AgriFoodTech Ecosystem

Community of Madrid

2022

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01
Intro

Introduction

Ana Ramírez de Molina. Managing Dr. of IMDEA Food

The agri-food system has expanded thanks to greater agricultural productivity and the expectation of consumers to have immediate access to food at a low cost. But the result obtained has come at a price, as the sector now presents great challenges to cover.

Threats to food sustainability. Despite extensive evidence showing the enormous value of food for health and sustainability, the perception of food as a high-value good by both producers and consumers has been reduced, resulting in competition on price, and the waste of almost a third of total global food production. On the other hand, the world's growing population and changing eating habits require an increase in food production, with an estimated 60% more production needed to feed 9 billion people in 2050. In addition, there is added the pressure of the use of resources in a not sustainable manner, and climate changes that lead to instabilities in primary production, food processing and distribution.

Distorted nutritional habits. The world faces two contradictory challenges: on the one hand, there are 3.5 billion people suffering from hunger and micronutrient deficiencies, while the number of obese or overweight people (more than 2.5 billion) continues to rise. Increasing, leading to an increase in chronic diseases such as type II diabetes. In addition, consumers receive conflicting messages between what is healthy and what kind of nutrition they need, leading to differences between their good intentions to eat healthily and their current behavior. In the era of personalized medicine, precision nutrition is opening up as a real possibility to understand the type of nutrition consumers need, with the possibility of giving food the added value it deserves, although there is still a long way to go before it is widely applied.

Limited entrepreneurial culture. The European food sector is characterized by a wide range of companies of different sizes, where 99.1% are SMEs that are less innovative than in other sectors. The lack of a vibrant entrepreneurial culture in the food sector, reflected by the fact that only 2.6% of start-ups are related to the agri-food sector, calls for a new mindset that embraces entrepreneurship and cross-sector collaboration. On the other hand, there is a lack of scientific skills in companies, necessary to solve complex multidisciplinary challenges such as there are in the agri-food sector, which is a major barrier to innovation in the sector.

Introductnio

Insufficient integration of emerging technologies. In other industrial sectors, the digital revolution has transformed the quality, immediacy and personalized choices of products, while the food sector is slow to integrate new technologies that could reconnect people with the food they eat and make them active players in the food system.

Limited consumer confidence. There are numerous sources of information on food that are not contrasted or managed by experts. The population is not aware of the accuracy of the information they receive, and in many cases there is a great intrusion from non-expert sources recommending eating habits. On the other hand, there are media cases of food contamination and authenticity problems that lead to greater concern of consumers about the complexity of the food system, affecting confidence in the transparency, safety and integrity of the food value chain. This is compounded by highly fragmented food supply chains and unbalanced business practices, which limit the potential for increased rigorous communication, as well as technological advances that could increase consumer confidence and enable disruptive innovations.

Finally, the agri-food sector has demonstrated its resilience during the most difficult phases of the COVID-19 pandemic, but has also been strained by the energy crisis caused by the war situation in Ukraine, demonstrating the cross-sectoral dependence between the different sectors.

Introduction

Pedro Álvarez, CEO of Ivoro Ventures

In 2016, at the Future Foodtech event in London, there was only a small group of Spaniards. That left me perplexed. An agri-food country like Spain was not sufficiently represented in the forums where people were starting to talk about foodtech and the future of food.

This anecdote provides an answer to the situation of foodtech in our country, and in the Community of Madrid. It has grown, no doubt, but the size of this sector is not proportional to the food industry in this country. In other words, if we take into account what is at stake, given the weight of the food industry, the size of the Spanish foodtech ecosystem is still underdeveloped if we take into account the number of startups and public-private investment in the sector.

However, recent events (Covid, energy crisis, rising commodity prices, climate change, etc.) have highlighted the need to redesign our agri-food systems. And the use of new technologies is one of the levers we have at our disposal to meet these macro challenges.

The European Union is releasing a huge amount of public funds. A part of them are destined for the food industry. This is the opportunity we could miss. To allocate these funds to finance the industry (SMEs above all), leaving aside start-ups and spin-offs, and everything that encourages and helps this foodtech sector to flourish with the strength and determination it deserves.

As a jury member of the EIC Accelerator (European Innovation Council) since 2018, I have noticed that spinoffs and startups coming from Southern Europe are much less funded and supported than those coming from the North, and this is why we have decided to work to bridge the gap.

At Ivoro Ventures, a venture builder specializing in agri-foodtech, we have set out to do our bit by helping universities, technology centers and regions to promote technology-based start-ups and spin-offs with our venture building methodology.

We have created this report with the support of UAM and IMDEA with the aim of knowing the situation of the foodtech ecosystem in the Community of Madrid, to take a snapshot of the situation, which will serve to promote this sector as it deserves, and not to miss the great opportunity we have in the Community of Madrid to be part of the regions that are strongly committed to promoting the development of new technologies that will facilitate the creation of healthy, sustainable, resilient and fair food systems for all.

The agri-food sector

In the Community of Madrid

We are facing a strategic sector for the region, key to boosting the economy, preserving the environment and establishing population roots" (Paloma Martín). Data 2021

The sector generates

9.5%

of industrial GDP

Livestock farms:

4,800

200.000

cultivated hectares

of which,

12.000

hectares of organic farming

Jobs

150.000

between direct and indirect jobs

Agricultural farms

8.200

Consumers: reaches a market of **6,5 mill**

26%

of the territory corresponds to arable land

Companies

1.700

Annual turnover

6.500 mill €

Source: El Economista , data from the Consejería de Medioambiente, Vivienda y Agricultura

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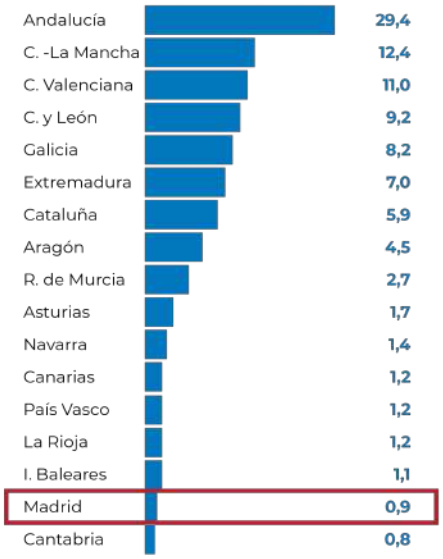
The agri-food sector

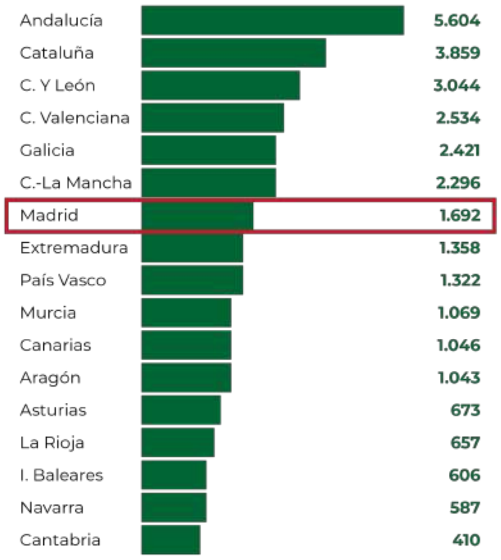
Comparison with other communities

The agri-food industry in the Region of Madrid is centered on the commercialization and distribution sector, with a very small share of the primary and production sector.

