecto Agro                      | ● inspectoagri.com/                     |   | Goiânia        | GO    | Centro-<br>Oeste |
| BMV - Programa Brasil<br>Mata Viva | <ul><li>brasilmataviva.com.br</li></ul> |   | Goiânia        | GO    | Centro-<br>Oeste |
| Celo4                              |   |   | Belo Horizonte | MG    | Sudeste          |
| Seedz                              | seedz.ag                                |   | Belo Horizonte | MG    | Sudeste          |
| Campo Capital                      |   |   | Patrocínio     | MG    | Sudeste          |
| Nagro                              | nagro.com.br                            |   | Uberaba        | MG    | Sudeste          |
| Gira                               | ⊚ gira.com.br/#/                        | <ul> <li>/company/giragest%</li> <li>C3% A3o-integrada-de-receb% C3% ADveis-do-agroneg% C3% B3cio/</li> </ul> | Uberlândia     | MG    | Sudeste          |
| PORTO Co.                          | <ul><li>porto.company</li></ul>         |   | Cascavel       | PR    | Sul              |
| Bart Digital                       | <ul><li>bartdigital.com.br</li></ul>    |   | Londrina       | PR    | Sul              |
| Verde rural                        | verderural.com.br     verderural.com.br |   | Londrina       | PR    | Sul              |

| Company                           | URL   | LinkedIn  | City                   | State             | Region  |
|-----------------------------------|---|---|------------------------|-------------------|---------|
| Softfocus (Crédito Rural)         | <ul><li>softfocus.com.br</li></ul>                | /company/softfocusbr/   | Pato Branco            | PR                | Sul     |
| Newe                              | neweseguros.com.br                                |   | Rio de Janeiro         | Rio de<br>Janeiro | Sudeste |
| Seges                             |   |   | Rio de Janeiro         | Rio de<br>Janeiro | Sudeste |
| Acerto Facil Pagamentos           | acertofacil.com.br                                | ● /company/acerto-f% C3%<br>A1cil/  | Porto Alegre           | RS                | Sul     |
| Fortalece Seguros                 | fortaleceseguros.com.br                           | <ul><li>/company/fortalece-<br/>corretora-de-seguros/</li></ul>   | Rio Grande             | RS                | Sul     |
| Brascard                          | ● brascard.agr.br                                 | <ul> <li>/in/brascard-<br/>administradora-de-conv%<br/>C3% AAnios-e-cart% C3%<br/>B5es-ltda-4890a7222/</li> </ul> | Três de Maio           | RS                | Sul     |
| Akkwa AgFintech                   | akkwa.com.br                                      | /company/akkwaagfintech   | Florianópolis          | SC                | Sul     |
| Creditares                        | • creditares.com.br/                              | /company/creditares/  | Florianópolis          | SC                | Sul     |
| Eumostro                          |   | /company/     eumostrooficial/  | Florianópolis          | SC                | Sul     |
| Agroforestry Carbon               | <ul><li>agroforestrycarbon.<br/>com.br/</li></ul> | <ul><li>/company/agroforestry-<br/>carbon/</li></ul>  | Florianópolis          | SC                | Sul     |
| Fazenda Cheia                     | ● fazendacheia.com.br                             |   | Florianópolis          | SC                | Sul     |
| Openbox Green Fintech             |   | • /company/<br>fintechopenbox/  | Florianópolis          | SC                | Sul     |
| Bolsa Agro CPR                    | <ul><li>bolsaagrocpr.com.br</li></ul>             |   | Barueri                | SP                | Sudeste |
| AGRINT                            | ■ agrint.com.br                                   | ● /in/agrint-agricultura-<br>inteligente-38052b21a/   | Campinas               | SP                | Sudeste |
| Brain Agriculture                 | ● brain.agr.br                                    | <ul><li>/company/brain-<br/>agriculture/</li></ul>  | Indaiatuba             | SP                | Sudeste |
| Agro Empreender                   | agroempreender.com.br                             | ● /in/agro-empreender-<br>837047b7/   | Itapetininga           | SP                | Sudeste |
| IMBR Agro                         |   |   | Piracicaba             | SP                | Sudeste |
| brCarbon                          |   |   | Piracicaba             | SP                | Sudeste |
| IDMAQ                             |   |   | Piracicaba             | SP                | Sudeste |
| Me Sinto Seguro                   | mesintoseguro.com.br                              | <ul><li>/company/me-sinto-<br/>seguro/</li></ul>  | Piracicaba             | SP                | Sudeste |
| Agriculture Collateral<br>Experts | aceagr.com.br/                                    |   | Ribeirão Preto         | SP                | Sudeste |
| Agromatic                         | agromatic.agr.br                                  |   | Ribeirão Preto         | SP                | Sudeste |
| Agronomics                        | ■ agronomics.agr.br                               | <ul><li>/company/agronomics-<br/>consultoria/</li></ul>   | Ribeirão Preto         | SP                | Sudeste |
| Terra Magna                       |   |   | São José dos<br>Campos | SP                | Sudeste |

| Company              | URL   | LinkedIn  | City                   | State | Region           |
|----------------------|---|---|------------------------|-------|------------------|
| Vega Monitoramento   | <ul><li>Vegamonitoramento.</li><li>com.br</li></ul> | /company/vega-monitoramento/                                | São José Dos<br>Campos | SP    | Sudeste          |
| Cerc                 | o cerc.inf.br/                                      | ● /company/cerc-recebiveis/                                 | São Paulo              | SP    | Sudeste          |
| Itsy Seguros Agro    | • itsyseguros.com/                                  | /company/itsy-         plataforma-de-seguros-         ltda/ | São Paulo              | SP    | Sudeste          |
| Agropermuta          | ■ agropermuta.com.br/                               |   | São Paulo              | SP    | Sudeste          |
| Bioma Investimentos  | <ul><li>biomainvestimentos.</li><li>com/</li></ul>  | <ul><li>/company/bioma-<br/>investimentos/</li></ul>        | São Paulo              | SP    | Sudeste          |
| Agristamp            | agristamp.com.br                                    | ● /in/agrint-agricultura-<br>inteligente-38052b21a/         | São Paulo              | SP    | Sudeste          |
| Agritrustchain       | agritrustchain.com                                  |   | São Paulo              | SP    | Sudeste          |
| agrolend             | ■ agrolend.agr.br/                                  |   | São Paulo              | SP    | Sudeste          |
| Audsat               | audsat.com.br     audsat.com.br                     |   | São Paulo              | SP    | Sudeste          |
| Biofíliza            | ● biofilica.com.br/                                 |   | São Paulo              | SP    | Sudeste          |
| Boi Seguro           |   |   | São Paulo              | SP    | Sudeste          |
| Culte                | o culte.com.br     o                                |   | São Paulo              | SP    | Sudeste          |
| DuAgro               |   |   | São Paulo              | SP    | Sudeste          |
| Laqus                |   |   | São Paulo              | SP    | Sudeste          |
| Moss Earth           | moss.earth  |   | São Paulo              | SP    | Sudeste          |
| Pag-Agro             | ● pag-agro.com                                      |   | São Paulo              | SP    | Sudeste          |
| StartMeUp            | <ul><li>startmeup.com.br</li></ul>                  | <ul><li>/company/<br/>smuinvestimentos/</li></ul>           | São Paulo              | SP    | Sudeste          |
| Terralogs            | ● terralogs.com.br                                  |   | São Paulo              | SP    | Sudeste          |
| Traive Finance       | <ul><li>● traivefinance.com</li></ul>               |   | São Paulo              | SP    | Sudeste          |
| Epioneers            | <ul><li>epioneer.io</li></ul>                       | <ul><li>/company/<br/>epioneersdotio/</li></ul>             | São Paulo              | SP    | Sudeste          |
| Master Barter        | <ul><li>masterbarter.com.br</li></ul>               | <ul><li>/company/masterbarter-<br/>agri/</li></ul>          | São Paulo              | SP    | Sudeste          |
| Pin Seguradora       | pinseg.com.br/                                      | <ul><li>/company/pin-<br/>seguradora/</li></ul>             | São Paulo              | SP    | Sudeste          |
| Agrometrika          | agrometrika.com.br                                  |   | Vinhedo                | SP    | Sudeste          |
| Nato-Digital         | nato-digital.com                                    |   | Palmas                 | то    | Norte            |
| Agryo                | ■ agryo.com   |   | Brasília               | DF    | Centro-<br>Oeste |
| Terras App Solutions | ⊚ terras.agr.br                                     | /company/terras-app-<br>solutions/                          | Belém                  | PA    | Norte            |
| Agrosimulador        |   | /company/agrosimulador/                                     | Chapecó                | SC    | Sul              |
| Mbr Agro             | mbragro.com.br                                      |   | Piracicaba             | SP    | Sudeste          |

| Company    | URL                               | LinkedIn   | City           | State             | Region           |
|------------|-----------------------------------|--|----------------|-------------------|------------------|
| Agrofficio | agrofficio.com.br                 | • /company/<br>agrofficioengenharia/                       | Piracicaba     | SP                | Sudeste          |
| Agrojob    |                                   | https://www. linkedin.com/sales/ company/33265417          | Brasília       | DF                | Centro-<br>Oeste |
| AgriWin    | ⊕ agriwin.com.br                  | /company/agriwinbrasil/                                    | Castro         | PR                | Sul              |
| Spot Agro  |                                   | <ul><li>● /company/spotagro-<br/>agrotecnologia/</li></ul> | Foz do Iguaçu  | PR                | Sul              |
| Cerealiza  |                                   | ● /company/cerealiza/                                      | Porto Alegre   | RS                | Sul              |
| Target     | <ul><li>targetmp.com.br</li></ul> | NE   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |

# 1.3 Fertilizers, Inoculants and Plant Nutrition

| Company                              | URL   | LinkedIn  | City                  | State | Region           |
|--------------------------------------|---|---|-----------------------|-------|------------------|
| BVL Vida                             | <ul><li>bvlvida.com.br/a-<br/>empresa</li></ul>   | <ul><li> /company/biovida-ind%</li><li>C3% BAstria-com% C3%</li><li>A9rcio-de-insumos-ltda/</li></ul> | Barreiras             | ВА    | Nordeste         |
| Krilltech                            |   |   | Dias d'Ávila          | BA    | Nordeste         |
| Cia das Algas (Netuno)               |   |   | Traíri                | CE    | Nordeste         |
| OrganoGran                           | organogran.com.br   | NE  | Brasília              | DF    | Centro-<br>Oeste |
| Biotecland                           | <ul><li>biotecland.com</li></ul>  |   | Luziânia              | GO    | Centro-<br>Oeste |
| Inocular Soluções<br>Biotecnológicas | <ul><li>inocular-solucoes-<br/>biotecnologicas.negocio.<br/>site</li></ul>                            | <ul><li>/company/in-solu% C3%</li><li>A7% C3% B5es-biol% C3%</li><li>B3gicas/</li></ul>               | Lucas do Rio<br>Verde | MT    | Centro-<br>Oeste |
| Verde                                | verde.ag/   |   | Belo Horizonte        | MG    | Sudeste          |
| Innova Logic Lab                     |   | NE  | Poços de Caldas       | MG    | Sudeste          |
| Riga Brasil                          | ● rigabrasil.com.br/  | <ul><li>● /in/tomas-castro-<br/>642a0514/#experience</li></ul>  | Santa Luzia           | MG    | Sudeste          |
| Solusolo                             | <ul><li>solusolo.com.br</li></ul>   |   | Varginha              | MG    | Sudeste          |
| Amazon Agro                          |   |   | Belém                 | PA    | Norte            |
| Sumabio Biocomposto para plantas     | <ul><li>instagram.com/<br/>amazonagrotech</li></ul>   | <ul><li>/in/sumabio-<br/>biocomposto-agr% C3%<br/>ADcola-38b0a8209/</li></ul>                         | Belém                 | PA    | Norte            |
| YBY Inovações<br>Biotecnológicas     | <ul><li>pb.programacentelha.<br/>com.br/es1/empresa/<br/>yby-inovacoes-<br/>biotecnologicas</li></ul> | NE  | João Pessoa           | PB    | Nordeste         |
| Agro 100                             |   |   | Londrina              | PR    | Sul              |

| Company                | URL  | LinkedIn  | City                       | State             | Region  |
|------------------------|--|---|----------------------------|-------------------|---------|
| Agrocete               | ■ agrocete.com.br/pt                           | NC  | Ponta Grossa               | PR                | Sul     |
| Terranossa(microXisto) |  |   | São Mateus do<br>Sul       | PR                | Sul     |
| Ecodefense             | • ecodefense.com.br                            |   | Toledo                     | PR                | Sul     |
| Prospersea             | <ul><li>prospersea.com</li></ul>               | /company/prospersea/  | Angra dos Reis             | Rio de<br>Janeiro | Sudeste |
| Biosolvit              | <ul><li>biosolvit.com</li></ul>                | • /company/biosolvit/   | Barra Mansa                | Rio de<br>Janeiro | Sudeste |
| Omega Agro             |  | NE  | Canoas                     | RS                | Sul     |
| ProspectaBio           | prospectabio.com.br                            | •   | Porto Alegre               | RS                | Sul     |
| Igapó                  |  | <ul><li>/company/<br/>igaporaizesdagua</li></ul>                  | Porto Alegre               | RS                | Sul     |
| Biorosam               | <ul><li>biorosam.com.br</li></ul>              |   | Criciúma                   | SC                | Sul     |
| Tns Nanotecnologia     |  |   | Florianópolis              | SC                | Sul     |
| Novatero BioAg         |  |   | Joinville                  | SC                | Sul     |
| INBC                   |  | NE  | Palhoça                    | SC                | Sul     |
| Vital Force            | • vitalforce.com.br                            |   | Barretos                   | SP                | Sudeste |
| Solo Sapiens           | <ul><li>solosapiens.com.br</li></ul>           | NE  | Bragança<br>Paulista       | SP                | Sudeste |
| Biodiversita           | <ul><li>biodiversita.com.br</li></ul>          |   | Campinas                   | SP                | Sudeste |
| Probiom                | <ul><li>probiom.com.br</li></ul>               | NE  | Campinas                   | SP                | Sudeste |
| Ferti Sense            | ● /in/carolina-moraes-<br>5062b172/#experience | ● /in/carolina-moraes-<br>5062b172/#experience                    | Cerquilho                  | SP                | Sudeste |
| CiaCamp                |  |   | Cordeirópolis              | SP                | Sudeste |
| Superbac               |  | <ul><li>/company/superbac-<br/>biotechnology-solutions/</li></ul> | Cotia                      | SP                | Sudeste |
| Fertile Agrosciences   | ● fertileagro.com                              |   | Jaboticabal                | SP                | Sudeste |
| Microgeo               | microgeo.com.br                                | /company/ microgeobiotecnologia/                                  | Limeira                    | SP                | Sudeste |
| Revbio                 |  |   | Paulínia                   | SP                | Sudeste |
| Biotech Agro           | biotechagro.com.br                             | NE  | Ribeirão Preto             | SP                | Sudeste |
| Axihum Fertilizantes   | axihum.com.br                                  | NE  | Rincão                     | SP                | Sudeste |
| Agrivalle              | agrivalle.com.br                               |   | Salto                      | SP                | Sudeste |
| Massari                | <ul><li>massari.com.br</li></ul>               | <ul><li>/company/massari-<br/>mineracao/</li></ul>                | Salto de<br>Pirapora       | SP                | Sudeste |
| Aloe Fértil Brasil     | aloefertilbrasil.com.br                        | NE  | Santa Cruz do<br>Rio Pardo | SP                | Sudeste |
| Bioworldtec            |  | ● /in/bioworldtecbrazil/  | Santo André                | SP                | Sudeste |

| Company                              | URL   | LinkedIn   | City                    | State | Region           |
|--------------------------------------|---|--|-------------------------|-------|------------------|
| FertGel                              | <ul><li>ø /in/adriel-bortolin-<br/>b587928b</li></ul> | NE   | São Carlos              | SP    | Sudeste          |
| Vittia Fertilizantes e<br>Biologicos | vittia.com.br   | ● /company/vittia/   | São Joaquim da<br>Barra | SP    | Sudeste          |
| Argilos                              |   |  | São Paulo               | SP    | Sudeste          |
| CampoRico                            |   | • /company/campo-rico-<br>fertilizantes/   | São Paulo               | SP    | Sudeste          |
| Itatijuca                            | <ul><li>bioagrotech.com.br</li></ul>                  |  | São Paulo               | SP    | Sudeste          |
| Jardim Bonito                        | <ul><li>jardimbonito.com.br</li></ul>                 |  | São Paulo               | SP    | Sudeste          |
| Krilltech Nanotecnologia<br>Agro     |   |  | São Paulo               | SP    | Sudeste          |
| Openeem                              | openeem.life  | • /company/<br>openeembioscience/  | São Paulo               | SP    | Sudeste          |
| Selenolife                           | selenolife.com.br                                     |  | São Paulo               | SP    | Sudeste          |
| Dana Agro                            |   | • /in/dana-<br>meschede-99784037/  | Tarumã                  | SP    | Sudeste          |
| Bea Bio                              |   | <ul><li>/in/bea-biotecnologia-<br/>agr% C3% ADcola-e-<br/>ambiental-26a862216/</li></ul> | Várzea Paulista         | SP    | Sudeste          |
| Nanoscoping                          | <ul><li>nanoscoping.com.br</li></ul>                  |  | Florianópolis           | SC    | Sul              |
| Herbae                               | herbae.com.br   | <ul><li>/company/herbae<br/>consultoria-em-projetos-<br/>agricolas/</li></ul>            | Jaboticabal             | SP    | Sudeste          |
| Alsukkar                             | alsukkar.com.br                                       | NE   | Ribeirão Preto          | SP    | Sudeste          |
| Solo Sagrado                         |   | <ul><li>/company/solo-sagrado-<br/>agroneg% C3% B3cios-<br/>ltda/</li></ul>              | Mogi Guaçu              | SP    | Sudeste          |
| NPK Soluções                         |   | ● /company/npk-solu% C3%<br>A7% C3% B5es/  | São Paulo               | SP    | Sudeste          |
| Ekoating                             | <ul><li>● ekoating.com</li></ul>                      | NE   | Curitiba                | PR    | Sul              |
| Blue Tecnologias                     | bluetecnologias.com.br                                | /company/blue-<br>tecnologias/   | Formosa                 | GO    | Centro-<br>Oeste |
| Gênica                               | genica.com.br   | <ul><li>● /company/<br/>genicabiotecnologia/</li></ul>                                   | Piracicaba              | SP    | Sudeste          |
| FitoApp                              |   |  | Londrina                | PR    | Sul              |

## 1.4 Animal Genomics and Breeding

| Company     | URL                 | LinkedIn | City     | State | Region           |
|-------------|---------------------|----------|----------|-------|------------------|
| RG Genética | ⊚ rggenetica.com.br |          | Água Boa | MT    | Centro-<br>Oeste |

| Company                  | URL  | LinkedIn  | City           | State             | Region  |
|--------------------------|--|---|----------------|-------------------|---------|
| Biomin Biotecnologia     | biomin.com.br  | NE  | Divinópolis    | MG                | Sudeste |
| Cellen                   | e cellen.com.br     e cellen.com.br  | NE  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| FABP Biotech             |  | NC  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| Symbiomics               | • symbiomics.com.br/   |   | Florianópolis  | SC                | Sul     |
| B.tools                  | <ul><li>btools.agr.br</li></ul>  | NE  | Videira        | SC                | Sul     |
| Agropartners             | • agropartners.com.br/   |   | Araçatuba      | SP                | Sudeste |
| Regenera Stem Cells      | ● regeneravet.com.br   | <ul><li>/company/regenera-<br/>medicina-veterin% C3%<br/>A1ria-avan% C3% A7ada/</li></ul> | Campinas       | SP                | Sudeste |
| rheabiotech              |  |   | Campinas       | SP                | Sudeste |
| WTA                      | • wtavet.com.br  | <ul><li>/company/wta<br/>watanabe-tecnologia-<br/>aplicada/</li></ul>                     | Cravinhos      | SP                | Sudeste |
| Inprenha                 |  | <ul><li>/company/inprenha-<br/>biotecnologia-s-a/</li></ul>                               | Jaboticabal    | SP                | Sudeste |
| Gentros                  | <ul><li>● gentros.com.br</li></ul>   |   | Paulínia       | SP                | Sudeste |
| MetaQuantiON             | • metaquantion.com   | NE  | Piracicaba     | SP                | Sudeste |
| Plate Form Biotecnologia | <ul> <li>esalqtec.com.br/site/<br/>atuante-na-area-de-<br/>biotecnologia-a-plate-<br/>form-biotechnology-<br/>inicia-sua-pre-<br/>incubacao-na-esalqtec</li> </ul> | NE  | Piracicaba     | SP                | Sudeste |
| Evolutta Agro            | evolutta-agro.com  |   | Ribeirão Preto | SP                | Sudeste |
| FastBio                  | • fastbio.com.br   |   | Ribeirão Preto | SP                | Sudeste |
| Invitra                  |  | NE  | Ribeirão Preto | SP                | Sudeste |
| Kimera Biotecnologia     | kimerabiotecnologia.     com   | <ul><li>/company/kimera-<br/>labs-inc/?originalS<br/>ubdomain=ve</li></ul>                | Ribeirão Preto | SP                | Sudeste |
| iBiotech                 | <ul><li>⊚ cietec.org.br/project/<br/>ibiotech</li></ul>  | NE  | São Paulo      | SP                | Sudeste |
| Krom (Cotton Droplet)    |  |   | São Paulo      | SP                | Sudeste |
| Breender                 | ● breender.com.br/   | NC  | São Paulo      | SP                | Sudeste |
| DGLab                    | ● dglab.com.br   |   | Ribeirão Preto | SP                | Sudeste |
| Gentros                  | gentros.com.br   |   | Paulínia       | SP                | Sudeste |
| Global Saúde Brasil      | globalsaudebrasil.com.br   |   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |

| Company                      | URL                                 | LinkedIn  | City           | State             | Region  |
|------------------------------|-------------------------------------|---|----------------|-------------------|---------|
| Vitafort                     | <ul><li>● vitafort.com.br</li></ul> |   | Ribeirão Preto | SP                | Sudeste |
| GoGenetic                    |                                     |   | Curitiba       | PR                | Sul     |
| ReproDEZ                     |                                     | NE  | Uberlândia     | MG                | Sudeste |
| Biocelltis Biotecnologia S.A |                                     | /company/     biocelltisbioengenharia/          | Florianópolis  | SC                | Sul     |
| BioBureau                    | biobureau.com.br                    |   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| Regenera Moléculas do<br>Mar | • regeneramoleculas. com.br         | • /company/regenera-mol%<br>C3% A9culas-do-mar/ | Porto Alegre   | RS                | Sul     |

## 1.5 Marketplace of Raw Materials for Agribusiness

| Company                  | URL  | LinkedIn  | City           | State             | Region           |
|--------------------------|--|---|----------------|-------------------|------------------|
| RG Genética              | ● rggenetica.com.br  |   | Água Boa       | MT                | Centro-<br>Oeste |
| Biomin Biotecnologia     | ● biomin.com.br  | NE  | Divinópolis    | MG                | Sudeste          |
| Cellen                   |  | NE  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| FABP Biotech             | ● fabpbiotech.com/   | NC  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| Symbiomics               | • symbiomics.com.br/   |   | Florianópolis  | SC                | Sul              |
| B.tools                  | <ul><li>btools.agr.br</li></ul>  | NE  | Videira        | SC                | Sul              |
| Agropartners             | • agropartners.com.br/   |   | Araçatuba      | SP                | Sudeste          |
| Regenera Stem Cells      | ● regeneravet.com.br   | <ul><li>/company/regenera-<br/>medicina-veterin% C3%<br/>A1ria-avan% C3% A7ada/</li></ul> | Campinas       | SP                | Sudeste          |
| rheabiotech              | rheabiotech.com.br   |   | Campinas       | SP                | Sudeste          |
| WTA                      | wtavet.com.br  | <ul><li>/company/wta<br/>watanabe-tecnologia-<br/>aplicada/</li></ul>                     | Cravinhos      | SP                | Sudeste          |
| Inprenha                 | ● inprenha.com.br  | <ul><li>/company/inprenha-<br/>biotecnologia-s-a/</li></ul>                               | Jaboticabal    | SP                | Sudeste          |
| Gentros                  | <ul><li>● gentros.com.br</li></ul>   |   | Paulínia       | SP                | Sudeste          |
| MetaQuantiON             | <ul><li>metaquantion.com</li></ul>   | NE  | Piracicaba     | SP                | Sudeste          |
| Plate Form Biotecnologia | <ul> <li>esalqtec.com.br/site/<br/>atuante-na-area-de-<br/>biotecnologia-a-plate-<br/>form-biotechnology-<br/>inicia-sua-pre-<br/>incubacao-na-esalqtec</li> </ul> | NE  | Piracicaba     | SP                | Sudeste          |

| Company                      | URL   | LinkedIn   | City           | State             | Region  |
|------------------------------|---|--|----------------|-------------------|---------|
| Evolutta Agro                | evolutta-agro.com                                     | <ul><li>/company/evolutta-agro-<br/>biotecnologia/</li></ul>               | Ribeirão Preto | SP                | Sudeste |
| FastBio                      | ● fastbio.com.br                                      |  | Ribeirão Preto | SP                | Sudeste |
| Invitra                      |   | NE   | Ribeirão Preto | SP                | Sudeste |
| Kimera Biotecnologia         | <ul><li>kimerabiotecnologia.</li><li>com</li></ul>    | <ul><li>/company/kimera-<br/>labs-inc/?original<br/>Subdomain=ve</li></ul> | Ribeirão Preto | SP                | Sudeste |
| iBiotech                     | <ul><li>cietec.org.br/project/<br/>ibiotech</li></ul> | NE   | São Paulo      | SP                | Sudeste |
| Krom (Cotton Droplet)        | <ul><li>krom.com.br/cotton.<br/>html</li></ul>        |  | São Paulo      | SP                | Sudeste |
| Breender                     |   | NC   | São Paulo      | SP                | Sudeste |
| DGLab                        |   |  | Ribeirão Preto | SP                | Sudeste |
| Gentros                      | gentros.com.br  |  | Paulínia       | SP                | Sudeste |
| Global Saúde Brasil          | globalsaudebrasil.com.br                              | <ul><li>/company/global-gest-o-<br/>em-sa-de/</li></ul>                    | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| Vitafort                     | vitafort.com.br                                       |  | Ribeirão Preto | SP                | Sudeste |
| GoGenetic                    | ⊚ gogenetic.com.br                                    |  | Curitiba       | PR                | Sul     |
| ReproDEZ                     |   | NE   | Uberlândia     | MG                | Sudeste |
| Biocelltis Biotecnologia S.A |   | <ul><li>/company/<br/>biocelltisbioengenharia/</li></ul>                   | Florianópolis  | SC                | Sul     |
| BioBureau                    |   |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| Regenera Moléculas do<br>Mar | <ul><li>regeneramoleculas.<br/>com.br</li></ul>       | <ul><li>/company/regenera-mol%</li><li>C3% A9culas-do-mar/</li></ul>       | Porto Alegre   | RS                | Sul     |

## 1.6 Animal Nutrition and Health

| Company                      | URL                    | LinkedIn  | City         | State | Region           |
|------------------------------|------------------------|---|--------------|-------|------------------|
| Synergy Animal Research      |                        | <ul><li>/company/<br/>synergyanimalresearch</li></ul>     | Vila Velha   | ES    | Sudeste          |
| RG Genética                  | ● rggenetica.com.br    |   | Água Boa     | MT    | Centro-<br>Oeste |
| Tecnoblock                   | tecnoblocknutri.com.br | <ul><li>/company/tecnoblock<br/>nutricaoanimal/</li></ul> | Campo Grande | MS    | Centro-<br>Oeste |
| Pró.Campo Nutrição<br>Animal | pcampo.com.br          |   | Londrina     | PR    | Sul              |

| Company                                | URL  | LinkedIn  | City                      | State             | Region  |
|--|--|---|---------------------------|-------------------|---------|
| Bio-Sano                               | <ul> <li>wcsasistemas.com/<br/>empresas/Parana/35/<br/>bio-sano-industria-de-<br/>produtos-farmacos-ltda-<br/>me-bio-sano-tecnologia-<br/>em-saude-animal.php</li> </ul> | NE  | Toledo                    | PR                | Sul     |
| AlgaSul Biotecnologia de<br>Microalgas |  | <ul><li>/company/algasul-<br/>biotecnologia-de-<br/>microalgas/</li></ul> | Rio Grande                | RS                | Sul     |
| Phytobiotec                            | <ul><li>phytobiotec.com</li></ul>  |   | Florianópolis             | SC                | Sul     |
| Algabloom                              | algabloom.com.br   | <ul><li>/company/<br/>algabloommicroalgas</li></ul>                       | Florianópolis             | SC                | Sul     |
| Global Saúde Brasil                    | globalsaudebrasil.com.br   | <ul><li>/company/global-gest-o-<br/>em-sa-de/</li></ul>                   | Rio de Janeiro            | Rio de<br>Janeiro | Sudeste |
| Yes                                    | yes.ind.br   | <ul><li>/company/yessinergy-<br/>agroindustrial/</li></ul>                | Campinas                  | SP                | Sudeste |
| Auster                                 | austernutri.com.br   |   | Hortolândia               | SP                | Sudeste |
| Protin Biotech                         | <ul><li>protinbiotech.com.br</li></ul>   |   | Itapevi                   | SP                | Sudeste |
| Imeve                                  | imeve.com.br   |   | Jaboticabal               | SP                | Sudeste |
| Kayros                                 | kayrosambiental.com.br   |   | Paulínia                  | SP                | Sudeste |
| Symbiotec                              | <ul><li>icorpsbrasil.com.br/<br/>symbiotec</li></ul>   | NE  | Piracicaba                | SP                | Sudeste |
| CYNS                                   |  |   | Piracicaba                | SP                | Sudeste |
| Arenales Homeopatianimal               | • arenales.com.br  | <ul><li>/company/arenales-<br/>homeopatianimal/</li></ul>                 | Presidente<br>Prudente    | SP                | Sudeste |
| Decoy                                  | decoysmart.com   | /company/decoy-smart-<br>control/   | Ribeirão Preto            | SP                | Sudeste |
| Farmacore                              | • farmacore.com.br   | /company/farmacore-<br>biotechnology-ltd/                                 | Ribeirão Preto            | SP                | Sudeste |
| Vitafort                               | vitafort.com.br  |   | Ribeirão Preto            | SP                | Sudeste |
| Salus                                  | • salusgroup.com.br  |   | Santo Antônio<br>de Posse | SP                | Sudeste |
| GenoBiomas Biotecnologia               |  | /company/genobiomas/  | São José dos<br>Campos    | SP                | Sudeste |
| Animal Flower                          | animalflower.com.br  | NE  | São Paulo                 | SP                | Sudeste |
| Ylive                                  | ylive.com.br   | /company/ylive-<br>biotecnologia/   | São Paulo                 | SP                | Sudeste |
| Tilabras                               | ● tilabras.com.br/pt/inicio/   |   | São Paulo                 | SP                | Sudeste |
| Buzz Fly                               | buzzfly.com.br   |   | São Paulo                 | SP                | Sudeste |
| Sanavis                                |  | NE  | São Paulo                 | SP                | Sudeste |

| Company           | URL   | LinkedIn   | City                 | State             | Region  |
|-------------------|---|--|----------------------|-------------------|---------|
| AgroForte         | meuagroforte.com.br                                     | ● /company/<br>43370107admin                       | São Paulo            | SP                | Sudeste |
| Merkato           | <ul><li>● merkatobrasil.com</li></ul>                   | <ul><li>/company/merkato-<br/>comercial/</li></ul> | Limeira              | SP                | Sudeste |
| OnFarm            | ● onfarm.com.br   |  | Pirassununga         | SP                | Sudeste |
| Massari           | massari.com.br  | /company/massari-<br>mineracao/                    | Salto de<br>Pirapora | SP                | Sudeste |
| Cellen            | ellen.com.br  | NE   | Rio de Janeiro       | Rio de<br>Janeiro | Sudeste |
| rheabiotech       | rheabiotech.com.br                                      |  | Campinas             | SP                | Sudeste |
| iBiotech          | <ul><li>⊚ cietec.org.br/project/<br/>ibiotech</li></ul> | NE   | São Paulo            | SP                | Sudeste |
| Zeit              | e zeitbr.com.br     e zeitbr.com.br                     | ● /company/<br>zeitportabilidade/                  | Santa Maria          | RS                | Sul     |
| Ecomarine Biotech | ecomarinebiotech.com                                    | NE   | Itajaí               | SC                | Sul     |

## 1.7 Seeds, Seedlings and Plant Genomics

| Company         | URL   | LinkedIn  | City                      | State             | Region           |
|-----------------|---|---|---------------------------|-------------------|------------------|
| DIOXD           |   | <ul><li>/company/dioxd-<br/>tratamento-de-sementes/</li></ul>                 | Luís Eduardo<br>Magalhães | ВА                | Nordeste         |
| Bioclone        |   | <ul><li>/company/bioclone-<br/>producao-de-mudas-ltda/</li></ul>              | Eusébio                   | CE                | Nordeste         |
| Image pesquisas | ● imagepesquisas.com.br   | <ul><li>/in/image-pesquisas-<br/>sementes-e-plantas-<br/>b160b4197/</li></ul> | Fortaleza                 | CE                | Nordeste         |
| NovAg Agricola  | ● tecnonutricao.com.br  | NE  | Rio Verde                 | GO                | Centro-<br>Oeste |
| Viveiro Nativo  | viveironativo.com.br  | NE  | Patos de Minas            | MG                | Sudeste          |
| ADWA Cannabis   | adwacannabis.com.br/  | /company/adwa-cannabis/   | Viçosa                    | MG                | Sudeste          |
| ekoating        | ekoating.com  | NE  | Curitiba                  | PR                | Sul              |
| GoGenetic       | ■ gogenetic.com.br  |   | Curitiba                  | PR                | Sul              |
| Vertron         | vertron.com.br     vert |   | Londrina                  | PR                | Sul              |
| Demetra         | <ul><li>demetraagronegocios.<br/>com.br</li></ul>   | <ul><li>/company/demetra-<br/>tecnologia/</li></ul>                           | Toledo                    | PR                | Sul              |
| SEED4SEED       | seed4seed.com.br     ■  |   | Campos dos<br>Goytacazes  | Rio de<br>Janeiro | Sudeste          |
| QP Mudas        | • qpmudas.com.br  | NE  | Santa Maria               | RS                | Sul              |
| Plante Sempre   | plantesempre.com.br   | NE  | Chapecó                   | SC                | Sul              |

| Company                                 | URL  | LinkedIn   | City                    | State | Region           |
|---|--|--|-------------------------|-------|------------------|
| Difusa Cultivares                       | <ul><li>orionparque.com/<br/>portfolio-item/difusa-<br/>cultivares</li></ul> | NE   | Lages                   | SC    | Sul              |
| Raix Sementes                           | • raixsementes.com.br/   | • /company/raixsementes/   | São Miguel do<br>Oeste  | SC    | Sul              |
| Multi Mudas Brasil                      | multimudasbrasil.com.br  | <ul><li>/company/<br/>multimudasbrasil/</li></ul>                | Andradina               | SP    | Sudeste          |
| BPI                                     | <ul><li>bpibiotecnologia.com.br</li></ul>                                    |  | Botucatu                | SP    | Sudeste          |
| Вејо                                    | ● bejo.com.br  | <ul><li>/company/bejo-sementes-<br/>do-brasil/</li></ul>         | Bragança<br>Paulista    | SP    | Sudeste          |
| Verde Nativo                            | verdenativo.com.br   |  | Bragança<br>Paulista    | SP    | Sudeste          |
| Pangea biotec                           | pangeiabiotech.com   | /company/<br>pangeiabiotech/                                     | Campinas                | SP    | Sudeste          |
| Native Plant Technology                 | • facebook.com/<br>nativeptech   | NE   | Piracicaba              | SP    | Sudeste          |
| PIRAÍ Sementes                          | ● pirai.com.br   |  | Piracicaba              | SP    | Sudeste          |
| Verdartis                               | <ul><li>● verdartis.com.br</li></ul>   | NE   | Ribeirão Preto          | SP    | Sudeste          |
| Brasil Agritest                         | <ul><li>brasilagritest.com</li></ul>   |  | São Carlos              | SP    | Sudeste          |
| Biome4all                               |  |  | São Paulo               | SP    | Sudeste          |
| Dinastia Genética                       | dinastiagenetica.com.br  | <ul><li>/company/dinastia-gen%</li><li>C3% A9tica-ltda</li></ul> | Sertãozinho             | SP    | Sudeste          |
| Agropartners                            | ● agropartners.com.br/   |  | Araçatuba               | SP    | Sudeste          |
| MTGG Participações e<br>Empreendimentos | mahoganyRR.com.br  | NE   | São Paulo               | SP    | Sudeste          |
| Sower                                   |  |  | São José do<br>Xingú    | MT    | Centro-<br>Oeste |
| Prodfy                                  | prodfy.com.br  | https://www.<br>linkedin.com/sales/<br>company/16207365          | Viçosa                  | MG    | Sudeste          |
| O Agro                                  | ● oagro.com.br   |  | Frederico<br>Westphalen | RS    | Sul              |
| Broto Facil                             | ● brotofacil.com.br  |  | Curitiba                | PR    | Sul              |
| Fermentec                               | <ul><li>● fermentec.com.br</li></ul>   |  | São Paulo               | SP    | Sudeste          |