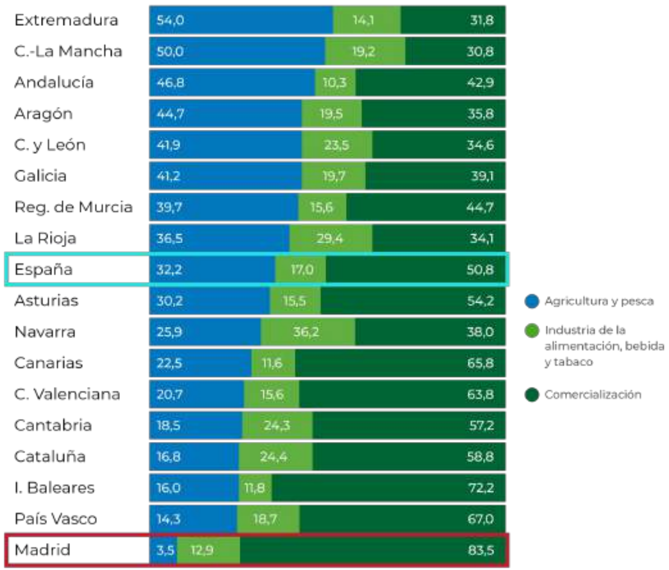
Agricultural farms. ***2020***
(% of 906,916 farms in Spain)



Agri-food companies. ***2021***
(Companies by region)



Employment structure in the sector ***2021***
(% by sector in the food chain)



Source: INE, Ivie. Agri-food sector observatory of the regions Spanish. November 2022

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The food service sector

In the Community of Madrid

In an environment such as that of the Community of Madrid, the most interesting foodtech sectors are those linked to the Food Service channel (Hotels, Restaurants and Catering). In Madrid, the restaurant and gastronomy sector is boiling over (María Naranjo, ICEX).

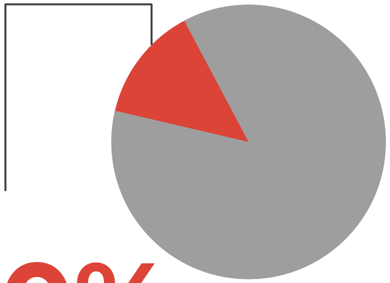
22 restaurants **Michelin stars**

210.000 employees food service

5% of regional GDP

1.266 new companies
1st sector in the ranking of business creation 2022, after the pandemic

18,000 companies
in the hotel and catering sector



10%
of total stores in Spain

Source: Information from companies INE Community of Madrid

The health & healthtech sector

In the Community of Madrid

The importance of Healthtech is clearly reflected by the number of innovation centers and by the fact that it is the sector with the highest number of startups created in the Community of Madrid. At the intersection between health and food there is a great framework of opportunities.

Madrid has

22 **hospitals**
university students

5 positioned among the **200** best of the world

8 IIS

Health Research Institutes

CIBER

Network

Biomedical Research Consortium, with 104 consortium member institutions

Healthtech is the

1st sector

where most companies have been created through spinoffs

14 FIB

Biomedical Research Foundations

200 startups

Health-tech, out of 300 in Spain

Healthtech companies in Madrid have been rising investment rounds above

10 Million

of euros per startup, from public and private funds

Source: "Healthtech scene in Madrid". , EIT Health, Madri+d Landscape Healthtech startups

02

Agrifood-tech

Agrifoodtech

Agrifoodtech is the emerging sector born from the intersection between agriculture or food and technology. It encompasses a wide range of scientific innovations and technologies, offering new solutions along the entire value chain to improve the way we produce, distribute and consume food.

The current challenges of the food system - inefficient, polluting and insufficient to feed the world's growing population - have been compounded by the recent crisis in health and the supply of essential raw materials. This situation has drawn even more attention to the sector. In 2021, investment in agrifoodtech reached a world record $51.7 trillion.

We are at a turning point towards a new system that must be radically more sustainable and efficient, while remaining healthy and safe.

The Madrid region is not outside of this revolution. In this report, we will see a hundred groundbreaking startups that are presenting solutions throughout the value chain. New forms of cultivation, new product concepts, new sources of protein, new health proposals, distribution platforms, digitalization of restaurants and circular economy proposals.

Agrifoodtech by sub-sectors

Agtech

Innovations related to agriculture and livestock farming. Including biotechnology solutions, biofertilizers livestock health, robots, drones, precision farming, marketplaces or novel methods such as vertical farming.

Alternative Proteins

Scientific and technological solutions and processes that generate new, more sustainable types of protein, such as meat, poultry, fish or egg substitutes. Including insects, plant protein, cellular agriculture or precision fermentation.

Innovative Food & Drinks

New food and beverage concepts, with healthy, natural, social, nutritional or convenience properties, with or without technological innovation. There are several categories such as water, juices, coffees, sauces, rice or spices.

Health & Nutrition

Innovations in the field of technology and biotechnology to improve the health and nutrition of consumers. Including personalized nutrition APPs, complete meal replacements, genetic analysis, or new active compounds such as CBD or probiotics.

Consumer APP

Applications that offer new services and experiences to consumers, related to food and catering. Including locators, reservations, payment, comparators, communities or chefs at home.

Food Delivery & Marketplaces

Services and platforms that facilitate the connection between food and users. Including home delivery, catering, menu subscriptions, meal kits or ingredients direct from farm to home.

Restaurant Tech

New solutions in processes and equipment, mainly aimed at improving efficiency and commercialization. Including robots digitalization of processes or ghost kitchens.

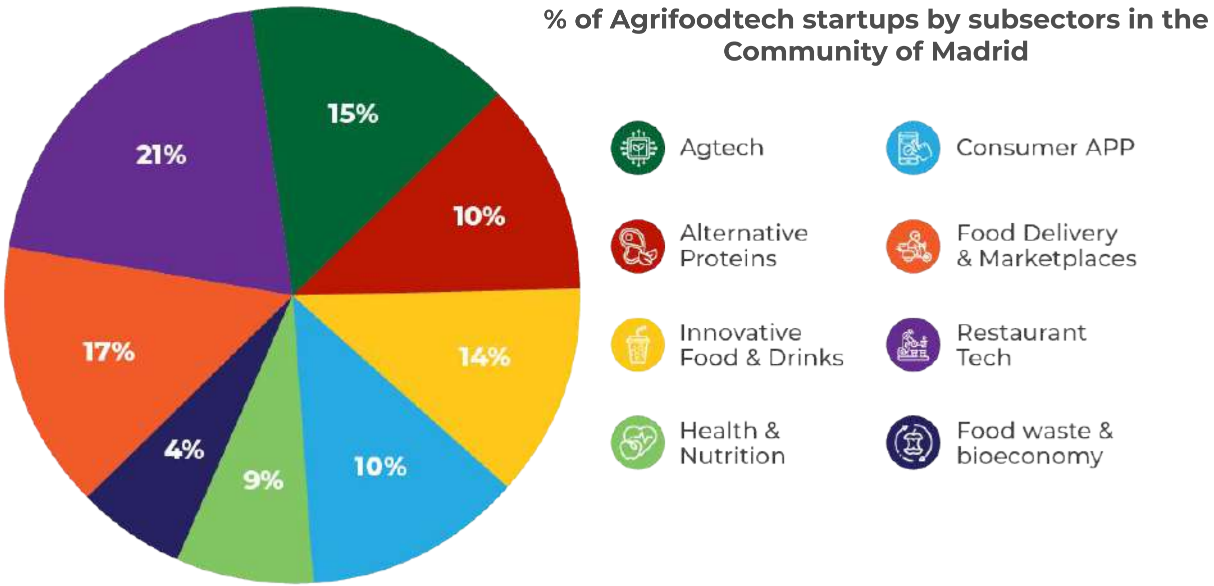
Food waste & bioeconomy

New practices, processes and technologies to reduce food waste and revalue by-products, along the entire value chain, following the principles of the circular economy.

Agrifoodtech Startups

Distribution by sub-sectors in the Community of Madrid

The Community of Madrid has **110** agrifoodtech startups. Half of them, **48%**, are aimed at the consumer and food service sector.



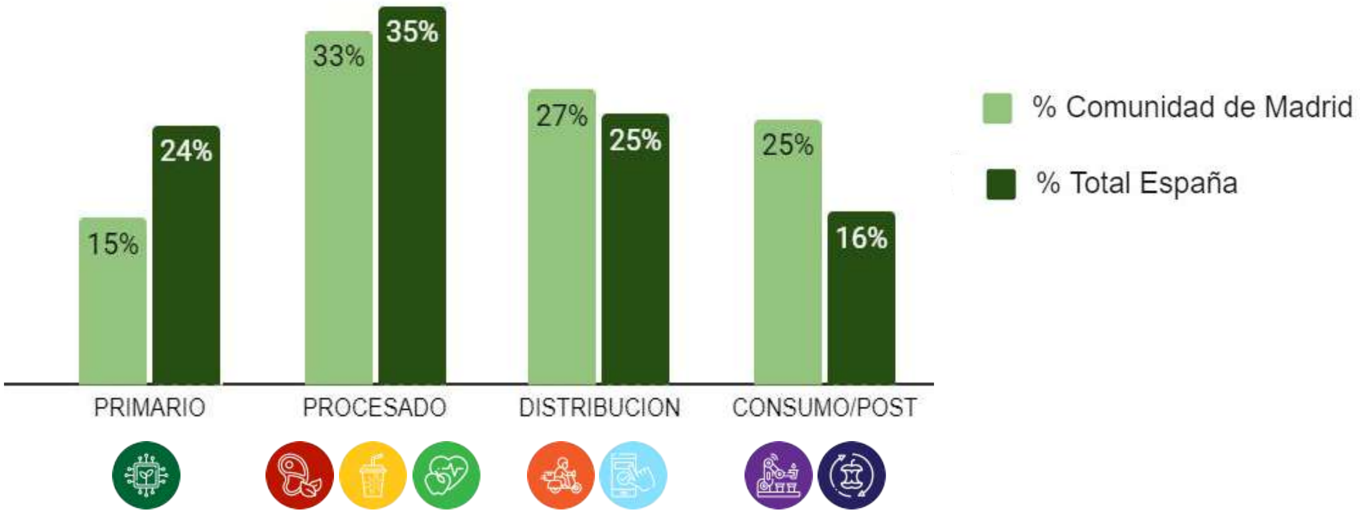
Source: Dealroom, Crunchbase,
Food Tech Data Navigator and own sources

Agrifoodtech Startups

Distribution by sub-sectors in the Community of Madrid

In the comparison with Spain as a whole, start-ups in the Madrid region, which account for **27%** of the total, are over weighted in the subsectors operating at the end of the value chain.

Community of Madrid vs Total Spain
in % by sub-sectors in the value chain



Source: Comparative data with ICEX report "Foodtech in Spain 2022

Agrifoodtech Startups

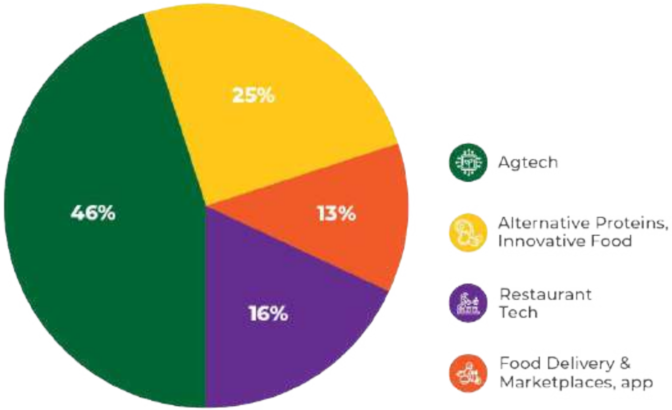
Investment in startups in the Madrid region

Agritech and Alternative Proteins were the most attractive sectors for investors in the Madrid region.
By contrast, most startups operate in the distribution and consumer areas. No Glovo-type delivery unicorn has emerged as has happened in other communities.

Startups in the Madrid region have accumulated a combined investment of €150m since their creation.
Investment is low and below the national average. None of the startups in the community are among the top 5 startups invested in 2022 in Spain and none have reached series A.

Cumulative investment by sector

Community of Madrid 2010-2022



Cumulative investment

Community of Madrid 2010-2022

~€150m

Investment 2022

Community of Madrid

€15m (*)

Investment 2022

Spain

€268m

Source: Dealroom, Crunchbase, ICEX "Foodech in Spain 2022" (*) Estimated investment, includes public rounds only.

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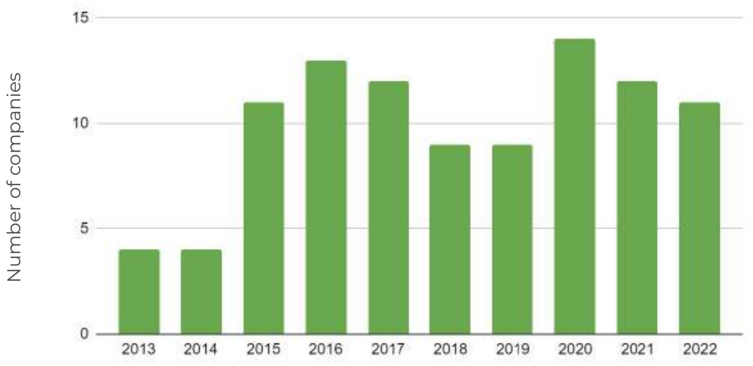
Agrifoodtech Startups

Dynamics of creation and investment in startups in the Community of Madrid

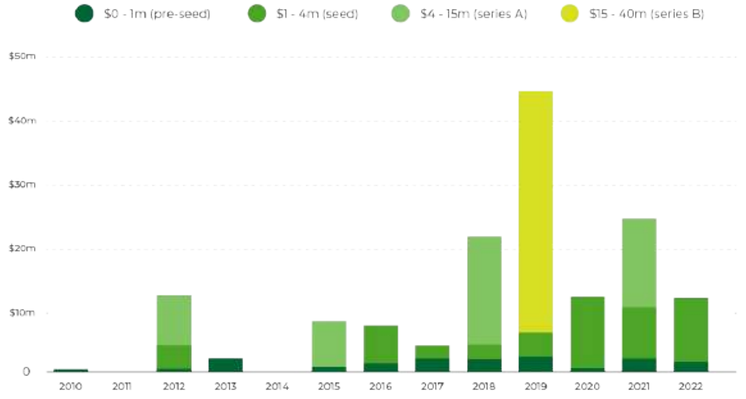
The creation of startups in the Community of Madrid has followed an irregular growth rate, below the overall growth of the sector in international markets. The outbreak of the pandemic became a catalyst for initiatives, many of them aimed at the digitalization of the Food Service sector.

Practically all therounds have taken place in the initial stages of pre-seed (<€1m) or seed (€1-4m). We observe a lack of investment in more advanced stages of scaling, which results in a lack of resources that make many projects unviable.