## 2 Directory of Agtechs in the Segment Inside the Farm

### 2.1 Apiculture and Pollination

| Company   | URL   | LinkedIn | City           | State | Region  |
|-----------|---|----------|----------------|-------|---------|
| SmartBugs | <ul><li>instagram.com/smart_<br/>bugs</li></ul> |          | Viçosa         | MG    | Sudeste |
| GeoApis   | geoapis.tech                                    |          | Piracicaba     | SP    | Sudeste |
| Agrobee   | agrobee.net                                     |          | Ribeirão Preto | SP    | Sudeste |

## 2.2 Connectivity and Telecommunications

| Company           | URL                                  | LinkedIn   | City                     | State | Region   |
|-------------------|--------------------------------------|--|--------------------------|-------|----------|
| BST Networks      | <ul><li>bstnetworks.com.br</li></ul> | <ul><li>/company/brasil-service-<br/>telecom-ltda/</li></ul> | Curitiba                 | PR    | Sul      |
| Global Press      |                                      | <ul><li>/company/globalpress-<br/>inovacao/</li></ul>        | Jaguariaíva              | PR    | Sul      |
| Meltech           | meltech.com.br                       | <ul><li>/company/meltech-<br/>tecnologia/</li></ul>          | Recife                   | PE    | Nordeste |
| Becon             |                                      |  | Joinville                | SC    | Sul      |
| Espectro Ltda     | • afacebook.com/<br>EspectroCampinas |  | Campinas                 | SP    | Sudeste  |
| Pluginbot         | pluginbot.ai                         |  | São Paulo                | SP    | Sudeste  |
| Verde Telecom     | • verdeinternet.com/<br>telecom/     |  | São Paulo                | SP    | Sudeste  |
| BrDot             | ● brdot.com.br                       |  | São Paulo                | SP    | Sudeste  |
| Fuga pras Colinas | ● fugaprascolinas.com.br/            | • /company/<br>fugaprascolinas/                              | Tapiraí                  | SP    | Sudeste  |
| Ativa Soluções    | ativasolucoes.com.br                 |  | Santa Rita do<br>Sapucaí | MG    | Sudeste  |

### 2.3 Content, Education, Social Media

| Company        | URL                  | LinkedIn                      | City                      | State | Region   |
|----------------|----------------------|-------------------------------|---------------------------|-------|----------|
| Tuxtu          | tuxtu.com.br         |                               | Macapá                    | AP    | Norte    |
| AgroInsight    | ● agroinsight.com.br |                               | Luís Eduardo<br>Magalhães | ВА    | Nordeste |
| The Green Hub  |                      | /company/the-green-hub-group/ | Salvador                  | ВА    | Nordeste |
| Alimente Solos | alimentesolos.com.br | ● /company/alimentesolos2/    | Salvador                  | BA    | Nordeste |
| PlantEDU       | plantedu.com.br      |                               | Banabuiú                  | CE    | Nordeste |

| Company  | URL  | LinkedIn  | City                     | State             | Region           |
|--|--|---|--------------------------|-------------------|------------------|
| Escola Agro  | escolaagro.com.br                                      |   | Campo Novo do<br>Parecis | MT                | Centro-<br>Oeste |
| Agronews   | ■ agronewsbrasil.com.br                                | ● /in/agronews-agriculture-<br>portal-848647153/  | Cuiabá                   | MT                | Centro-<br>Oeste |
| RuralCentro  | ● ruralcentro.com.br                                   |   | Campo Grande             | MS                | Centro-<br>Oeste |
| Minas RFID   | minasrfid.com.br                                       | ● /in/minas-rfid-a272951a4/   | Belo Horizonte           | MG                | Sudeste          |
| Rehagro  |  |   | Belo Horizonte           | MG                | Sudeste          |
| Portal do Agronegócio  | <ul><li>portaldoagronegocio.<br/>com.br</li></ul>      | NE  | Uberaba                  | MG                | Sudeste          |
| <ul><li>Ag.In</li></ul>  | agin.agr.br  | /company/agricultura-<br>inteligente/   | Uberlândia               | MG                | Sudeste          |
| AgroSchool   |  |   | Uberlândia               | MG                | Sudeste          |
| Agricultura Simples  | <ul><li>agriculturasimples.com.</li><li>br</li></ul>   | <ul><li>/company/agricultura-<br/>simples/</li></ul>  | Curitiba                 | PR                | Sul              |
| Realize Hub  | ● realizehub.com                                       |   | Curitiba                 | PR                | Sul              |
| Veteduka   | veteduka.com.br  |   | Curitiba                 | PR                | Sul              |
| Já Entendi AGRO  | jaentendiagro.com.br                                   | NE  | Curitiba                 | PR                | Sul              |
| Abraseda   | abraseda.org.br/                                       | <ul><li>/company/associa% C3%<br/>A7% C3 % A3o-brasileira-<br/>de-seda- abraseda/</li></ul> | Londrina                 | PR                | Sul              |
| AGROTRUST  | <ul><li>agrotrust.wixsite.com/<br/>agrotrust</li></ul> | <ul><li>/company/agrotrust-per%</li><li>C3% ADcias/</li></ul>                               | Londrina                 | PR                | Sul              |
| Brasbiotec   | <ul><li>brasbiotec.com</li></ul>                       | • /sales/company/<br>25070375?_<br>ntb=2AiYJswMRLmi6zp<br>Qez20fA% 3D% 3D                   | Rio de Janeiro           | Rio de<br>Janeiro | Sudeste          |
| Agrischool   | ⊕ agrischool.com.br                                    | NE  | Porto Alegre             | RS                | Sul              |
| Elevagro   | elevagro.com   |   | Porto Alegre             | RS                | Sul              |
| Capril Virtual Portal<br>Especializado em Ovinos e<br>Caprinos |  |   | Porto Alegre             | RS                | Sul              |
| ManejeBem  | manejebem.com  | ● /company/manejebem/   | Biguaçu                  | SC                | Sul              |
| Keeps  |  |   | Florianópolis            | SC                | Sul              |
| iLergic-SaúdealémdoRótulo                                      |  |   | Lages                    | SC                | Sul              |
| Datagro Markets  | <ul><li>datagro.com/datagro-<br/>markets</li></ul>     | ● /company/datagro/   | Barueri                  | SP                | Sudeste          |
| YouAgro  | <ul><li>youagro.com</li></ul>                          |   | Campinas                 | SP                | Sudeste          |
| Agromulher   | ⊕ agromulher.com.br/                                   | •   | Campinas                 | SP                | Sudeste          |
| Valornovo  | <ul><li>valornovo.com</li></ul>                        |   | Cravinhos                | SP                | Sudeste          |

| Company                           | URL   | LinkedIn  | City                   | State | Region   |
|-----------------------------------|---|---|------------------------|-------|----------|
| Agripoint                         | <ul><li>● agripoint.com.br</li></ul>              |   | Piracicaba             | SP    | Sudeste  |
| AgroAdvance                       | agroadvance.com.br                                | ● /in/agroadvance-<br>brasil-259392185/   | Piracicaba             | SP    | Sudeste  |
| Agromic                           | <ul><li>agromic.com.br</li></ul>                  | NE  | Piracicaba             | SP    | Sudeste  |
| APagri                            | <ul><li>apagri.com.br</li></ul>                   |   | Piracicaba             | SP    | Sudeste  |
| Beefpoint                         | beefpoint.com.br                                  |   | Piracicaba             | SP    | Sudeste  |
| werkey                            | <ul><li>werkey.co</li></ul>                       |   | Piracicaba             | SP    | Sudeste  |
| Droneng                           |   | ● /company/dronengbr/   | Presidente<br>Prudente | SP    | Sudeste  |
| AgriLearning                      | • agrilearning.com.br                             |   | Ribeirão Preto         | SP    | Sudeste  |
| Alimentares                       | <ul><li>alimentares.com</li></ul>                 |   | Santo André            | SP    | Sudeste  |
| Doutor Agro                       |   | NE  | Santos                 | SP    | Sudeste  |
| STC Simuladores                   | stcsimulador.com.br                               | <ul><li>/company/stc-sistemas-e-<br/>tecnologia-ltda/</li></ul>                                       | São José dos<br>Campos | SP    | Sudeste  |
| ensistec                          | ⊕ ensistec.com.br                                 | <ul><li>/company/ensistec-<br/>consultoria-e-<br/>treinamento-em-<br/>agricultura-org-nica/</li></ul> | São Paulo              | SP    | Sudeste  |
| FoodPass                          | ● foodpass.com.br                                 |   | São Paulo              | SP    | Sudeste  |
| Life Biological Control (Pragas)  | • pragas.com.br                                   | NE  | São Paulo              | SP    | Sudeste  |
| N2BBrasil                         |   |   | São Paulo              | SP    | Sudeste  |
| Nutrisoft                         | <ul><li>nutrisoft.com.br</li></ul>                |   | São Paulo              | SP    | Sudeste  |
| Revista dos Vegetarianos          | <ul><li>revistavegetarianos.<br/>com.br</li></ul> | <ul><li>● /company/editora-<br/>europa/</li></ul>   | São Paulo              | SP    | Sudeste  |
| Revista Orgânicos                 | revistacalifornia.com.br                          | ● /sales/company/10316816   | São Paulo              | SP    | Sudeste  |
| Salt Ambiental                    | saltambiental.com.br                              | ● /company/saltsea-&-<br>limno-technology/  | São Paulo              | SP    | Sudeste  |
| Smart Agri                        |   |   | Paraíso do TO          | то    | Norte    |
| Bioagrocert Soluções<br>Agrícolas | <ul><li>bioagrocert.com.br</li></ul>              | <ul><li>/company/bioagrocert-<br/>solu% C3% A7% C3% B5es-<br/>agr% C3% ADcolas/</li></ul>             | Barretos               | SP    | Sudeste  |
| Dana Agro                         |   | ● /in/dana-<br>meschede-99784037/   | Tarumã                 | SP    | Sudeste  |
| Ajagro                            |   | NE  | Canoas                 | RS    | Sul      |
| Agtech Academy                    | ⊕ agtech.academy                                  |   | Barueri                | SP    | Sudeste  |
| Agrovesi                          | • facebook.com/agrovesi                           |   | Quixadá                | CE    | Nordeste |
| Capril Virtual                    | <ul><li> caprilvirtual.com.br</li></ul>           |   | Porto Alegre           | RS    | Sul      |

| Company                                | URL   | LinkedIn   | City         | State | Region           |
|--|---|--|--------------|-------|------------------|
| Clube Agro Brasil                      |   |  | Barra Bonita | SP    | Sudeste          |
| Cordeirobiz                            |   | NE   | Botucatu     | SP    | Sudeste          |
| Biocult                                | biocult.com.br  |  | São Paulo    | SP    | Sudeste          |
| Agropocket                             | ■ agropocket.com.br                                   |  | Jataí        | GO    | Centro-<br>Oeste |
| Clarivi                                | clarivi.com.br  |  | Uberlândia   | MG    | Sudeste          |
| VetSmart                               | vetsmart.com.br                                       |  | São Paulo    | SP    | Sudeste          |
| Agromove                               | agromove.com.br                                       |  | Vinhedo      | SP    | Sudeste          |
| Equilibrio Florestal                   | <ul><li>equilibrioflorestal.com.</li><li>br</li></ul> | <ul><li>/company/equil% C3%</li><li>ADbrio-prota% C3% A7%</li><li>C3% A3o-florestal/</li></ul> | Piracicaba   | SP    | Sudeste          |
| Communitaria Consultoria<br>Social     |   |  | São Paulo    | SP    | Sudeste          |
| Agrobooks                              | agrobooks.com.br                                      | NE   | São Paulo    | SP    | Sudeste          |
| Eacea Soluções em Cultivo<br>Protegido | ● eacea.com.br  | <ul><li>/company/eacea-solu%</li><li>C3% A7% C3% B5es-em-<br/>cultivos-protegidos/</li></ul>   | Cunha        | SP    | Sudeste          |

## 2.4 Biological Control and Integrated Plague Management

| Company  | URL  | LinkedIn   | City                      | State | Region           |
|--|--|--|---------------------------|-------|------------------|
| VisionFarm                                       | • visionfarm.com.br  | ● /in/visionfarm53508a206                                    | Luís Eduardo<br>Magalhães | ВА    | Nordeste         |
| Solubio  |  |  | Gurupi                    | то    | Norte            |
| Agroneural                                       | <ul><li>● agroneural.com</li></ul>                         |  | Brasília                  | DF    | Centro-<br>Oeste |
| Kidera   | <ul><li>● instagram.com/<br/>kiderabiotec</li></ul>        | ● /in/kiderabiotecnologia<br>67592422a                       | Brasília                  | DF    | Centro-<br>Oeste |
| Blue Tecnologias E<br>Participações Empresariais | <ul><li>bluetecnologias.com.br</li></ul>                   | <ul><li>/company/blue-<br/>tecnologias/</li></ul>            | Formosa                   | GO    | Centro-<br>Oeste |
| Beas   | beasstartup.com  |  | Ouro Preto                | MG    | Sudeste          |
| JB Biotecnologia                                 |  | <ul><li>● não registrada</li></ul>                           | Paraopeba                 | MG    | Sudeste          |
| Predativa  | predativa.com.br   |  | Patos de Minas            | MG    | Sudeste          |
| Sintrop  |  |  | Cascavel                  | PR    | Sul              |
| Diagneasy  | <ul><li>penseagro.paniclobster.<br/>com/teams/20</li></ul> |  | Curitiba                  | PR    | Sul              |
| Agribela   | agribela.com.br  | NE   | Londrina                  | PR    | Sul              |
| BioLysi Soluções Biológicas                      | ■ biolysi.com.br/home                                      | <ul><li>/company/biolysi-<br/>solucoes-biologicas/</li></ul> | Londrina                  | PR    | Sul              |
| Usina Biologica                                  | usinabiologica.com.br                                      |  | Londrina                  | PR    | Sul              |

| Company               | URL   | LinkedIn   | City                     | State | Region  |
|-----------------------|---|--|--------------------------|-------|---------|
| Dillon                | ● dillonbio.com.br  | /company/eccb     empresa-caxiense-de-     controle-biol-gico-ltda-/ | Caxias do Sul            | RS    | Sul     |
| Simbiose              |   |  | Cruz Alta                | RS    | Sul     |
| Isca Tecnologias      | isca.com.br   | <ul><li>/company/isca-<br/>tecnologias/</li></ul>                    | ljuí                     | RS    | Sul     |
| Partamon              | <ul><li>partamon.com</li></ul>  |  | Pelotas                  | RS    | Sul     |
| BioIn                 |   |  | Porto Alegre             | RS    | Sul     |
| Droptec               | <ul><li>facebook.com/</li><li>Droptecnologia</li></ul>  |  | Chapecó                  | SC    | Sul     |
| Revella Agritech      | revellaagritech.com   |  | Florianópolis            | SC    | Sul     |
| Agrize                |   |  | Vila Nova<br>Joinville   | SC    | Sul     |
| Ballagro              | <ul><li>ballagro.com.br</li></ul>   |  | Bom Jesus dos<br>Perdões | SP    | Sudeste |
| Colly Química         |   | <ul><li>/company/colly-qu% C3%<br/>ADmica/</li></ul>                 | Capivari                 | SP    | Sudeste |
| Bio Controle          | biocontrole.com.br  |  | Indaiatuba               | SP    | Sudeste |
| Zasso                 |   |  | Indaiatuba               | SP    | Sudeste |
| Homeopatia Rural      | <ul><li>homeopatiarural.com</li></ul>   | <ul><li>/company/<br/>homeopatiarural/</li></ul>                     | Jaú                      | SP    | Sudeste |
| Promip                | ● promip.agr.br   |  | Limeira                  | SP    | Sudeste |
| Gênica                |   | /company/ genicabiotecnologia/                                       | Piracicaba               | SP    | Sudeste |
| Ideelab               |   |  | Piracicaba               | SP    | Sudeste |
| Pragas.Com            | ● pragas.com.vc   |  | Piracicaba               | SP    | Sudeste |
| Smartbreeder          | • smartbreeder.com.br   |  | Piracicaba               | SP    | Sudeste |
| Agrientech            | <ul><li>● agrientech.com</li></ul>  |  | São Carlos               | SP    | Sudeste |
| BR3 Agrobiotecnologia | ● br3.ind.br  | <ul><li>/company/br3-<br/>agrobiotecnologia/</li></ul>               | São Paulo                | SP    | Sudeste |
| Oga                   | ogawabiocycles.com  | <ul><li>/company/ogawa-<br/>biocycles/</li></ul>                     | São Paulo                | SP    | Sudeste |
| Innovatis             | <ul><li>innovatisbio.com</li></ul>  | NE   | Taboão da Serra          | SP    | Sudeste |
| Vector Control        | vectorcontrol.agr.br     vectorcontro | NE   | Vinhedo                  | SP    | Sudeste |
| Anáhata               |   |  | Sorocaba                 | SP    | Sudeste |
| Vittia                | vittia.com.br   |  | São Joaquim da<br>Barra  | SP    | Sudeste |
| Itatijuca Biotech     | <ul><li>bioagrotech.com.br</li></ul>  |  | São Paulo                | SP    | Sudeste |

| Company      | URL                                | LinkedIn  | City           | State | Region           |
|--------------|------------------------------------|---|----------------|-------|------------------|
| Decoy        | <ul><li>● decoysmart.com</li></ul> | <ul><li>/company/decoy-smart-<br/>control/</li></ul>              | Ribeirão Preto | SP    | Sudeste          |
| NetWord Agro | networdagro.com.br                 | <ul><li>/company/netword-<br/>consultoria-e-tecnologia/</li></ul> | Palotina       | PR    | Sul              |
| AgriQ        | ● agriq.com.br                     | ● /company/<br>agriqreceituario/                                  | Goiânia        | GO    | Centro-<br>Oeste |

# 2.5 Drones, Machines and Equipment

| Company                                  | URL  | LinkedIn   | City                  | State | Region           |
|--|--|--|-----------------------|-------|------------------|
| Drone Ops                                |  |  | Brasília              | DF    | Centro-<br>Oeste |
| NONG                                     | nong.com.br  | <ul><li>/company/nong-precision-<br/>agriculture/</li></ul>                        | Brasília              | DF    | Centro-<br>Oeste |
| Avant Agro                               | avantagro.com.br                                     |  | Goiânia               | GO    | Centro-<br>Oeste |
| Campesino                                | • facebook.com/<br>campesino.<br>campesino.520       |  | Orizona               | GO    | Centro-<br>Oeste |
| Agrotecno                                | ■ agrotecno.com.br                                   |  | Lucas do Rio<br>Verde | MT    | Centro-<br>Oeste |
| ENG - Soluções<br>Tecnológicas LTDA - ME | ● engtecnologia.com                                  | <ul><li>/company/eng-solu% C3%<br/>A7% C3% B5es-tecnol%<br/>C3% B3gicas/</li></ul> | Campo Grande          | MS    | Centro-<br>Oeste |
| Seive                                    | seive.com.br   | <ul><li>/company/<br/>seivesupressores/</li></ul>                                  | Belo Horizonte        | MG    | Sudeste          |
| Verde Drone                              | • verdedrone.com                                     |  | Belo Horizonte        | MG    | Sudeste          |
| Tbit                                     |  |  | Lavras                | MG    | Sudeste          |
| Geaap                                    |  | <ul><li>/company/geaap-<br/>agrociencias/</li></ul>                                | Uberlândia            | MG    | Sudeste          |
| Volutech                                 | <ul><li>volutech.com.br</li></ul>                    |  | Viçosa                | MG    | Sudeste          |
| Prisma Inox                              | <ul><li>prismainox.com.br</li></ul>                  | NE   | Belém                 | PA    | Norte            |
| Agrovest                                 | <ul><li>● epicont.com</li></ul>                      |  | Cambe                 | PR    | Sul              |
| PRO SOLUS                                | <ul><li>prosolus.com</li></ul>                       | <ul><li>/company/pro-solus-do-<br/>brasil-sa/</li></ul>                            | Campo Mourão          | PR    | Sul              |
| Agroflux                                 | ⊕ agroflux.ind.br/                                   |  | Campo Mourão          | PR    | Sul              |
| Eagle Power Tecnologia                   | <ul><li>facebook.com/<br/>eaglepowerdrones</li></ul> |  | Cascavel              | PR    | Sul              |
| AgroRaptor                               | agroraptor.com                                       |  | Curitiba              | PR    | Sul              |
| Alvaz                                    | alvaz.com  |  | Londrina              | PR    | Sul              |
| Daga Agrinavi                            | dagaagrinavi.com.br                                  |  | Toledo                | PR    | Sul              |

| Company   | URL                                  | LinkedIn  | City                    | State             | Region   |
|---|--------------------------------------|---|-------------------------|-------------------|----------|
| Rupert Indústria<br>Aeronáutica                   | o rupert.com.br                      | <ul><li>/company/rupert-ind%</li><li>C3% BAstria -aeron% C3%</li><li>A1utica/</li></ul>                       | Caruaru                 | PE                | Nordeste |
| Astech  |                                      | NE  | Petrópolis              | Rio de<br>Janeiro | Sudeste  |
| Seed Rain   |                                      | ● /company/seed-rain/   | Rio de Janeiro          | Rio de<br>Janeiro | Sudeste  |
| Ajagro  | • ajagro.agr.br                      | NE  | Canoas                  | RS                | Sul      |
| Schavinski PD&I para o<br>Agronegócio             |                                      | NE  | Horizontina             | RS                | Sul      |
| Plantário   | <ul><li>plantario.com.br</li></ul>   | <ul><li>● /company/plant% C3%<br/>A1rio/</li></ul>  | Porto Alegre            | RS                | Sul      |
| SkyAgri   | skyagri.com.br                       |   | Porto Alegre            | RS                | Sul      |
| SkyDrones   |                                      |   | Porto Alegre            | RS                | Sul      |
| G2W Sistemas                                      |                                      |   | Santa Maria             | RS                | Sul      |
| Arpac   | <ul><li>arpacbrasil.com.br</li></ul> |   | São Leopoldo            | RS                | Sul      |
| PVT Agriculture (Antiga<br>PulveRio de Janeiroet) | • pvtagriculture.com.br/             |   | Tapejara                | RS                | Sul      |
| ArnsTronic  | • arnstronic.com                     | Antonio Pereira Arns  | Uruguaiana              | RS                | Sul      |
| Gertech Soluções<br>Industriais Ltda              | gertech.ind.br                       | <ul><li>/company/gertech-<br/>solucoes/</li></ul>   | Chapecó                 | SC                | Sul      |
| Topview Agricultura<br>Inteligente                |                                      |   | Chapecó                 | SC                | Sul      |
| Fornari Industria                                 | fornariindustria.com.br              | <ul><li>/company/fornari-ind%</li><li>C3% BAstria/</li></ul>  | Concórdia               | SC                | Sul      |
| Horus Aeronaves                                   | <ul><li>horusaeronaves.com</li></ul> | ● /sales/company/10441498   | Florianópolis           | SC                | Sul      |
| Novarum Sky Tecnologia                            | <ul><li>novarumsky.com</li></ul>     |   | Florianópolis           | SC                | Sul      |
| Yup Drones  | <ul><li>yupdrones.com.br</li></ul>   |   | Florianópolis           | SC                | Sul      |
| Agricotec   | <ul><li>● agricotec.com.br</li></ul> |   | Jaraguá do Sul          | SC                | Sul      |
| YAK   | <ul><li>yaktractors.com</li></ul>    | ● /company/yak-tratores-<br>el% C3% A9tricos/   | Joinville               | SC                | Sul      |
| SF Geo - Sul Florestas                            | sulflorestas.com.br                  | <ul><li>● /company/sf-geo-<br/>engenharia-ltda/</li></ul>   | Lages                   | SC                | Sul      |
| Triton  | • tritonmaquinas.com.br/             |   | Luzerna                 | SC                | Sul      |
| Ligretech   |                                      | <ul><li>/company/ligretech-ind%</li><li>C3% BAstria-e-com% C3%</li><li>A9rcio-de-equipamentos-ltda/</li></ul> | Rio Negrinho            | SC                | Sul      |
| BIA Tecnologia                                    |                                      |   | São Francisco<br>do Sul | SC                | Sul      |

| Company                             | URL   | LinkedIn  | City                     | State | Region  |
|-------------------------------------|---|---|--------------------------|-------|---------|
| Sollus                              | <ul><li>facebook.com/<br/>sollusmecanizacao</li></ul> |   | Assis                    | SP    | Sudeste |
| Agtech Academy                      | ■ agtech.academy                                      | <ul><li>/company/<br/>agtechacademy/</li></ul>  | Barueri                  | SP    | Sudeste |
| Jetwind Brasil                      | jetwind.com.br  |   | Barueri                  | SP    | Sudeste |
| Maply Tecnologia                    | <ul><li>maply.io</li></ul>                            |   | Barueri                  | SP    | Sudeste |
| Csmart.ai                           | Csmart.ai   | •   | Campinas                 | SP    | Sudeste |
| Dallas Autonomus                    | dallasautonomus.com                                   | <ul><li>/company/dallas-<br/>autonomus/</li></ul>   | Jacareí                  | SP    | Sudeste |
| Tecnofacil                          | ◆ tecnofacil.foryou.digital                           | <ul> <li>/company/tecnofacil-m%</li> <li>C3% A1quinas-e-</li> <li>equipamentos-com-</li> <li>software-integrado/</li> </ul> | Marília                  | SP    | Sudeste |
| chem4u                              | o chem4u.com.br                                       |   | Mauá                     | SP    | Sudeste |
| RK                                  | • brvant.com.br                                       | <ul><li>/company/brvant-brv-uav-<br/>&amp;-flight-systems/</li></ul>  | Mogi das Cruzes          | SP    | Sudeste |
| Fishtag                             |   | <ul><li>/company/fishtag-<br/>consultoria-ambiental/</li></ul>  | Mogi Guaçu               | SP    | Sudeste |
| Agricef                             | agricef.com.br  |   | Paulínia                 | SP    | Sudeste |
| Aero Agri                           | aeroagri.com.br                                       | ● /company/aeroagri/  | Piracicaba               | SP    | Sudeste |
| Drop                                |   |   | Piracicaba               | SP    | Sudeste |
| Smart Sensing                       | <ul><li>smartsensingbrasil.com.</li><li>br</li></ul>  | <ul><li>/company/<br/>smartsensingbrasil/</li></ul>   | Piracicaba               | SP    | Sudeste |
| Nuvem UAV Indústria de<br>Aeronaves | nuvemuav.com  |   | Presidente<br>Prudente   | SP    | Sudeste |
| Sar Drones                          | <ul><li>sardrones.com.br</li></ul>                    | NE  | Ribeirão Preto           | SP    | Sudeste |
| Beer2U                              |   |   | Riberão Preto            | SP    | Sudeste |
| duo automation                      |   | • /company/duo-<br>automation/  | Santa Bárbara<br>d'Oeste | SP    | Sudeste |
| Saci Soluções                       | sacisolucoes.com.br                                   | NE  | Santa Bárbara<br>d'Oeste | SP    | Sudeste |
| Altamar                             | altamar.com.br  | <ul><li>/company/altamar-<br/>sistemas-aquaticos/</li></ul>   | Santos                   | SP    | Sudeste |
| Adroit Robotics                     | adroitrobotics.com                                    |   | São Bernardo<br>do Campo | SP    | Sudeste |
| acquanativa                         | acquanativa.com.br                                    | /company/acquanativa/   | São Carlos               | SP    | Sudeste |
| DropScope (SprayX)                  | <ul><li>sprayx.com.br</li></ul>                       |   | São Carlos               | SP    | Sudeste |
| Enalta (Rex)                        |   |   | São Carlos               | SP    | Sudeste |

| Company                              | URL   | LinkedIn   | City                   | State | Region           |
|--------------------------------------|---|--|------------------------|-------|------------------|
| Model Works                          | modelworks.com.br   | <ul><li>/company/modelworks-<br/>engenharia-ltda/</li></ul>                    | São Carlos             | SP    | Sudeste          |
| Xmobots                              |   |  | São Carlos             | SP    | Sudeste          |
| Acrux                                | acruxtech.com.br       acruxtech.com.br       acruxtech.com.br       acruxtech.com.br       acruxtech.com.br  | <ul><li>/company/acrux-<br/>aerospace-technologies/</li></ul>                  | São José dos<br>Campos | SP    | Sudeste          |
| NCB Sistemas Embarcados              | ● ncb.ind.br  | <ul><li>/company/ncb-sistemas-<br/>embarcados/</li></ul>                       | São José dos<br>Campos | SP    | Sudeste          |
| Moya Aero                            | ■ moyaaero.com/   |  | São José dos<br>Campos | SP    | Sudeste          |
| FieldPRO                             | ● fieldpro.com.br   |  | São Paulo              | SP    | Sudeste          |
| G-Drones                             | g-drones.com.br   | NE   | São Paulo              | SP    | Sudeste          |
| GND                                  |   | NE   | São Paulo              | SP    | Sudeste          |
| TerraTecno                           | <ul><li>/company/terratecno<br/>-tecnologias-agr% C3%<br/>Adcolas</li></ul>   | <ul><li>/in/terratecno-<br/>agribusiness-<br/>technologies-a15878110</li></ul> | São Paulo              | SP    | Sudeste          |
| BioLambda                            |   |  | São Paulo              | SP    | Sudeste          |
| Linax                                |   | <ul><li>/company/linax-oleos-<br/>essenciais/</li></ul>                        | Votuporanga            | SP    | Sudeste          |
| Macofren tecnologias                 | <ul><li>macofren.com</li></ul>  | <ul><li>/company/<br/>macofrentecnologias/</li></ul>                           | Brasília               | DF    | Centro-<br>Oeste |
| Fine Instrument<br>Technology        | ● fitinstrument.com   | <ul><li>/company/fitinstrument/%</li><li>20</li></ul>                          | São Carlos             | SP    | Sudeste          |
| Monitoragua                          | <ul><li>saadrodrigues.wixsite.<br/>com/website</li></ul>  |  | Tremembé               | SP    | Sudeste          |
| Vertron                              | vertron.com.br     vert |  | Londrina               | PR    | Sul              |
| Droneng                              | ● droneng.com.br  | /company/dronengbr/  | Presidente<br>Prudente | SP    | Sudeste          |
| Agrize                               | ● agrize.com.br   |  | Vila Nova<br>Joinville | SC    | Sul              |
| Neo Farm (Projeto Neo<br>Things IoT) | ● neofarm.agr.br  | • /showcase/neofarm-iot/   | Belo Horizonte         | MG    | Sudeste          |
| Grupo Fienile (Irriluce)             | ⊚ grupofienile.com.br   |  | Monte Carmelo          | MG    | Sudeste          |
| Amana Katu                           | amanakatu.com   | NE   | Belém                  | PA    | Norte            |
| Acqua Vitta Floral                   | <ul><li>● acquavitta.com.br</li></ul>   | NE   | Bauru                  | SP    | Sudeste          |
| Spectral Solutions                   | • spectralsolutions.com.br  |  | Embu das Artes         | SP    | Sudeste          |
| PersonalBov                          | <ul><li>personalbov.com</li></ul>   | ● /sales/company/65754113  | Piracicaba             | SP    | Sudeste          |
| Engegrow                             | engegrow.com.br   |  | Votuporanga            | SP    | Sudeste          |
| ScanFito                             |   | NE   | Lavras                 | MG    | Sudeste          |
| Envidrone                            | <ul><li>envidrone.com</li></ul>   | NE   | Altinópolis            | SP    | Sudeste          |

| Company                            | URL  | LinkedIn   | City                   | State | Region  |
|------------------------------------|--|--|------------------------|-------|---------|
| Birdview                           |  | NE   | Botucatu               | SP    | Sudeste |
| Spectrum                           |  | <ul><li>/company/spectrum-<br/>intelig% C3% AAncia-<br/>florestal/</li></ul>                                       | Botucatu               | SP    | Sudeste |
| Farm Drone Consultoria<br>Agrícola | • farmdroneconsultoria. com.br                     | NE   | lpuã                   | SP    | Sudeste |
| Inspectral                         |  | ● /company/inspectral/   | Presidente<br>Prudente | SP    | Sudeste |
| Gravta                             |  | <ul><li>/sales/company/</li><li>12577741?_ ntb=Spd%</li><li>2Fxzud TQ% 2B1k% 2BF0h</li><li>ZvOpg% 3D% 3D</li></ul> | Ribeirão Preto         | SP    | Sudeste |
| Altave                             | altave.com.br                                      | ● /sales/company/2225839   | São José dos<br>Campos | SP    | Sudeste |
| Cron                               |  | ø /sales/company/<br>79717270?_<br>ntb=gyC9vQYLSGCZ<br>ftFRt% 2 Fxeig% 3D% 3D                                      | São José dos<br>Campos | SP    | Sudeste |
| FT Sistemas                        |  | <ul><li>/company/flight-<br/>technologies-s-a/</li></ul>   | São José dos<br>Campos | SP    | Sudeste |
| Imagem (IMG)                       |  |  | São José dos<br>Campos | SP    | Sudeste |
| Intergado                          |  |  | Contagem               | MG    | Sudeste |
| Agroconforto                       | <ul><li>● facebook.com/<br/>Agroconforto</li></ul> |  | Castro                 | PR    | Sul     |
| Qualicode                          | • qualicode.com.br                                 |  | Curitiba               | PR    | Sul     |
| Z2S                                | • facebook.com/z2sbrasil                           |  | Passo Fundo            | RS    | Sul     |
| Agrotechlink                       | agrotechlink.com                                   |  | Joinville              | SC    | Sul     |
| AgroData                           | • agrodata.me                                      |  | Piracicaba             | SP    | Sudeste |
| Agertek                            | ■ agertek.com.br                                   | NE   | São Paulo              | SP    | Sudeste |
| Angoera                            |  |  | São Paulo              | SP    | Sudeste |