Evolution Startups Creation



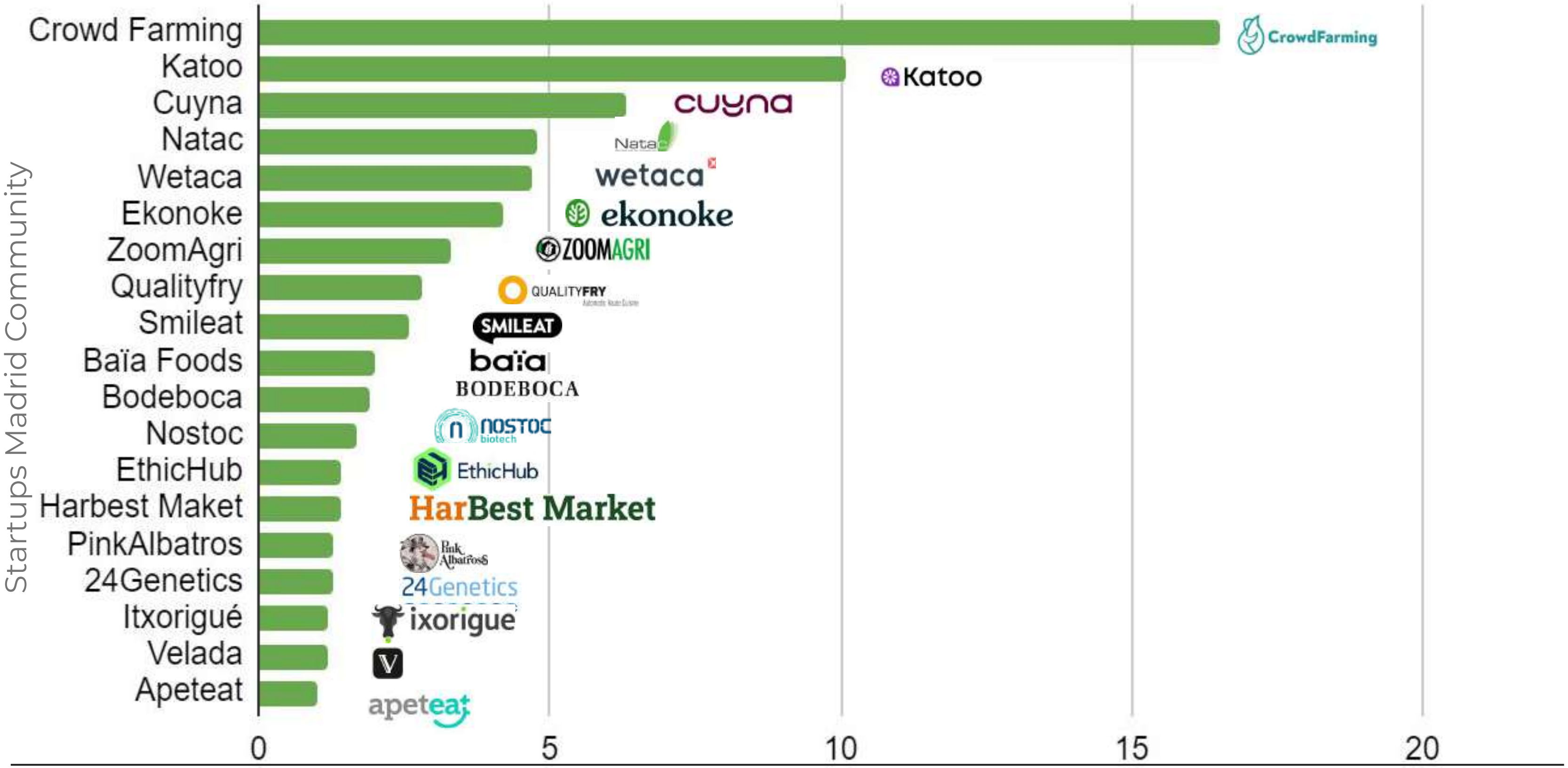
Startups Investment Evolution



Source: internal sources, Dealroom

Agrifoodtech Startups

Ranking of startups in cumulative investment in the Community of Madrid



Source: Dealroom, Crouchbase. Aggregate investment in € million

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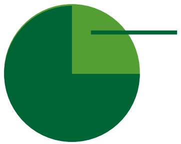
Agrifoodtech Ecosystem

Activity in the Community of Madrid

Startups:

110



27%

of all startups in Spain

Accelerators and specialized food hubs **4**

Accelerators with foodtech projects

12

14 Universities and science parks

8 Government and Support Institutions

Business platforms and associations **10**

14 Corporations with open collaborative programs

18 Events, trade fairs and trade press

1.000 people working in the sector

03

Startup Map

Agrifoodtech Startups

Map by activity in the Community of Madrid

Agtech

EthicHub, Terracelat, Helix BioS, digitanimal, ekonoke, SANZAR Group, easyponic, Fruitbull

Alternative Proteins

Pink Albatross, Green&Great, Greenfoods, Hello Plant, agrenvec, BeanBased, MIMIC Seafood, iliko, ALGENEX

Innovative Food

Agua en Caja Mejor, La Bomba, Smileat, Marlon, Moon Water, Auara, De buen café, Vita Vodka, Roots, Pepe Mate

Health & Nutrition

aora Health, nootric, 4Chronic, 24Genetics, limeco health, VIDALIM, Pharmactive Biotech Products, P4H, Satislent, baïa

Consumer APP

Supper Stars, yoomers, Gopick, Solofoodies, ZERSTi, MiDRYNK, teikei, PayCui, barwise

Food Delivery & Marketplaces

apeteat, Pidesano.es, CrowdFarming, HB, wetaca, colibery, Eatisygo, PATASBOX, uncovercity

Restaurant Tech

bistrohub, Super Robotics, cuyna, wetechfood, br5, iflares, MiFood Robot, UpperEat, waitry, NOM, Tigoût, thefoodplease, Miss Tipsi, Menew, DynamEat

Food waste & bioeconomy

L. Pernía, Foodexperts, HEFO, metiora

Agtech

Examples of startups Madrid Community

Ethic Hub

Blockchain-based P2P platform connecting profitable small farming communities with lenders and product buyers.

Founding date	2017
Vertical	Agtech
B2B/B2C	B2B

Ekonoke

Growing hops (for beer) indoors. We produce natural ingredients locally, while guaranteeing sustainability and reliability of supply, developing climate-resilient agricultural solutions

Founding date	2021
Vertical	Agtech
B2B/B2C	B2B

Plant on Demand

The first management and sales platform in short channels for organica farmers, cooperatives. "gestion de pedidos en una sola plataforma"

Founding date	2018
Vertical	Agtech
B2B/B2C	B2B

Ixorigue Technologies

Provide livestock digitizatior solutions that increases the profitability and quality of life farmers

Founding date	2019
Vertical	Agtech
B2B/B2C	B2B

Alternative Proteins

Examples of startups Madrid Community

Pink Albatross

Sells plant-based ice cream products through foodservice and retail

Founding date	2018
Vertical	Alternative Proteins
B2B/B2C	B2C

Mimic Seafood

Plant-based alternative seafood that saves oceans

Founding date	2019
Vertical	Alternative Proteins
B2B/B2C	B2C

Hello plant

Develops a 100% vegetable meat made from plants with an incredible texture, for restaurants and hotels.

Founding date	2019
Vertical	Alternative Proteins
B2B/B2C	B2B

Greenfoods network

An agri-food technology-based company, that provides solutions to improve nutritional and healthy properties of food

Founding date	2015
Vertical	Alternative Proteins
B2B/B2C	B2B

Innovative Food & Drinks

Examples of startups Madrid Community

Smileat

Baby food organic

Founding date	2015
Vertical	Innovative Food & Drinks
B2B/B2C	B2C

MOON DRINKS

The healthy soda as an alternative to traditional soda

Founding date	2017
Vertical	Innovative Food & Drinks
B2B/B2C	B2C

Auara

AUARA is a food & beverages company provides natural mineral water.