# 2.6 Shared Economy

| Company      | URL                                | LinkedIn | City      | State | Region           |
|--------------|------------------------------------|----------|-----------|-------|------------------|
| Fiboo        | ● fiboo.com.br                     | NE       | Barreiras | ВА    | Nordeste         |
| Tour Gourmet |                                    | NE       | Salvador  | BA    | Nordeste         |
| Maqfácil     | maqfacil.wixsite.com/     maqfacil | NE       | Cuiabá    | MT    | Centro-<br>Oeste |

| Company                                 | URL   | LinkedIn   | City           | State | Region           |
|---|---|--|----------------|-------|------------------|
| Agrirent                                | <ul><li>facebook.com/</li><li>AgriRentBR</li></ul>                |  | Sinop          | MT    | Centro-<br>Oeste |
| Alluagro                                | alluagro.com.br   |  | Uberlândia     | MG    | Sudeste          |
| Tracktoor                               |   |  | Uberlândia     | MG    | Sudeste          |
| Plantecom                               | plantecom.com   | <ul><li>/company/plantecom-<br/>agrocoworking/</li></ul> | Mamanguape     | РВ    | Nordeste         |
| Suas Plantas                            | • suasplantas.com   |  | Iracema        | RR    | Norte            |
| ViaRural                                | <ul><li>● viarural.net.br</li></ul>                               | NE   | Porto Alegre   | RS    | Sul              |
| AgriMates                               | • agrimates.com.br  |  | Campinas       | SP    | Sudeste          |
| Comida Invisível                        |   | <ul><li>/company/comida-<br/>invisivel/</li></ul>        | São Paulo      | SP    | Sudeste          |
| MTGG Participações e<br>Empreendimentos |   | NE   | São Paulo      | SP    | Sudeste          |
| poupachef                               | <ul><li>poupachef.com</li></ul>                                   |  | São Paulo      | SP    | Sudeste          |
| SharedEquips                            | <ul><li>comunidade.startse.</li><li>com/in/sharedequips</li></ul> |  | São Paulo      | SP    | Sudeste          |
| Teste Receitas                          | • testereceitas.com.br  | NE   | Sertãozinho    | SP    | Sudeste          |
| Singra                                  |   | <ul><li>/company/singra-agro-<br/>connection/</li></ul>  | São Paulo      | SP    | Sudeste          |
| AppJusto                                | • appjusto.com.br   |  | São Paulo      | SP    | Sudeste          |
| Amazonfruitfood                         | • amazonfruitsofficial.com  | NE   | Castanhal      | PA    | Norte            |
| Materre                                 | Materre.com.br  | NE   | Belo Horizonte | MG    | Sudeste          |
| Aurora                                  | • sigaaurora.com  | NE   | Porto Alegre   | RS    | Sul              |
| Restin                                  | <ul><li>● restin.com.br</li></ul>                                 |  | Americana      | SP    | Sudeste          |
| Ecofood                                 | <ul><li>ecofood.com.br/index.<br/>html</li></ul>                  |  | Londrina       | PR    | Sul              |
| Food to Save                            | ● foodtosave.com.br/  |  | São Paulo      | SP    | Sudeste          |
| Menu do Dia                             | appmenudodia.com/ lpaplicativo.php                                | NE   | Florianópolis  | SC    | Sul              |

## 2.7 Agricultural waste management

| Company                         | URL                       | LinkedIn  | City           | State | Region   |
|---------------------------------|---------------------------|---|----------------|-------|----------|
| Canteiro Soluções<br>Ambientais | ● /in/eniogiulianogirao   |   | Fortaleza      | CE    | Nordeste |
| Canteiro                        | instagram.  comcanteirobr | 0   | Horizonte      | CE    | Nordeste |
| aterra                          | • aterraambiental.com     | <ul><li>/company/aterra-<br/>ambiental/</li></ul> | Belo Horizonte | MG    | Sudeste  |

| Company                          | URL  | LinkedIn  | City                   | State             | Region   |
|----------------------------------|--|---|------------------------|-------------------|----------|
| Residuall                        | residuall.com  | <ul><li>● /company/yatto-logistica-<br/>reversa/</li></ul>                                | Belo Horizonte         | MG                | Sudeste  |
| VG Residuos                      |  | ● /company/vertown/   | Belo Horizonte         | MG                | Sudeste  |
| Grupo Vitae                      |  |   | Uberaba                | MG                | Sudeste  |
| Econtrole                        | <ul><li>● econtrole.com</li></ul>                                | NE  | Viçosa                 | MG                | Sudeste  |
| Recycle Solutions                | • recyclesolutions.co  | NE  | Petrolina              | PE                | Nordeste |
| Lets Fly                         | letsflyfood.com/   | NE  | Cachoeiras de<br>Macau | Rio de<br>Janeiro | Sudeste  |
| BR Polen                         | brpolen.com.br   |   | Rio de Janeiro         | Rio de<br>Janeiro | Sudeste  |
| Biohack                          | ● biohacks.netlify.app/  |   | Rio de Janeiro         | Rio de<br>Janeiro | Sudeste  |
| Kemia Tratamento de<br>Efluentes | ⊚ kemia.com.br   | /company/kemia-<br>tratamento-de-efluentes/   | Chapecó                | SC                | Sul      |
| Brotei                           | ● brotei.com.br  | NE  | Florianópolis          | SC                | Sul      |
| Evoluma                          | evoluma.com  |   | Tubarão                | SC                | Sul      |
| DevCoffee                        |  | /company/devcoffee/   | Leme                   | SP                | Sudeste  |
| 5ecos                            |  | NE  | Piracicaba             | SP                | Sudeste  |
| EcoBiotech                       | ⊕ ecobiotech.com.br  | <ul><li> /company/ecobiotech-<br/>biotecnologia-e-automa%<br/>C3% A7% C3 % A3o/</li></ul> | Ribeirão Preto         | SP                | Sudeste  |
| BioSource Company                | <ul><li>⊚ cietec.org.br/project/<br/>biosource-company</li></ul> | NE  | São Paulo              | SP                | Sudeste  |
| da Natureza                      | ⊚ cietec.org.br/project/     danatureza                          | NE  | São Paulo              | SP                | Sudeste  |
| Eureciclo                        | <ul><li>● eureciclo.com.br</li></ul>                             |   | São Paulo              | SP                | Sudeste  |
| RSU Brasil                       | • rsubrasil.com.br   |   | São Paulo              | SP                | Sudeste  |
| Tec3geo                          | tec3geo.com.br   | NE  | São Paulo              | SP                | Sudeste  |
| Biosolvit                        | <ul><li>biosolvit.com</li></ul>                                  |   | Barra Mansa            | Rio de<br>Janeiro | Sudeste  |
| Rise Go                          |  |   | Pato Branco            | PR                | Sul      |
| NETResiduos                      | <ul><li>netresiduos.com.br</li></ul>                             | ● /company/<br>sistemanetresiduos/  | Belo Horizonte         | MG                | Sudeste  |
| Mundo Livres                     | <ul><li>facebook.com/pg/<br/>MundoLivres</li></ul>               |   | Rio de Janeiro         | Rio de<br>Janeiro | Sudeste  |
| Aquavale                         | <ul><li>● /in/woshinghton-gervaz-<br/>0a85906b</li></ul>         |   | Jaboticabal            | SP                | Sudeste  |
| ProInsecta                       | <ul><li>● icorpsbrasil.com.br/<br/>proinsecta</li></ul>          | NE  | Piracicaba             | SP                | Sudeste  |

| Company   | URL                    | LinkedIn   | City      | State | Region   |
|-----------|------------------------|--|-----------|-------|----------|
| Eccaplan  | eccaplan.com.br        | <ul><li>/company/eccaplan-<br/>consultoria-em-<br/>sustentabilidade/</li></ul> | São Paulo | SP    | Sudeste  |
| Selletiva | selletiva.com.br     ■ | <ul><li>/company/<br/>sistemaselletiva/</li></ul>                              | Fortaleza | CE    | Nordeste |
| GranBio   | ● granbio.com.br/      |  | São Paulo | SP    | Sudeste  |

# 2.8 Internet of Things for Agriculture Agtechs: plague detection, soil, climate and irrigation

| Company                              | URL   | LinkedIn   | City                      | State | Region           |
|--------------------------------------|---|--|---------------------------|-------|------------------|
| Kalliandra                           | kalliandra.com.br   |  | Luís Eduardo<br>Magalhães | ВА    | Nordeste         |
| Olho Do Dono                         | olhododono.agr.br   | NE   | Vitória                   | ES    | Sudeste          |
| Droklin                              | ● droklin.com   |  | Goiânia                   | GO    | Centro-<br>Oeste |
| Indext                               | ● indext.com.br   |  | Campo Grande              | MT    | Centro-<br>Oeste |
| Oscarpes                             | • facebook.com/Oscarpes-<br>Agricultura- Inteligente-<br>1611494252240761                     | NE   | Tapurah                   | MT    | Centro-<br>Oeste |
| Neo Farm (Projeto Neo<br>Things IoT) | neofarm.agr.br  | ● /showcase/neofarm-iot/   | Belo Horizonte            | MG    | Sudeste          |
| Neo Things IoT                       | ● neothingsiot.com  |  | Belo Horizonte            | MG    | Sudeste          |
| IBEEF                                | ● facebook.com/ibeefufr   |  | Belém                     | PA    | Norte            |
| Agrisolus                            | <ul><li>● agrisolus.com.br</li></ul>  |  | Campo Mourão              | PR    | Sul              |
| E-aware                              | • eaware.com.br   | /company/     eawaretechnologies/  | Curitiba                  | PR    | Sul              |
| Extractify                           | <ul><li>● extractify.ai</li></ul>   |  | Curitiba                  | PR    | Sul              |
| True Work                            | truework.com.br   | <ul><li>/company/true-<br/>work-consultoria-e-<br/>desenvolvimento-de-<br/>sistemas/</li></ul> | Curitiba                  | PR    | Sul              |
| Rex9                                 | <ul><li>pr1.sinapsedainovacao.<br/>com.br/pr1/ideia/rex9-<br/>seu-patrimonio-seguro</li></ul> | NE   | Londrina                  | PR    | Sul              |
| Rise Go                              | ● risego.com.br   |  | Pato Branco               | PR    | Sul              |
| Grandeo                              | ● grandeo.com.br  |  | Ponta Grossa              | PR    | Sul              |
| SEAS Agro                            | ● instagram.com/seasagro  | NE   | Ponta Grossa              | PR    | Sul              |
| Agrotatil                            | ■ agrotatil.com.br  |  | Rolândia                  | PR    | Sul              |

| Company                                    | URL   | LinkedIn   | City                    | State             | Region   |
|--|---|--|-------------------------|-------------------|----------|
| iotag                                      |   |  | São José dos<br>Pinhais | PR                | Sul      |
| E.Aí                                       | ● eai.tec.br  | /company/     eaitecnologiasinteligentes                     | Recife                  | PE                | Nordeste |
| SEMINE Agricultura<br>Irrigada Inteligente | semine.com.br   | 0  | Recife                  | PE                | Nordeste |
| Phygitall                                  | phygitall.com.br  | • /company/phygitall-solu%<br>C3% A7% C3% B5es-em-<br>iot/   | Rio de Janeiro          | Rio de<br>Janeiro | Sudeste  |
| PotyChip                                   | <ul><li>potychip.com.</li><li>br/#region2wrap</li></ul>   | <ul><li>/company/potychip-<br/>tecnologia/</li></ul>         | Natal                   | RN                | Nordeste |
| Eirene Solutions                           | <ul><li>● eirenesolutions.com</li></ul>                   | <ul><li>/company/eirene-<br/>solutions/</li></ul>            | Porto Alegre            | RS                | Sul      |
| Falker Automação Agrícola                  | ● falker.com.br   | ● /company/<br>falkerautomacao/                              | Porto Alegre            | RS                | Sul      |
| CowMed                                     |   |  | Santa Maria             | RS                | Sul      |
| T5 Tecnologia                              |   |  | Florianópolis           | SC                | Sul      |
| AgroInfo                                   | agroinfoti.com.br   |  | Campinas                | SP                | Sudeste  |
| edroponic                                  | <ul><li>edroponic.iotresolve.<br/>com/kitbasico</li></ul> | NE   | Campinas                | SP                | Sudeste  |
| Tarvos                                     |   |  | Campinas                | SP                | Sudeste  |
| Kajoo                                      | ⊗ kajoo.com.br/#features                                  | <ul><li>/company/kajoo-smart-<br/>solutions/</li></ul>       | Campinas                | SP                | Sudeste  |
| Prime Field                                | <ul><li>primefield.com.br</li></ul>                       | <ul><li>/company/primefield-<br/>tecnologia/</li></ul>       | Jaú                     | SP                | Sudeste  |
| Stresscan                                  | ● facebook.com/stresscan                                  |  | Presidente<br>Prudente  | SP                | Sudeste  |
| Sensaiotech                                | <ul><li>● sensaiotech.com</li></ul>                       |  | Santo André             | SP                | Sudeste  |
| AnimallTAG                                 | br.animalltag.com   |  | São Carlos              | SP                | Sudeste  |
| Treevia                                    | • treevia.com.br  | <ul><li>/company/treevia-forest-<br/>technologies/</li></ul> | São José dos<br>Campos  | SP                | Sudeste  |
| Doroth                                     |   | NE   | São Paulo               | SP                | Sudeste  |
| Dynalogic                                  |   | <ul><li>/company/dynalogic-<br/>smart-solutions/</li></ul>   | São Paulo               | SP                | Sudeste  |
| RMS Math                                   |   | NE   | São Paulo               | SP                | Sudeste  |
| Invert                                     |   | NE   | São Paulo               | SP                | Sudeste  |
| Anáhata Serviços<br>Agronômicos            |   |  | Sorocaba                | SP                | Sudeste  |
| SpecLab                                    | speclab.com.br  | ● /company/speclab/  | Sumaré                  | SP                | Sudeste  |
| Smart Sensing                              | <ul><li>smartsensingbrasil.com.</li><li>br</li></ul>      |  | Piracicaba              | SP                | Sudeste  |

| Company   | URL  | LinkedIn  | City                   | State | Region           |
|---|--|---|------------------------|-------|------------------|
| AgroFACI - Future<br>AgroClimatic Information       | agrofaci.com                                     |   | Adrianópolis           | AM    | Norte            |
| Pitaya Irrigação                                    |  | <ul><li>/company/pitaya-irriga%</li><li>C3% A7% C3% A3o-<br/>eficiente/</li></ul>                         | São Carlos             | SP    | Sudeste          |
| SEIP 7  | seip7.com  |   | Sorocaba               | SP    | Sudeste          |
| Spacevis  |  |   | Londrina               | PR    | Sul              |
| Performance Vegetal                                 | <ul><li>performancevegetal.<br/>com.br</li></ul> | <ul><li>/company/<br/>performance-vegetal/<br/>?originalSubdomain=cr</li></ul>                            | Santa Maria            | RS    | Sul              |
| Scicrop   | scicrop.com                                      | • /sales/company/9471384  | São Paulo              | SP    | Sudeste          |
| Tecno IT  |  | <ul><li>/company/tecno-it-<br/>tecnologia-e-servi% C3%<br/>A7os/</li></ul>                                | Goiânia                | GO    | Centro-<br>Oeste |
| Agrointeli  | agrointeli.com.br                                |   | Campo Grande           | MS    | Centro-<br>Oeste |
| Prediza   | ● prediza.io                                     |   | Caxias do Sul          | RS    | Sul              |
| DIMO Soluções em<br>Tecnologia                      |  | <ul><li></li></ul>  | Chapecó                | SC    | Sul              |
| Four Agri   |  | NE  | Pirajuí                | SP    | Sudeste          |
| Pulverize (Farmtec)                                 | • facebook.com/<br>redefarmtec                   | <ul><li>/company/<br/>farmtecservicos/</li></ul>  | Pompéia                | SP    | Sudeste          |
| Agro Robotics                                       | <ul><li>● agrorobotics.com.br</li></ul>          | • /sales/company/10048047   | São Paulo              | SP    | Sudeste          |
| OK Desenvolvimento de<br>Softwares                  |  | <ul><li>/company/ok-<br/>desenvolvimento-de-<br/>software/</li></ul>                                      | Dourados               | MS    | Centro-<br>Oeste |
| Pasto sempre verde                                  | ● facebook.com/psvapp                            | <ul><li>/company/<br/>pastosempreverde/</li></ul>   | Campinas               | SP    | Sudeste          |
| Cowboy Soluções<br>Integradas para o<br>Agronegócio |  | NE  | Campinas               | SP    | Sudeste          |
| SensorVision  | sensorvision.com.br                              | <ul><li> /sales/company/</li><li>11716542?_ntb=</li><li>MrCmo83bQ7qivlYru</li><li>UugCg% 3D% 3D</li></ul> | Paulínia               | SP    | Sudeste          |
| Tecsus  |  | ø /company/tecsus/  | São José dos<br>Campos | SP    | Sudeste          |
| agroThings  | <ul><li>agrothings.net</li></ul>                 |   | São Paulo              | SP    | Sudeste          |
| Chipsafer   | chipsafer.com                                    | <ul><li>/company/chipsafer/<br/>?trk=ppro_cprof</li><li>&amp;originalSub domain=uy</li></ul>              | São Paulo              | SP    | Sudeste          |

## 2.9 Meteorology and Irrigation and Water Management

| Company                                       | URL  | LinkedIn   | City                     | State | Region   |
|---|--|--|--------------------------|-------|----------|
| AgroFACI - Future<br>AgroClimatic Information | <ul><li>● agrofaci.com</li></ul>                           |  | Adrianópolis             | AM    | Norte    |
| SDW   | <ul><li>sdwforall.com</li></ul>                            |  | Salvador                 | ВА    | Nordeste |
| Irricontrol                                   | <ul><li>● irricontrol.com.br</li></ul>                     |  | Itajubá                  | MG    | Sudeste  |
| Grupo Fienile (Irriluce)                      | grupofienile.com.br  |  | Monte Carmelo            | MG    | Sudeste  |
| SoilTech                                      | soiltech.com.br  |  | Santa Rita do<br>Sapucaí | MG    | Sudeste  |
| irriger                                       | ● irriger.com.br   | NE   | Uberaba                  | MG    | Sudeste  |
| Icrop   |  | <ul><li>/company/i-cropgest%</li><li>C3% A3o-de-irriga% C3%</li><li>A7% C3% A3o/</li></ul>                                     | Uberlândia               | MG    | Sudeste  |
| Zeusagro                                      | zeusagro.com   |  | Uberlândia               | MG    | Sudeste  |
| IrriSimples                                   | ● irriplus.com.br  | NE   | Viçosa                   | MG    | Sudeste  |
| Liamarinha                                    | liamarinha.com.br  |  | Viçosa                   | MG    | Sudeste  |
| Amana Katu                                    | <ul><li>amanakatu.com</li></ul>                            | NE   | Belém                    | PA    | Norte    |
| Smart Drop                                    | <ul><li>penseagro.paniclobster.<br/>com/teams/33</li></ul> | NE   | Curitiba                 | PR    | Sul      |
| IrriGate                                      | • facebook.com/<br>irrigate2020/                           | ● /company/irrigate-<br>automa% C3% A7% C3%<br>A3o/  | Curitiba                 | PR    | Sul      |
| Acquaconte                                    | • acquaconte.com.br  | <ul><li>/in/acquaconte-solu%</li><li>C3% A7% C3% B5es-h%</li><li>C3% ADdricas-sustent%</li><li>C3% A1veis-519771162/</li></ul> | Londrina                 | PR    | Sul      |
| Agro-D  | ● agro-d.com   | NE   | Passo Fundo              | RS    | Sul      |
| Sistema Irriga                                | sistemairriga.com.br                                       | NE   | Santa Maria              | RS    | Sul      |
| Raks  |  | <ul><li>● /company/raks-<br/>tecnologia-agricola/</li></ul>  | São Leopoldo             | RS    | Sul      |
| Eletroeste Tecnologia &<br>Automação          | eletroesters.com.br  | /company/     eletroestersmycompany  | Uruguaiana               | RS    | Sul      |
| Linear Energia                                |  | NE   | Xanxerê                  | SC    | Sul      |
| Acqua Vitta Floral                            | acquavitta.com.br  | NE   | Bauru                    | SP    | Sudeste  |
| Modclima                                      | modclima.com.br  | NR   | Bragança<br>Paulista     | SP    | Sudeste  |
| Agrosmart                                     | ■ agrosmart.com.br   |  | Campinas                 | SP    | Sudeste  |
| Jacobucci Sistemas de<br>Irrigação e Serviços | jacobucci.ind.br   | <ul><li>/company/jacobucci-<br/>sistemas-de-irriga% C3%<br/>A7% C3% A3o/</li></ul>   | Leme                     | SP    | Sudeste  |

| Company                    | URL  | LinkedIn   | City                   | State | Region           |
|----------------------------|--|--|------------------------|-------|------------------|
| Ecology Glass              | • facebook.com/<br>EcologyGlassAmbiental   | NE   | Limeira                | SP    | Sudeste          |
| Agromakers                 | agromakers.com.br  | /company/agromakers/   | Piracicaba             | SP    | Sudeste          |
| Agrymet                    |  |  | Piracicaba             | SP    | Sudeste          |
| Weather Service            | • weatherservice.com.br/   | •  | Piracicaba             | SP    | Sudeste          |
| Hidrofito                  | <ul><li>/company/hidrofito-<br/>agricultura-de-alta-<br/>efici% C3% AAncia</li></ul> | <ul><li>/company/hidrofito-<br/>agricultura-de-alta-efici%<br/>C3% AAncia/</li></ul> | Pirassununga           | SP    | Sudeste          |
| Pitaya Irrigação           | <ul><li>pitayairrigacao.com.br</li></ul>   | <ul><li>/company/pitaya-irriga%</li><li>C3% A7% C3% A3o-<br/>eficiente/</li></ul>    | São Carlos             | SP    | Sudeste          |
| Pwtech                     | <ul><li>pwtech.eco.br</li></ul>  |  | São Carlos             | SP    | Sudeste          |
| Sencer                     | sencer.com.br  | NE   | São Carlos             | SP    | Sudeste          |
| AgroClima Pro              | climatempoconsultoria.     com.br/agroclima-pro                                      |  | São José dos<br>Campos | SP    | Sudeste          |
| Climacta                   |  | NE   | São José dos<br>Campos | SP    | Sudeste          |
| Mentor                     | • attotechnology.com.br  | NE   | São José dos<br>Campos | SP    | Sudeste          |
| Cyan Agroanalytics         |  |  | São Paulo              | SP    | Sudeste          |
| Omni-Eletrônica            | • omni-electronica.com.br  | <ul><li>/company/<br/>omnielectronica/</li></ul>                                     | São Paulo              | SP    | Sudeste          |
| <ul><li>Pluvi.On</li></ul> | <ul><li>pluvion.com.br</li></ul>   | NE   | São Paulo              | SP    | Sudeste          |
| SEIP 7                     | ● seip7.com  |  | Sorocaba               | SP    | Sudeste          |
| Symbiotec                  | <ul><li>icorpsbrasil.com.br/<br/>symbiotec</li></ul>                                 | NE   | Piracicaba             | SP    | Sudeste          |
| FieldPRO                   | • fieldpro.com.br  |  | São Paulo              | SP    | Sudeste          |
| aterra                     | aterraambiental.com  | <ul><li>/company/aterra-<br/>ambiental/</li></ul>                                    | Belo Horizonte         | MG    | Sudeste          |
| Droklin                    | <ul><li>● droklin.com</li></ul>  |  | Goiânia                | GO    | Centro-<br>Oeste |
| FishLabs                   | <ul><li>fishlabs.com.br</li></ul>  | NE   | Itajaí                 | SC    | Sul              |
| Ruhwater                   | o ruhwater.com.br  |  | Unaí                   | GO    | Centro-<br>Oeste |
| Elio Tecnologia            | elio.xyz   |  | São Paulo              | SP    | Sudeste          |
| Autoponia                  | • autoponia.com.br/  |  | Itajubá                | MG    | Sudeste          |
| Optimale                   | optimale.com.br  | /company/optimale-<br>technical-solutions/   | Campo Grande           | MS    | Centro-<br>Oeste |

#### 2.10 Integrating platform for systems, solutions and data

| Company                            | URL  | LinkedIn  | City                      | State | Region           |
|------------------------------------|--|---|---------------------------|-------|------------------|
| Tor Tech Tecnologia &<br>Automação |  | •   | Luís Eduardo<br>Magalhães | BA    | Nordeste         |
| AgroSusten                         | <ul><li>facebook.com/<br/>agrosusten</li></ul> | NE  | Salvador                  | BA    | Nordeste         |
| SimpleVet                          | simples.vet                                    |   | Salvador                  | ВА    | Nordeste         |
| Tetetanque                         |  |   | Salvador                  | ВА    | Nordeste         |
| Sisagri                            | <ul><li>sisagri.com.br</li></ul>               | ● /sales/company/68310934   | Guaraciaba do<br>Norte    | CE    | Nordeste         |
| Agrovesi                           | • facebook.com/agrovesi                        |   | Quixadá                   | CE    | Nordeste         |
| Agrolivre                          | <ul><li>agrolivre.com.br</li></ul>             | NE  | Brasília                  | DF    | Centro-<br>Oeste |
| Agryo                              | • agryo.com                                    |   | Brasília                  | DF    | Centro-<br>Oeste |
| Frete Rápido                       | ● freterapido.com                              | ● /sales/company/10491579   | Baixo Guandu              | ES    | Sudeste          |
| InteCred (Implanta IT)             |  |   | Goiânia                   | GO    | Centro-<br>Oeste |
| AgroV                              | ■ agrov.com.br                                 |   | Cuiabá                    | MT    | Centro-<br>Oeste |
| Lucro rural                        | lucrorural.com.br                              |   | Cuiabá                    | MT    | Centro-<br>Oeste |
| Acronex                            | <ul><li>acronex.com</li></ul>                  |   | Lucas do Rio<br>Verde     | MT    | Centro-<br>Oeste |
| TBDC                               |  |   | Nova Mutum                | MT    | Centro-<br>Oeste |
| plantUP Intelligence               | <ul><li>meuplantup.com</li></ul>               | <ul><li>/company/<br/>meuplantupoficial/</li></ul>                                  | Rondonópolis              | MT    | Centro-<br>Oeste |
| Sower                              | <ul><li>sowerx.com</li></ul>                   |   | São José do<br>Xingú      | MT    | Centro-<br>Oeste |
| RapixLog                           |  | NE  | Sinop                     | MT    | Centro-<br>Oeste |
| Beef-Tec                           | <ul><li>beeftec.com.br</li></ul>               | <ul><li>● /in/rodrigo-spengler-<br/>8587b830/</li></ul>                             | Campo Grande              | MS    | Centro-<br>Oeste |
| B tracer                           | <ul><li>btracer.com.br</li></ul>               |   | Belo Horizonte            | MG    | Sudeste          |
| Flowins                            | • flowins.me                                   |   | Belo Horizonte            | MG    | Sudeste          |
| Licentia                           |  |   | Belo Horizonte            | MG    | Sudeste          |
| Sapiens.Agro                       |  | <ul><li>/company/sapiens-finan%</li><li>C3% A7as-para-seres-<br/>humanos/</li></ul> | Uberlandia                | MG    | Sudeste          |
| Atomic Agro                        | • atomicagro.com.br                            | ● /company/atomicagro/  | Uberlândia                | MG    | Sudeste          |

| Company                 | URL   | LinkedIn   | City           | State             | Region   |
|-------------------------|---|--|----------------|-------------------|----------|
| agriBl                  |   | NE   | Viçosa         | MG                | Sudeste  |
| Mata Nativa             | matanativa.com.br   | /company/software-mata-<br>nativa/   | Viçosa         | MG                | Sudeste  |
| Prodfy                  | ● prodfy.com.br   | ● /sales/company/16207365  | Viçosa         | MG                | Sudeste  |
| BMS Softwares           | <ul><li>grupobms.com.br/winfit-<br/>saat</li></ul>              | NE   | Viçosa         | MG                | Sudeste  |
| Amachains               | • amachains.com   |  | Belém          | PA                | Norte    |
| Terras App Solutions    | ⊚ terras.agr.br   | <ul><li>/company/terras-app-<br/>solutions/</li></ul>                            | Belém          | PA                | Norte    |
| Nice Planet             | <ul><li>niceplanet.com.br</li></ul>                             | /company/niceplanet/   | Redenção       | PA                | Norte    |
| Med Vaca Leite          | <ul><li>medvacaleite.com</li></ul>                              | NE   | Campo Mourão   | PR                | Sul      |
| Girotech                | giro.tech   |  | Curitiba       | PR                | Sul      |
| Lithus                  |   | <ul><li>/company/lithustech-<br/>sistemas-eletr% C3%<br/>B4nicos-ltda/</li></ul> | Curitiba       | PR                | Sul      |
| O Polen                 | ● opolen.com.br   |  | Curitiba       | PR                | Sul      |
| Radek Systems           | radek.com.br  | • /sales/company/24998097  | Curitiba       | PR                | Sul      |
| ST-One                  | st-one.io   |  | Curitiba       | PR                | Sul      |
| WebReceita              | webreceita.com.br   |  | Curitiba       | PR                | Sul      |
| Neosilos                | <ul><li>neosilos.com</li></ul>                                  |  | Curitiba       | PR                | Sul      |
| Stac                    |   |  | Foz do Iguaçu  | PR                | Sul      |
| Arabyka                 | arabyka.com   | NE   | Londrina       | PR                | Sul      |
| Brid Soluções           | <ul><li>bridsolucoes.com.br</li></ul>                           | <ul><li>/company/bridsolucoes/</li></ul>   | Londrina       | PR                | Sul      |
| Farmdome                | ● farmdome.com.br   | NE   | Londrina       | PR                | Sul      |
| FitoApp                 | fitoapp.com.br  |  | Londrina       | PR                | Sul      |
| Fitovision              | <ul><li>fitovision.com.br</li></ul>                             |  | Londrina       | PR                | Sul      |
| Talkall                 | talkall.com.br  |  | Londrina       | PR                | Sul      |
| Spacevis                |   |  | Londrina       | PR                | Sul      |
| Unisolo                 | unisolo.agr.br  |  | Maringá        | PR                | Sul      |
| SMARTRURAL              |   | linkedin.cominsmartrural   | Recife         | PE                | Nordeste |
| Aqbits                  | <ul> <li>         • site não encontrado     </li> </ul>         |  | Teresina       | PI                | Nordeste |
| BIPP                    |   | ● /company/bipp-<br>tecnologia/  | Teresina       | PI                | Nordeste |
| Rede Parcerias          | redeparcerias.com   |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| RTD Tecnologia e Defesa | <ul><li>angel.co/company/rtd-<br/>tecnologia-e-defesa</li></ul> | <ul><li>/company/lean-startup-<br/>rtd-tecnologia-e-defesa/</li></ul>            | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |

| Company                           | URL  | LinkedIn   | City                    | State             | Region  |
|-----------------------------------|--|--|-------------------------|-------------------|---------|
| Santos Lab                        |  | <ul><li>/sales/company/</li><li>25042320?_ntb=qh</li><li>L8sdRzQbqjM2qH6p</li><li>1imA% 3D% 3D</li></ul>               | Rio de Janeiro          | Rio de<br>Janeiro | Sudeste |
| Giinger Foodtech                  | <ul><li>giinger.com.br</li></ul>                                   | ● /company/giinger/  | Rio de Janeiro          | Rio de<br>Janeiro | Sudeste |
| O Agro                            | oagro.com.br   |  | Frederico<br>Westphalen | RS                | Sul     |
| e-Rural                           | exec.dev   | NE   | ljuí                    | RS                | Sul     |
| Avelã Big Data                    | <ul><li>avelapublicaffairs.com/<br/>pt-br/avela-big-data</li></ul> | NE   | Porto Alegre            | RS                | Sul     |
| Capril Virtual                    | <ul><li> caprilvirtual.com.br</li></ul>                            |  | Porto Alegre            | RS                | Sul     |
| ConnectFarm                       |  |  | Porto Alegre            | RS                | Sul     |
| Elysios                           | elysios.com.br   | <ul><li>/company/elysios-<br/>agricultura-inteligente/</li></ul>   | Porto Alegre            | RS                | Sul     |
| OvinoPro                          | ovinopro.com.br  | ● /sales/company/69555496  | Porto Alegre            | RS                | Sul     |
| GRAZING Soluções<br>Agropecuárias | grazing.com.br   | NE   | Porto Alegre            | RS                | Sul     |
| Agextec                           |  | <ul> <li>/company/agextec-solu%</li> <li>C3% A7% C3% B5es-<br/>digitais-para-o-agroneg%</li> <li>C3% B3cio/</li> </ul> | Santa Maria             | RS                | Sul     |
| Auster Tecnologia                 | austertecnologia.com   | <ul><li>● /company/<br/>austertecnologia/</li></ul>  | Santa Maria             | RS                | Sul     |
| Crops Team                        | ● fb.com/cropsteam   |  | Santa Maria             | RS                | Sul     |
| Performance Vegetal               | <ul><li>performancevegetal.<br/>com.br</li></ul>                   | <ul><li>/company/performance-<br/>vegetal/?originalSubdo-<br/>main=cr</li></ul>  | Santa Maria             | RS                | Sul     |
| PULVERIZA                         | • spraysolution.agr.br   | NE   | Santa Maria             | RS                | Sul     |
| Essent Agro                       | <ul><li>● essentagro.com.br</li></ul>                              |  | Tucunduva               | RS                | Sul     |
| Agrosimulador                     | <ul><li>● agrosimulador.com.br</li></ul>                           |  | Chapecó                 | SC                | Sul     |
| Sigma                             |  | ● /sales/company/24905461  | Chapecó                 | SC                | Sul     |
| Granter                           |  |  | Florianópolis           | SC                | Sul     |
| FishLabs                          | ● fishlabs.com.br  | NE   | Itajaí                  | SC                | Sul     |
| Saitn Agro                        | saitnagro.com.br   | ● /sales/company/64620312  | Itapema                 | SC                | Sul     |
| GoFind                            | gofind.online  |  | Joinville               | SC                | Sul     |
| Clube Agro Brasil                 |  |  | Barra Bonita            | SP                | Sudeste |
| Far More Land                     | ● farmoreland.com  | NE   | Barueri                 | SP                | Sudeste |
| Cordeirobiz                       |  | NE   | Botucatu                | SP                | Sudeste |
| IdealSis                          | idealsis.com.br  | ● NR   | Buritama                | SP                | Sudeste |

| Company  | URL   | LinkedIn   | City                   | State | Region  |
|--|---|--|------------------------|-------|---------|
| Gobots   | gobots.com.br                                       |  | Campinas               | SP    | Sudeste |
| Kasco  |   |  | Campinas               | SP    | Sudeste |
| YahP   | yahp.com.br   |  | Campinas               | SP    | Sudeste |
| Spectral Solutions   | spectralsolutions.com.br                            |  | Embu das Artes         | SP    | Sudeste |
| NFeAGRO  | nfeagro.com.br                                      |  | Franca                 | SP    | Sudeste |
| e-Trap   | etrap.com.br  |  | Ibirá                  | SP    | Sudeste |
| Mercado de terras  | mercadodeterras.com.br                              |  | Itapetininga           | SP    | Sudeste |
| NAPP Solutions   | nappsolutions.com.br                                | <ul><li>/company/<br/>nappsolutionsbr/</li></ul>                                   | Leme                   | SP    | Sudeste |
| aFHF   | ● afhf.com.br                                       | NE   | Matão                  | SP    | Sudeste |
| BRFLOR   | ● brflor.com.br                                     |  | Piracicaba             | SP    | Sudeste |
| IntelliAgri  |   | NE   | Piracicaba             | SP    | Sudeste |
| Mbr Agro   | mbragro.com.br                                      |  | Piracicaba             | SP    | Sudeste |
| PersonalBov  | personalbov.com                                     | ● /sales/company/65754113  | Piracicaba             | SP    | Sudeste |
| Quickium   | quickium.com  | ● /sales/company/34671071  | Piracicaba             | SP    | Sudeste |
| Milk Monitor   | milkmonitor.com.br                                  |  | Piracicaba             | SP    | Sudeste |
| ASP Agrodigital  | apspagrodigital.com.br                              | NE   | Pompéia                | SP    | Sudeste |
| Cygni  |   |  | Pompéia                | SP    | Sudeste |
| Analytics2Go   |   |  | Presidente<br>Prudente | SP    | Sudeste |
| Agroconecta  | agroconecta.com.br                                  |  | Ribeirão Preto         | SP    | Sudeste |
| Bem Agro   | ● bemagro.com/home                                  |  | Riberão Preto          | SP    | Sudeste |
| InCeres Desenvolvimento<br>de Software e<br>Processamento de Dados<br>S.A. | ⊚ inceres.com.br                                    |  | Rio Das Pedras         | SP    | Sudeste |
| Ampla Intelligence   | <ul><li>amplaintelligence.com.</li><li>br</li></ul> | <ul><li>/company/<br/>amplaintelligence/</li></ul>                                 | São José dos<br>Campos | SP    | Sudeste |
| Agrotools  | ■ agrotools.com.br                                  | <ul><li>/company/agrotools-<br/>gestao-e-monitoramento-<br/>geoespacial/</li></ul> | São Paulo              | SP    | Sudeste |
| Agrus Data   | agrusdata.com                                       |  | São Paulo              | SP    | Sudeste |
| Biocult  |   |  | São Paulo              | SP    | Sudeste |
| Docket   |   |  | São Paulo              | SP    | Sudeste |
| Geofusion  |   |  | São Paulo              | SP    | Sudeste |
| Guiato   |   |  | São Paulo              | SP    | Sudeste |