Founding date	2015
Vertical	Innovative Food & Drinks
B2B/B2C	B2C

Arroces la bomba

Arroces La Bomba offers Bistrot rice dishes for restaurant and hotels.

Founding date	2020
Vertical	Innovative Food & Drinks
B2B/B2C	B2B

Health & Nutrition

Examples of startups Madrid Community

24Genetics

24Genetics DNA tests reveal information about your genetics: origins, health, nutrition, and much more

Founding date	2020
Vertical	Health & Nutrition
B2B/B2C	B2C

Nootric

Consumer APP for healthy leaving, exercise and nutrition.

Founding date	2016
Vertical	Health & Nutrition
B2B/B2C	B2B, B2C

Linneo Health

Linneo Health manufactures and supplies medical cannabis flowers, extracts, and products.

Founding date	2016
Vertical	Health & Nutrition
B2B/B2C	B2B

Baia Food

Offers a selection of organic superfoods for a nutritional experience

Founding date	2013
Vertical	Health & Nutrition
B2B/B2C	B2C

Consumer APP

Examples of startups Madrid Community

Barty

Platform helps to find nearby bars and sports bar to watch sports games

ounding date	2016
'ertical	Consumer APP
2B/B2C	B2C

Paycui

Convenient, effective and simple mobile payment app for restaurants

Founding date	2015
Vertical	Consumer APP
B2B/B2C	B2B

Supper Stars

Supper Stars offers Food Experiences at your Home

Founding date	2016
Vertical	Consumer APP
B2B/B2C	B2C

Velada

Provides an easy way to discover and book restaurants in Madrid, Barcelona, Valencia, Málaga and Marbella

Founding date	2020
Vertical	Consumer APP
B2B/B2C	B2C

Food Delivery & Marketplaces

Examples of startups Madrid Community

HarBest Market

Marketplace that connects restaurants with farmers for the purchase of fruits and vegetables without intermediaries

Founding date	2020
Vertical	Food delivery & Marketplaces
B2B/B2C	B2B

Crowd Farming

Food supply chain that creates a direct link between consumers and producers

Founding date	2017
Vertical	Food delivery & Marketplaces
B2B/B2C	B2C

Mentta

The first marketplace specialized in food: artisan products, Gourmet products, prepared food, BIO food, and much more

Founding date	2015
Vertical	Food delivery & Marketplaces
B2B/B2C	B2C

Wetaca

Tuppers de menus semanales por subscripción

Founding date	2015
Vertical	Food delivery & Marketplaces
B2B/B2C	B2C

Restaurant Tech

Examples of startups Madrid Community

Prior	Cuyna	Katoo	wetechfood
APP y web para pedidos de delivery y take away on line sin coste de desarrollo	Virtual kitchens network that enables restaurant brands to expand at minimum risk via delivery-only locations	Offers food procurement tools for restaurants and suppliers	Builds CLX4, the new kitchen robot that improves KPIs monitoring and eliminates human-related costs

Prior

Founding date	2015
Vertical	Restaurant tech
B2B/B2C	B2B

Cuyna

Founding date	2020
Vertical	Restaurant tech
B2B/B2C	B2B

Katoo

Founding date	2019
Vertical	Restaurant tech
B2B/B2C	B2B

wetechfood

Founding date	2019
Vertical	Restaurant tech
B2B/B2C	B2B

Food Waste

Examples of startups Madrid Community

Food experts

A one-stop shop cloud platform and technical expertise to make better decisions through data analytics and improving information flow.

Founding date	
Vertical	Food waste
B2B/B2C	B2B

Metiora

Using data for smart decisions. Cold chain monitoring, tracking and alerts

Founding date	2016
Vertical	Food waste
B2B/B2C	B2B

HOFO

HOFO is a development of a self-sustainable model to turn food loss into a replenishment process.

Founding date	2017
Vertical	Food waste
B2B/B2C	B2B

L.Pernía

Collection and Distribution Services of Beer Bagasse for farm feeding upcycling.

Founding date	2016
Vertical	Food waste
B2B/B2C	B2B

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04

Institutional ecosystem map

Agrifoodtech Ecosystem

Map of facilitators in the Community of Madrid

Incubators, Accelerators, Hubs and Entrepreneurship Spaces

ivoro Ventures · Madrid Food Innovation Hub · EATABLE Adventures · Impact Hub · Tetuan Valley · Spain Foodtech II Edición · La Bolsa Social · Barrabés · Kunsen · DEMIUM startups · BBVA Open Innovation · Wayra Telefónica Innovation · Lantern · Google for Startups · Fondo de Emprendedores · ufounders

Universities, Science Parks, Technology Centers and Institutions

Politécnica · UAM · CNTA · CIAL · Madrid K-node · uc3m · Fundación Parque Científico de Madrid · IE University · INIA CSIC · complutemprende · actúaUPM · CSIC · ICEX · madri+d · IMDEA · IMIDRA

Investors and public support organizations

enisa · CDTI · neotec · Tech Transfer Agrifood · PeakBridge · Spain Foodtech · La Bolsa Social · the_foodtech lab · EATABLE Adventures · swanlaab Venture Factory · fellowfunders · BSV Big Sur Ventures · JME Ventures · Cardumen Capital

Platforms and Associations

ReV · Plataforma Tecnológica Española Food for Life Spain · aseacam · FIAB · proveg international · eit Food · biovegen · MCM · PTV · Bioplat · Madrid

Corporations with Open Innovation

Campofrío · Inno Ventures Pascual · Bar Lab Ventures · Tastech · Cerealto Siro Foods · Coca-Cola Iberia · Ebro · Mondelēz International · Kellogg's · makro · Carrefour · ifa · El Corte Inglés · Alcampo

Events and Media

meat attraction · madrid fusión · fruit attraction · HIP Horeca Professional Expo · Intersicop · EAT2GO · act · V2B · Foro Interalimentario · Vendibérica · tech food magazine · Alibetopías · Gastro · AECOC Congreso de Gran Consumo · South Summit · Salón Gourmets · Alimenta Madrid · Foodtech

Hubs and Accelerators

Examples in the Community of Madrid

Madrid Food Innovation Hub
Type of entity: public (Madrid City Council)
Services: hub, Incubator, Entrepreneurship Programs, Events
Established: 2019
Space: 300m coworking space and 300m kitchen for proof of concept.
Focus: Madrid's first food entrepreneurship center An initiative focused on fostering innovation and entrepreneurship along the entire value chain.

Eatable Adventures
Type of entity: private
Services: accelerator, events, publications, m50€ fund
Established: 2015
Space: offices
Fous: Accelerator with a mission to build tomorrow's food system. Identifies and supports the innovative and disruptive food technology startups by helping them to growing in the global market

Ivoro Ventures
Type of entity: private
Services: venture building programs with universities and technology centers
Establishment: 2021
Space: offices and kitchen - Kitchen Lab - for proof of concept testing
Focus: VB specialized in agrifoodtech that finds and develops opportunities from idea to market, with the mission to create startups and spin-offs that improve our future.