| Company                      | URL   | LinkedIn  | City                      | State             | Region           |
|------------------------------|---|---|---------------------------|-------------------|------------------|
| InoArb                       | <ul><li>inoarb.azurewebSites.</li><li>net</li></ul> | NE  | São Paulo                 | SP                | Sudeste          |
| IZIO                         | izio.com.br   |   | São Paulo                 | SP                | Sudeste          |
| Myleus                       | <ul><li>/company/<br/>myleusfoodsafety</li></ul>    | •   | São Paulo                 | SP                | Sudeste          |
| Nama                         | nama.ai   | <ul><li>/company/nama-<br/>software/</li></ul>  | São Paulo                 | SP                | Sudeste          |
| PlataformaVerde              | <ul><li>plataformaverde.com.br</li></ul>            |   | São Paulo                 | SP                | Sudeste          |
| S4 Agtech                    | s4agtech.com  | NE  | São Paulo                 | SP                | Sudeste          |
| Scicrop                      | <ul><li>scicrop.com</li></ul>                       |   | São Paulo                 | SP                | Sudeste          |
| Singra                       | singra.com.br                                       | <ul><li>/company/singra-agro-<br/>connection/</li></ul>   | São Paulo                 | SP                | Sudeste          |
| Spacetime Analytics          | <ul><li>spacetimelabs.ai</li></ul>                  | <ul><li>/company/space-time-<br/>analytics/</li></ul>   | São Paulo                 | SP                | Sudeste          |
| Steinkirch                   | steinkirch.com                                      | NE  | São Paulo                 | SP                | Sudeste          |
| Tractian                     | <ul><li>● tractian.com</li></ul>                    |   | São Paulo                 | SP                | Sudeste          |
| Gaivota                      | gaivota.ai/   |   | São Paulo                 | SP                | Sudeste          |
| Viveiro web                  | viveiroweb.com.br                                   |   | São Pedro                 | SP                | Sudeste          |
| Engegrow                     | engegrow.com.br                                     | ● /sales/company/11719227   | Votuporanga               | SP                | Sudeste          |
| Revella                      | <ul><li>agenciarevella.com.br</li></ul>             | <ul><li>/company/revella-ag%</li><li>C3% AAncia-digital/</li></ul>  | Araguaina                 | то                | Centro-<br>Oeste |
| e-Tech Agro                  | <ul><li>etechagro.com</li></ul>                     | NE  | Araguaina                 | ТО                | Centro-<br>Oeste |
| Agrorobótica                 | ● agrorobotica.com.br                               |   | São Carlos                | SP                | Sudeste          |
| Cellco Biotec do Brasil LTDA |   |   | São Carlos                | SP                | Sudeste          |
| Newe                         | <ul><li>neweseguros.com.br</li></ul>                |   | Rio de Janeiro            | Rio de<br>Janeiro | Sudeste          |
| Brascard                     | ● brascard.agr.br                                   | <ul><li>/in/brascard-<br/>administradora-de-conv%<br/>C3% AAnios-e-cart% C3%<br/>B5es-ltda-4890a7222/</li></ul> | Três de Maio              | RS                | Sul              |
| IDMAQ                        | idmaq.com.br  |   | Piracicaba                | SP                | Sudeste          |
| Agrometrika                  | agrometrika.com.br                                  |   | Vinhedo                   | SP                | Sudeste          |
| Agrovest                     | <ul><li>● epicont.com</li></ul>                     |   | Cambe                     | PR                | Sul              |
| ArnsTronic                   | • arnstronic.com                                    | Antonio Pereira Arns  | Uruguaiana                | RS                | Sul              |
| poupachef                    | <ul><li>poupachef.com</li></ul>                     | /company/oicayena/  | São Paulo                 | SP                | Sudeste          |
| Kalliandra                   | kalliandra.com.br                                   |   | Luís Eduardo<br>Magalhães | BA                | Nordeste         |

| Company                        | URL   | LinkedIn   | City                   | State | Region           |
|--------------------------------|---|--|------------------------|-------|------------------|
| Dynalogic                      | <ul><li>● dynalogic.net</li></ul>                   |  | São Paulo              | SP    | Sudeste          |
| Agrymet                        | ● agrymet.com.br                                    |  | Piracicaba             | SP    | Sudeste          |
| Far More Land                  | <ul><li>farmoreland.com</li></ul>                   | NE   | Barueri                | SP    | Sudeste          |
| IDGeo                          |   |  | Piracicaba             | SP    | Sudeste          |
| Consiste Informática           | <ul><li>● consiste.com.br</li></ul>                 | <ul><li>/company/consiste-<br/>consultoria-e-sistemas-<br/>ltda/</li></ul> | Salvador               | ВА    | Nordeste         |
| Milk Plan                      | milkplan.com.br                                     |  | Cruzíla                | MG    | Sudeste          |
| Laticin                        | <ul><li>● laticin.io</li></ul>                      | NE   | Itajubá                | MG    | Sudeste          |
| 4milk                          | ● 4milk.com.br                                      | NE   | Nova Lima              | MG    | Sudeste          |
| GSB Softwares                  |   | <ul><li>/company/gsbsoftware<br/>gestaoparaoagro<br/>negociome/</li></ul>  | Patos de Minas         | MG    | Sudeste          |
| Agrotopus                      | ● agrotopus.com.br                                  | ● /sales/company/16212386  | Curitiba               | PR    | Sul              |
| FarmGo                         | • farmgo.com.br                                     |  | Maringá                | PR    | Sul              |
| Agro Pro Monitor               | agropromonitor.com                                  | NE   | Ponta Grossa           | PR    | Sul              |
| Gestoragro                     | <ul><li>● gestoragro.online</li></ul>               |  | Toledo                 | PR    | Sul              |
| Agromarra                      | ● agromarra.com.br                                  | NE   | Natal                  | RN    | Nordeste         |
| Checkplant                     |   |  | Pelotas                | RS    | Sul              |
| DigiFarmz Smart<br>Agriculture | <ul><li>● digifarmz.com</li></ul>                   |  | Porto Alegre           | RS    | Sul              |
| Pomartec                       | <ul><li>pomartec.agr.br</li></ul>                   |  | Porto Alegre           | RS    | Sul              |
| Agriness                       | ● agriness.com/pt                                   |  | Florianópolis          | SC    | Sul              |
| Alcance Tecnologia             | <ul><li>alcancetecnologia.com.</li><li>br</li></ul> | ● /sales/company/28248826  | São Miguel do<br>Oeste | SC    | Sul              |
| AgriGIS                        | • agrigis.com.br                                    | NE   | Palmital               | SP    | Sudeste          |
| G.R.A. Agricola                | ● graagricola.com.br                                | NE   | São Paulo              | SP    | Sudeste          |
| i3agro                         |   | NE   | Tatuí                  | SP    | Sudeste          |
| Inobram                        | ● inobram.com.br                                    |  | Pato Branco            | PR    | Sul              |
| Agres                          | ● agres.com.br                                      | <ul><li>● /company/<br/>agresagricultura/</li></ul>                        | Pinhais                | PR    | Sul              |
| Fruitkeep                      | ● fruitkeep.com                                     | NE   | Lages                  | SC    | Sul              |
| Farm Solutions                 | • farmsolutions.com.br                              |  | Piracicaba             | SP    | Sudeste          |
| Geplant                        | ● geplant.com.br                                    |  | Piracicaba             | SP    | Sudeste          |
| TrackingCoop                   | ● trackingcoop.com.br                               | NE   | Goiânia                | GO    | Centro-<br>Oeste |

| Company    | URL                    | LinkedIn                                       | City         | State | Region  |
|------------|------------------------|--|--------------|-------|---------|
| Supercampo | ● supercampo.com       | <ul><li>/company/supercampo-<br/>sa/</li></ul> | Curitiba     | PR    | Sul     |
| Agricon    | • agriconbusiness.com/ | •  | Porto Alegre | RS    | Sul     |
| Breender   |                        | NC   | São Paulo    | SP    | Sudeste |

#### 2.11 Remote Sensoring, Diagnosis and Image Monitoring

| Company  | URL                                   | LinkedIn   | City                        | State | Region           |
|--|---------------------------------------|--|-----------------------------|-------|------------------|
| GeoSpace   |                                       | NE   | Eusébio                     | CE    | Nordeste         |
| Ruraltech  | ● ruraltech.com.br                    |  | Brasília                    | DF    | Centro-<br>Oeste |
| Vant Mapper<br>Levantamentos e<br>Geoprocessamento | vantmapper.com                        | NR   | Brasília                    | DF    | Centro-<br>Oeste |
| Geoinova   | geoinova.com.br                       |  | Goiânia                     | GO    | Centro-<br>Oeste |
| Tecno IT   | tecno-it.com.br                       | <ul><li>/company/tecno-it-<br/>tecnologia-e-servi% C3%<br/>A7os/</li></ul> | Goiânia                     | GO    | Centro-<br>Oeste |
| Ruhwater   | ● ruhwater.com.br                     |  | Unaí                        | GO    | Centro-<br>Oeste |
| AgroEasy   | ■ agroeasymt.com.br                   | NE   | Rondonópolis                | MT    | Centro-<br>Oeste |
| Agrointeli   | <ul><li>● agrointeli.com.br</li></ul> |  | Campo Grande                | MS    | Centro-<br>Oeste |
| Kerow Soluções De<br>Precisão                      |                                       | <b>●</b> 0   | Campo Grande                | MS    | Centro-<br>Oeste |
| Quanticum  | • quanticum.com.br                    | /company/     quanticumbrazil/   | Alpinópolis                 | MG    | Sudeste          |
| QiPixel  |                                       |  | Lavras                      | MG    | Sudeste          |
| ScanFito   |                                       | NE   | Lavras                      | MG    | Sudeste          |
| Agropixel  | ■ agropixel.com.br                    |  | São Sebastião<br>do Paraíso | MG    | Sudeste          |
| Raster Agritech                                    | ● /in/mauro-<br>borges-381356165      | NE   | Uberlandia                  | MG    | Sudeste          |
| Sensix   | sensix.com.br                         |  | Uberlândia                  | MG    | Sudeste          |
| Campo Seguro                                       |                                       | ● /company/campo-seguro-<br>brasil/  | Uberlândia                  | MG    | Sudeste          |
| Agrisensing  | agrisensing.com.br                    | NE   | Viçosa                      | MG    | Sudeste          |

| Company   | URL  | LinkedIn  | City           | State             | Region  |
|---|--|---|----------------|-------------------|---------|
| Pro Farm Soluções<br>Agrícolas                    |  | <ul><li>/in/thiago-de-almeida-<br/>prado/</li></ul>   | Curitiba       | PR                | Sul     |
| Pixlog  | ● pixlog.com.br/   |   | Curitiba       | PR                | Sul     |
| Mypetscan   | • mypetscan.com.br   | NE  | Curitiba       | PR                | Sul     |
| Digital Farms                                     | <ul><li>digitalfarms.com.br</li></ul>  |   | Londrina       | PR                | Sul     |
| Agrosat   | <ul><li>agrosattopografia.com.</li><li>br</li></ul>  | NE  | Maringá        | PR                | Sul     |
| NetWord Agro                                      | networdagro.com.br   | <ul><li>/company/netword-<br/>consultoria-e-tecnologia/</li></ul>                                 | Palotina       | PR                | Sul     |
| CropView  |  |   | Ponta Grossa   | PR                | Sul     |
| Ambidados Serviços e<br>Inovações                 | <ul> <li>comunidade.startse.<br/>com/in/ambidados-<br/>servicos-e-inovacoes-<br/>ltda</li> </ul> |   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| StarkSat  | starksat.com   |   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| AgFlier   | agflier.com  | NE  | Alegrete       | RS                | Sul     |
| Prediza   | • prediza.io   |   | Caxias do Sul  | RS                | Sul     |
| Pix Force   | <ul><li>pixforce.com.br</li></ul>  |   | Porto Alegre   | RS                | Sul     |
| Codex   | ⊚ codex.com.br/  | /company/     codexcorporacao/  | Porto Alegre   | RS                | Sul     |
| Auros Robotics                                    | <ul><li>aurosrobotics.com.br</li></ul>   |   | Rio Grande     | RS                | Sul     |
| Auster Imagens e<br>Monitoramentos Aéreos<br>LTDA | austertecnologia.com   | <ul><li>/company/<br/>austertecnologia</li></ul>  | Santa Maria    | RS                | Sul     |
| Agriexata   | ● agriexata.com.br   | <ul><li>/company/agriexata-<br/>consultoria-em-<br/>agricultura-de-precis%<br/>C3% A3o/</li></ul> | Vacaria        | RS                | Sul     |
| DIMO Soluções em<br>Tecnologia                    | <ul><li>dimosolucoes.com.br</li></ul>  | <ul><li>/sales/<br/>company/84475158?_<br/>ntb=DV0K0UsgQe% 2BJE%<br/>2BbNrwVkcA% 3D% 3D</li></ul> | Chapecó        | SC                | Sul     |
| Agrosatelite                                      | agrosatelite.com.br  |   | Florianópolis  | SC                | Sul     |
| Canopy Remote Sensing<br>Solutions                | <ul><li>/company/canopy-<br/>remote-sensing-<br/>solutions</li></ul>                             | •   | Florianópolis  | SC                | Sul     |
| Quiron  | quiron.digital/  |   | Lages          | SC                | Sul     |
| Envidrone   | envidrone.com  | NE  | Altinópolis    | SP                | Sudeste |
| Birdview  | <ul><li>birdview.com.br</li></ul>  | NE  | Botucatu       | SP                | Sudeste |

| Company                            | URL  | LinkedIn   | City                     | State | Region  |
|------------------------------------|--|--|--------------------------|-------|---------|
| Spectrum                           | spectrum.agr.br     spectrum.agr.br                        | <ul><li>/company/spectrum-<br/>intelig% C3% AAncia-<br/>florestal/</li></ul>         | Botucatu                 | SP    | Sudeste |
| Agrocad                            | ■ agrocad.com.br   |  | Campinas                 | SP    | Sudeste |
| Anubz                              |  | ● /sales/company/3091834   | Campinas                 | SP    | Sudeste |
| Cropman                            |  |  | Campinas                 | SP    | Sudeste |
| CWC Tecnologia Agrícola            | <ul><li>wanderpallone.wixsite.<br/>com/cwcagrmob</li></ul> | NE   | Campinas                 | SP    | Sudeste |
| Farm Drone Consultoria<br>Agrícola | <ul><li>farmdroneconsultoria.<br/>com.br</li></ul>         | NE   | lpuã                     | SP    | Sudeste |
| Labmet                             |  |  | Jaboticabal              | SP    | Sudeste |
| Agrofficio                         | ■ agrofficio.com.br  | ● /sales/<br>company/22318888?_<br>ntb=ftbEnHjvRRa1%<br>2BdHUURIfdg% 3D% 3D          | Piracicaba               | SP    | Sudeste |
| Forlidar                           | ● forlidar.com.br  | NE   | Piracicaba               | SP    | Sudeste |
| IDGeo                              |  |  | Piracicaba               | SP    | Sudeste |
| MyEasyFarm                         | <ul><li>myeasyfarm.com</li></ul>                           |  | Piracicaba               | SP    | Sudeste |
| Pix2Agro                           | ● facebook.com/pix2agro                                    |  | Piracicaba               | SP    | Sudeste |
| Somo                               | <ul><li>somoagro.com</li></ul>                             | NE   | Piracicaba               | SP    | Sudeste |
| Four Agri                          | ● instagram.com/four_agri                                  | NE   | Pirajuí                  | SP    | Sudeste |
| Pulverize (Farmtec)                | • facebook.com/ redefarmtec                                | <ul><li>/company/<br/>farmtecservicos/</li></ul>                                     | Pompéia                  | SP    | Sudeste |
| digital rural                      | ø digitalrural.com.br                                      |  | Presidente<br>Prudente   | SP    | Sudeste |
| Inspectral                         |  |  | Presidente<br>Prudente   | SP    | Sudeste |
| Gravta                             | ⊚ gravta.com   | ● /sales/<br>company/12577741?_<br>ntb=Spd% 2FxzudTQ%<br>2B1k% 2BF0hZvOpg%<br>3D% 3D | Ribeirão Preto           | SP    | Sudeste |
| Effatha Agro                       |  |  | Santo André              | SP    | Sudeste |
| Dominus Soli                       |  |  | São João da Boa<br>Vista | SP    | Sudeste |
| Agrocomp                           | agrocomp.com.br  | NE   | São José do Rio<br>Pardo | SP    | Sudeste |
| Acosta Aerospace                   | acosta-aerospace.com                                       | <ul><li>/company/acosta-<br/>aerospace/</li></ul>                                    | São José dos<br>Campos   | SP    | Sudeste |
| Agronow                            | ⊕ agronow.com.br   |  | São José dos<br>Campos   | SP    | Sudeste |

| Company                            | URL                                  | LinkedIn  | City                   | State | Region           |
|------------------------------------|--------------------------------------|---|------------------------|-------|------------------|
| Altave                             | altave.com.br                        |   | São José dos<br>Campos | SP    | Sudeste          |
| Cron                               |                                      | ø /sales/<br>company/79717270?_<br>ntb=gyC9vQYLSGCZftFRt%<br>2Fxeig% 3D% 3D | São José dos<br>Campos | SP    | Sudeste          |
| FT Sistemas                        | • ftsistemas.com.br                  | <ul><li>/company/flight-<br/>technologies-s-a/</li></ul>                    | São José dos<br>Campos | SP    | Sudeste          |
| Geomap                             | geomap.com.br                        | • /company/geomap-digital-<br>ltda/   | São José dos<br>Campos | SP    | Sudeste          |
| Imagem (IMG)                       |                                      |   | São José dos<br>Campos | SP    | Sudeste          |
| radaz                              | ● radaz.com.br                       |   | São José dos<br>Campos | SP    | Sudeste          |
| Agribase                           | agribase.com.br                      | ● /sales/company/16188521   | São Paulo              | SP    | Sudeste          |
| Agro Robotics                      | ■ agrorobotics.com.br                | ● /sales/company/10048047   | São Paulo              | SP    | Sudeste          |
| cromAl                             |                                      |   | São Paulo              | SP    | Sudeste          |
| Elio Tecnologia                    | elio.xyz                             |   | São Paulo              | SP    | Sudeste          |
| GMG Ambiental                      |                                      |   | São Paulo              | SP    | Sudeste          |
| MVISIA                             | mvisia.com.br                        |   | São Paulo              | SP    | Sudeste          |
| Optimus                            | optimusgis.com.br                    |   | São Paulo              | SP    | Sudeste          |
| Drone Ops                          | ● droneops.com.br                    |   | Brasília               | DF    | Centro-<br>Oeste |
| Avant Agro                         | avantagro.com.br                     |   | Goiânia                | GO    | Centro-<br>Oeste |
| Verde Drone                        | • verdedrone.com                     | ● /company/verde-drone/   | Belo Horizonte         | MG    | Sudeste          |
| Tbit                               | ● tbit.com.br                        |   | Lavras                 | MG    | Sudeste          |
| Geaap                              | geaap.com.br                         | /company/geaap-<br>agrociencias/  | Uberlândia             | MG    | Sudeste          |
| Alvaz                              | • alvaz.com                          |   | Londrina               | PR    | Sul              |
| SkyAgri                            | • skyagri.com.br                     |   | Porto Alegre           | RS    | Sul              |
| Topview Agricultura<br>Inteligente |                                      |   | Chapecó                | SC    | Sul              |
| Horus Aeronaves                    | <ul><li>horusaeronaves.com</li></ul> | • /sales/company/10441498   | Florianópolis          | SC    | Sul              |
| Novarum Sky Tecnologia             |                                      |   | Florianópolis          | SC    | Sul              |
| Yup Drones                         | • yupdrones.com.br                   |   | Florianópolis          | SC    | Sul              |
| SF Geo - Sul Florestas             | • sulflorestas.com.br                | <ul><li>● /company/sf-geo-<br/>engenharia-ltda/</li></ul>                   | Lages                  | SC    | Sul              |
| Maply Tecnologia                   | maply.io                             |   | Barueri                | SP    | Sudeste          |

| Company  | URL   | LinkedIn   | City                   | State             | Region  |
|--|---|--|------------------------|-------------------|---------|
| Aero Agri  | aeroagri.com.br                                     | ● /company/aeroagri/   | Piracicaba             | SP                | Sudeste |
| Drop   | <ul><li>● dropagricultura.com.br</li></ul>          | <ul><li>/company/drop-<br/>agricultura/</li></ul>                                  | Piracicaba             | SP                | Sudeste |
| Nuvem UAV Indústria de<br>Aeronaves  | • nuvemuav.com                                      |  | Presidente<br>Prudente | SP                | Sudeste |
| Acrux  | • acruxtech.com.br                                  | <ul><li>/company/acrux-<br/>aerospace-technologies/</li></ul>                      | São José dos<br>Campos | SP                | Sudeste |
| NCB Sistemas Embarcados  |   | •  | São José dos<br>Campos | SP                | Sudeste |
| G-Drones   |   | NE   | São Paulo              | SP                | Sudeste |
| Doroth   | doroth.webnode.com                                  | NE   | São Paulo              | SP                | Sudeste |
| Agro-D   | ● agro-d.com  | NE   | Passo Fundo            | RS                | Sul     |
| Agrosmart  | • agrosmart.com.br                                  |  | Campinas               | SP                | Sudeste |
| Jacobucci Sistemas de<br>Irrigação e Serviços                              | jacobucci.ind.br                                    | <ul><li>/company/jacobucci-<br/>sistemas-de-irriga% C3%<br/>A7% C3% A3o/</li></ul> | Leme                   | SP                | Sudeste |
| Nice Planet  |   |  | Redenção               | PA                | Norte   |
| Santos Lab   | santoslab.com                                       | • /sales/com-<br>pany/25042320?_ntb=-<br>qhL8sdRzQbqjM2qH6p1i-<br>mA% 3D% 3D       | Rio de Janeiro         | Rio de<br>Janeiro | Sudeste |
| Auster Tecnologia  | <ul><li>● austertecnologia.com</li></ul>            | ● /company/<br>austertecnologia/   | Santa Maria            | RS                | Sul     |
| Cygni  |   | ● /company/<br>cygniagroscience/   | Pompéia                | SP                | Sudeste |
| Bem Agro   |   |  | Riberão Preto          | SP                | Sudeste |
| InCeres Desenvolvimento<br>de Software e<br>Processamento de Dados<br>S.A. | inceres.com.br     inceres.com.br                   | /company/inceres-agro/   | Rio Das Pedras         | SP                | Sudeste |
| InoArb   | <ul><li>inoarb.azurewebSites.</li><li>net</li></ul> | NE   | São Paulo              | SP                | Sudeste |
| Spacetime Analytics  | spacetimelabs.ai                                    | <ul><li>/company/space-time-<br/>analytics/</li></ul>                              | São Paulo              | SP                | Sudeste |
| Drakkar / efarm  | drakkar.com.br                                      | /company/drakkarsolos/   | Santa Maria            | RS                | Sul     |
| DataFarm   | datafarm.com.br                                     | /company/datafarm/   | Campinas               | SP                | Sudeste |

## 2.12 Rural Property Management System

| Company                                    | URL  | LinkedIn   | City                      | State | Region           |
|--|--|--|---------------------------|-------|------------------|
| Açaímaps                                   | acaimaps.com   | <ul><li> √company/a% C3% A7a%</li><li>C3% ADmaps</li></ul>                 | Macapá                    | AP    | Norte            |
| AGBRA - Inteligência em<br>Bons Negócios   | <ul><li>agbragroup.wixsite.com/<br/>agbra/agbra-solucoes-<br/>inteligentes</li></ul> | NE   | Manaus                    | AM    | Norte            |
| Sscrop                                     |  | <ul><li>/company/sscrop-gest%</li><li>C3% A3o-de-fazendas/</li></ul>       | Luís Eduardo<br>Magalhães | BA    | Nordeste         |
| AgHolmes                                   | <ul><li>● agriholmes.com.br</li></ul>  | <ul><li>AgriHolmes</li></ul>   | Luís Eduardo<br>Magalhães | ВА    | Nordeste         |
| Consiste Informática                       |  | <ul><li>/company/consiste-<br/>consultoria-e-sistemas-<br/>ltda/</li></ul> | Salvador                  | ВА    | Nordeste         |
| Dr. Farm                                   | • facebook.com/<br>DrFarmBR  | NE   | Salvador                  | ВА    | Nordeste         |
| Fertili                                    | <ul><li>● fertili.com.br</li></ul>   |  | Vitória da<br>Conquista   | ВА    | Nordeste         |
| Galpãotec - Tecnologia em<br>Manejo Animal |  | NE   | Crato                     | CE    | Nordeste         |
| Delfos                                     | delfosim.com   | <ul><li>/company/delfos-<br/>intelligent-maintenance/</li></ul>            | Fortaleza                 | CE    | Nordeste         |
| Agrolite                                   | •  | •  | Fortaleza                 | CE    | Nordeste         |
| AgroConsenso                               | <ul><li>● agroconsenso.com.br</li></ul>  | NE   | Brasília                  | DF    | Centro-<br>Oeste |
| Agrojob                                    | bluefarm.com.br  | • /sales/company/33265417  | Brasília                  | DF    | Centro-<br>Oeste |
| LinkSis                                    |  |  | Brasília                  | DF    | Centro-<br>Oeste |
| Mwova                                      |  |  | Vitória                   | ES    | Sudeste          |
| AgriQ Receituário<br>Agronômico            | ⊕ agriq.com.br   |  | Goiânia                   | GO    | Centro-<br>Oeste |
| Fazenda Rentável                           |  | ● /company/<br>fazendarentavel/  | Goiânia                   | GO    | Centro-<br>Oeste |
| iRancho                                    | ● irancho.com.br   |  | Goiânia                   | GO    | Centro-<br>Oeste |
| Multibovinos                               | <ul><li>multbovinos.com.br</li></ul>   | <ul><li>/company/multsoft-<br/>agronegocios/</li></ul>                     | Goiânia                   | GO    | Centro-<br>Oeste |
| MyFarm                                     | myfarm.com.br  |  | Goiânia                   | GO    | Centro-<br>Oeste |
| Geodata                                    | ⊚ geodata.com.br/  | <ul><li>/company/geodataap/<br/>mycompany/</li></ul>                       | Goiânia                   | GO    | Centro-<br>Oeste |

| Company                            | URL                                 | LinkedIn   | City                 | State | Region           |
|------------------------------------|-------------------------------------|--|----------------------|-------|------------------|
| Agropocket                         | agropocket.com.br                   |  | Jataí                | GO    | Centro-<br>Oeste |
| PlansAgro                          | ● fb.com/plansagro                  | NE   | Piracanjuba          | GO    | Centro-<br>Oeste |
| Campo SA                           |                                     | <ul><li>Campo Soluções</li><li>Agropecuárias</li></ul>   | Alta Floresta        | MT    | Centro-<br>Oeste |
| Brazsoft                           | • brazsoft.com.br                   | <ul><li>/company/brazsoft-sw-<br/>rural/</li></ul>   | Cuiabá               | MT    | Centro-<br>Oeste |
| Smart Grain                        |                                     | ● /company/smartgrain/   | Cuiabá               | MT    | Centro-<br>Oeste |
| N2agro                             | n2agro.com.br                       | NE   | Guarantã do<br>Norte | MT    | Centro-<br>Oeste |
| Unisystem                          | • unisystem.agr.br                  | NE   | Rondonópolis         | MT    | Centro-<br>Oeste |
| Softsul Sistemas                   | softsulsistemas.com.br              | linkedin.cominsoftsulsiste-<br>masoficial  | Rondonópolis         | MT    | Centro-<br>Oeste |
| Prodix                             | ● prodix.com.br                     |  | Ronodonópolis        | MT    | Centro-<br>Oeste |
| UpCampo                            | upcampo.com.br                      |  | Sapezal              | MT    | Centro-<br>Oeste |
| Plantae                            | plantae.agr.br                      |  | Sorriso              | MT    | Centro-<br>Oeste |
| OK Desenvolvimento de<br>Softwares |                                     | <ul><li>/company/ok-<br/>desenvolvimento-de-<br/>software/</li></ul>   | Dourados             | MS    | Centro-<br>Oeste |
| Primor Agrícola                    | • primoragricola.com.br             | NE   | Dourados             | MS    | Centro-<br>Oeste |
| Rastrovet                          | ● rastrovet.com.br                  | <ul><li>/company/rastrovet-<br/>rastreabilidade-e-<br/>identifica% C3% A7% C3%<br/>A3o-eletronica/</li></ul> | Maracaju             | MS    | Centro-<br>Oeste |
| AgroSlim                           | <ul><li>● agroslim.com.br</li></ul> | NE   | Alfenas              | MG    | Sudeste          |
| Gerente Agrícola                   | gaagrosolucoes.com.br               | ● /in/ga-agrosolu%<br>C3% A7% C3% B5es-<br>47998a212/  | Alfenas              | MG    | Sudeste          |
| Agrow                              | ■ agrownegocios.com.br              |  | Araguari             | MG    | Sudeste          |
| Ideagri                            |                                     |  | Belo Horizonte       | MG    | Sudeste          |
| NETResiduos                        | ● netresiduos.com.br                | <ul><li>/company/<br/>sistemanetresiduos/</li></ul>  | Belo Horizonte       | MG    | Sudeste          |
| Procreare                          | • procreare.com.br                  | <ul><li>/company/procreare-<br/>software/</li></ul>  | Belo Horizonte       | MG    | Sudeste          |
| Softpec                            | softpec.com.br                      | NE   | Belo Horizonte       | MG    | Sudeste          |

| Company                                 | URL  | LinkedIn  | City           | State | Region  |
|---|--|---|----------------|-------|---------|
| Cachaça Gestor                          | ● cachacagestor.com.br/                                | ● /company/cacha% C3%<br>A7a-gestor/  | Belo Horizonte | MG    | Sudeste |
| Geocampos                               | geocampos.eng.br                                       | • /company/<br>geocamposeng/  | Campos Altos   | MG    | Sudeste |
| Milk Plan                               | milkplan.com.br  |   | Cruzíla        | MG    | Sudeste |
| Laticin                                 |  | NE  | Itajubá        | MG    | Sudeste |
| Autoponia                               | autoponia.com.br/                                      |   | Itajubá        | MG    | Sudeste |
| AgroBold                                | ■ agrobold.com.br                                      | ● /sales/company/65990582   | Lavras         | MG    | Sudeste |
| Muito Mais Café                         | • maiscafe.com.br                                      | • /company/maiscafeapp/<br>people/  | Manhuaçu       | MG    | Sudeste |
| CertifiCafé                             | <ul><li>⊚ certificafe.com.br</li></ul>                 |   | Manhuaçu       | MG    | Sudeste |
| Mainstay Zootechnical<br>Control        | • controlezootecnico.com. br/scripts/index.php         | NE  | Viçosa         | MG    | Sudeste |
| 4milk                                   |  | NE  | Nova Lima      | MG    | Sudeste |
| GSB Softwares                           | gsbsoftware.com.br                                     | <ul><li>/company/gsbsoftware-<br/>gestaoparaoagronego-<br/>ciome/</li></ul>           | Patos de Minas | MG    | Sudeste |
| NetNúcleo NetBovino                     | netnucleo.com.br                                       | linkedin.cominnetnucleo   | Uberaba        | MG    | Sudeste |
| Agrodez                                 |  |   | Uberlândia     | MG    | Sudeste |
| Agrosolutions                           | <ul><li>agrosolutions.agr.br</li></ul>                 |   | Uberlândia     | MG    | Sudeste |
| Clarivi                                 |  |   | Uberlândia     | MG    | Sudeste |
| Consiste Ti                             |  | NE  | Uberlândia     | MG    | Sudeste |
| ReproDEZ                                | ● reprodez.com.br                                      | NE  | Uberlândia     | MG    | Sudeste |
| Vine Soluções                           | vinesolucoes.com.br                                    |   | Uberlândia     | MG    | Sudeste |
| Dinnisoft Esteio Gestão<br>Agropecuaria |  | <ul><li> /company/esteio-gest%</li><li>C3% A3o-agropecu% C3%</li><li>A1ria/</li></ul> | Viçosa         | MG    | Sudeste |
| Pecuária Brasil                         | <ul><li>pecuariabrasilassessoria.<br/>com.br</li></ul> |   | Viçosa         | MG    | Sudeste |
| Datacoper                               | datacoper.com.br                                       | <ul><li>/company/datacoper-<br/>software-ltda/</li></ul>                              | Cascavel       | PR    | Sul     |
| Farmin                                  | ● farmin.com.br  |   | Cascavel       | PR    | Sul     |
| AgriWin                                 |  | /company/agriwinbrasil/   | Castro         | PR    | Sul     |
| Agrotis Agroinformática                 | ● agrotis.com  | ● /company/<br>softwareagrotis/   | Curitiba       | PR    | Sul     |
| Agrotopus                               |  | • /sales/company/16212386   | Curitiba       | PR    | Sul     |
| Brisa Consulting                        | <ul><li>brisaconsulting.com.br</li></ul>               | NE  | Curitiba       | PR    | Sul     |
| Caqui                                   | plataformacaqui.com                                    |   | Curitiba       | PR    | Sul     |
| Leigado                                 | eigado.com.br  |   | Dois Vizinhos  | PR    | Sul     |

| Company   | URL  | LinkedIn  | City                  | State             | Region   |
|---|--|---|-----------------------|-------------------|----------|
| Mootalk   | milk.farmin.com.br                                 | NE  | Dois Vizinhos         | PR                | Sul      |
| Leigado Inteligência para<br>Gado Leiteiro            | eigado.com.br     eigado.com.br                    |   | Dois Vizinhos         | PR                | Sul      |
| CloudCRM  |  | ● /in/cloudcrm-tech-<br>87668411b   | Foz do Iguaçu         | PR                | Sul      |
| Spot Agro   |  | <ul><li>● /company/spotagro-<br/>agrotecnologia/</li></ul>                                | Foz do Iguaçu         | PR                | Sul      |
| Checkmilk   |  | ● /in/check-milk  | Londrina              | PR                | Sul      |
| FarmGo  | ● farmgo.com.br                                    |   | Maringá               | PR                | Sul      |
| Gestão Agropecuária                                   | gestaoagropecuaria.     com.br                     | /company/ gestaoagropecuaria/   | Maringá               | PR                | Sul      |
| Viasoft   |  |   | Pato Branco           | PR                | Sul      |
| Agro Pro Monitor                                      | agropromonitor.com                                 | NE  | Ponta Grossa          | PR                | Sul      |
| Avalia Sistemas                                       | avaliasistemas.com.br                              | <ul><li>● /company/avalia-<br/>sistemas/</li></ul>  | Ponta Grossa          | PR                | Sul      |
| Gestoragro  | gestoragro.online                                  |   | Toledo                | PR                | Sul      |
| Info Rio Sistemas                                     |  | NE  | petrolina             | PE                | Nordeste |
| Cultiv.aí   |  | NE  | Recife                | PE                | Nordeste |
| Aquabit   | aquabit.com.br                                     |   | Teresina              | PI                | Nordeste |
| Multisoft   | <ul><li>multisoftinformatica.<br/>com.br</li></ul> | NE  | Teresina              | PI                | Nordeste |
| Databoi   | templo.cc/databoi                                  | NE  | Rio de Janeiro        | Rio de<br>Janeiro | Sudeste  |
| Foodtech  | <ul><li>foodtechconsultoria.<br/>com.br</li></ul>  | /company/ foodtechconsultoria/  | Rio de Janeiro        | Rio de<br>Janeiro | Sudeste  |
| Agromarra   | ⊕ agromarra.com.br                                 | NE  | Natal                 | RN                | Nordeste |
| Capataz Gestão<br>Sustentável de Pecuária de<br>Corte |  | <ul><li>/company/capatazgest%</li><li>C3% A3oparapecu% C3%</li><li>A1riadecorte</li></ul> | Alegrete              | RS                | Sul      |
| agrocloud Brasil                                      | agrocloudbrasil.com.br                             | NE  | Caxias do Sul         | RS                | Sul      |
| Webagrosystem   | webagrosystem.com.br                               | NE  | Cruz Alta             | RS                | Sul      |
| Agro1   | agro1.inf.br     agro1.inf.br                      |   | Erechim               | RS                | Sul      |
| Praxiagro   | ● rstrainingrural.com.br                           | NE  | Júlio de<br>Castilhos | RS                | Sul      |
| Agrare  | agrare.com.br                                      |   | Passo Fundo           | RS                | Sul      |
| Checkplant  | checkplant.com.br                                  |   | Pelotas               | RS                | Sul      |
| Connectere Agrogestão                                 |  | <ul><li>● /company/<br/>connectereagrogestao/</li></ul>                                   | Pelotas               | RS                | Sul      |