Business platforms and associations

Examples in the Community of Madrid

Food for Life Spain
Objective: Promotion and transfer of research, scientific and technological advances through public-private partnerships.
Scope: national
Partners: main actors in the agri-food sector in relation to R&D
Services: positioning reinforcement, differentiation, networking, tools, value-added services for R&D

EIT Food
Aim: to accelerate innovation to create a healthier and more sustainable future food system for everyone
Scope: international, European
Partners: international startup community, corporates, investors and consumers
Services: innovation, education, entrepreneurship and change agent networking events

Biovegen
Objective: Reference network for R&D in Plant Biotechnology.
Scope: national
Partners: 133 companies, 10 private foundations, 22 public research organizations/universities
Services: business development and competitive improvement via plant innovation

Corporations with open collaborative programs

Examples in the Community of Madrid

Pascual Innoventures
Corporate: Pascual
Creation date: 2021
Services: Incubator. Explore, incubate, accelerate, invest and "Invent".
General challenges: society, planet, security, health and circular economy
Specific challenges: Milkcubator is the dairy industry's first incubation program for cellular agriculture projects.

Barlab Ventures
Corporate: Mahou San Miguel
Date Created: 2016
Services: open innovation platform. They offer an open innovation line to channel ideas. Investment potential
Generic focus: creating new opportunities in the gastronomy sector
Specific challenge: upgrading of brewery products

Ebro Talent
Corporate: Ebro Foods with Loyola Univ.
Date Created: 2021
Services: Open innovation platform. Bootcamp, mentoring, networking and financial compensation to finalists.
Generic focus: detecting innovative projects, ideas and talent in the food sector
Specific challenge: sustainable solutions applicable to the group's food value chain. Rice and pasta

Investors and finance support organizations

Examples in the Community of Madrid

The Food Tech Lab
Vehicle: Investment Club
Type of organization: private
Investor profile: network of professionals, mostly related to the agri-food sector, who add value to the invested companies.
Investment criterion: innovative projects with high potential to grow and develop within the agri-food industry.

Tech Transfer Agrifood
Vehicle: investment platform
Type of organization: private. Key Capital
Fund size: €15.2m for investment and PoC
Investor profile: 212 technology centers and food industry ecosystem
Investment criteria: technology demand fund in the agri-food sector support entrepreneurs and high-impact technologies, connecting technology demand and supply.

Spain Foodtech
Vehicle: acceleration programme
Type of organization: Private
Fund size: up to €1m investment for startups
Investor profile: Eatable Adventures investment fund, in collaboration with ICEX and CNTA.
Investment criteria: startups with sustainable and disruptive technologies and solutions that are applied and have an impact along the entire value chain.

Events and specialized media

Examples in the Community of Madrid

[Fruit attraction]
Venue: IFEMA Madrid, 3-5 Oct 23
Impact: +90k participants, 1.8k exhibitors, 58k sqm.
Scope: international
Activities: exhibition fair
Focus: global epicenter of fresh produce marketing

[Horeca Provessional Expo]
Venue: IFEMA Madrid, 6-8 March 23rd
Impact: +35k participants, 500 exhibitors, 40k sqm.
Scope: national
Activities: fair, exhibition and congress
Focus: professional trade show, the most important event of Food Service innovation

[Tech Food Magazine]
Media: magazine
Sections: countryside, retail, restaurant, home, trends, ecosystem
Focus: up-to-date information and analysis on innovation and foodtech
Objective: to bring companies closer to startups, investors and industry organizations

Universities and R&D organizations

Examples in the Community of Madrid

IMDEA Food
Type of entity: public
Institution: Research and Development Institute
Services: R&D, Technology transfer
Scope: +100 researchers and technicians
Space: 4 Laboratories. Educational space
Focus: food science and health, precision nutrition

IMIDRA
Type of entity: public
Institution: Research and Development Institute
Services: R&D and other technological activities. Promotion of the rural world.
Space: 7 experimental farms spread over 7 municipalities. Laboratories and Museum
Focus: rural, agricultural and food development

Autonomous University of Madrid
Type of entity: public
Institution: university
Services: studies, scientific and technical research, innovation and knowledge transfer. UAM Emprende Collaboration
Outreach: 30,000 students, +3,000 teachers and researchers, +600 research projects
Space: classrooms, laboratories
Focus: multi-sectoral, 67 departments

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Universities and R&D organizations

Examples of startups from **IMDEA FOOD**

4Chronic

Forchronic is a company specialized in precision nutraceuticals, with a patented lipid vehicle technology (TVL) that improves the bioavailability of natural extracts.

Founding date	2019
Vertical	Health & Nutrition
B2B/B2C	B2B

P4H

Study of biochemical processes in the human body to understand their effect on health and well-being.

Founding date	2018
Vertical	Health & Nutrition
B2B/B2C	B2B

Examples of startups from **UAM**

Bread Free

Biotechnology and Artificial Intelligence to manufacture wheat flour suitable for celiacs. We incorporate waste from the agri-food industry to revolutionize gluten-free eating.

Founding date	2020
Vertical	Health & Nutrition
B2B/B2C	B2B

GanaderIA

Technological firm that uses Artificial Intelligence to optimize the livestock sector, comprehensively benefiting the farmer, the consumer and the state of the art

Founding date	2021
Vertical	Agtech
B2B/B2C	B2B

05
Expert opinion

Expert opinion (interviews)

Natalia Valle
CEO and co-founder
Plant on Demand

Maria Naranjo
Dr. Food Industry
ICEX

Itzíar Ortega
Dr. Madrid Food Innovation Hub

Jaime Martin
CEO and founding partner
Lantern

Beatriz Romanos
Coach. Public speaker. Founder
Tech Food Magazine

Alberto Jimenez
CEO and co-founder
Smileat

Juan Cividanes
Managing Partner
The Food Tech Lab

Estefania Erro
Dr. Mktg and Innovation
CNTA

On the following pages we publish a selection of interviews with relevant people in the sector.

Expert opinion

Natalia Valle
CEO Plant on Demand

Natalia Could you define in a few lines the purpose of your company?
Accelerate the agroecological world transition through technology.

Do you consider that the Agritech sector is relevant and has potential for the Community of Madrid?
Of course, it is in the interest of many community actors to make a quick and efficient transition to local and green consumption.

- Governments: to achieve the European targets set out in the Green Deal and other policies mandating increased green production and consumption.
- People: those who demand and seek to consume more local and healthy but are unable to access such products, either due to price or availability/convenience.

Are you satisfied with the support you have received from the Community of Madrid for the creation and development of your startup?
It is true that they have provided us with free coworking in the first years of the company's life and some incubation, but the taxes, maintenance costs, administrative obstacles, etc., are stifling.

What startup support initiatives do you know about?

- Madrid Food Innovation Hub
- Mares (now closed but a great help in his time)
- Social entrepreneur and entrepreneurial awards, but which again include a bureaucracy that makes you want to do nothing.
- BAN Madrid Forum and Madrid Emprende Investment Forum

What are the levers of success that you find lacking in the Madrid region but that you do find in other regions or regional ecosystems?

- Subsidies and financial aid for the launch and growth of companies (Navarre is a great example of this).
- Help to deal with bureaucratic issues and tax discounts for hiring employees, tax deferrals, etc.
- Improving access to finance (debt, investment...)
- Improving the entrepreneurial ecosystem. It is unacceptable that we are in the capital and there is not even a powerful center for entrepreneurship (create a Lanzadera in Madrid).

Do you think that university-business technology transfer is sufficiently developed, and what initiatives are needed to improve it?
I don't know. What I saw in my experience at the university of economics in Madrid 5 years ago, the transfer was absolutely null, but I understand that it will have changed. As far as I know from other communities, university competitions with cash prizes catapult many initiatives.