| Company                                       | URL   | LinkedIn  | City                       | State | Region |
|---|---|---|----------------------------|-------|--------|
| Precisão em Campo                             | <ul><li>precisaoemcampo.com.</li><li>br</li></ul>   | NE  | Pelotas                    | RS    | Sul    |
| Aegro   | aegro.com.br     aegro.com.br |   | Porto Alegre               | RS    | Sul    |
| Cerealiza                                     |   | NE  | Porto Alegre               | RS    | Sul    |
| DigiFarmz Smart<br>Agriculture                |   |   | Porto Alegre               | RS    | Sul    |
| Pomartec                                      | ● pomartec.agr.br   |   | Porto Alegre               | RS    | Sul    |
| SOWAGRO                                       |   | /company/sowagrooficial                                 | Porto Alegre               | RS    | Sul    |
| Green Next                                    |   | ● /company/greennext/                                   | Rio Grande                 | RS    | Sul    |
| Scadiagro                                     |   |   | Rio Grande                 | RS    | Sul    |
| Agridados                                     | agridados.com.br  |   | Santa Maria                | RS    | Sul    |
| Drakkar / efarm                               | ● drakkar.com.br  |   | Santa Maria                | RS    | Sul    |
| efarm   | ● efarm.agr.br  | NE  | Santa Maria                | RS    | Sul    |
| Gestbov                                       |   | NE  | Santa Vitória do<br>Palmar | RS    | Sul    |
| Qualitec Rural                                | ● icaravana.com   | NE  | São Gabriel                | RS    | Sul    |
| Brabov  | <ul><li>brabov.com.br</li></ul>   |   | São Leopoldo               | RS    | Sul    |
| ControlMilk                                   | ● controlmilk.com.br  |   | Teutônia                   | RS    | Sul    |
| M2Agro  | ● facebook.com/m2agro   |   | Blumenau                   | SC    | Sul    |
| FASTEC - Soluções em<br>Tecnologia Rural      | fazendatecnologica.     com.br/   | NE  | Capinzal                   | SC    | Sul    |
| Agrofiscal                                    | agrofiscal.com.br   | ● /sales/company/67343726                               | Chapecó                    | SC    | Sul    |
| Gravitwave (Coopig)                           | gravitwave.com  | NE  | Chapecó                    | SC    | Sul    |
| Sempre Mais Sistemas                          | <ul><li>sempremaissistemas.</li><li>com.br</li></ul>  | <ul><li>● /company/sempre-mais-<br/>sistemas/</li></ul> | Chapecó                    | SC    | Sul    |
| Agrocodex                                     | ● agrocodex.com.br  | NE  | Concórdia                  | SC    | Sul    |
| Agriness                                      | • agriness.com/pt   |   | Florianópolis              | SC    | Sul    |
| Leaf  | <ul><li>leafagriculture.com.br</li></ul>  | <ul><li>/company/leaf-<br/>agriculture/</li></ul>       | Florianópolis              | SC    | Sul    |
| Rezolve                                       | <ul><li>● rezolve.com.br</li></ul>  | NE  | Florianópolis              | SC    | Sul    |
| PecSmart                                      | ● pecsmart.com.br   |   | Florianópolis              | SC    | Sul    |
| Ecomarine Biotech                             | ecomarinebiotech.com  | NE  | Itajaí                     | SC    | Sul    |
| Cowtrol                                       |   |   | Lages                      | SC    | Sul    |
| Salvo Soluções Digitais                       | salvosd.com.br  |   | Lajes                      | SC    | Sul    |
| Gota  | gotaambiental.com.br  |   | Rio Negrinho               | SC    | Sul    |
| Boa Vista Industria de<br>Óleos e Consultoria | consultoriaboavista.com   | NE  | Santa Rosa de<br>Lima      | SC    | Sul    |

| Company                               | URL   | LinkedIn   | City                     | State | Region  |
|---------------------------------------|---|--|--------------------------|-------|---------|
| Alcance Tecnologia                    | <ul><li>alcancetecnologia.com.</li><li>br</li></ul>   | ● /sales/company/28248826                                      | São Miguel do<br>Oeste   | SC    | Sul     |
| Equino Gestor                         | <ul><li>equinogestor.com.br</li></ul>   | NE   | Americana                | SP    | Sudeste |
| FMX - Smart Trato                     | • fmxsolucoes.com.br  | • /company/<br>fmxsolucoesemti/                                | Araçatuba                | SP    | Sudeste |
| Solinftec                             | <ul><li>solinftec.com</li></ul>   |  | Araçatuba                | SP    | Sudeste |
| Agritask                              | <ul><li>agritask.com</li></ul>  | <ul><li>/company/agritaskmycom-<br/>panyverification</li></ul> | Barueri                  | SP    | Sudeste |
| DataFarm                              |   |  | Campinas                 | SP    | Sudeste |
| Geração Agro                          |   |  | Campinas                 | SP    | Sudeste |
| Le Bov                                | ebov.com.br     elebov.com.br     elebo |  | Campinas                 | SP    | Sudeste |
| Pasto sempre verde                    |   | • /company/<br>pastosempreverde/                               | Campinas                 | SP    | Sudeste |
| Agroboard                             | <ul><li>agroboard.com.br</li></ul>  | <ul><li>/company/agroboard-<br/>tecnologia/</li></ul>          | Campinas                 | SP    | Sudeste |
| Izagro                                | izagro.com.br   |  | Franca                   | SP    | Sudeste |
| Agricast                              | <ul><li>● agricast.com.br</li></ul>   |  | Itatiba                  | SP    | Sudeste |
| Agrostorm                             | <ul><li>agrostorm.com.br</li></ul>  |  | Marília                  | SP    | Sudeste |
| Sig Agro Intelligence                 | <ul><li>sigfarm.com.br</li></ul>  |  | Mogi das Cruzes          | SP    | Sudeste |
| AgriGIS                               | <ul><li>agrigis.com.br</li></ul>  | NE   | Palmital                 | SP    | Sudeste |
| @tech                                 | techagr.com   |  | Piracicaba               | SP    | Sudeste |
| Agroclinic                            | <ul><li>● agroclinic.com.br</li></ul>   | NE   | Piracicaba               | SP    | Sudeste |
| Gatec                                 | gatec.com.br  |  | Piracicaba               | SP    | Sudeste |
| Gerente Boviplan                      | ⊚ gerenteboviplan.com.br  | NE   | Piracicaba               | SP    | Sudeste |
| Simple Farm                           |   | NE   | Piracicaba               | SP    | Sudeste |
| JetBov                                | jetbov.com  |  | Piracicaba               | SP    | Sudeste |
| Aquaeficiência                        | aquaeficiencia.com.br   | NE   | Pirassununga             | SP    | Sudeste |
| GoFarms                               |   | NE   | Presidente<br>Prudente   | SP    | Sudeste |
| Agrogestor                            | <ul><li>● agrogestor.com</li></ul>  | NE   | Ribeirão Preto           | SP    | Sudeste |
| Master Planti                         | masterplanti.com.br   |  | Ribeirão Preto           | SP    | Sudeste |
| Gesagri                               | ⊚ gesagri.com.br  | ● NR   | São Joaquim da<br>Barra  | SP    | Sudeste |
| Livefarm Tecnologia<br>Agropecuaria   |   | <ul><li>/company/livefarm-tech-<br/>agro/</li></ul>            | São José do Rio<br>Preto | SP    | Sudeste |
| Kersys Desenvolvimento de<br>Software | kersys.com.br   |  | São José dos<br>Campos   | SP    | Sudeste |

| Company                              | URL   | LinkedIn   | City                   | State | Region           |
|--------------------------------------|---|--|------------------------|-------|------------------|
| Agromonitor Soluções<br>Inteligentes |   | <ul><li>/company/global-<br/>partners-consulting-brazil</li></ul>                          | Sao Paulo              | SP    | Sudeste          |
| Agrimanager                          | agrimanager.com.br                              | NE   | São Paulo              | SP    | Sudeste          |
| BovControl                           | <ul><li>bovcontrol.com</li></ul>                |  | São Paulo              | SP    | Sudeste          |
| BovExo                               | <ul><li>bovexo.com</li></ul>                    |  | São Paulo              | SP    | Sudeste          |
| G.R.A. Agricola                      | ● graagricola.com.br                            | NE   | São Paulo              | SP    | Sudeste          |
| MarketUP                             | marketup.com                                    | <ul><li>/company/marketup.<br/>brasil/</li></ul>   | São Paulo              | SP    | Sudeste          |
| mititech.agro                        |   | ● /company/mititech-agro/  | São Paulo              | SP    | Sudeste          |
| Perfarm                              | <ul><li>perfarm.com</li></ul>                   | ● /company/perfarm/  | São Paulo              | SP    | Sudeste          |
| Ponki Marketing                      | ● ponki.com.br                                  | <ul><li>/company/ponki-<br/>marketing-interativo-<br/>ltda-/</li></ul>                     | São Paulo              | SP    | Sudeste          |
| Reprosis                             | ● reprosis.com.br                               | NE   | São Paulo              | SP    | Sudeste          |
| Saveadd                              |   | NE   | São Paulo              | SP    | Sudeste          |
| Shooju                               | <ul><li>shooju.com</li></ul>                    |  | São Paulo              | SP    | Sudeste          |
| SOhL Horticultura Digital            | sohl.com.br                                     | NE   | São Paulo              | SP    | Sudeste          |
| VetSmart                             | vetsmart.com.br                                 |  | São Paulo              | SP    | Sudeste          |
| Auravant Brasil Ltda                 | <ul><li>auravant.com/pt/home-<br/>pt/</li></ul> | /company/auravant/ mycompany/  | São Paulo              | SP    | Sudeste          |
| Tecbov                               | tecbov.com.br                                   | ● 0  | Sorocaba               | SP    | Sudeste          |
| i3agro                               | ⊚ i3agro.com                                    | NE   | Tatuí                  | SP    | Sudeste          |
| Agromove                             |   |  | Vinhedo                | SP    | Sudeste          |
| DigiPec                              | ● digipec.com.br                                | NE   | Araguaína              | то    | Norte            |
| Brain Agriculture                    | ● brain.agr.br                                  | <ul><li>/company/brain-<br/>agriculture/</li></ul>   | Indaiatuba             | SP    | Sudeste          |
| GeoApis                              |   |  | Piracicaba             | SP    | Sudeste          |
| ENG - Soluções<br>Tecnológicas       | ● engtecnologia.com                             | <ul><li>/company/eng-solu% C3%</li><li>A7% C3% B5es-tecnol%</li><li>C3% B3gicas/</li></ul> | Campo Grande           | MS    | Centro-<br>Oeste |
| Agrisolus                            | agrisolus.com.br                                |  | Campo Mourão           | PR    | Sul              |
| AgroClima Pro                        | climatempoconsultoria.     com.br/agroclima-pro | ● /company/climatempo/   | São José dos<br>Campos | SP    | Sudeste          |
| Tetetanque                           |   |  | Salvador               | BA    | Nordeste         |
| AgroV                                | agrov.com.br                                    | ● /company/agrov/  | Cuiabá                 | MT    | Centro-<br>Oeste |
| Beef-Tec                             | ● beeftec.com.br                                | • /in/rodrigo-spengler-<br>8587b830/   | Campo Grande           | MS    | Centro-<br>Oeste |
| Flowins                              | <ul><li>flowins.me</li></ul>                    |  | Belo Horizonte         | MG    | Sudeste          |

| Company                                | URL                                   | LinkedIn   | City          | State | Region           |
|--|---------------------------------------|--|---------------|-------|------------------|
| BMS Softwares                          | grupobms.com.br/winfit-     saat      | NE   | Viçosa        | MG    | Sudeste          |
| Brid Soluções                          | <ul><li>bridsolucoes.com.br</li></ul> |  | Londrina      | PR    | Sul              |
| Aqbits                                 |                                       |  | Teresina      | PI    | Nordeste         |
| e-Rural                                | exec.dev                              | NE   | ljuí          | RS    | Sul              |
| ConnectFarm                            |                                       |  | Porto Alegre  | RS    | Sul              |
| Elysios                                | elysios.com.br                        | <ul><li>/company/elysios-<br/>agricultura-inteligente/</li></ul>   | Porto Alegre  | RS    | Sul              |
| OvinoPro                               | ovinopro.com.br                       | ● /sales/company/69555496  | Porto Alegre  | RS    | Sul              |
| Agextec                                | agextec.com.br                        | <ul> <li>/company/agextec-solu%</li> <li>C3% A7% C3% B5es-<br/>digitais-para-o-agroneg%</li> <li>C3% B3cio/</li> </ul> | Santa Maria   | RS    | Sul              |
| Essent Agro                            | <ul><li>● essentagro.com.br</li></ul> |  | Tucunduva     | RS    | Sul              |
| Granter                                |                                       |  | Florianópolis | SC    | Sul              |
| NFeAGRO                                |                                       |  | Franca        | SP    | Sudeste          |
| BRFLOR                                 | ● brflor.com.br                       |  | Piracicaba    | SP    | Sudeste          |
| Docket                                 |                                       |  | São Paulo     | SP    | Sudeste          |
| Agriexata                              | agriexata.com.br                      | <ul><li>/company/agriexata-<br/>consultoria-em-<br/>agricultura-de-precis%<br/>C3% A3o/</li></ul>                      | Vacaria       | RS    | Sul              |
| Optimus                                | optimusgis.com.br                     |  | São Paulo     | SP    | Sudeste          |
| Wolk Tecnologia                        | wolk.com.br                           |  | Curitiba      | PR    | Sul              |
| Agromizer                              |                                       |  | Itupeva       | SP    | Sudeste          |
| Flora                                  | ● flora.agr.br                        | NE   | São Paulo     | SP    | Sudeste          |
| Web Rota                               | webrota.com.br                        |  | Uberlândia    | MG    | Sudeste          |
| Aliança da Terra /<br>Produzindo Certo | produzindocerto.com.br                | ● /company/<br>produzindocerto/  | Goiânia       | GO    | Centro-<br>Oeste |

## 2.13 Telemetry and Automation

| Company              | URL   | LinkedIn                                   | City         | State | Region           |
|----------------------|---|--|--------------|-------|------------------|
| Dropfy               |   | NE   | Brasília     | DF    | Centro-<br>Oeste |
| HomeGlobal Solutions | <ul><li>facebook.com/<br/>homeglobalsolutions</li></ul> | NE   | Goiânia      | GO    | Centro-<br>Oeste |
| Optimale             | optimale.com.br   | /company/optimale-<br>technical-solutions/ | Campo Grande | MS    | Centro-<br>Oeste |

| Company   | URL   | LinkedIn   | City                     | State | Region  |
|---|---|--|--------------------------|-------|---------|
| Rúmina  | ● rumina.com.br   |  | Belo Horizonte           | MG    | Sudeste |
| Aiko  | aiko.digital  | /company/aikobrasil  | Belo Horizonte           | MG    | Sudeste |
| Intergado   |   |  | Contagem                 | MG    | Sudeste |
| Ativa Soluções                                      | ativasolucoes.com.br  |  | Santa Rita do<br>Sapucaí | MG    | Sudeste |
| SAGA - Sistema Antifurto<br>para Gado               | <ul><li>/company/saga-cattle-<br/>anti-theft-system</li></ul> |  | Santa Rita do<br>Sapucaí | MG    | Sudeste |
| P&D Soluções  | <ul><li>pedsolucoesbrasil.com</li></ul>                       | • /in/ped-solu% C3% A7%<br>C3% B5es-industriais-e-<br>manuten% C3% A7% C3%<br>A3o-a69137182/ | Uberaba                  | MG    | Sudeste |
| Agroconforto  | <ul><li>facebook.com/</li><li>Agroconforto</li></ul>          |  | Castro                   | PR    | Sul     |
| Qualicode   | qualicode.com.br  |  | Curitiba                 | PR    | Sul     |
| Wolk Tecnologia                                     | wolk.com.br   | <ul><li>● /company/<br/>wolktecnologia/</li></ul>  | Curitiba                 | PR    | Sul     |
| Siaut   |   |  | Curitiba                 | PR    | Sul     |
| Agritel - Telemetria agrícola                       | <ul><li>● agritel.com.br</li></ul>                            |  | Londrina                 | PR    | Sul     |
| Inobram   |   |  | Pato Branco              | PR    | Sul     |
| Agres   |   | <ul><li>● /company/<br/>agresagricultura/</li></ul>  | Pinhais                  | PR    | Sul     |
| Jahde Tecnologia                                    | jahde.com.br  | <ul><li>● /company/<br/>jahdetecnologia/</li></ul>   | Lajeado                  | RS    | Sul     |
| Z2S   | • facebook.com/z2sbrasil                                      | ● /company/30144273  | Passo Fundo              | RS    | Sul     |
| Catfish Engenharia                                  | <ul><li> catfish.eng.br</li></ul>                             | NE   | Vale Verde               | RS    | Sul     |
| Packid  | <ul><li>packid.com.br</li></ul>                               |  | Chapecó                  | SC    | Sul     |
| Agrotechlink  | ● agrotechlink.com  |  | Joinville                | SC    | Sul     |
| Fruitkeep   | ● fruitkeep.com   | NE   | Lages                    | SC    | Sul     |
| LabCloud  |   |  | Lages                    | SC    | Sul     |
| Cowboy Soluções<br>Integradas para o<br>Agronegócio |   | NE   | Campinas                 | SP    | Sudeste |
| R4F Tecnologia                                      | ● r4f.com.br  | NE   | Campinas                 | SP    | Sudeste |
| Saveway   | <ul><li>saveway.com.br</li></ul>                              |  | Campinas                 | SP    | Sudeste |
| Tauflow   | tauflow.com   |  | Campinas                 | SP    | Sudeste |
| Agromizer   | ■ agromizer.com.br  |  | Itupeva                  | SP    | Sudeste |
| SensorVision  | sensorvision.com.br   |  | Paulínia                 | SP    | Sudeste |
| AgroData  | • agrodata.me   |  | Piracicaba               | SP    | Sudeste |
| Farm Solutions                                      | <ul><li>farmsolutions.com.br</li></ul>                        | <ul><li>/company/farm-solutions/</li></ul>   | Piracicaba               | SP    | Sudeste |

| Company                   | URL                                    | LinkedIn   | City                     | State             | Region   |
|---------------------------|--|--|--------------------------|-------------------|----------|
| Velos                     | velos.ag                               |  | São Carlos               | SP                | Sudeste  |
| Perfect Flight            | <ul><li>perfectflightapp.com</li></ul> |  | São João da Boa<br>Vista | SP                | Sudeste  |
| Tecsus                    | ● tecsus.com.br                        |  | São José dos<br>Campos   | SP                | Sudeste  |
| Agertek                   |  | NE   | São Paulo                | SP                | Sudeste  |
| Agri Connected            | agriconnected.com                      |  | São Paulo                | SP                | Sudeste  |
| agroThings                | <ul><li>agrothings.net</li></ul>       |  | São Paulo                | SP                | Sudeste  |
| Angoera                   |  |  | São Paulo                | SP                | Sudeste  |
| Chipsafer                 | <ul><li>● chipsafer.com</li></ul>      | <ul><li>/company/chipsafer/</li></ul>  | São Paulo                | SP                | Sudeste  |
| Flora                     | ● flora.agr.br                         | NE   | São Paulo                | SP                | Sudeste  |
| Sky.One                   |  | <ul><li>/company/skyonesolu-<br/>tionsmycompany</li></ul>                        | São Paulo                | SP                | Sudeste  |
| AgriConnected             | agriconnected.com                      |  | São Paulo                | SP                | Sudeste  |
| Meltech                   | meltech.com.br                         |  | Recife                   | PE                | Nordeste |
| Volutech                  | volutech.com.br                        |  | Viçosa                   | MG                | Sudeste  |
| Pro Solus                 | <ul><li>prosolus.com</li></ul>         | <ul><li>/company/pro-solus-do-<br/>brasil-sa/</li></ul>                          | Campo Mourão             | PR                | Sul      |
| Fishtag                   | ● fishtag.com.br                       | <ul><li>/company/fishtag-<br/>consultoria-ambiental/</li></ul>                   | Mogi Guaçu               | SP                | Sudeste  |
| duo automation            |  |  | Santa Bárbara<br>d'Oeste | SP                | Sudeste  |
| Adroit Robotics           | <ul><li>● adroitrobotics.com</li></ul> |  | São Bernardo<br>do Campo | SP                | Sudeste  |
| Evoluma                   | evoluma.com                            |  | Tubarão                  | SC                | Sul      |
| Olho Do Dono              | olhododono.agr.br                      | NE   | Vitória                  | ES                | Sudeste  |
| E-aware                   | eaware.com.br                          | <ul><li></li></ul>   | Curitiba                 | PR                | Sul      |
| iotag                     |  |  | São José dos<br>Pinhais  | PR                | Sul      |
| Phygitall                 | phygitall.com.br                       | <ul><li>/company/phygitall-solu%</li><li>C3% A7% C3% B5es-em-<br/>iot/</li></ul> | Rio de Janeiro           | Rio de<br>Janeiro | Sudeste  |
| PotyChip                  | potychip.com.br                        |  | Natal                    | RN                | Nordeste |
| Falker Automação Agrícola | ● falker.com.br                        | <ul><li>● /company/<br/>falkerautomacao/</li></ul>                               | Porto Alegre             | RS                | Sul      |
| CowMed                    |  |  | Santa Maria              | RS                | Sul      |

| Company         | URL   | LinkedIn   | City                     | State | Region  |
|-----------------|---|--|--------------------------|-------|---------|
| edroponic       | <ul><li>edroponic.iotresolve.<br/>com/kitbasico</li></ul> | NE   | Campinas                 | SP    | Sudeste |
| Lithus          | lithus.com.br   | <ul><li>/company/lithustech-<br/>sistemas-eletr% C3%<br/>B4nicos-ltda/</li></ul> | Curitiba                 | PR    | Sul     |
| Sigma           |   | ● /company/24905461  | Chapecó                  | SC    | Sul     |
| Kasco           |   |  | Campinas                 | SP    | Sudeste |
| aFHF            | ● afhf.com.br   | NE   | Matão                    | SP    | Sudeste |
| Solinftec       | solinftec.com   |  | Araçatuba                | SP    | Sudeste |
| Campotech       |   |  | Santa Rita do<br>Sapucaí | MG    | Sudeste |
| Neokohm         | neokohm.com   |  | Chapecó                  | SC    | Sul     |
| Aware Logistics | awarelog.com  |  | Campinas                 | SP    | Sudeste |

## 3 Directory of Agtechs in the Segment After the Farm

#### 3.1 Innovative foods and new food trends

| Company                         | URL   | LinkedIn  | City             | State | Region           |
|---------------------------------|---|---|------------------|-------|------------------|
| Coaper                          | <ul><li>polennatuflora.com.br</li></ul>             | NE  | Canavieiras      | ВА    | Nordeste         |
| Flora Miúra                     | ● floramiura.com.br                                 | NE  | Casa Nova        | ВА    | Nordeste         |
| Paraiso Verde                   | <ul><li>⊚ casaparaisoverde.com</li></ul>            | NE  | Ilhéus           | ВА    | Nordeste         |
| Choc                            | <ul><li>choc-chocolatesfinos.<br/>com.br</li></ul>  | <ul><li>/company/choc-<br/>chocolates-finos/</li></ul>      | Lauro de Freitas | ВА    | Nordeste         |
| Alimentos da Vila               | • alimentosdavila.com.br                            | ● /company/alimentos-da-<br>vila/                           | Salvador         | ВА    | Nordeste         |
| Gula Fit Food                   |   | NE  | Salvador         | ВА    | Nordeste         |
| Iron Bag                        | ● ironbag.com.br                                    |   | Salvador         | ВА    | Nordeste         |
| Mendoá Chocolates               | <ul><li>mendoachocolates.<br/>com.br</li></ul>      | <ul><li>/company/mendo% C3%</li><li>A1chocolates/</li></ul> | Salvador         | ВА    | Nordeste         |
| NossaFruta                      | <ul><li>nossafrutabrasil.com.br</li></ul>           | /company/nossa-fruta-<br>brasil/                            | Eusébio          | CE    | Nordeste         |
| Snackout                        |   |   | Fortaleza        | CE    | Nordeste         |
| Bioporã                         | <ul><li>biopora.com</li></ul>                       | <ul><li>/company/biopor% C3%</li><li>A3/</li></ul>          | Brasília         | DF    | Centro-<br>Oeste |
| Espirito Cacau                  | ● espiritocacau.com.br                              |   | Serra            | ES    | Sudeste          |
| Gi Alimentos                    | saudaveldagi.com.br                                 | NE  | Vila Velha       | ES    | Sudeste          |
| Vila Ervas                      | ⊚ grupovilaervas.com.br                             | NE  | Vila Velha       | ES    | Sudeste          |
| Organ Alimentos                 | • organalimentos.com.br                             | <ul><li>/company/organ-<br/>alimentos/</li></ul>            | Vitória          | ES    | Sudeste          |
| Vivaodia Lab Super<br>Alimentos | <ul><li>organicosvivaodia.com.</li><li>br</li></ul> | NE  | Vitória          | ES    | Sudeste          |
| Iza Foods                       | ● izafoods.com.br/                                  |   | Vitória          | ES    | Sudeste          |
| Cozinha sem Culpa               | cozinhasemculpa.com.br                              | NE  | Goiânia          | GO    | Centro-<br>Oeste |
| Ervaria                         |   | NE  | Neropolis        | GO    | Centro-<br>Oeste |
| Estação Solar                   | ● estacaosolar.com.br                               |   | Pirenópolis      | GO    | Centro-<br>Oeste |
| Floresta em pé                  | souflorestaempe.com.br                              | <ul><li></li></ul>  | Juína            | MT    | Centro-<br>Oeste |
| Mixnutri                        | mixnutri.com.br                                     |   | Campo Grande     | MS    | Centro-<br>Oeste |
| Línea Alimentos                 | lineaalimentos.com.br                               | /company/lineaalimentos/                                    | Araguari         | MG    | Sudeste          |
| GranMoar                        |   |   | Belo Horizonte   | MG    | Sudeste          |

| Company                            | URL   | LinkedIn   | City                     | State | Region   |
|------------------------------------|---|--|--------------------------|-------|----------|
| Java Chocolates                    | javachocolates.com.br                             |  | Belo Horizonte           | MG    | Sudeste  |
| Lifeme                             | • facebook.com/pg/<br>lifemebh                    | NE   | Belo Horizonte           | MG    | Sudeste  |
| Offgluten                          | ● offgluten.com.br                                | NE   | Belo Horizonte           | MG    | Sudeste  |
| Senhora Pipoca                     |   | <ul><li>/company/senhora-<br/>pipoca-ltda/</li></ul>   | Belo Horizonte           | MG    | Sudeste  |
| Cafe Campo Mistico                 |   | NE   | Bueno Brandão            | MG    | Sudeste  |
| Haoma                              |   | /company/haoma-health-fine-chocolate/         /company/haoma-health-         /com | Divinópolis              | MG    | Sudeste  |
| Mais Fit                           |   | NE   | Itaúna                   | MG    | Sudeste  |
| SoleaFoods                         | soleabrasil.com.br                                | <ul><li>/company/sole% C3%</li><li>A1brasil/</li></ul>   | João Pinheiro            | MG    | Sudeste  |
| Food4Fit                           | ● food4fitbrasil.com.br                           | NE   | Juiz de Fora             | MG    | Sudeste  |
| Vida Veg                           | vidaveg.com.br                                    | /company/vidaveg/         /         /         /  | Lavras                   | MG    | Sudeste  |
| Ama-O                              | amaofood.com.br                                   | NE   | Moeda                    | MG    | Sudeste  |
| Oner Alimentos                     |   | NE   | Nova Lima                | MG    | Sudeste  |
| Tim Ransley Alimentos -<br>Mardico | mardico.com.br                                    |  | Nova Lima                | MG    | Sudeste  |
| Amantikir Origem Natural           | amantikirnatural.com.br                           | <ul><li>/company/<br/>amantikirnatural/</li></ul>  | São Lourenço             | MG    | Sudeste  |
| Goodsoy / Belive                   | goodsoy.com.br                                    | /company/araunah-foods/         /  | Uberaba                  | MG    | Sudeste  |
| Amazônia Cacau                     | amazoniacacau.com.br                              | NE   | Belém                    | PA    | Norte    |
| Sekiama - Alimentos da<br>Amazônia | sekiama.com                                       | NE   | Belém                    | PA    | Norte    |
| Nutrify                            | nutrify.com.br                                    | • /company/nutrifysaude/   | Embu Guaçu               | PA    | Norte    |
| Bem Natural                        | <ul><li>bemnaturalalimentos.<br/>com.br</li></ul> |  | Cabedelo                 | РВ    | Nordeste |
| Konjac Massa MF                    | • konjacmassamf.com/                              | /company/konjac-massa-<br>mf/  | João Pessoa              | РВ    | Nordeste |
| Dr. Peanut                         |   |  | Almirante<br>Tamandaré   | PR    | Sul      |
| Carob House                        |   | <ul> <li>/company/carobhouse-<br/>ind% C3% BAstria-e-com%<br/>C3% A9rcio-de-alimentos-<br/>ltda./</li> </ul>   | Campina<br>Grande do Sul | PR    | Sul      |
| Elemento Puro                      | elementopuro.com.br                               | /company/elementopuro/   | Cascavel                 | PR    | Sul      |
| Duom Alimentos                     | laboratorioduom.com.br                            | NE   | Colombo                  | PR    | Sul      |
| Babuxca                            |   |  | Curitiba                 | PR    | Sul      |
| Broto Facil                        | <ul><li>brotofacil.com.br</li></ul>               |  | Curitiba                 | PR    | Sul      |

| Company                         | URL   | LinkedIn   | City                      | State             | Region   |
|---------------------------------|---|--|---------------------------|-------------------|----------|
| Casa Rigani Sem Glúten          | <ul><li>casariganisemgluten.</li><li>com.br</li></ul>                               | NE   | Curitiba                  | PR                | Sul      |
| Le Bio                          |   | NE   | Curitiba                  | PR                | Sul      |
| Molhos Artesanais Curitiba      | <ul><li>facebook.com/Molhos-<br/>Artesanais-Curitiba-560<br/>736114300283</li></ul> | NE   | Curitiba                  | PR                | Sul      |
| Nice Foods                      | <ul><li>nicefoods.com.br</li></ul>  |  | Curitiba                  | PR                | Sul      |
| Nutfree                         | ⊕ emporionutfree.com.br/  | NE   | Curitiba                  | PR                | Sul      |
| Panda Proteico                  | pandaproteico.com.br  | /company/panda-<br>proteico/   | Curitiba                  | PR                | Sul      |
| PerksBreak                      | <ul><li>perksbreak.com</li></ul>  |  | Curitiba                  | PR                | Sul      |
| PUTZ!                           | <ul><li>pastaputz.com.br</li></ul>  |  | Curitiba                  | PR                | Sul      |
| Sirnutri                        | <ul><li>produtosnaturais<br/>sirnutre.com</li></ul>                                 | NE   | Curitiba                  | PR                | Sul      |
| The Coffee                      |   | <ul><li>/company/the-coffee-jp/<br/>mycompany/</li></ul>                   | Curitiba                  | PR                | Sul      |
| Mandioca Iguaçu                 | mandiocasiguacu.com.br  | <ul><li>/company/mandiocas-<br/>iguacu/</li></ul>                          | Foz do Iguaçu             | PR                | Sul      |
| Benni Alimentos                 | <ul><li>bennialimentos.com.br</li></ul>   | ● /company/<br>bennialimentos/   | Ibiporã                   | PR                | Sul      |
| Viva Mate                       | vivamatebrasil.com.br   | NE   | Ivaí                      | PR                | Sul      |
| Catalmedic                      | catalmedic.com.br   | NE   | Maringá                   | PR                | Sul      |
| Annora Alimentos                | annora.com.br   | <ul><li>● /company/annora-<br/>alimentos/</li></ul>                        | Pinhais                   | PR                | Sul      |
| Colágeno Líquido -<br>Qualinova |   |  | Pinhais                   | PR                | Sul      |
| Gauer                           |   | •  | São José dos<br>Pinhais   | PR                | Sul      |
| Crokan                          |   | NE   | Petrolina                 | PE                | Nordeste |
| BioLogicus                      | <ul><li>biologicus.com.br</li></ul>   |  | Recife                    | PE                | Nordeste |
| Cia da Moringa                  | <ul><li>facebook.com/<br/>companhiadamoringa</li></ul>                              | ● NR   | Recife                    | PE                | Nordeste |
| Grupo PXT                       |   |  | Recife                    | PE                | Nordeste |
| FungiNE                         | <ul><li>funginebiotecnologia.</li><li>com</li></ul>                                 | <ul><li>/company/<br/>funginordestepesquisas<br/>embiotecnologia</li></ul> | Vitória de Santo<br>Antão | PE                | Nordeste |
| Ecodrytec                       | <ul><li>ufpi.br/empresas-<br/>incubadas</li></ul>                                   | NE   | Teresina                  | PI                | Nordeste |
| AmázzoniGin                     |   |  | Barra Mansa               | Rio de<br>Janeiro | Sudeste  |

| Company                              | URL   | LinkedIn   | City           | State             | Region   |
|--------------------------------------|---|--|----------------|-------------------|----------|
| Ginger Temperos                      | ⊚ gingertemperos.com.br                               | <ul><li>/company/ginger-<br/>temperos/</li></ul>   | Niterói        | Rio de<br>Janeiro | Sudeste  |
| DoBacon                              |   | NE   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Fazenda Culinária                    | fazendaculinaria.com.br                               | <ul><li>/company/fazenda-<br/>culinaria/</li></ul>   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Fazenda Futuro                       | <ul><li>fazendafuturo.io</li></ul>                    | ● /company/fazendafuturo/  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| GRÃO+GRÃO                            |   | NE   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Home Chefs                           | • homechefs.com.br                                    | ● /company/home-chefs/   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Leatt                                |   | <ul><li>/company/leatt-<br/>corporation/</li></ul>   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Mother Plant-based                   | mother.com.br   | <ul><li>/company/motherplant<br/>basednutrients/</li></ul>   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Mundo Livres                         | <ul><li>facebook.com/pg/<br/>MundoLivres</li></ul>    |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| NoMoo                                |   | ● /company/nomoo-<br>plant-based/?original_<br>referer=s% 3A% 2F%<br>2Fwww% 2Egoogle%<br>2Ecom% 2F&originalSu<br>bdomain=br  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| NSC - Nutritional Science<br>Company | facebook.com/     nscompanyus/                        | <ul> <li>/in/nsc-nutritional-science-company-<br/>177aba192/?original_referer=s% 3A% 2F%<br/>2Fwww% 2Egoogle%<br/>2Ecom% 2F&amp;originalSub<br/>domain=br</li> </ul> | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Purifica                             | purifica.eco.br                                       |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Seeds Brazil                         | <ul><li>seedsbrazil.com</li></ul>                     | NE   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| TARTINER                             |   |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Tiferet                              |   | ● /company/tiferet-a-f%<br>C3% A1brica-de-molhos/  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Veguita                              | basicoplantfood.com.br                                | NE   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Vitalatte & Yorgus                   | <ul><li>vitalatte.com.br;yorgus.<br/>com.br</li></ul> | <ul><li>/company/vitalatte-<br/>yorgus/</li></ul>  | Valença        | Rio de<br>Janeiro | Sudeste  |
| Cajueiro                             | ⊚ cajueiro.com.vc                                     | <ul><li>● /company/cajueiro-do-<br/>brasil/</li></ul>  | Natal          | RN                | Nordeste |

| Company                          | URL                                     | LinkedIn  | City                         | State | Region |
|----------------------------------|---|---|------------------------------|-------|--------|
| Flowbar                          |   | NE  | Arroio do Meio               | RS    | Sul    |
| Santulana Alimentos<br>Saudáveis |   |   | Caxias do Sul                | RS    | Sul    |
| TENSEI                           | ● tensei.com.br                         | <ul><li>/company/tensei-vegano-<br/>saudavel/</li></ul>             | Farroupilha                  | RS    | Sul    |
| Inovamate                        |   |   | Ilópolis                     | RS    | Sul    |
| LYOH                             |   |   | Novo Hamburgo                | RS    | Sul    |
| Hart's Naturais                  | <ul><li>hartsnatural.com.br</li></ul>   |   | Pareci Novo                  | RS    | Sul    |
| Zele Alimentos Funcionais        | <ul><li> zelealimentos.com.br</li></ul> | <ul><li>/company/z% C3% A9le-<br/>suplementos-funcionais/</li></ul> | Portão                       | RS    | Sul    |
| All Protein                      | allprotein.com.br                       |   | Porto Alegre                 | RS    | Sul    |
| Better Life                      | ● betterlifebr.com.br                   |   | Porto Alegre                 | RS    | Sul    |
| FeelJoy                          |   |   | Porto Alegre                 | RS    | Sul    |
| FeitosaGourmet                   | <ul><li>Feitosagourmet.com.br</li></ul> | <ul><li>/company/feitosa-<br/>gourmet/</li></ul>                    | Porto Alegre                 | RS    | Sul    |
| QuiperFresh                      | • quiperfresh.com.br                    |   | Porto Alegre                 | RS    | Sul    |
| TaoKombucha                      | • taokombucha.com                       |   | Porto Alegre                 | RS    | Sul    |
| Tidbit Healthy Nutrition         | ● tidbit.com.br                         | NE  | Porto Alegre                 | RS    | Sul    |
| Ambi Real Food                   | <ul><li>ambirealfood.com</li></ul>      | ● NE  | Porto Alegre                 | RS    | Sul    |
| Linho Lev                        | ● linholev.com.br                       | NE  | Santo Ângelo                 | RS    | Sul    |
| DaColônia                        | <ul><li>● dacolonia.com.br</li></ul>    | <ul><li>/company/dacolonia-<br/>alimentos-naturais-ltda/</li></ul>  | Santo Antônio<br>da Patrulha | RS    | Sul    |
| Ocean Drop                       |   |   | Balneário<br>Camboriú        | SC    | Sul    |
| Madhu Ghee                       | madhughee.com.br                        |   | Blumenau                     | SC    | Sul    |
| FiberVita                        | ● fibervita.com                         |   | Chapecó                      | SC    | Sul    |
| Biocelltis Biotecnologia S.A     | <ul><li>biocelltis.com</li></ul>        | <ul><li>● /company/<br/>biocelltisbioengenharia/</li></ul>          | Florianópolis                | SC    | Sul    |
| BIOGUMMY                         | biogummy.com                            |   | Florianópolis                | SC    | Sul    |
| Veganway Nutrition               | veganway.com.br     veganway.com.br     |   | Florianópolis                | SC    | Sul    |
| Aromy Brasile                    |   | NE  | GaSão Pauloar                | SC    | Sul    |
| Donna Asta                       | ● donnaasta.com.br                      |   | GaSão Pauloar                | SC    | Sul    |
| Santo Óleo                       | ● santooleo.com.br                      | ● /company/santo-% C3%<br>B3leo/                                    | GaSão Pauloar                | SC    | Sul    |
| Seu Divino                       | seudivino.com.br                        |   | GaSão Pauloar                | SC    | Sul    |

|                               | URL  | LinkedIn   | City                    | State | Region  |
|-------------------------------|--|--|-------------------------|-------|---------|
| Du Quintal Tempero<br>Natural | duquintal.com.br                                     |  | Itajaí                  | SC    | Sul     |
| Vitalin                       | vitalin.com.br                                       | <ul><li>/company/vitalin-<br/>alimentos-sem-gl% C3%<br/>BAten/</li></ul> | Jaraguá do Sul          | SC    | Sul     |
| Naturinni                     | <ul><li>naturinni.com.br</li></ul>                   | NE   | Nova Trento             | SC    | Sul     |
| Souly                         | souly.com.br   | NE   | Palhoça                 | SC    | Sul     |
| Natupalm                      | natupalm.com.br                                      | NE   | Porto Belo              | SC    | Sul     |
| Essential Nutrition           | <ul><li>essentialnutrition.com.</li><li>br</li></ul> | <ul><li>/company/<br/>essentialnutrition/</li></ul>                      | São José                | SC    | Sul     |
| Verdali                       | verdali.com.br                                       |  | Videira                 | SC    | Sul     |
| Nature Real Nutrition         | naturerealnutrition.com                              | NE   | Xaxim                   | SC    | Sul     |
| Rakkau                        | rakkau.com.br  | /company/rakkaus-<br>furniture-ltd/                                      | Americana               | SP    | Sudeste |
| Master Café                   | <ul><li>mastercafe.com.br</li></ul>                  |  | Araraquara              | SP    | Sudeste |
| Kom                           |  | <ul><li>/company/kom-<br/>international/</li></ul>                       | Atibaia                 | SP    | Sudeste |
| BR Spices                     | <ul><li>brspices.com.br</li></ul>                    |  | Barueri                 | SP    | Sudeste |
| Mais Pura                     | <ul><li>maispura.ind.br</li></ul>                    |  | Barueri                 | SP    | Sudeste |
| WeWish                        | <ul><li>wewi.com.br</li></ul>                        |  | Barueri                 | SP    | Sudeste |
| BrigadeiroComVC               | <ul><li>brigadeiro.com.vc</li></ul>                  |  | Barueri                 | SP    | Sudeste |
| Azeite Hass                   | azeitehass.com.br                                    | ø /in/azeite-<br>hass-246578197/   | Bauru                   | SP    | Sudeste |
| Jaguacy Brasil                | jaguacy.com.br                                       |  | Bauru                   | SP    | Sudeste |
| Snella - Gotas de Colágeno    |  | NE   | Botucatu                | SP    | Sudeste |
| Sabor Da Terra                | osabordaterra.com.br                                 | NE   | Bragança<br>Paulista    | SP    | Sudeste |
| logurte Moo                   |  |  | Brodowski               | SP    | Sudeste |
| BioinFood                     | <ul><li>bioinfood.com</li></ul>                      |  | Campinas                | SP    | Sudeste |
| Native Berries                | <ul><li>nativeberries.com.br</li></ul>               | NE   | Campinas                | SP    | Sudeste |
| Noviga                        |  |  | Campinas                | SP    | Sudeste |
| QPOD                          |  |  | Campinas                | SP    | Sudeste |
| Amazonika Mundi               | amazonikamundi.com.br                                | ø /company/<br>amazonikamundi/   | Campinas                | SP    | Sudeste |
| Fitoka                        | ● fitoka.com.br                                      |  | Campo Limpo<br>Paulista | SP    | Sudeste |
| Flow Foods / Pipó Gourmet     | <ul><li>flowfoods.com.br</li></ul>                   |  | Cotia                   | SP    | Sudeste |

| Company                          | URL   | LinkedIn  | City                    | State | Region  |
|----------------------------------|---|---|-------------------------|-------|---------|
| Essência do Vale                 | essenciadovale.com  |   | Cruzeiro                | SP    | Sudeste |
| Bentifoods                       | <ul><li>bentifoods.com.br</li></ul>   |   | Dois Córregos           | SP    | Sudeste |
| Ekobe Vitaminas e<br>Suplementos | ekobe.ind.br  |   | Franca                  | SP    | Sudeste |
| FAUNA & FLORA                    | ● faunaeflora.com.br  | <ul><li>/company/fauna-&amp;-flora-<br/>international/</li></ul>  | Franca                  | SP    | Sudeste |
| Booz Kombucha                    |   | <ul> <li>/company/boozk         ombucha/?trk=similar-         pages_ result-card_         full-click&amp;original         Subdomain=ke</li> </ul> | IlhaBela                | SP    | Sudeste |
| Almaromi Viccino                 | almoromi.com.br     almoromi.com.br | NR  | Indaiatuba              | SP    | Sudeste |
| Frispy                           |   | NE  | Indaiatuba              | SP    | Sudeste |
| Herbal Nutrition                 | • herbalnutrition.com.br  | <ul><li>/company/herbal-<br/>nutrition/</li></ul>   | São Paulo               | SP    | Sudeste |
| Britchis                         | <ul><li>britchis.com.br</li></ul>   | <ul><li>/company/<br/>britishabrasives/</li></ul>   | Itaí                    | SP    | Sudeste |
| Alere Gourmet                    | • aleregourmet.com.br   | NE  | Itapecerica da<br>Serra | SP    | Sudeste |
| No Carbon                        | nocarbon.com.br/  | NC  | Itirapina               | SP    | Sudeste |
| Strumpf                          | strumpf.com.br  | /company/ketchup-<br>strumpf/   | ltu                     | SP    | Sudeste |
| Qualifruta                       |   | NC  | Itu                     | SP    | Sudeste |
| Enzymilk                         | ● facebook.com/Enzymilk-<br>107365687737907   | NE  | Jaboticabal             | SP    | Sudeste |
| Alimentaryum                     |   | NE  | Jarinu                  | SP    | Sudeste |
| Belnatur                         | <ul><li>belnatur.com.br</li></ul>   | <ul><li>/company/belnatur-<br/>jundiai/</li></ul>   | Jundiaí                 | SP    | Sudeste |
| Vegway Foods                     | <ul><li>vegwayfoods.com.br</li></ul>  | NE  | Jundiaí                 | SP    | Sudeste |
| Sorbos Canudo Comestível         | <ul><li>canudocomestivel.com.</li><li>br</li></ul>  | NE  | Louveira                | SP    | Sudeste |
| Power One                        | power1one.com.br  | NE  | Marília                 | SP    | Sudeste |
| Dorff                            | baladorff.com.br  | NE  | Martinópolis            | SP    | Sudeste |
| Nutrawell                        | nutrawell.com.br  |   | Mirandópolis            | SP    | Sudeste |
| Villa Piva                       | villapiva.com.br  | NE  | Osasco                  | SP    | Sudeste |
| Lotus Produtos Naturais          | lotusprodutos.com.br  | /company/lotus-pet-<br>foods/   | Pindamonhan-<br>gaba    | SP    | Sudeste |
| Florien                          |   |   | Piracicaba              | SP    | Sudeste |
| AIRON                            | <ul><li>aironsaboresaude.com.</li><li>br</li></ul>  | /company/airon-inovacao-<br>do-brasil/  | Ribeirão Preto          | SP    | Sudeste |

| Company                          | URL  | LinkedIn  | City                       | State | Region  |
|----------------------------------|--|---|----------------------------|-------|---------|
| Hakkuna                          |  | <ul><li>/company/hakkuna-<br/>foodtech/</li></ul>   | Ribeirão Preto             | SP    | Sudeste |
| YACON-BR                         | <ul><li>yaconfos.com.br</li></ul>                  | NE  | Ribeirão Preto             | SP    | Sudeste |
| La Pianezza                      |  |   | Santa Bárbara<br>d'Oeste   | SP    | Sudeste |
| tecbio FOOD                      | • bsweet.me  | /company/tecbioinvert/  | Santa Bárbara<br>d'Oeste   | SP    | Sudeste |
| Gobeche Chocolates               |  |   | Santa Cruz do<br>Rio Pardo | SP    | Sudeste |
| Mr. Veggy                        | mrveggy.com  |   | Santana de<br>Parnaíba     | SP    | Sudeste |
| H2life                           |  | <ul><li>/company/h2life-<br/>alimentos/</li></ul>   | Santo André                | SP    | Sudeste |
| The One Supps                    | • theonesupps.com                                  | NE  | Santo André                | SP    | Sudeste |
| Morrones                         | <ul><li>facebook.com/<br/>morronesveg/</li></ul>   | NE  | São Caetano<br>do Sul      | SP    | Sudeste |
| LioMeal                          |  | <ul><li>/in/liomeal-liofiliza%</li><li>C3% A7% C3% A3o-de-<br/>alimentos-69575210a/</li></ul> | São Carlos                 | SP    | Sudeste |
| Biotech                          |  | NE  | São José dos<br>Campos     | SP    | Sudeste |
| Trade Food                       |  | <ul><li>/company/trade-food-<br/>brasil/</li></ul>  | São José dos<br>campos     | SP    | Sudeste |
| 100 Foods                        | ● 100foods.com.br                                  |   | São Paulo                  | SP    | Sudeste |
| Adaptogen / Quest                | adaptogen.com.br                                   |   | São Paulo                  | SP    | Sudeste |
| Alho Negro do Sitio              | alhonegrodositio.com.br                            |   | São Paulo                  | SP    | Sudeste |
| ATaldaCastanha                   | ataldacastanha.com.br                              |   | São Paulo                  | SP    | Sudeste |
| Awí Earth Warriors<br>Superfoods | awisuperfoods.com.br                               |   | São Paulo                  | SP    | Sudeste |
| b.eat                            | b-eatfood.com                                      | ● /company/b-eatfood/   | São Paulo                  | SP    | Sudeste |
| Baer-Mate                        | baermate.com                                       |   | São Paulo                  | SP    | Sudeste |
| Beba Rio                         |  | NE  | São Paulo                  | SP    | Sudeste |
| Behind The Foods                 | <ul><li>behindthefoods.com.br</li></ul>            | NE  | São Paulo                  | SP    | Sudeste |
| Bianca Simões                    | <ul><li>//blog.biancasimoes.<br/>com.br/</li></ul> | <ul><li>/company/bianca-simoes-<br/>cozinha-natural/</li></ul>                                | São Paulo                  | SP    | Sudeste |
| Bombay                           | <ul><li>bombayhs.com.br</li></ul>                  |   | São Paulo                  | SP    | Sudeste |
| B-ON Nutrição                    |  |   | São Paulo                  | SP    | Sudeste |
| Bravo Açai                       | bravoacai.com.br                                   | NE  | São Paulo                  | SP    | Sudeste |

| Company                    | URL  | LinkedIn  | City      | State | Region  |
|----------------------------|--|---|-----------|-------|---------|
| Cafene Innova (Bitcoffee)  | bitcoffee.com.br                                   | NE  | São Paulo | SP    | Sudeste |
| Caffeine Army              | caffeinearmy.com.br                                |   | São Paulo | SP    | Sudeste |
| Caldo Natural              | caldonatural.com.br                                | /company/caldo-natural/                                   | São Paulo | SP    | Sudeste |
| Castanharia                | castanharia.com                                    | /company/castanharia/                                     | São Paulo | SP    | Sudeste |
| Celivita Gluten Free       | celivita.com.br                                    |   | São Paulo | SP    | Sudeste |
| Chock                      |  |   | São Paulo | SP    | Sudeste |
| Chocolife                  |  |   | São Paulo | SP    | Sudeste |
| Color Andina Food          |  | /company/color-andina-<br>food/                           | São Paulo | SP    | Sudeste |
| Cucina di Manjuba / Fresco | ⊚ cucinadimanjuba.com.br                           | <ul><li>/company/<br/>cucinadimanjuba/</li></ul>          | São Paulo | SP    | Sudeste |
| Cuesta Gourmet             |  | NE  | São Paulo | SP    | Sudeste |
| Da Terrinha Alimentos      | <ul><li>daterrinhaalimentos.</li><li>com</li></ul> | <ul><li>/company/<br/>daterrinhaalimentos/</li></ul>      | São Paulo | SP    | Sudeste |
| Desinchá                   |  |   | São Paulo | SP    | Sudeste |
| Dobro                      |  |   | São Paulo | SP    | Sudeste |
| Dux Nutrition Lab          |  |   | São Paulo | SP    | Sudeste |
| Eat Clean                  | <ul><li>● eatcleanbrasil.com.br</li></ul>          |   | São Paulo | SP    | Sudeste |
| Energia da Terra           | energiadaterra.com.br                              |   | São Paulo | SP    | Sudeste |
| Estar Bem                  | <ul><li>estarbemalimentos.<br/>com.br</li></ul>    | <ul><li>/company/estar-bem-<br/>distribuidora/</li></ul>  | São Paulo | SP    | Sudeste |
| Fit Food                   | <ul><li>fitfoodbrasil.com</li></ul>                |   | São Paulo | SP    | Sudeste |
| Five Diamonds              |  |   | São Paulo | SP    | Sudeste |
| Flora Fiora                |  |   | São Paulo | SP    | Sudeste |
| Foodz                      |  |   | São Paulo | SP    | Sudeste |
| Fresco                     | eatfresco.com.br                                   |   | São Paulo | SP    | Sudeste |
| Germinou                   | germinou.com.br                                    |   | São Paulo | SP    | Sudeste |
| Gerônimo Foods             |  | <ul><li>/company/ger% C3%</li><li>B4nimo-foods/</li></ul> | São Paulo | SP    | Sudeste |
| Gold&Ko                    | gold-ko.com.br                                     |   | São Paulo | SP    | Sudeste |
| holy nuts                  | <ul><li>holynuts.com.br</li></ul>                  |   | São Paulo | SP    | Sudeste |
| Hummus Compot              |  | NE  | São Paulo | SP    | Sudeste |
| Isto É Veg                 |  | NE  | São Paulo | SP    | Sudeste |
| Jakêra                     | ⊚ jakera.com.br                                    | ● /company/jak% C3%<br>AAra/                              | São Paulo | SP    | Sudeste |
| Kiro Bebidas               | <ul><li>bebakiro.com</li></ul>                     |   | São Paulo | SP    | Sudeste |
| Lifemix                    |  |   | São Paulo | SP    | Sudeste |

| Company                               | URL  | LinkedIn   | City      | State | Region  |
|---------------------------------------|--|--|-----------|-------|---------|
| Lowko                                 |  |  | São Paulo | SP    | Sudeste |
| Made In Natural                       | madeinnatural.com.br                                     | /company/made-in-<br>natural/  | São Paulo | SP    | Sudeste |
| Maismu                                |  |  | São Paulo | SP    | Sudeste |
| Mbee Mel De Terroir                   |  |  | São Paulo | SP    | Sudeste |
| Mee Bebidas Criativas                 | <ul><li>bebamee.com.br</li></ul>                         | NE   | São Paulo | SP    | Sudeste |
| Mestiço Chocolates Ltda               | <ul><li>mesticochocolates.com.</li><li>br</li></ul>      | NE   | São Paulo | SP    | Sudeste |
| Miss Croc                             |  | NE   | São Paulo | SP    | Sudeste |
| Origem Temperos<br>Milenares          | ● origemtemperos.com.br/                                 | NE   | São Paulo | SP    | Sudeste |
| Monnid Doces                          | monnid.com.br  |  | São Paulo | SP    | Sudeste |
| Mun Artesanal Proteína<br>Sustentável | munartesanal.com   | <ul><li>/company/mun-artesanal-<br/>prote% C3% ADna-<br/>sustent% C3% A1vel/</li></ul> | São Paulo | SP    | Sudeste |
| DaOca                                 | ● sorvetenaked.com.br                                    |  | São Paulo | SP    | Sudeste |
| Naked Nuts                            |  |  | São Paulo | SP    | Sudeste |
| Natural One                           | ● natone.com.br  |  | São Paulo | SP    | Sudeste |
| Natuterra                             | natuterradrinks.com                                      | ø /company/<br>natuterradrinks/  | São Paulo | SP    | Sudeste |
| Nutripleno                            | <ul><li>nutripleno2.<br/>webSiteseguro.com/br/</li></ul> | <ul><li>/company/nutripleno-<br/>alimentos/</li></ul>                                  | São Paulo | SP    | Sudeste |
| Nutrisanti                            | <ul><li>● nutrisanti.com.br</li></ul>                    | /company/santialimentos/   | São Paulo | SP    | Sudeste |
| Oak's Burritos                        | <ul><li>oaksburritos.com</li></ul>                       | <ul><li>/company/oak%</li><li>27s-burritos/</li></ul>                                  | São Paulo | SP    | Sudeste |
| Olga RI                               | olgari.com.br  |  | São Paulo | SP    | Sudeste |
| One More - Balanc                     | onemoredrink.com.br                                      | ø /company/one-more<br>balance-drink/  | São Paulo | SP    | Sudeste |
| Organic 4                             | ● organic4.com.br  |  | São Paulo | SP    | Sudeste |
| Original Blend                        | ● originalblend.com.br/                                  | <ul><li>/company/originalblend/</li></ul>  | São Paulo | SP    | Sudeste |
| Padariadosbebês                       | • padariadosbebes.com.br                                 | ø /company/<br>padariadosbebes/  | São Paulo | SP    | Sudeste |
| Pamalani                              | <ul><li>pamalani.com.br/store</li></ul>                  | NE   | São Paulo | SP    | Sudeste |
| Pão de Beijo                          | <ul><li>paodebeijo.com.br</li></ul>                      | NE   | São Paulo | SP    | Sudeste |
| Pasta de Amendoim da<br>Tereza        | <ul><li>pastadeamendoimdate-<br/>reza.com.br</li></ul>   | <ul><li>/company/pasta-de-<br/>amendoim-da-tereza/</li></ul>                           | São Paulo | SP    | Sudeste |
| PIC ME                                | <ul><li>picmenatural.com.br</li></ul>                    |  | São Paulo | SP    | Sudeste |
| PipóGourmet                           | <ul><li>pipogourmet.com.br</li></ul>                     | NE   | São Paulo | SP    | Sudeste |

| Company                      | URL  | LinkedIn   | City        | State | Region  |
|------------------------------|--|--|-------------|-------|---------|
| Puravida                     | puravida.com.br                                      |  | São Paulo   | SP    | Sudeste |
| Puro Verde                   | <ul><li>puroverdesucos.com.br</li></ul>              |  | São Paulo   | SP    | Sudeste |
| Qualy ErvaseE Bomfloral      |  | <ul><li>/company/qualy-ervas-<br/>natural-nutrition/</li></ul> | São Paulo   | SP    | Sudeste |
| Reserva Mundi                | reservamundi.com.br                                  | NE   | São Paulo   | SP    | Sudeste |
| RootsToGo                    | ● rootstogo.com.br                                   |  | São Paulo   | SP    | Sudeste |
| só                           | <ul><li>sosnacks.mercadoshops.<br/>com.br/</li></ul> | NE   | São Paulo   | SP    | Sudeste |
| Sorvete Mondo                | <ul><li>sorvetemondo.com.br</li></ul>                |  | São Paulo   | SP    | Sudeste |
| Sowl                         | ● ritualsowl.com.br                                  |  | São Paulo   | SP    | Sudeste |
| Sri Sri Tattva               | • srisriayurveda.com.br/                             |  | São Paulo   | SP    | Sudeste |
| STEVIA 12                    | ⊚ stevia12.com.br                                    | NE   | São Paulo   | SP    | Sudeste |
| The New Butcher              | • thenewbutchers.com.br                              |  | São Paulo   | SP    | Sudeste |
| The Question Mark<br>Company | questionmark.com.br                                  | <ul><li>/company/thequestion-<br/>markcompany/</li></ul>       | São Paulo   | SP    | Sudeste |
| Tudozeroleite                |  |  | São Paulo   | SP    | Sudeste |
| Urban Remedy                 | urbanremedy.com.br                                   | • /company/urban-remedy-<br>brasil/                            | São Paulo   | SP    | Sudeste |
| Utropia                      | <ul><li>facebook.com/<br/>umautropia</li></ul>       |  | São Paulo   | SP    | Sudeste |
| Veganah Foods                | <ul><li>veganah.com.br</li></ul>                     |  | São Paulo   | SP    | Sudeste |
| Vegpet                       | vegpet.com.br  |  | São Paulo   | SP    | Sudeste |
| Vih!                         |  | NE   | São Paulo   | SP    | Sudeste |
| WVEGAN                       | <ul><li>wvegan.com.br</li></ul>                      | NE   | São Paulo   | SP    | Sudeste |
| Énozes                       | • amoenozes.com.br/                                  | • /company/% C3%<br>A9nozes/                                   | São Paulo   | SP    | Sudeste |
| Blends do Brasil             | cafeblendsdobrasil.com                               | <ul><li>/company/caf% C3% A9-<br/>blends-do-brasil/</li></ul>  | São Paulo   | SP    | Sudeste |
| Green Up                     | ⊚ greenup.com.br                                     |  | São Paulo   | SP    | Sudeste |
| More Plants                  |  | ● /in/t% C3% BAlio-<br>rodrigues-b6196012                      | São Paulo   | SP    | Sudeste |
| Super Vegan                  | superveganchoc.com.br                                |  | São Vicente | SP    | Sudeste |
| Casarão / Allgood            | sealalimentos.com.br                                 | NE   | Tatuí       | SP    | Sudeste |
| NachoLoco                    | nacholoco.com.br                                     |  | Vinhedo     | SP    | Sudeste |
| Zaya                         | zayaflour.com  | NR   | Vinhedo     | SP    | Sudeste |
| Biolinker                    | ● biolinker.tech/                                    |  | São Paulo   | SP    | Sudeste |

| Company                              | URL   | LinkedIn   | City                 | State             | Region   |
|--------------------------------------|---|--|----------------------|-------------------|----------|
| Foodtech                             | <ul><li>foodtechconsultoria.<br/>com.br</li></ul>       | <ul><li>/company/<br/>foodtechconsultoria/</li></ul>             | Rio de Janeiro       | Rio de<br>Janeiro | Sudeste  |
| PolyNatural                          |   | •  | Santiago de<br>Chile | SP                | Sudeste  |
| Mondial Brands                       | • facebook.com/<br>mondialbrands                        | NE   | São Paulo            | SP                | Sudeste  |
| Sustentec - Produtores<br>Associados |   | <ul><li>/company/sustentec-<br/>produtores-associados/</li></ul> | Pato Bragado         | PR                | Sul      |
| Inspire - La Food                    | inspirealimentos.com                                    | NE   | Rio de Janeiro       | Rio de<br>Janeiro | Sudeste  |
| Scienco Biotech                      |   | <ul><li>/company/scienco-<br/>biotech/</li></ul>                 | Lages                | SC                | Sul      |
| SetYou                               | setyou.com.br   |  | São Paulo            | SP                | Sudeste  |
| Frutas Exoticas Brasileiras          | <ul><li>frutasexoticasbrasileiras.<br/>com.br</li></ul> | NE   | São Paulo            | SP                | Sudeste  |
| Fru-Fruta                            | ● frufruta.com.br                                       |  | Curitiba             | PR                | Sul      |
| Cachaça Samanaú                      | cachacasamanau.com.br                                   | NE   | Natal                | RN                | Nordeste |
| LibreAlimentos                       | librealimentos.com.br                                   |  | São Paulo            | SP                | Sudeste  |
| Liv Up                               |   |  | São Paulo            | SP                | Sudeste  |
| Supra Ervas                          |   | NE   | Maringá              | PR                | Sul      |

# 3.2 Storage, Infrastructure and Logistics

| Company  | URL  | LinkedIn  | City                      | State | Region           |
|--|--|---|---------------------------|-------|------------------|
| Agrimapp   | agrimapp.com.br                                    |   | Luís Eduardo<br>Magalhães | ВА    | Nordeste         |
| Gravel Coin  | <ul><li>● gravelcoin.com</li></ul>                 |   | Salvador                  | BA    | Nordeste         |
| Infleet  |  |   | Salvador                  | BA    | Nordeste         |
| Gekom  | gekom.com.br                                       | <ul><li>/company/gekom-<br/>combustivel/</li></ul>          | Vitória                   | ES    | Sudeste          |
| Nutriimport  | <ul><li>gruponutriimport.com.</li><li>br</li></ul> | NE  | Vitória                   | ES    | Sudeste          |
| E-Log Brasil   | • facebook.com/elogbrasil                          | NE  | Balsas                    | MA    | Nordeste         |
| Ataros   | • ataros.io  | NE  | Cuiabá                    | MT    | Centro-<br>Oeste |
| Rondon Gerenciamento de<br>Riscos e Monitoramento de<br>Veículos | ● rondongr.com.br                                  | <ul><li>/company/rondongeren-<br/>ciamentoderisco</li></ul> | Cuiabá                    | MT    | Centro-<br>Oeste |

| Company           | URL   | LinkedIn   | City                     | State             | Region   |
|-------------------|---|--|--------------------------|-------------------|----------|
| Juice Delivery    | <ul><li>juicedelivery.online</li></ul>  | NE   | Belo Horizonte           | MG                | Sudeste  |
| Portal Delivery   | <ul><li>portaldelivery.click</li></ul>  | NE   | Conselheiro<br>Lafaiete  | MG                | Sudeste  |
| Lupi Delivery     | <ul><li>lupi.delivery</li></ul>   | NE   | Sete Lagoas              | MG                | Sudeste  |
| Campotech         |   |  | Santa Rita do<br>Sapucaí | MG                | Sudeste  |
| Azship            | <ul><li>azship.com.br</li></ul>   |  | Uberlândia               | MG                | Sudeste  |
| Polifrete         | <ul><li>polifrete.com</li></ul>   |  | Uberlândia               | MG                | Sudeste  |
| Web Rota          | webrota.com.br  | ● /company/webrota/  | Uberlândia               | MG                | Sudeste  |
| Moovery           |   |  | João Pessoa              | PB                | Nordeste |
| Trucker do Agro   | ● truckerdoagro.agr.br  | ● /company/truckerdoagro/  | Campo Mourão             | PR                | Sul      |
| AddLog            | addlog.com.br   | <ul><li>/company/addlog-solu%</li><li>C3% A7% C3% B5es-<br/>tecnol% C3% B3gicas/</li></ul> | Curitiba                 | PR                | Sul      |
| Cargon            |   |  | Curitiba                 | PR                | Sul      |
| Link Agro         | <ul><li>linkmonitoramento.<br/>com.br/blog/postagem-<br/>completa/18/</li></ul> | •  | Curitiba                 | PR                | Sul      |
| Melck             |   |  | Curitiba                 | PR                | Sul      |
| Cycloar           |   |  | Curitiba                 | PR                | Sul      |
| Agropacking       | <ul><li>agropackingsolutions.</li><li>com</li></ul>                             |  | Londrina                 | PR                | Sul      |
| LebenLOG          |   |  | Londrina                 | PR                | Sul      |
| Termoplex         | <ul><li>● termoplex.com.</li><li>br/#home</li></ul>                             |  | Londrina                 | PR                | Sul      |
| Trace Pack        |   |  | Londrina                 | PR                | Sul      |
| Tem entrega       |   | <ul><li>/company/unionsystem-<br/>sistemas/</li></ul>                                      | Maringá                  | PR                | Sul      |
| Ironware          | ● ironware.com.br   | <ul><li>/company/ironware-<br/>sistemas-para-industria/</li></ul>                          | Ponta Grossa             | PR                | Sul      |
| Bushel do Brasil  | <ul><li>busheldobrasil.com.br</li></ul>   | <ul><li>busheldobrasil</li></ul>   | Quatro Barras            | PR                | Sul      |
| Silos             | <ul><li>silosbrasil.com</li></ul>   | NE   | Rio Azul                 | PR                | Sul      |
| Tendyaaz          | tendyaaz.com.br     tendyaaz.com.br   | ● /in/renato-machado-<br>b47a28188/  | Toledo                   | PR                | Sul      |
| Omniturn          |   | /company/omniturnbr/   | Recife                   | PE                | Nordeste |
| RFID Technologies | ● rfidtechnologies.com.br   | NE   | Rio de Janeiro           | Rio de<br>Janeiro | Sudeste  |
| Target            |   | NE   | Rio de Janeiro           | Rio de<br>Janeiro | Sudeste  |

| Company                                 | URL   | LinkedIn  | City           | State | Region  |
|---|---|---|----------------|-------|---------|
| AgroD Inovação e<br>Resultados no Campo | ■ agrodtech.com.br  | NE  | Caxias do Sul  | RS    | Sul     |
| Agrolocal                               |   |   | Pelotas        | RS    | Sul     |
| Melhor Envio                            | melhorenvio.com.br  |   | Pelotas        | RS    | Sul     |
| ChoppFácil                              | choppfacil.com.br   |   | Porto Alegre   | RS    | Sul     |
| Silo Verde                              | <ul><li>tecnosinos.com.br/<br/>livrodigital/company/<br/>silo-verde</li></ul> |   | São Leopoldo   | RS    | Sul     |
| Нуре                                    |   | NE  | Blumenau       | SC    | Sul     |
| Closin Tecnologia                       |   |   | Chapecó        | SC    | Sul     |
| Neokohm                                 | neokohm.com   |   | Chapecó        | SC    | Sul     |
| Procer Automação                        | procer.com.br   | <ul><li>/company/<br/>procertecnologia/</li></ul> | Criciúma       | SC    | Sul     |
| Quartz Technology                       |   | NE  | Florianópolis  | SC    | Sul     |
| Veggi                                   | veggi.io  | <ul><li>br./company/veggibr</li></ul>             | Florianópolis  | SC    | Sul     |
| Aware Logistics                         | awarelog.com  |   | Campinas       | SP    | Sudeste |
| CropChain                               |   |   | Campinas       | SP    | Sudeste |
| Tiffin Foods                            | • tiffinfoods.com.br  |   | Campinas       | SP    | Sudeste |
| Clique Comida                           | cliquecomida.com.br   | ● /in/clique-comida-<br>23594a1bb                 | Osvaldo Cruz   | SP    | Sudeste |
| Agroprox                                | <ul><li>esalqtec.com.br/site/<br/>project/agroprox</li></ul>                  | NE  | Piracicaba     | SP    | Sudeste |
| MicroControl Innovation                 | icorpsbrasil.com.br/     microcontrol   |   | Ribeirão Preto | SP    | Sudeste |
| Fluit                                   | https://choppupbr.     wixsite.com/fluit                                      | https://www./company/ fluitio/                    | São Paulo      | SP    | Sudeste |
| Box Delivery                            | <ul><li>boxdelivery.com.br</li></ul>  | /company/     boxdeliveryonline/                  | Santos         | SP    | Sudeste |
| B2log                                   | b2log.com   |   | São Paulo      | SP    | Sudeste |
| Brasil Fretes                           | brasilfretes.com.br   |   | São Paulo      | SP    | Sudeste |
| Carbono Zero                            |   | /company/carbono-zero-<br>courier/                | São Paulo      | SP    | Sudeste |
| ChefMeat                                |   |   | São Paulo      | SP    | Sudeste |
| ChoppUp                                 |   |   | São Paulo      | SP    | Sudeste |
| Collectspot                             | collectspot.com   |   | São Paulo      | SP    | Sudeste |
| Eats for You                            | eatsforyou.com.br   |   | São Paulo      | SP    | Sudeste |
| Intelipost                              | intelipost.com.br   |   | São Paulo      | SP    | Sudeste |
| Loggi                                   | ● loggi.com   |   | São Paulo      | SP    | Sudeste |

| Company                                  | URL   | LinkedIn   | City           | State             | Region           |
|--|---|--|----------------|-------------------|------------------|
| Mandaê                                   | mandae.com.br   |  | São Paulo      | SP                | Sudeste          |
| Mondial Brands                           | • facebook.com/<br>mondialbrands                              | NE   | São Paulo      | SP                | Sudeste          |
| PegaKi                                   | pegaki.com.br   |  | São Paulo      | SP                | Sudeste          |
| SaideraBrasil                            | saiderabrasil.com.br  | /company/saidera-brasil/   | São Paulo      | SP                | Sudeste          |
| Sontra Cargo                             |   |  | São Paulo      | SP                | Sudeste          |
| Terra Nova Solução em<br>Desinfecção     | ● tnco.com.br   | NE   | São Paulo      | SP                | Sudeste          |
| Comboyo Asymmetric<br>Logistic Solutions | ⊚ comboyo.com.br.   | <ul><li>/company/comboyo-<br/>asymmetric-logistic-<br/>solutions/</li></ul>    | São Paulo      | SP                | Sudeste          |
| Nana Delivery                            |   |  | São Paulo      | SP                | Sudeste          |
| AppJusto                                 |   |  | São Paulo      | SP                | Sudeste          |
| GFB                                      |   |  | São Paulo      | SP                | Sudeste          |
| Ecotrace Tecnologia da<br>Informação     | <ul><li>● ecotrace.info</li></ul>                             | <ul><li>/company/ecotrace-<br/>solutions/</li></ul>                            | Vinhedo        | SP                | Sudeste          |
| BioLambda                                |   |  | São Paulo      | SP                | Sudeste          |
| SharedEquips                             | <ul><li>comunidade.startse.<br/>com/in/sharedequips</li></ul> | <ul><li>https://www.linkedin.<br/>com/school/startse/</li></ul>                | São Paulo      | SP                | Sudeste          |
| Econtrole                                | econtrole.com   | NE   | Viçosa         | MG                | Sudeste          |
| Frete Rápido                             | ● freterapido.com   | https://www.<br>linkedin.com/sales/<br>company/10491579                        | Baixo Guandu   | ES                | Sudeste          |
| RapixLog                                 | ● rapixlog.com.br   | NE   | Sinop          | MT                | Centro-<br>Oeste |
| B tracer                                 | ● btracer.com.br  |  | Belo Horizonte | MG                | Sudeste          |
| Giinger Foodtech                         |   |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| Smart Grain                              | <ul><li></li></ul>  |  | Cuiabá         | MT                | Centro-<br>Oeste |
| CargoX                                   |   |  | São Paulo      | SP                | Sudeste          |
| Lummer                                   | ● instagram.com/lummer_<br>delivery/                          | NE   | Boituba        | SP                | Sudeste          |
| Zero Plastics                            | e zeroplastic.com.br/   | <ul><li>/company/zero-plastic-<br/>oceans/?originalSub<br/>domain=fr</li></ul> | Americana      | SP                | Sudeste          |
| BioSmart Nanotechnology                  | <ul><li>biosmartnano.com</li></ul>                            | <ul><li>/company/biosmart-<br/>nanotechnology-ltda/</li></ul>                  | Araraquara     | SP                | Sudeste          |
| Reciclapac                               | ⊚ //reciclapac.com.br/  | NR   | São Paulo      | SP                | Sudeste          |
| Arabyka                                  |   | NE   | Londrina       | PR                | Sul              |