What is your vision of how the agrifoodtech sector will evolve in the next 3/5 years?
Will grow. Especially agtech, alternative proteins (growing in the market, many are now in the ideation phase), and circular economy. People are increasingly aware of their food and its impact (on health, environment and animals). There will be a growing trend towards ethical, local and organic food consumption.

Expert opinion

Maria Naranjo
Dr. Food Industry

María, what strategic areas do you consider to be priorities for the Community of Madrid?

Although all areas can have an interesting development in an environment such as that of the Community of Madrid, the ones I consider most interesting are those linked to the Food Service channel (Cooking & Restaurant Tech); Food Delivery & Markeplaces and Novel Food. In Madrid, on the one hand, the foodservice sector and gastronomy are boiling over.

In addition, a large metropolis with a highly liberalized service sector demands agility in the service and supply of food (delivery). On the other hand, the capacity and demand for new products is also important. All these factors make these three niches the most interesting and strategic for this Autonomous Community.

How would you define the current state of the foodtech ecosystem in the Community of Madrid?

Madrid is particularly well positioned in the European and even global ecosystem. Our strategic position between Europe and LATAM on the one hand, coupled with the power of the Spanish food industry and the excellent communications of Spain and particularly Madrid with the rest of the world make it a strategic destination.

In addition, Madrid has a solid ecosystem with accelerators (Eatable Adventures); hubs (Madrid Food Innovation Hub); an environment of universities (Carlos III, Politécnica, UAM, IE...); large logistics centers (MERCAMADRID) that favors and attracts the implementation of startups and also other agents of the Spanish ecosystem (recent landing of CNTA, for example) and the entire investment ecosystem. Another of Madrid's strengths is its capital status and proximity to public institutions such as CDTI, CSIC and ICEX. This proximity makes it easier to access information and activities organized by the central services of these organizations.

How have you seen the evolution of the foodtech sector in the last 3 years in this community?

The foodtech sector has developed very intensively in the last three years in the Community of Madrid thanks to the factors mentioned above and the support of public institutions, both from the Autonomous Community of Madrid and the City Council. Many of these initiatives have been developed by the Department of Innovation (Madrid Food Innovation Center) and the Regional Ministry of Economy (MIDE). Investments from private funds and the emergence of sectoral VCs are another sign of this boost to the foodtech ecosystem. The number of startups in the foodtech sector has multiplied in almost all verticals of this niche.

Programs have emerged from large corporations in the food industry (PASCUAL, MAHOU...) that reflect the private sector's commitment to innovation in the Community of Madrid.

Expert opinion

What are the levers of success that have brought us this far? What could have been done better?

Public-private partnerships have been key to the development of the ecosystem. Facilitative measures for private investment and a package of more agile public financial instruments in the area of venture capital would be needed. Public investment should give clear signals of the opportunities that exist in food innovation precisely to address market failures, betting on early-stage companies with potential. Connecting the local ecosystem with other international ecosystems should be a strategic line of development in the future. The creation of forums for local and international companies to meet and network with investment funds is essential for the ecosystem to consolidate.

Madrid lacks its own technology center unlike other regions (Catalonia, the Basque Country, Navarre, etc.). It is true that some of these TCs are also being set up in Madrid, but perhaps this is a weakness that could be solved in the coming years through alliances or operators and hubs such as the Madrid Food Innovation Hub, which has been created by the City Council.

Do you think Madrid's universities are playing their rightful role in the foodtech ecosystem?

Undoubtedly, universities are a key player in the development of the foodtech ecosystem. Once again, University-Business collaboration must be highlighted in this area. Madrid has an extensive network of public and private universities. Perhaps its main shortcoming is the lack of size of the research departments.

Encouraging exchanges of professors with scholarship programs (Fulbright, Rafael del Pino, Ramón Areces) that promote the installation of researchers and the emergence of research projects linked to strategic niches would be a development factor to be promoted.

Do you think that the Madrid Region has the potential to become a benchmark foodtech ecosystem in Europe?

Spain has the potential to be an ecosystem of reference in Europe and the world. At the moment, there is a wide dispersion of initiatives across the country that do not always facilitate the exchange of ideas and open innovation working schemes. To the extent that Madrid is able to capitalize on these efforts and attract talent from all over the country and the rest of the world, it could consolidate its position as a benchmark.

What would need to happen to achieve this?

The public sector should act as a signpost with a sustained commitment over time to innovative initiatives. To the extent that a regulatory framework facilitating the establishment of start-ups and investment funds is consolidated, and that there is also a commitment to research and development in the university environment, this process will be consolidated. This must be a long-term strategy, as the return on investment in these projects is not immediate.

Another development factor will be the creation of networking forums where all the agents of the ecosystem, not only Spanish but also international, can exchange ideas and projects.

Finally, Madrid should facilitate the presence of companies based in the region in the rest of the world through technical conferences and meetings.

Expert opinion

What is your vision of how the foodtech sector will evolve in the next 3/5 years?
I see a very promising outlook for the foodtech sector in Spain and worldwide. The challenges linked to the food of the future in terms of sustainability, raw material sourcing, circularity and food safety are driving the development of this industry. Only to the extent that Spain is able to capitalize on the privileged position that its food industry currently holds by committing to innovation, will we be able to maintain our potential in the future.

Coordinated work is needed from all public administrations with long-term strategies that facilitate the development of a strong foodtech ecosystem that is integrated with the rest of the world. Spain and Madrid can take advantage of their position as a bridge between Europe and LATAM and even become a reference for other foodtech ecosystems (Israel, Singapore…) that value the assets and the network of institutional and private operators that exist in our country.

Itzíar Ortega
Dr. Madrid Food Innovation Hub

Itzíar, what strategic areas do you see as priorities for the community?
All the areas of innovation that apply to the agri-food value chain are strategic as they work in different fields that provide solutions to local and global challenges of sustainability, efficiency and food security.

How would you define the current state of the Madrid foodtech ecosystem?
Madrid is the most attractive city in Spain for startups and entrepreneurs and the sixth most attractive in Europe according to the Financial Times. It is undoubtedly a great pole of attraction for talent, especially in the Foodtech vertical, thanks to pioneering initiatives such as the Madrid Food Innovation Hub, which offers facilities and mentoring with top-level professionals to entrepreneurs throughout the year and completely free of charge, an initiative of the Madrid City Council.

How have you seen the evolution of the foodtech sector in the last 3 years?
Investment is the first indicator of the growth of an entrepreneurial ecosystem. In the case of foodtech, we are seeing a very significant increase from year to year. In Madrid Food Innovation Hub we have incubated and accelerated, in its first year of life, more than 60 startups that develop innovative projects applied to the agri-food industry. In addition, almost 10% of the Spanish Foodtech ecosystem has been developed in the center

What has been done well and what could have been done better?
Among the successful initiatives, in addition to the Madrid Food Innovation Hub, we highlight the dissemination activity that ICEX has been carrying out for the last two years to position and raise the profile of Spanish foodtech through informative meetings and detailed reports on the ecosystem and investment trends. On the other hand, CNTA has just announced the creation of Eatex, a collaborative innovation hub for the transfer and implementation of technology in the agri-food industry. It is a strategic project supported by the Government of Navarra and aims to accelerate and improve technology transfer through collaboration between R&D centers companies and startups.

Expert opinion

Do you think that university-business technology transfer is sufficiently developed, and what initiatives would be necessary to improve the transfer ratio and the creation of spinoffs?
From the Madrid Food Innovation Hub we receive university students every week, we collaborate with several universities with different specializations and we believe that it is absolutely necessary to promote the connection between entrepreneurial talent and profiles more related to research, generating multidisciplinary teams that contribute to the success of the initiatives.