# 3.3 Biodiversity and Sustainability

| Company                                | URL   | LinkedIn   | City           | State             | Region           |
|--|---|--|----------------|-------------------|------------------|
| Apse Cosmetics                         | apsecosmetics.com.br                              | ● NR   | Vitória        | ES                | Sudeste          |
| Aliança da Terra /<br>Produzindo Certo | produzindocerto.com.br                            | /company/<br>produzindocerto/                                    | Goiânia        | GO                | Centro-<br>Oeste |
| Bankarbon                              | <ul><li>bankarbon.com</li></ul>                   | NE   | Campo Grande   | MS                | Centro-<br>Oeste |
| Zero Carbono                           | zerocarbon.com.br                                 | /company/zerocarbon-<br>brasil/                                  | Belo Horizonte | MG                | Sudeste          |
| Cerrado Científica                     | cerradocientifica.com.br                          | NE   | Uberlândia     | MG                | Sudeste          |
| Universo Saudável                      | universosaudavel.com.br                           | <ul><li>/company/universo-saud%</li><li>C3% A1vel/</li></ul>     | Ananindeua     | PA                | Norte            |
| Amazonfruitfood                        | • amazonfruitsofficial.com                        | NE   | Castanhal      | PA                | Norte            |
| NanoMetallis                           | nanometallis.com.br                               |  | Curitiba       | PR                | Sul              |
| Sustentec - Produtores<br>Associados   | • sustentec.org.br                                | <ul><li>/company/sustentec-<br/>produtores-associados/</li></ul> | Pato Bragado   | PR                | Sul              |
| MUSH                                   | mush.eco  |  | Ponta Grossa   | PR                | Sul              |
| Grupo Nanomax®                         | • facebook.com/<br>Nanomaxltda                    | NE   | Toledo         | PR                | Sul              |
| BioBureau                              | <ul><li>biobureau.com.br</li></ul>                |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| TreeID Legal                           | • treeidlegal.com                                 |  | Natal          | RN                | Nordeste         |
| Drº ECCOS - Hortas<br>Urbanas          | eccosrecyclle.com.br                              | ● /in/roberto-<br>silva-57129028/                                | Campo Bom      | RS                | Sul              |
| Terramares                             | • facebook.com/<br>terramaresambiental            | /company/ terramaresambiental/                                   | Pelotas        | RS                | Sul              |
| ArboreaBiotech                         | arboreabiotech.com                                | <ul><li>/company/arborea-<br/>biotech/</li></ul>                 | Porto Alegre   | RS                | Sul              |
| Regenera Moléculas do<br>Mar           | <ul><li>regeneramoleculas.<br/>com.br</li></ul>   | <ul><li></li></ul>   | Porto Alegre   | RS                | Sul              |
| Turma da Árvore                        | turmadaarvore.com.br                              | <ul><li>● /company/<br/>turmadaarvore/</li></ul>                 | Lages          | SC                | Sul              |
| PlantCare                              | ● plantcare.com.br                                | NE   | Campinas       | SP                | Sudeste          |
| Rubian                                 | rubian.com.br                                     | /company/rubianextratos/   | Campinas       | SP                | Sudeste          |
| Cosnatech                              | <ul><li>● cosnatech.com.br</li></ul>              | ● /company/cosnatech/  | Campinas       | SP                | Sudeste          |
| Haka Bioprocessos                      | <ul><li>/company/haka-<br/>bioprocessos</li></ul> | /company/haka-<br>bioprocessos/                                  | Catanduva      | SP                | Sudeste          |
| Agttec Inovação                        |   | NE   | Dois Córregos  | SP                | Sudeste          |
| Aquavale                               |   | <ul><li>/in/woshinghton-gervaz-<br/>0a85906b</li></ul>           | Jaboticabal    | SP                | Sudeste          |

| Company                            | URL   | LinkedIn   | City            | State | Region           |
|------------------------------------|---|--|-----------------|-------|------------------|
| Mirá Biotech                       | mirabiotech.com.br  |  | Mogi das Cruzes | SP    | Sudeste          |
| Tramppo                            | ● tramppo.com.br  |  | Osasco          | SP    | Sudeste          |
| Delta CO2                          | ø deltaco2.com.br   | ● NR   | Piracicaba      | SP    | Sudeste          |
| Equilibrio Florestal               | • equilibrioflorestal.com. br   | <ul><li>/company/equil% C3%</li><li>ADbrio-prota% C3% A7%</li><li>C3% A3o-florestal/</li></ul> | Piracicaba      | SP    | Sudeste          |
| Geplant                            |   |  | Piracicaba      | SP    | Sudeste          |
| ProInsecta                         | ● icorpsbrasil.com.br/<br>proinsecta  | NE   | Piracicaba      | SP    | Sudeste          |
| Cotton Droplet                     |   | <ul><li>/company/cotton-droplet-<br/>inc/</li></ul>  | São Paulo       | SP    | Sudeste          |
| geoflorestas                       |   |  | São Paulo       | SP    | Sudeste          |
| Graha agroflorestas<br>urbanas     |   | NE   | São Paulo       | SP    | Sudeste          |
| JustyBioSolutions                  | <ul><li>justybiosolutions.com</li></ul>   | <ul><li>/company/<br/>justybiosolutions/</li></ul>   | São Paulo       | SP    | Sudeste          |
| Seiva Brasilis                     | <ul><li>● seivabrazilis.com.br</li></ul>  | <ul><li>/company/seivabrasilis-<br/>ltda/</li></ul>  | São Paulo       | SP    | Sudeste          |
| Eccaplan                           | eccaplan.com.br   | <ul><li>/company/eccaplan-<br/>consultoria-em-<br/>sustentabilidade/</li></ul>                 | São Paulo       | SP    | Sudeste          |
| Communitaria Consultoria<br>Social |   |  | São Paulo       | SP    | Sudeste          |
| Acquaplant                         | • acquaplant.com.br   | <ul><li>/company/acquaplantqu%</li><li>C3% ADmicadobrasil/</li></ul>                           | Joinville       | SC    | Sul              |
| BMV - Programa Brasil<br>Mata Viva | <ul><li>brasilmataviva.com.br</li></ul>   |  | Goiânia         | GO    | Centro-<br>Oeste |
| Eumostro                           | ● sobre.eumostro.com.br/  | /company/     eumostrooficial/   | Florianópolis   | SC    | Sul              |
| Biofíliza                          | ● biofilica.com.br/   | /company/biofilicabr/  | São Paulo       | SP    | Sudeste          |
| Moss Earth                         | moss.earth  |  | São Paulo       | SP    | Sudeste          |
| Cia das Algas (Netuno)             |   |  | Traíri          | CE    | Nordeste         |
| Biotecland                         | biotecland.com  |  | Luziânia        | GO    | Centro-<br>Oeste |
| YBY Inovações<br>Biotecnológicas   | <ul><li>pb.programacentelha.<br/>com.br/es1/empresa/<br/>yby-inovacoes-<br/>biotecnologicas</li></ul> | NE   | João Pessoa     | РВ    | Nordeste         |
| Ecodefense                         |   |  | Toledo          | PR    | Sul              |
| INBC                               |   | NE   | Palhoça         | SC    | Sul              |

| Company                                       | URL  | LinkedIn   | City                  | State             | Region   |
|---|--|--|-----------------------|-------------------|----------|
| Biodiversita                                  |  | <ul> <li>/company/<br/>biodiversita/?trk=public_<br/>profile_topcard-current-<br/>company&amp;origina<br/>ISubdomain=br</li> </ul> | Campinas              | SP                | Sudeste  |
| Krom (Cotton Droplet)                         | • krom.com.br/cotton.<br>html                                  |  | São Paulo             | SP                | Sudeste  |
| Agroper                                       | ■ agroper.com.br/  | <ul><li> ∕company/agroper-org%</li><li>C3% A2nicos/</li></ul>  | Lajeado               | RS                | Sul      |
| Verdartis                                     | <ul><li>verdartis.com.br</li></ul>                             | NE   | Ribeirão Preto        | SP                | Sudeste  |
| Tuxtu   | tuxtu.com.br   |  | Macapá                | AP                | Norte    |
| Ideelab                                       | ideelab.com.br   | ● /company/ideelabbr/  | Piracicaba            | SP                | Sudeste  |
| Astech  |  | NE   | Petrópolis            | Rio de<br>Janeiro | Sudeste  |
| BioSource Company                             | <ul><li>cietec.org.br/project/<br/>biosource-company</li></ul> | NE   | São Paulo             | SP                | Sudeste  |
| RSU Brasil                                    | ● rsubrasil.com.br   |  | São Paulo             | SP                | Sudeste  |
| Tec3geo                                       | tec3geo.com.br   | NE   | São Paulo             | SP                | Sudeste  |
| SDW   | <ul><li>sdwforall.com</li></ul>                                | • /company/sdwforall/  | Salvador              | ВА                | Nordeste |
| Acquaconte                                    | <ul><li>acquaconte.com.br</li></ul>                            | <ul><li>/in/acquaconte-solu%</li><li>C3% A7% C3% B5es-h%</li><li>C3% ADdricas-sustent%</li><li>C3% A1veis-519771162/</li></ul>     | Londrina              | PR                | Sul      |
| O Polen                                       | opolen.com.br  |  | Curitiba              | PR                | Sul      |
| Gota  |  | ● /company/gota-projetos/  | Rio Negrinho          | SC                | Sul      |
| Boa Vista Industria de<br>Óleos e Consultoria |  | NE   | Santa Rosa de<br>Lima | SC                | Sul      |
| Veganway Nutrition                            | veganway.com.br  | • /company/veganway-<br>nutrition/   | Florianópolis         | SC                | Sul      |
| YACON-BR                                      | <ul><li>yaconfos.com.br</li></ul>                              | NE   | Ribeirão Preto        | SP                | Sudeste  |
| MicroControl Innovation                       | <ul><li>icorpsbrasil.com.br/<br/>microcontrol</li></ul>        |  | Ribeirão Preto        | SP                | Sudeste  |
| Universo Saudável                             | • universosaudavel.com.br                                      | <ul><li>/company/universo-saud%</li><li>C3% A1vel/</li></ul>   | Ananindeua            | PA                | Norte    |
| Globalyeast                                   |  |  | Rio de Janeiro        | Rio de<br>Janeiro | Sudeste  |
| BioativosGroup                                | <ul><li>bioativosgroup.com.br</li></ul>                        | <ul><li>/company/bioativos-<br/>naturais/</li></ul>  | São Paulo             | SP                | Sudeste  |
| GreenB Biological Solutions<br>LTDA           |  | <ul><li>/company/greenb-<br/>biological-solutions-ltda/</li></ul>  | Criciúma              | SC                | Sul      |
| Smart Yeast                                   |  |  | Piracicaba            | SP                | Sudeste  |
| Meu Copo Eco                                  | meucopoeco.com.br  |  | Florianópolis         | SC                | Sul      |

# 3.4 Bioenergy and Renewable Energy

| Company                                  | URL   | LinkedIn                           | City           | State             | Region   |
|--|---|------------------------------------|----------------|-------------------|----------|
| Puro Fogo                                | purofogo.com.br   | NE                                 | Andrelândia    | MG                | Sudeste  |
| Solarbid                                 | solarbid.com.br   | NE                                 | Belo Horizonte | MG                | Sudeste  |
| BChem                                    | bchem.com.br  | NE                                 | Itaúna         | MG                | Sudeste  |
| eco3energia                              | eco3energia.com.br  |                                    | Nova Lima      | MG                | Sudeste  |
| Inocas                                   |   |                                    | Patos de Minas | MG                | Sudeste  |
| Inovathys                                | ● /in/celsopadilha  |                                    | João Pessoa    | PB                | Nordeste |
| Bley Energias                            |   | ● /in/cicero-bley-<br>jr-38321523/ | Curitiba       | PR                | Sul      |
| Eletricow                                | • penseagro.paniclobster. com/teams/41                          | NE                                 | Curitiba       | PR                | Sul      |
| Hidreo (antiga Metha)                    |   |                                    | Curitiba       | PR                | Sul      |
| Globalyeast                              | globalyeast.com   | ● /company/globalyeast/            | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Syra Solar                               | • syrasolar.com   | ● /company/syrasolar/              | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Brazilian Biocombustíveis                | <ul><li>brazilianbiocombusti-<br/>veis.com</li></ul>            | NE                                 | Macaíba        | RN                | Nordeste |
| Biotechnos                               |   | NE                                 | Santa Rosa     | RS                | Sul      |
| SulBiogás                                | <ul><li>● sulbiogas.com</li></ul>                               |                                    | Florianópolis  | SC                | Sul      |
| Vignis                                   | vignis.com.br   | NE                                 | Campinas       | SP                | Sudeste  |
| Eacea Soluções em Cultivo<br>Protegido   | eacea.com.br  | • /in/eacea                        | Cunha          | SP                | Sudeste  |
| Algae                                    | ■ algae.com.br  | NE                                 | Holambra       | SP                | Sudeste  |
| Solar Market                             |   |                                    | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| CH4 Soluções                             | <ul><li>ch4agroenergia.wixsite.<br/>com/ch4agroenegia</li></ul> | NE                                 | Piracicaba     | SP                | Sudeste  |
| Sunalizer                                | sunalizer.com.br  |                                    | Ribeirão Preto | SP                | Sudeste  |
| BioativosGroup                           |   | <ul><li></li></ul>                 | São Paulo      | SP                | Sudeste  |
| Carbosolo                                | cietec.org.br/project/     carbosolo                            | NE                                 | São Paulo      | SP                | Sudeste  |
| Fermentec                                | ● fermentec.com.br  |                                    | São Paulo      | SP                | Sudeste  |
| iSolis Brasilis Praticas<br>Sustentaveis |   | NE                                 | São Paulo      | SP                | Sudeste  |
| GranBio                                  | ⊚ granbio.com.br/   |                                    | São Paulo      | SP                | Sudeste  |

| Company        | URL  | LinkedIn   | City    | State | Region  |
|----------------|--|--|---------|-------|---------|
| SEER           | <ul><li>seer-tecnologia.</li><li>webnode.com</li></ul> | <ul><li>/company/seer-<br/>tecnologia/</li></ul> | Tabapuã | SP    | Sudeste |
| Linear Energia |  | NE   | Xanxerê | SC    | Sul     |

# 3.5 Cloud kitchen and ghost kitchen

| Company       | URL                    | LinkedIn                         | City           | State | Region  |
|---------------|------------------------|----------------------------------|----------------|-------|---------|
| SmartKitchens | • smartkitchens.com.br | NE                               | Belo Horizonte | MG    | Sudeste |
| Clouki        |                        |                                  | Curitiba       | PR    | Sul     |
| Le Manjue     |                        | ● /company/le-manjue-<br>bistro/ | São Paulo      | SP    | Sudeste |
| Mimic         |                        |                                  | São Paulo      | SP    | Sudeste |
| DDM           |                        |                                  | São Paulo      | SP    | Sudeste |

## 3.6 Food industry and processing 4.0

| Company                     | URL                                     | LinkedIn   | City           | State             | Region           |
|-----------------------------|---|--|----------------|-------------------|------------------|
| Shimejito                   | shimejito.com                           |  | Brasília       | DF                | Centro-<br>Oeste |
| Cogni                       |   | NE   | Goiânia        | GO                | Centro-<br>Oeste |
| Industrycare                |   | ● /company/industrycare/   | Goiânia        | GO                | Centro-<br>Oeste |
| AS31                        | • facebook.com/As31-<br>600218513504572 | NE   | Belo Horizonte | MG                | Sudeste          |
| Orbita                      | ● orbitaei.com.br                       | <ul><li>/company/<br/>orbitatecnologia/</li></ul>  | Belo Horizonte | MG                | Sudeste          |
| MilkChain                   | milkchain.com.br                        | NE   | Juiz de Fora   | MG                | Sudeste          |
| Aimirim Pulse               | aimirimsti.com.br                       | • /company/aimirim-solu%<br>C3% A7% C3% B5es-<br>tecnol% C3% B3gicas-<br>integradas-ltda-/ | Uberlândia     | MG                | Sudeste          |
| Amazondreams                | br./company/amazon-<br>dreams-sa        | /company/amazon- dreams-sa/  | Belém          | PA                | Norte            |
| Manfing                     | manfing.com                             |  | Toledo         | PR                | Sul              |
| Senfio                      | senfio.com                              |  | Recife         | PE                | Nordeste         |
| Inspire - La Food           |   | NE   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| GreenB Biological Solutions | greenbtech.com                          | ● /company/greenb-<br>biological-solutions-ltda/   | Criciúma       | SC                | Sul              |

| Company                                  | URL   | LinkedIn  | City                    | State | Region  |
|--|---|---|-------------------------|-------|---------|
| Aquarela Advanced<br>Analytics           | aquare.la   |   | Florianópolis           | SC    | Sul     |
| S3nano Indústria de<br>Aditivos Químicos |   | • /company/s3nano/  | Florianópolis           | SC    | Sul     |
| Agapys                                   |   | <ul><li>/company/<br/>agapysconsulting/</li></ul>                                 | Joinville               | SC    | Sul     |
| Mais Soluções Inteligentes               | <ul><li>maissi.com.br</li></ul>                   | <ul><li>/company/mais-solu%</li><li>C3% A7% C3% B5es-<br/>inteligentes/</li></ul> | Lages                   | SC    | Sul     |
| Scienco Biotech                          | scienco.bio.br                                    | <ul><li>/company/scienco-<br/>biotech/</li></ul>                                  | Lages                   | SC    | Sul     |
| Siosi                                    | siosi.com.br                                      |   | Pinhalzinho             | SC    | Sul     |
| IBY FOODS                                | ibyfoods.com.br                                   |   | Campinas                | SP    | Sudeste |
| if.IntelligentFoods                      |   | <ul><li>/company/if-intelligent-<br/>foods/</li></ul>                             | Itupeva                 | SP    | Sudeste |
| Intelup                                  |   |   | Piracicaba              | SP    | Sudeste |
| Smart Yeast                              |   |   | Piracicaba              | SP    | Sudeste |
| Pentagro                                 | pentagro.com.br                                   | <ul><li>/company/pentagro-solu-<br/>es-tecnol-gicas/</li></ul>                    | São Carlos              | SP    | Sudeste |
| SetYou                                   | setyou.com.br                                     |   | São Paulo               | SP    | Sudeste |
| Ag-Solution                              | <ul><li>● ag-solution.co</li></ul>                |   | Vargem Grande<br>do Sul | SP    | Sudeste |
| Ivare                                    |   |   | Uberlândia              | MG    | Sudeste |
| Neoprospecta                             | neoprospecta.com                                  | <ul><li>/company/neoprospecta-<br/>food/</li></ul>                                | Florianópolis           | SC    | Sul     |
| Beer2U                                   | beer2u.com.br                                     |   | Riberão Preto           | SP    | Sudeste |
| T5 Tecnologia                            |   |   | Florianópolis           | SC    | Sul     |
| ST-One                                   | st-one.io   |   | Curitiba                | PR    | Sul     |
| IdealSis                                 | ● idealsis.com.br                                 | ● NR  | Buritama                | SP    | Sudeste |
| Quickium                                 | • quickium.com                                    | • https://www.<br>linkedin.com/sales/<br>company/34671071                         | Piracicaba              | SP    | Sudeste |
| Trade Food                               | ● tradefood.com.br                                | <ul><li>/company/trade-food-<br/>brasil/</li></ul>                                | São José dos<br>campos  | SP    | Sudeste |
| Vegpet                                   | vegpet.com.br     vegpet.com.br     vegpet.com.br |   | São Paulo               | SP    | Sudeste |
| Algae                                    | algae.com.br                                      | NE  | Holambra                | SP    | Sudeste |
| Safe Trace                               | safetrace.com.br                                  |   | Itajubá                 | MG    | Sudeste |

# 3.7 Marketplaces and Trade and sales Platforms for agriculture and livestock products

| Company                              | URL   | LinkedIn   | City                       | State | Region           |
|--------------------------------------|---|--|----------------------------|-------|------------------|
| Onisafra                             | <ul><li>● onisafra.com</li></ul>                |  | Manaus                     | AM    | Norte            |
| Aproxima Grãos                       | aproximagraos.com.br                            | <ul><li>/company/aproximagr%</li><li>C3% A3os</li></ul>        | Luís Eduardo<br>Magalhães  | BA    | Nordeste         |
| Stono Ex                             | stonoex.com                                     |  | Salvador                   | ВА    | Nordeste         |
| Muda meu Mundo                       | <ul><li>mudameumundo.com.</li><li>br/</li></ul> | /company/muda-meu-mundo/                                       | Fortaleza                  | CE    | Nordeste         |
| Wine                                 | wine.com.br                                     |  | Serra                      | ES    | Sudeste          |
| Haveacoffee                          | haveacoffee.com.br                              | <ul><li>/company/have-a-coffee<br/>-barista-digital/</li></ul> | Venda Nova do<br>Imigrante | ES    | Sudeste          |
| Ecopen Engenharia de<br>Pesca        | • facebook.com/eco-<br>penproducaodepescado     | ● NR   | Vila Velha                 | ES    | Sudeste          |
| Farmly                               | <ul><li>farmlyclub.com</li></ul>                |  | Vitória                    | ES    | Sudeste          |
| Agrai (Antiga Raiz<br>Capixaba)      | ⊕ agrai.com.br/                                 | ● /company/agraibrasil/  | Vitória                    | ES    | Sudeste          |
| Conecta Campo Business               | app.vc/     conectacampobusiness                | NE   | Caldas Novas               | GO    | Centro-<br>Oeste |
| eBarnPortal de Negócios<br>Agrícolas | ebarn.com.br                                    |  | Goiânia                    | GO    | Centro-<br>Oeste |
| TrackingCoop                         |   | NE   | Goiânia                    | GO    | Centro-<br>Oeste |
| Feira Delivery                       | dafeiradelivery.com.br                          |  | Rio Verde                  | GO    | Centro-<br>Oeste |
| Cropper                              | ⊚ cropper.com.br/                               | ● /in/cropper-mercado-<br>agro-a252b71b1/                      | Campo Verde                | MT    | Centro-<br>Oeste |
| Gado Certo                           |   |  | Cuiabá                     | MT    | Centro-<br>Oeste |
| Agrotonic                            | agrotronic.com.br                               |  | Lucas do Rio<br>Verde      | MT    | Centro-<br>Oeste |
| Agrity                               | ⊕ agrity.com.br                                 |  | Nova Mutum                 | MT    | Centro-<br>Oeste |
| Boi24h                               |   | ● /in/boi-vinte-quatro-<br>horas-226492201/                    | Sinop                      | MT    | Centro-<br>Oeste |
| Compre Rural                         |   |  | Campo Grande               | MS    | Centro-<br>Oeste |
| Trucadão                             |   |  | Campo Grande               | MS    | Centro-<br>Oeste |
| Leiloapp                             | eiloapp.com.br/      leiloapp.com.br/           |  | Três Lagoas                | MS    | Centro-<br>Oeste |

| Company                           | URL   | LinkedIn   | City                        | State             | Region   |
|-----------------------------------|---|--|-----------------------------|-------------------|----------|
| Rede do Campo                     | rededocampo.com.br                                      | /company/rededocam-<br>poagronegocio/                                    | Alfenas                     | MG                | Sudeste  |
| Da Horta na Porta                 | dahortapraporta.com.br                                  | /company/da-horta-pra-<br>porta/   | Belo Horizonte              | MG                | Sudeste  |
| Materre                           | <ul><li>Materre.com.br</li></ul>                        | NE   | Belo Horizonte              | MG                | Sudeste  |
| TARKEN                            | • tarken.ag   |  | Belo Horizonte              | MG                | Sudeste  |
| The Best Coffee in Brazil         | • thebestcoffeeinbrazil. com                            | <ul><li>/company/the-best-<br/>coffee-in-brazil/</li></ul>               | Poços de Caldas             | MG                | Sudeste  |
| Agrorigem                         | agrorigem.com.br  |  | Santa Rita do<br>Sapucaí    | MG                | Sudeste  |
| E-ctare                           | ectare.com.br   |  | São Sebastião<br>do Paraíso | MG                | Sudeste  |
| Grão Direto                       | • graodireto.com.br                                     |  | Uberaba                     | MG                | Sudeste  |
| Agromercantil                     | agromercantil.com.br                                    | /company/agromercantil/  | Uberlândia                  | MG                | Sudeste  |
| Coozco                            |   | NE   | João Pessoa                 | PB                | Nordeste |
| Agromatic Automação e<br>Controle | agromatic.com.br  | •  | Cascavel                    | PR                | Sul      |
| Osalim Agribusiness               |   | <ul><li>/company/osalim-<br/>agribusiness/</li></ul>                     | Curitiba                    | PR                | Sul      |
| Supercampo                        |   | <ul><li>● /company/supercampo-<br/>sa/</li></ul>                         | Curitiba                    | PR                | Sul      |
| Growin Co                         | • growinco.com  |  | Curitiba                    | PR                | Sul      |
| Agrallis Imóveis                  | agrallisimoveis.com.br                                  |  | Jandaia do Sul              | PR                | Sul      |
| Nobis                             | • eatnobis.com  | ● 0  | Japira                      | PR                | Sul      |
| Mercado Agro                      |   | NE   | Londrina                    | PR                | Sul      |
| Lojas Country                     |   |  | Recife                      | PE                | Nordeste |
| Pitiba                            | <ul><li>● instagram.com/<br/>pitibahortifruti</li></ul> | <ul><li>/company/pitiba-<br/>distribuidora-de-<br/>hortifruti/</li></ul> | Vitória de Santo<br>Antão   | PE                | Nordeste |
| Horse Bids                        | ● horsebids.com.br/                                     | NE   | Niterói                     | Rio de<br>Janeiro | Sudeste  |
| APYS                              |   | /company/     plataformaapys/  | Niterói                     | Rio de<br>Janeiro | Sudeste  |
| FooDivine                         |   |  | Rio de Janeiro              | Rio de<br>Janeiro | Sudeste  |
| Gavea Marketplace                 | ● gavea.com   | /company/gavea-<br>marketplace/  | Rio de Janeiro              | Rio de<br>Janeiro | Sudeste  |
| YBY Online                        | ybyonline.com.br  |  | Rio de Janeiro              | Rio de<br>Janeiro | Sudeste  |

| Company               | URL   | LinkedIn   | City                | State             | Region  |
|-----------------------|---|--|---------------------|-------------------|---------|
| Newtail               | newtail.com.br/                                   |  | Rio de Janeiro      | Rio de<br>Janeiro | Sudeste |
| 12+                   | ● 12mais.com/                                     |  | Rio de Janeiro      | Rio de<br>Janeiro | Sudeste |
| Clubbi                |   |  | Rio de Janeiro      | Rio de<br>Janeiro | Sudeste |
| AgPay                 | agpay.com.br                                      |  | Cachoeira do<br>Sul | RS                | Sul     |
| AgriHome              | <ul><li>● agrihome.com.br</li></ul>               |  | Passo Fundo         | RS                | Sul     |
| Aurora                | <ul><li>● sigaaurora.com</li></ul>                | NE   | Porto Alegre        | RS                | Sul     |
| Campear               |   | ⊚ /company/campear/  | Porto Alegre        | RS                | Sul     |
| Central do Boi        | <ul><li>● centraldoboi.com</li></ul>              |  | Porto Alegre        | RS                | Sul     |
| Moagro                | facebook.com/pg/     moagro/posts                 | NE   | Porto Alegre        | RS                | Sul     |
| Somos PMP             |   |  | Porto Alegre        | RS                | Sul     |
| Agricon               | <ul><li>● agriconbusiness.com/</li></ul>          | •  | Porto Alegre        | RS                | Sul     |
| Gestor Orgânico       | <ul><li>● gestororganico.com.br</li></ul>         |  | Blumenau            | SC                | Sul     |
| Unibov                | ● facebook.com/unibov                             | NE   | Blumenau            | SC                | Sul     |
| Biomercado            | biomercadobrasil.com.br                           | <ul><li>/company/biomercado-<br/>brasil/</li></ul>                                   | Palhoça             | SC                | Sul     |
| Restin                | <ul><li>● restin.com.br</li></ul>                 |  | Americana           | SP                | Sudeste |
| Civilitas             |   |  | Bauru               | SP                | Sudeste |
| Busca Terra           | <ul><li>buscaterra.com.br</li></ul>               |  | Campinas            | SP                | Sudeste |
| Meu Quintal Orgânicos | <ul><li>meuquintalorganicos.<br/>com.br</li></ul> | NR   | Cordeirópolis       | SP                | Sudeste |
| Seu Gado              | <ul><li>seugado.com</li></ul>                     | NE   | Franca              | SP                | Sudeste |
| hortify               | ● hortify.app                                     |  | Holambra            | SP                | Sudeste |
| Agroplace             | • agroplace.online                                |  | Junqueirópolis      | SP                | Sudeste |
| MFRural               | ● mfrural.com.br                                  |  | Marília             | SP                | Sudeste |
| Commotech             | <ul><li>commotech.net</li></ul>                   | <ul><li>/company/commotech-<br/>marketplace/</li></ul>                               | Piracicaba          | SP                | Sudeste |
| Veroo                 | veroo.com.br/                                     |  | Ribeirao Preto      | SP                | Sudeste |
| Agromercador          | ● agromercador.ag                                 | <ul><li>/company/agromercador-<br/>marketplace/?originalSub-<br/>domain=au</li></ul> | Ribeirão Preto      | SP                | Sudeste |
| HF Rural              | <ul><li>hfrural.com</li></ul>                     |  | Ribeirão Preto      | SP                | Sudeste |
| JV Biotec             | <ul><li>jvbiotec.com.br</li></ul>                 |  | Ribeirão Preto      | SP                | Sudeste |
| Rural Sale            | ● ruralsale.com.br                                | NE   | Ribeirão Preto      | SP                | Sudeste |

| Company                     | URL   | LinkedIn  | City                     | State | Region  |
|-----------------------------|---|---|--------------------------|-------|---------|
| Terravi                     |   | NE  | Ribeirão Preto           | SP    | Sudeste |
| CompreGados                 | ● compregados.com.br  | • /company/compregados/                           | São José do Rio<br>Preto | SP    | Sudeste |
| Fazenda Aberta              | ● fazendaaberta.com.br  | ● NR  | São José do Rio<br>Preto | SP    | Sudeste |
| Distribuitor                | ● distribuitor.com.br/  | •   | São José do Rio<br>Preto | SP    | Sudeste |
| 4vets                       | grupo4vets.com.br   |   | São Paulo                | SP    | Sudeste |
| Agrishare                   | agrishare.com.br  | <ul><li>/company/agrishare/</li></ul>             | São Paulo                | SP    | Sudeste |
| Agrobooks                   | <ul><li>agrobooks.com.br</li></ul>  | NE  | São Paulo                | SP    | Sudeste |
| Boi na Linha                | <ul><li>● boinalinha.com</li></ul>  |   | São Paulo                | SP    | Sudeste |
| BPSS                        | ● bpss.com.br   |   | São Paulo                | SP    | Sudeste |
| CargoX                      |   |   | São Paulo                | SP    | Sudeste |
| CBC Agronegocios            | cbcagronegocios.com.br  |   | São Paulo                | SP    | Sudeste |
| Clicampo                    |   |   | São Paulo                | SP    | Sudeste |
| Cotabest                    |   |   | São Paulo                | SP    | Sudeste |
| Edafo Pec                   | ● edafopec.com  |   | São Paulo                | SP    | Sudeste |
| Evino                       | evino.com.br      o     evino.com.br     evi |   | São Paulo                | SP    | Sudeste |
| Fazen                       |   |   | São Paulo                | SP    | Sudeste |
| Finpec                      |   |   | São Paulo                | SP    | Sudeste |
| Frutas Exoticas Brasileiras | <ul><li>frutasexoticasbrasileiras.<br/>com.br</li></ul>   | NE  | São Paulo                | SP    | Sudeste |
| Frutas na Mesa              | • frutasnamesa.com.br   |   | São Paulo                | SP    | Sudeste |
| Fungo de Quintal            | <ul><li>fungodequintal.com.br</li></ul>   | <ul><li>/company/fungo-de-<br/>quintal/</li></ul> | São Paulo                | SP    | Sudeste |
| Instaagro                   | ● instaagro.com   |   | São Paulo                | SP    | Sudeste |
| Karavel                     |   |   | São Paulo                | SP    | Sudeste |
| Natue                       | natue.com.br  |   | São Paulo                | SP    | Sudeste |
| Netfoods                    | netfoods.com.br   |   | São Paulo                | SP    | Sudeste |
| Numenu                      | numenu.info   |   | São Paulo                | SP    | Sudeste |
| Pangea Parts                | pangeaparts.com.br  |   | São Paulo                | SP    | Sudeste |
| Pingo                       | ■ usepingo.com  |   | São Paulo                | SP    | Sudeste |
| Smartagro                   |   | NE  | São Paulo                | SP    | Sudeste |
| Supermercado Now            | supermercadonow.com   | <ul><li>/company/supermercado-<br/>now/</li></ul> | São Paulo                | SP    | Sudeste |
| Vida Em Grãos               | vidaemgraos.com.br  |   | São Paulo                | SP    | Sudeste |

| Company                         | URL   | LinkedIn  | City                    | State             | Region   |
|---------------------------------|---|---|-------------------------|-------------------|----------|
| Webgados                        | webgados.com.br                                     | NE  | São Paulo               | SP                | Sudeste  |
| Caiena                          | ⊚ caiena.agr.br/                                    |   | São Paulo               | SP                | Sudeste  |
| OpenSolo                        |   |   | São Paulo               | SP                | Sudeste  |
| Floki                           |   |   | São Paulo               | SP                | Sudeste  |
| Glocou                          |   | NE  | São Paulo               | SP                | Sudeste  |
| Gooxxy                          | gooxxy.com  |   | São Paulo               | SP                | Sudeste  |
| Litos                           |   |   | São Paulo               | SP                | Sudeste  |
| Yes We Grow                     | <ul><li>yeswegrow.com.br</li></ul>                  | /company/yes-we-grow/<br>people/                      | São Paulo               | SP                | Sudeste  |
| connectbuy                      |   | •   | São Paulo               | SP                | Sudeste  |
| Santa Food                      | • santafood.com.br                                  | <ul><li>/company/santa-food-<br/>alimentos/</li></ul> | São Paulo               | SP                | Sudeste  |
| B4 Waste                        | b4waste.com.br/                                     |   | São Paulo               | SP                | Sudeste  |
| Baskets                         |   |   | São Paulo               | SP                | Sudeste  |
| Caffeex                         |   |   | São Paulo               | SP                | Sudeste  |
| Rural Vende                     | o ruralvende.com.br                                 | NE  | Sorocaba                | SP                | Sudeste  |
| Orgânicos da Vila               | organicosdavila.com.br                              | NE  | Suzano                  | SP                | Sudeste  |
| Agrobatida                      | • agrobatida.com.br                                 | NE  | Aracaju                 | Sergipe           | Nordeste |
| Olá Rancho                      | <ul><li>instagram.com/<br/>olarancho</li></ul>      | NE  | Araguaína               | то                | Norte    |
| agro2business                   | ⊕ agro2business.com/                                |   | Taboão da Serra         | SP                | Sudeste  |
| Animal Flower                   | animalflower.com.br                                 | NE  | São Paulo               | SP                | Sudeste  |
| Alluagro                        | alluagro.com.br                                     |   | Uberlândia              | MG                | Sudeste  |
| Tracktoor                       | ● tracktoor.com.br                                  |   | Uberlândia              | MG                | Sudeste  |
| ASP Agrodigital                 | <ul><li>apspagrodigital.com.br</li></ul>            | NE  | Pompéia                 | SP                | Sudeste  |
| Fertili                         | <ul><li>● fertili.com.br</li></ul>                  |   | Vitória da<br>Conquista | ВА                | Nordeste |
| Databoi                         | templo.cc/databoi                                   | NE  | Rio de Janeiro          | Rio de<br>Janeiro | Sudeste  |
| Vivaodia Lab Super<br>Alimentos | <ul><li>organicosvivaodia.com.</li><li>br</li></ul> | NE  | Vitória                 | ES                | Sudeste  |
| Orgânicos in Box                | ● organicosinbox.com.br                             | <ul><li>● /company/<br/>organicosinbox/</li></ul>     | Rio de Janeiro          | Rio de<br>Janeiro | Sudeste  |
| Home Refill                     | homerefill.com.br                                   | /company/homerefill/                                  | São Paulo               | SP                | Sudeste  |
| ATábua Artesanal                |   |   | São Paulo               | SP                | Sudeste  |

# 3.8 Online grocery

| Company             | URL                                      | LinkedIn  | City           | State             | Region           |
|---------------------|--|---|----------------|-------------------|------------------|
| eMercado            | <ul><li>● emercadoapp.com</li></ul>      | <ul><li>/company/<br/>emercadodigital/</li></ul>            | Manaus         | AM                | Norte            |
| Dindix              |  |   | Salvador       | ВА                | Nordeste         |
| Ubaiacestasdesaúde  | • portalubaia.com.br                     | NE  | Brasília       | DF                | Centro-<br>Oeste |
| Laszlo Aromatologia | <ul><li>● emporiolaszlo.com.br</li></ul> | /company/laszlooficial/                                     | Belo Horizonte | MG                | Sudeste          |
| Suub                |  |   | Belo Horizonte | MG                | Sudeste          |
| Bertolin            | • chacarabertolin.com.br                 | <ul><li>/company/ch% C3%</li><li>A1cara-bertolin/</li></ul> | Colombo        | PR                | Sul              |
| Cooltivando         |  |   | Curitiba       | PR                | Sul              |
| Fru-Fruta           | ● frufruta.com.br                        |   | Curitiba       | PR                | Sul              |
| Themarket           | • themarket.com.br                       | /company/themarket-<br>com/                                 | Curitiba       | PR                | Sul              |
| Divina Castanha     | divinacastanha.com.br                    | ● NR  | Maringá        | PR                | Sul              |
| Clube Orgânico      |  | <ul><li>/company/clube-org%</li><li>C3% A2nico/</li></ul>   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| Comida da Gente     | ● comidadagente.com                      | /company/comida-da-gente/                                   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| Orgânicos in Box    | ● organicosinbox.com.br                  | • /company/<br>organicosinbox/                              | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| Organomix           | ● organomix.com.br                       |   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| Kuke                | kuke.com.br/                             |   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste          |
| Cachaça Samanaú     | • cachacasamanau.com.br                  | NE  | Natal          | RN                | Nordeste         |
| Fresh Organicos     | • freshorganicos.com.br                  | NE  | Porto Alegre   | RS                | Sul              |
| Shoppr              | shoppr.com.br                            |   | Porto Alegre   | RS                | Sul              |
| Zaply               |  |   | Porto Alegre   | RS                | Sul              |
| Raeasy              | ● raeasy.com                             |   | Campo Alegre   | SC                | Sul              |
| UpPoints            | ● uppoints.com                           |   | Florianópolis  | SC                | Sul              |
| Sumá                |  | ⊚ 0   | Penha          | SC                | Sul              |
| AgroPad             | ● agropad.com.br                         |   | Barueri        | SP                | Sudeste          |
| Nutrir Orgânicos    | ● nutrir.agr.br                          | • /company/<br>nutrirorganicos/                             | Botucatu       | SP                | Sudeste          |
| Local Alimentos     | <ul><li>localalimentos.com</li></ul>     | /company/localalimentos                                     | Ribeirão Preto | SP                | Sudeste          |
| Praso               | ⊚ praso.com.br/                          | /company/prasoltd/<br>people/                               | Sao Paulo      | SP                | Sudeste          |

| Company                              | URL  | LinkedIn  | City           | State | Region  |
|--------------------------------------|--|---|----------------|-------|---------|
| deBetti                              | debetti.com.br                                       |   | São Paulo      | SP    | Sudeste |
| Feira na Box                         | ● feiranabox.com.br                                  | NE  | São Paulo      | SP    | Sudeste |
| Food Finder                          | ● foodfinder.eco.br                                  |   | São Paulo      | SP    | Sudeste |
| Frexco                               | ● frexco.com.br                                      |   | São Paulo      | SP    | Sudeste |
| Fruta Imperfeita                     | frutaimperfeita.com.br                               | <ul><li>/company/fruta-<br/>imperfeita/</li></ul>   | São Paulo      | SP    | Sudeste |
| Go Green                             | ⊚ gogreenhortifruti.com.br                           | NE  | São Paulo      | SP    | Sudeste |
| GreensMarket                         | <ul><li>greens.market</li></ul>                      | <ul><li>/company/loja-greens-<br/>market/</li></ul>                                       | São Paulo      | SP    | Sudeste |
| Home Refill                          | <ul><li>homerefill.com.br</li></ul>                  |   | São Paulo      | SP    | Sudeste |
| lçougue                              |  |   | São Paulo      | SP    | Sudeste |
| menu.com.vc                          | menu.com.vc  |   | São Paulo      | SP    | Sudeste |
| Mercado Fresh                        | mercadofresh.com.br                                  |   | São Paulo      | SP    | Sudeste |
| Minnis                               | minnis.com.br  |   | São Paulo      | SP    | Sudeste |
| Natural Meat                         | <ul><li>naturalmeat.com.br</li></ul>                 |   | São Paulo      | SP    | Sudeste |
| Ndays                                |  |   | São Paulo      | SP    | Sudeste |
| Neovita Foods Ingredientes<br>Online | <ul><li>ingredientesonline.com.</li><li>br</li></ul> | <ul><li>/company/ingredientes-<br/>online/</li></ul>                                      | São Paulo      | SP    | Sudeste |
| Pede Sabores                         | <ul><li>pedesabores.com.br</li></ul>                 | ● /in/pede-<br>sabores-340437140/   | São Paulo      | SP    | Sudeste |
| Raizs                                |  |   | São Paulo      | SP    | Sudeste |
| m.eat                                | meatapp.com.br/                                      | <ul><li>/company/meat-house-<br/>delivery-emp% C3% B3rio-<br/>de-carnes-nobres/</li></ul> | São Paulo      | SP    | Sudeste |
| ATábua Artesanal                     | <ul><li> atabua.com.br</li></ul>                     |   | São Paulo      | SP    | Sudeste |
| Mara                                 | mara.com.br  |   | São Paulo      | SP    | Sudeste |
| Da Mata                              | ⊕ damata.bio/  | •   | São Paulo      | SP    | Sudeste |
| Atlantikos                           |  |   | São Paulo      | SP    | Sudeste |
| Organ Alimentos                      | ● organalimentos.com.br                              | <ul><li>● /company/organ-<br/>alimentos/</li></ul>  | Vitória        | ES    | Sudeste |
| Offgluten                            | ● offgluten.com.br                                   | NE  | Belo Horizonte | MG    | Sudeste |
| Senhora Pipoca                       | senhorapipoca.com                                    | <ul><li>/company/senhora-<br/>pipoca-ltda/</li></ul>                                      | Belo Horizonte | MG    | Sudeste |
| Ama-O                                | <ul><li>amaofood.com.br</li></ul>                    | NE  | Moeda          | MG    | Sudeste |
| Oner Alimentos                       | <ul><li>● onerbrasil.com.br</li></ul>                | NE  | Nova Lima      | MG    | Sudeste |
| Amantikir Origem Natural             | amantikirnatural.com.br                              | <ul><li>/company/<br/>amantikirnatural/</li></ul>   | São Lourenço   | MG    | Sudeste |

| Company                            | URL  | LinkedIn   | City           | State             | Region  |
|------------------------------------|--|--|----------------|-------------------|---------|
| Sekiama - Alimentos da<br>Amazônia | sekiama.com  | NE   | Belém          | PA                | Norte   |
| Nutrify                            | nutrify.com.br   |  | Embu Guaçu     | PA                | Norte   |
| Viva Mate                          | vivamatebrasil.com.br  | NE   | Ivaí           | PR                | Sul     |
| Ginger Temperos                    |  | <ul><li>/company/ginger-<br/>temperos/</li></ul>           | Niterói        | Rio de<br>Janeiro | Sudeste |
| Nutripleno                         | <ul><li>nutripleno2.</li><li>webSiteseguro.com/br/</li></ul> | <ul><li>/company/nutripleno-<br/>alimentos/</li></ul>      | São Paulo      | SP                | Sudeste |
| Nutrisanti                         | nutrisanti.com.br  | /company/santialimentos/                                   | São Paulo      | SP                | Sudeste |
| Nutriimport                        | <ul><li>gruponutriimport.com.</li><li>br</li></ul>           | NE   | Vitória        | ES                | Sudeste |
| Nana Delivery                      |  | /company/nana-delivery/                                    | São Paulo      | SP                | Sudeste |
| IBY FOODS                          | ibyfoods.com.br  |  | Campinas       | SP                | Sudeste |
| Clubbi                             |  |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| HF Rural                           | ● hfrural.com  |  | Ribeirão Preto | SP                | Sudeste |
| Vida Em Grãos                      | vidaemgraos.com.br   | <ul><li>● /company/vida-em-gr%</li><li>C3% A3os/</li></ul> | São Paulo      | SP                | Sudeste |
| Baskets                            |  |  | São Paulo      | SP                | Sudeste |
| Olá Rancho                         | ● instagram.com/<br>olarancho                                | NE   | Araguaína      | то                | Norte   |

# 3.9 Urban farming: plant factory and new ways of farming

| Company                   | URL  | LinkedIn   | City           | State             | Region  |
|---------------------------|--|--|----------------|-------------------|---------|
| Be Green                  | begreen.farm                                     | ● /company/begreen-farm/                             | Belo Horizonte | MG                | Sudeste |
| Favo                      | ● favotecnologia.com.br                          | /company/mercadofavo/                                | Curitiba       | PR                | Sul     |
| Growpower                 | <ul><li>produtos.growpower.<br/>com.br</li></ul> | ● /company/<br>growpoweroficial/                     | Curitiba       | PR                | Sul     |
| Minhorta                  | minhorta.com                                     |  | Curitiba       | PR                | Sul     |
| Brota Company             | brotacompany.com.br                              | <ul><li>/company/brota-<br/>company/</li></ul>       | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| Nucleário                 | nucleario.com/pt                                 |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| Eccos Recyclle            | eccosrecyclle.com.br/                            | •  | Campo Bom      | RS                | Sul     |
| Vasos Autoirrigáveis Raiz | vasosraiz.com.br                                 | ● /in/vasos-raiz-autoirrig%<br>C3% A1veis-b311091a4/ | Novo Hamburgo  | RS                | Sul     |
| Farfarm                   | ● farfarm.co                                     |  | Porto Alegre   | RS                | Sul     |
| Fazendas Bioma            | • fazendasbioma.com.br                           | <ul><li>/company/fazendas-<br/>bioma/</li></ul>      | Joinville      | SC                | Sul     |

| Company                                | URL   | LinkedIn   | City           | State | Region  |
|--|---|--|----------------|-------|---------|
| Semente Urbana                         | <ul><li>sementeurbana.com</li></ul>                   | <ul><li>/company/semente-<br/>urbana/</li></ul>  | Schroeder      | SC    | Sul     |
| Eacea Soluções em Cultivo<br>Protegido | eacea.com.br  | <ul><li>/company/eacea-solu%</li><li>C3% A7% C3% B5es-em-<br/>cultivos-protegidos/</li></ul> | Cunha          | SP    | Sudeste |
| Instituto Cidade Jardim                | <ul><li>institutocidadejardim.<br/>com.br</li></ul>   | <ul><li>/company/instituto-<br/>cidade-jardim/</li></ul>                                     | ltu            | SP    | Sudeste |
| Ecojardim                              | <ul><li>ecojardimfranquias.<br/>com.br</li></ul>      | /company/     ecojardimbrasil/   | Porto Ferreira | SP    | Sudeste |
| Babilônia                              |   |  | São Paulo      | SP    | Sudeste |
| 100% Livre                             | <ul><li>● cemporcentolivre.com</li></ul>              | /company/     cemporcentolivre/  | São Paulo      | SP    | Sudeste |
| Aguapé Horta Urbana                    | <ul><li>aguapefazendaurbana.</li><li>com.br</li></ul> | <ul><li>/company/<br/>aguapefazendaurbana/</li></ul>   | São Paulo      | SP    | Sudeste |
| Fazenda Cubo                           | • fazendacubo.com.br                                  | ● /company/fazenda-cubo/   | São Paulo      | SP    | Sudeste |
| Fazenda Urbana                         | <ul><li>● fazendaurbana.com.br</li></ul>              | <ul><li>/company/fazenda-<br/>urbana/</li></ul>  | São Paulo      | SP    | Sudeste |
| fazu                                   | ● fazu.bio  | /company/fazu-rede-de-fazendas-urbanas/  | São Paulo      | SP    | Sudeste |
| Pink Farms                             | pinkfarms.com.br                                      |  | São Paulo      | SP    | Sudeste |
| Plantário                              | plantario.com.br                                      | • /company/plant% C3% A1rio/   | Porto Alegre   | RS    | Sul     |

#### 3.10 Online restaurants and Meal Kits

| Company        | URL                                      | LinkedIn   | City           | State             | Region  |
|----------------|--|--|----------------|-------------------|---------|
| Almoço Grátis  | almocogratis.com.br                      |  | Vitória        | ES                | Sudeste |
| RobinFood      | ● robinfood.com.br                       | <ul><li>/company/robin-food-<br/>delivery/</li></ul> | Juiz de Fora   | MG                | Sudeste |
| James Delivery | <ul><li>● jamesdelivery.com.br</li></ul> |  | Curitiba       | PR                | Sul     |
| Nóz Fit        | ● nozfit.com.br                          | NE   | Curitiba       | PR                | Sul     |
| Ecofood        | • ecofood.com.br/index.<br>html          |  | Londrina       | PR                | Sul     |
| Chefsclub      |  |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| WeseekFood     | weseekfood.com                           |  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| Beergo         | beergo.app                               |  | Volta Redonda  | Rio de<br>Janeiro | Sudeste |
| QrDrinks       |  | NE   | Canela         | RS                | Sul     |

| Company                   | URL   | LinkedIn   | City           | State   | Region   |
|---------------------------|---|--|----------------|---------|----------|
| Allps Alimentos Saudáveis | allps.com.br                                      | <ul><li>/company/allps-alimentos-<br/>saudaveis/</li></ul> | Caxias do Sul  | RS      | Sul      |
| Delivery Much             | ø deliverymuch.com.br                             | <ul><li>/company/<br/>deliverymuchbrasil/</li></ul>        | Santa Maria    | RS      | Sul      |
| Amo Delivery              | amo.delivery                                      |  | Chapecó        | SC      | Sul      |
| OhBeer!                   | <ul><li>ohbeerapp.com</li></ul>                   |  | Florianópolis  | SC      | Sul      |
| Appedidos                 | appedidos.com.br                                  | <ul><li>/company/appedidos/</li></ul>                      | Araçatuba      | SP      | Sudeste  |
| BauruFood                 | <ul><li>baurufoodapp.com.br</li></ul>             | NE   | Bauru          | SP      | Sudeste  |
| Alecrim Integrais         | alecrimintegrais.com.br                           | NE   | Leme           | SP      | Sudeste  |
| ifood                     | ● ifood.com.br                                    |  | Osasco         | SP      | Sudeste  |
| Urban Farmacy             | urbanfarmcy.com.br                                |  | Poa            | SP      | Sudeste  |
| Alfred Delivery           | alfreddelivery.com                                | /company/alfreddelivery/                                   | Ribeirão Preto | SP      | Sudeste  |
| du local                  |   |  | São Carlos     | SP      | Sudeste  |
| Apptite                   | apptite.com                                       |  | São Paulo      | SP      | Sudeste  |
| Beleaf                    | <ul><li>beleaf.com.br</li></ul>                   |  | São Paulo      | SP      | Sudeste  |
| Casa Da Coxinha Vegana    | <ul><li>casadacoxinhavegana.<br/>com.br</li></ul> | NE   | São Paulo      | SP      | Sudeste  |
| Cheftime                  |   |  | São Paulo      | SP      | Sudeste  |
| Green Station             |   | <ul><li>/company/greenstation-<br/>franqueadora/</li></ul> | São Paulo      | SP      | Sudeste  |
| Gym Chef                  | gymchef.com.br                                    |  | São Paulo      | SP      | Sudeste  |
| lechefbrasil              | echefbr.com                                       |  | São Paulo      | SP      | Sudeste  |
| Legurmê                   | egurme.com.br                                     |  | São Paulo      | SP      | Sudeste  |
| LibreAlimentos            |   |  | São Paulo      | SP      | Sudeste  |
| Liv Up                    |   |  | São Paulo      | SP      | Sudeste  |
| Luccofit                  |   |  | São Paulo      | SP      | Sudeste  |
| Mandala Comidas Especiais |   | <ul><li>/company/mandala-<br/>comidas-especiais/</li></ul> | São Paulo      | SP      | Sudeste  |
| Vipfood                   | vipfood.com.br                                    | /company/vipfoodoficial/                                   | São Paulo      | SP      | Sudeste  |
| VYA                       | vya.com.br     vya.com.br                         |  | São Paulo      | SP      | Sudeste  |
| Food to Save              | ● foodtosave.com.br/                              |  | São Paulo      | SP      | Sudeste  |
| Cheap Food                |   | /company/cheapfoodapp/                                     | São Paulo      | SP      | Sudeste  |
| Papila                    | papilapoke.com.br/menu                            | /company/papiladeli/                                       | São Paulo      | SP      | Sudeste  |
| Simple&Co                 | wearesimple.co/                                   | /company/simpleandco/                                      | São Paulo      | SP      | Sudeste  |
| Empório Semente do Bem    | sementedobem.net.br                               | NE   | Aracaju        | Sergipe | Nordeste |

| Company       | URL                                 | LinkedIn  | City           | State             | Region  |
|---------------|-------------------------------------|---|----------------|-------------------|---------|
| Seeds Brazil  | <ul><li>● seedsbrazil.com</li></ul> | NE  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| H2life        | h2lifesorvetes.com.br               | <ul><li>/company/h2life-<br/>alimentos/</li></ul>   | Santo André    | SP                | Sudeste |
| Foodz         | ● foodz.store                       |   | São Paulo      | SP                | Sudeste |
| Olga RI       | olgari.com.br                       |   | São Paulo      | SP                | Sudeste |
| SaideraBrasil | saiderabrasil.com.br                |   | São Paulo      | SP                | Sudeste |
| Le Manjue     |                                     | ● /company/le-manjue-<br>bistro/  | São Paulo      | SP                | Sudeste |
| Kuke          |                                     |   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| m.eat         | ● meatapp.com.br/                   | <ul><li>/company/meat-house-<br/>delivery-emp% C3% B3rio-<br/>de-carnes-nobres/</li></ul> | São Paulo      | SP                | Sudeste |

# 3.11 Food safety and traceability

| Company                   | URL   | LinkedIn                             | City                 | State | Region  |
|---------------------------|---|--------------------------------------|----------------------|-------|---------|
| SCL Rota                  |   | ● /in/milksrota/                     | Belo Horizonte       | MG    | Sudeste |
| Safe Trace                | safetrace.com.br                                  | ● /company/safe-trace-s-a/           | Itajubá              | MG    | Sudeste |
| DataMatte                 |   | NE                                   | São Mateus do<br>Sul | PR    | Sul     |
| Hyperfarm                 | hyperfarm.com.br                                  |                                      | Canoas               | RS    | Sul     |
| Agtrace                   |   |                                      | Florianópolis        | SC    | Sul     |
| eumostro                  |   | • /company/<br>eumostrooficial/      | Florianópolis        | SC    | Sul     |
| Paripassu                 | paripassu.com.br                                  |                                      | Florianópolis        | SC    | Sul     |
| Brasil Beef Quality - BBQ |   | ● /company/<br>brazilbeefqualitybbq/ | Piracicaba           | SP    | Sudeste |
| Aurratech                 | aurratech.com.br/                                 | • /company/aurratechbrasil/          | Santo André          | SP    | Sudeste |
| InQuímica                 | inquimica.wordpress.     com                      |                                      | São Paulo            | SP    | Sudeste |
| Suflex                    | suflex.com.br/                                    |                                      | São Paulo            | SP    | Sudeste |
| Veg Oxi MP                | vegoxi.com.br     vegoxi.com.br     vegoxi.com.br |                                      | São Paulo            | SP    | Sudeste |
| EATTAE RASTREABILIDADE    | ⊚ eattae.com.br                                   | /company/     eattaerastreabilidade  | São Paulo            | SP    | Sudeste |

## 3.12 Food stores and services autonomous management system

| Company        | URL  | LinkedIn  | City                   | State             | Region   |
|----------------|--|---|------------------------|-------------------|----------|
| Supermenu      | supermenu.com.br   |   | Fortaleza              | CE                | Nordeste |
| Kero Rango     |  | NE  | Umuarama               | PR                | Sudeste  |
| Zaitt          |  |   | Vitória                | ES                | Sudeste  |
| Cliente Fiel   | • appclientefiel.com.br                                  |   | Belo Horizonte         | MG                | Sudeste  |
| iZap Softworks |  |   | Belo Horizonte         | MG                | Sudeste  |
| Reservatio     | <ul><li>● reservatio.com.br</li></ul>                    | NE  | Juiz de Fora           | MG                | Sudeste  |
| Food Verso     | <ul><li>foodverso.com</li></ul>                          | NE  | Pirapetinga            | MG                | Sudeste  |
| Indcard        | ● indcard.com.br   | NE  | Cascavel               | PR                | Sul      |
| Pedelogo       | <ul><li>pedelogo.online</li></ul>                        |   | Curitiba               | PR                | Sul      |
| Vlupt          | vlupt.com  |   | Curitiba               | PR                | Sul      |
| Rapidito       | ● rapidito.com.br  | NE  | Foz do Iguaçu          | PR                | Sul      |
| SUPRA ERVAS    |  | NE  | Maringá                | PR                | Sul      |
| Food Freedom   | ● foodfreedom.com.br/                                    | • /company/food-freedom/                          | Macaé                  | Rio de<br>Janeiro | Sudeste  |
| Tagme          |  |   | Rio de Janeiro         | Rio de<br>Janeiro | Sudeste  |
| Bionicook      |  |   | Caxias do Sul          | RS                | Sul      |
| Saipos         | <ul><li>saipos.com</li></ul>                             |   | São Leopoldo           | RS                | Sul      |
| OiMenu         |  |   | Araranguá              | SC                | Sul      |
| Menu do Dia    | <ul><li>appmenudodia.com/<br/>lpaplicativo.php</li></ul> | NE  | Florianópolis          | SC                | Sul      |
| Di Coffee      |  | <ul><li>/company/dicoffee-<br/>machine/</li></ul> | Joinville              | SC                | Sul      |
| City Foods     |  |   | São José               | SC                | Sul      |
| Pyhcus         |  |   | Barueri                | SP                | Sudeste  |
| Smart Menu     | smenu.com.br   | NE  | Campinas               | SP                | Sudeste  |
| Lummer         |  | NE  |                        |                   |          |
| 5mart          |  | NE  | Ribeirão Preto         | SP                | Sudeste  |
| Sistema Pallas |  |   | São José dos<br>Campos | SP                | Sudeste  |
| Alyment        |  |   | São Paulo              | SP                | Sudeste  |
| Get In App     | getinapp.com.br  |   | São Paulo              | SP                | Sudeste  |
| Luckro         |  |   | São Paulo              | SP                | Sudeste  |
| Mangos         | mangos.com.br  |   | São Paulo              | SP                | Sudeste  |

| Company             | URL   | LinkedIn   | City      | State | Region  |
|---------------------|---|--|-----------|-------|---------|
| Menyoo              | menyoo.me   |  | São Paulo | SP    | Sudeste |
| ShelfPix            | shelfpix.com.br   |  | São Paulo | SP    | Sudeste |
| Territorio da Carne | • oterritoriodacarne.com.<br>br   | <ul><li>/company/o-territ% C3%</li><li>B3rio-da-carne/</li></ul> | São Paulo | SP    | Sudeste |
| VocêQpad            | voceqpad.com.br      voceqpad.com | ● /company/voc% C3%<br>AAqpad/                                   | São Paulo | SP    | Sudeste |
| Epadoca             | ● epadoca.com   |  | São Paulo | SP    | Sudeste |
| Feira Mix           | ● feiramix.com  | NE   | São Paulo | SP    | Sudeste |
| OZ Technologies     |   |  | São Paulo | SP    | Sudeste |
| Pantore             | pantore.com.br  |  | São Paulo | SP    | Sudeste |
| DriveTrue Delivery  | drivetrue.com.br  |  | Sorocaba  | SP    | Sudeste |
| Goomer              |   |  | Sorocaba  | SP    | Sudeste |
| Primeira Mesa       | primeiramesa.com.br   | /company/primeira-mesa/  | Sorocaba  | SP    | Sudeste |

# 3.13 Packaging systems, Environment and Recycling

| Company                 | URL   | LinkedIn  | City           | State             | Region   |
|-------------------------|---|---|----------------|-------------------|----------|
| Selletiva               | selletiva.com.br     ■  | <ul><li>/company/<br/>sistemaselletiva/</li></ul>   | Fortaleza      | CE                | Nordeste |
| Maifredo Embalagens     | ● maifredo.com.br   | <ul><li>/company/maifredo-<br/>embalagens/</li></ul>  | Serra          | ES                | Sudeste  |
| Neogranel               | neogranel.com.br  |   | Vila Velha     | ES                | Sudeste  |
| NanoPack                | <ul><li>/company/nanopack-<br/>tecnologias-em-<br/>embalagens</li></ul> | <ul><li>/company/nanopack-<br/>tecnologias-em-<br/>embalagens/</li></ul>                                      | Ouro Branco    | MG                | Sudeste  |
| Macpet Embalagens       | macpet.com.br   | <ul><li>/company/macpet-<br/>embalagens/</li></ul>  | Curitiba       | PR                | Sul      |
| Monitorar               | <ul><li>monitorarconsultoria.</li><li>com.br</li></ul>                  | <ul><li>/company/monitorar-<br/>consultoria/</li></ul>  | Rio de Janeiro | Rio de<br>Janeiro | Sudeste  |
| Ecooler                 | ecooler.com.br  |   | Carlos Barbosa | RS                | Sul      |
| Korui Ciclos De Vida    |   | <ul><li>/company/korui-solu%</li><li>C3% A7% C3% B5es-<br/>menstruais-reutiliz% C3%</li><li>A1veis/</li></ul> | Florianópolis  | SC                | Sul      |
| Meu Copo Eco            | meucopoeco.com.br   |   | Florianópolis  | SC                | Sul      |
| Zero Plastics           | ● zeroplastic.com.br/   | /company/zero-plastic-<br>oceans/   | Americana      | SP                | Sudeste  |
| BioSmart Nanotechnology |   | <ul><li>/company/biosmart-<br/>nanotechnology-ltda/</li></ul>   | Araraquara     | SP                | Sudeste  |

| Company            | URL  | LinkedIn  | City           | State             | Region  |
|--------------------|--|---|----------------|-------------------|---------|
| Oka bioembalagens  | <ul><li>okabioembalagens.com.</li><li>br</li></ul> | /company/oka-<br>bioembalagens/   | Botucatu       | SP                | Sudeste |
| Incubapack         |  |   | Carapicuíba    | SP                | Sudeste |
| Biopolix           | ⊕ biopolix.com.br                                  | <ul><li>/company/biopolix-<br/>materiais-tecnol% C3%<br/>B3gicos-ltda./</li></ul> | Ribeirão Preto | SP                | Sudeste |
| Nanox              | nanox.com.br                                       |   | São Carlos     | SP                | Sudeste |
| Boomera            |  |   | São Paulo      | SP                | Sudeste |
| Econudo            | <ul><li>● econudo.com.br</li></ul>                 | NE  | São Paulo      | SP                | Sudeste |
| Green Cup          |  |   | São Paulo      | SP                | Sudeste |
| Molecoola          | <ul><li>molecoola.eco</li></ul>                    | <ul><li>/company/molecoola-<br/>fidelidade-ambiental/</li></ul>                   | São Paulo      | SP                | Sudeste |
| Morada da Floresta | moradadafloresta.eco.br                            | ● /company/morada-da-<br>floresta/  | São Paulo      | SP                | Sudeste |
| Protectmais        | <ul><li>● protectmais.com</li></ul>                | NE  | São Paulo      | SP                | Sudeste |
| Reciclapac         | ● //reciclapac.com.br/                             | ● NR  | São Paulo      | SP                | Sudeste |
| Agua na Caixa      | • aguanacaixa.com.br/                              |   | São Paulo      | SP                | Sudeste |
| Camargo Embalagens | camargociaembalagens.     com.br                   | <ul><li>/company/camargo-cia-<br/>de-embalagens/</li></ul>                        | Tietê          | SP                | Sudeste |
| chem4u             | o chem4u.com.br                                    | ● /company/chem4u/  | Mauá           | SP                | Sudeste |
| Biohack            | ⊕ biohacks.netlify.app/                            |   | Rio de Janeiro | Rio de<br>Janeiro | Sudeste |
| Eureciclo          | ● eureciclo.com.br                                 |   | São Paulo      | SP                | Sudeste |
| Agropacking        | agropackingsolutions.     com                      |   | Londrina       | PR                | Sul     |
| Tramppo            | ● tramppo.com.br                                   |   | Osasco         | SP                | Sudeste |

## **Final remarks**

From the concept of innovation ecosystem, it is possible to understand the Brazilian agricultural sector as a large network of interaction between several categories of players, who establish competitive, collaborative and complementary relationships. The concept of open innovation is closely associated with this dynamic, since companies can use external sources of knowledge to develop technologies and products, by creating collaborative arrangements and new business models.

Considering the dynamics of the Brazilian agricultural innovation ecosystem, companies must be aligned with the needs and capacities of other participants of the ecosystem, creating and capturing value together. Thus, the association between companies makes them think outside their borders, co-creating and co-developing innovations in partnership.

This potential for developing solutions has gained new momentum in Brazil with the edition of recent legislation to encourage innovation and scientific and technological production, such as the Innovation Law, the Legal Framework of Startups and the Legal Framework of Science, Technology and Innovation. These legislations strengthened the role of Scientific, Technological and Innovation Institutions (STIs) in the development of solutions, as well as facilitated the establishment of partnerships between STIs and private entities, aiming at collective innovation. In this environment that is more favorable to entrepreneurship, investors, in the most diverse stages, help entrepreneurs both in terms of finance and strategic discussions, turning knowledge into solutions for products and/or services for the society.

Thus, the new wave of digital revolution and bioeconomy has been attracting startups, called agtechs or agrifoodtechs, as well as organizations focused on generating and strengthening new ventures, companies that provide telecommunications services and large companies in the information technology segment.

In this new wave, innovation in the business model is crucial, since it is not only important to develop new technologies, to create and capture value, but also to adjust the business model for a given problem. Additionally, the very new collaborative organizational arrangements, focused on innovation, enable the approximation between the players that make up the Brazilian agribusiness, as well as the operationalization of partnerships.

Often, these players inhabit environments of agricultural innovation, and thus establish stronger bonds and direct cooperation. At times, this organization, including the innovation environments themselves, takes place through regional ecosystems.

In this context, Radar Agtech Brasil 2022 acts to strengthen the databases on investors and agtechs. Through an active mapping, several sources were consulted, which added to and updated the database from the previous edition, such as: database with contacts provided the directors; list of startups enrolled in acceleration programs and agtech events promoted by partners; monitoring of studies; research of those selected in public announcements focused on agtechs; and queries in startups ecosystem databases. A survey was also carried out, identifying additional agtechs.

This edition of Radar Agtech Brasil identified 1,703 agtechs, most of which (87%) are concentrated in the Southeast (61.4%) and South (25.6%) regions of the country. The federative unit with the highest number of agtechs is São Paulo, with 47.0% of the country's total. Maintaining

a complexity of the individual ecosystem in each federative unit, already demonstrated in 2021, the presence or absence of agtechs by category maintained a distribution similar to that of previous years. São Paulo is the only federative unit to have the 33 categories of agtechs in its territory. The other federative units that stand out are the following: Minas Gerais (31), Santa Catarina (30), Paraná (29) and Rio Grande do Sul (27).

In 2022, it was observed that 26 municipalities (of the 349 identified) have ten or more representatives of agreeds, with a total of 1,060 agreeds (62.2%). Of these municipalities, 14 are state capitals.

Regarding the agricultural production chain, the study carried out by Radar Agtech 2022 identified 242 agtechs operating before the farm, 705 inside the farm and 756 after the farm, which shows little change in the profile of agribusiness startups between the 2022 and 2021 editions. The segments inside the farm and after the farm still represent more than 85% of the startups found, and the segment after the farm remains as the largest, since it includes most of the foodtechs.

This scenario of geographical and sectoral distribution indicates that the agtech ecosystem grows stronger based on the consolidation of the main innovation centers as startup hubs, similar to what happens with startups from other sectors and markets. However, it is also important to note the increasing distribution of agtechs in smaller cities with little agricultural tradition.

In this edition, Radar Agtech Brasil brings additional quantitative and qualitative information to monitor the main movements of the national agri-food innovation environment, as well as identifies the main Brazilian innovation ecosystems and the different players involved, observing how they relate to one another. Understanding this dynamic positively impacts Brazilian agribusiness, as it strengthens and qualifies innovation ecosystems to generate wealth for Brazil, ensuring sustainability in the main agricultural production chains.

For the next editions, the mapping can be expanded to other themes and dimensions, such as: local productive arrangements; national, state and municipal public policies to support agtechs and their regulatory aspects; private relationship programs with agtechs; and the internationalization of Brazilian agtechs. There is also the possibility of performing a deeper analysis of each of the categories in relation to technology and the market, and the profile of agtechs in aspects such as characteristics of the founders and collaborators, organizational needs and stage of development and production of continuous content, as well as other actions and activities. In this perspective, Radar Agtech Brasil is open to partnerships with other institutions, aiming at continuously contributing with the development of the agtech ecosystem.

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