Do you think that the Madrid Region has the potential to become a benchmark foodtech ecosystem in Europe?
Thanks to all the above-mentioned initiatives, the Community of Madrid is undoubtedly consolidating its position in the Foodtech vertical and attracting the interest of international players and investors.

What would need to happen to achieve this?
We have to follow the path we have set out, continue to grow, promote entrepreneurship and foster public-private collaboration to consolidate our local ecosystem.

What is your vision of how the foodtech sector will evolve in the next 3/5 years?
We are coming from exponential growth in the Foodtech vertical, where in 2021 we tripled investment compared to the previous year. In the coming years, we expect to consolidate this growth with larger rounds that will enable the scaling and internationalization of these startups.

Juan Cividianes
Manager Partner
the_foodtech lab

Juan, what strategic areas do you consider to be priorities for the Community of Madrid?
Spain is a power in the agri-food industry, and the importance of beverages (wines, spirits and beers), the dairy and fruit and vegetable sectors, to name but a few of the largest.
If we think of strategic areas for the Community of Madrid, I believe that any technology related to catering (digitalization of customer service processes or robotics in food production and delivery) can be a great opportunity due to the dynamic nature of the catering sector as a whole.

In addition, there are issues such as recycling and waste management, which, in collaboration with the administrations, should be a field of innovation in which the Community of Madrid plays an important role. I would also like to mention the alternative protein industry as a field of research and the implementation of industries for the production of new proteins for the agri-food industry. The latter is a field with great potential for development.

How would you define the current state of the foodtech ecosystem in Madrid? There are many startups with a lot of potential, but there are ecosystems that are more conducive to the rapid development of innovation in the agri-food industry. In order to consolidate ecosystems and turn them into robust ones, there must be changes in the way public bodies approach them.

Expert opinion

How have you seen the evolution of the foodtech sector in the last 3 years? The creation of startups is an alternative professional outlet for many professionals of all ages, and the foodtech sector is one of the drivers of innovation, and this has been consolidated in recent years. Therefore, there has been a big leap in recent years.

What are the levers of success that have brought us this far, and what are the mistakes to avoid that may have interfered? I think that the recognition of the agri-food sector as one of the sectors with the greatest opportunities for transformation through innovation is the best proof that things are being done well. Many public bodies (ICEX, Enisa, ...) are very involved in the development of the industry, and that is a great lever. I believe that there should be greater public-private collaboration that in a structured way leads the consolidation of robust innovation ecosystems. The commitments of public institutions should be based on a single body leading all economic support for innovation and allocating budgets to specific industries. Foodtech is undoubtedly one of them.

Do you think that university-business technology transfer is sufficiently developed?
Universities in Spain, in general, are not structured to transfer technology to industry. There is a lot to change, and I can't talk about particular positive cases, which I'm sure there are.

Do you think that the Madrid Region has the potential to become a benchmark foodtech ecosystem in Europe?

The potential clearly exists, but as I say, there is a need for a firmer commitment and the design of much more agile models, which from my point of view involves a public-private partnership.

What would need to happen to achieve this?
This question cannot be answered in one line, but I believe that trust in ecosystem actors is a very relevant macro issue and that improving it would make startup promoters more concerned.

What is your vision of how the foodtech sector will evolve in the next 3/5 years?
It is going to experience big growth, with new technological solutions. The question is whether Spain will have any "global champions". That will largely depend on how robust the ecosystems are.

Beatriz Romanos
Founder TechFood Magazine

Beatriz, what strategic areas do you see as priorities for the community?

Those that are linked to a high technical, bioscientific added value. Where the concentration of specialized talent can be harnessed and increased. We have large, highly recognized universities. We also have large companies. We must take advantage of this.

Expert opinion

In that sense, I see everything related to novel foods. Of course, everything related to the bio-economy, following the sense given by the recent order of the Biden Administration in the US, to create a whole country strategy around this concept, focused on fostering innovation, guaranteeing food security and sovereignty, and leading in these fields, not lagging behind other countries.

Madrid, along with other highly touristic regions, is also a leader in the digitization of the hotel and catering industry. And I think it is important to play this role as a benchmark compared to other regions. It would be interesting to make even more progress in the professionalized digitization of the back office, which is still pending in this sector. And that it could "export" these examples and use cases to other regions.

All foodtech ecosystems, even the most mature ones, have a major challenge when it comes to scaling up. And that is something we can learn from those that are ahead of us, and take as a strategic opportunity. In Madrid, and in Spain in general, we have a powerful food sector, companies with proven experience and industrial capacity, not only as corporations, but also in terms of talent, on which we can leverage to become an attractive scale-up hub for our own startups, but also for those in other regions that lack these strengths.

The so-called mid-stream, everything that has to do with logistics optimization of supply chains, traceability. Madrid is a technological powerhouse and we have to take advantage of that.

How would you define the current state of the foodtech ecosystem in Madrid? Along with Barcelona, it is a growing ecosystem. There are more startups and they are more diversified and in a more advanced stage than before. However, I think it still has a long way to go before it resembles more thriving ecosystems such as Tel Aviv, London, Berlin or the Netherlands.

How have you seen the evolution of the foodtech sector in the last 3 years in this community? It has grown, it is more visible. Initiatives such as the Food Innovation Hub are helping to make it more dynamic. We are starting to see collaboration initiatives between corporates and startups. Although there is still a long way to go. We need to accompany startups from their early stages to their consolidation.

What are the mistakes to avoid or suggestions for a more determined development of this sector? It would be interesting to have a national strategy to promote this industry. It should be collaborative between regions, administrations, companies and other agents. One that somehow channels or facilitates the connection of initiatives, with a view to the medium and long term. It should define the role we want to play in this race, which has only just begun, but in which we have a lot at stake. Precisely because it is a young race - which is being played with new tools and rules of the game - size, tradition, reputation as a food or gastronomic power, etc. have less weight (sometimes they can even be a weight in the opposite direction, acting as an immune system that hinders innovation). What matters is the ability to want to play in that league, to be able to think and act differently, to collaborate. And to be very agile.

Expert opinion

It's a new industry, it's just starting out and we are learning, so logically, there are aspects to evolve. For example, to develop a clear vision, an understanding of the implications and opportunities of this industry. A vision that makes the present compatible with looking to the medium and long term, what we are and what we can be.

Do you think that university-business technology transfer is sufficiently developed? There is room for improvement in the field of technology transfer. Bringing the two poles, research and industry, closer together. Perhaps industry can incorporate a more long-term vision of this transfer, adding to its expectations of immediacy, of solutions very close to the market, a commitment to projects in earlier stages, with more risk, of course, but also with greater potential for impact in the event of success. And perhaps there is also a need for transfer in the other direction, from the entrepreneurial world to the university. Transfer of mentality, of skills, of vision, of concern for going beyond generating knowledge. It is a two-way channel. It is also important to develop the skills of the people involved in research. Make it easier for them to acquire them. At the same time, the criteria by which they are valued must be reviewed.

Do you think that the Madrid Region has the potential to become a foodtech ecosystem of reference in Europe? What should happen to achieve this?

1. In my work with companies, I like to start by showing how the technological convergence we are experiencing is accelerating the transformation of many industries, and how the food industry is no stranger to this.

The future is moving very fast, and it is increasingly difficult to predict it (think of the disruptions we have experienced in the last three years: pandemics, supply chain disruption, war, inflation...) In a situation of uncertainty, the best way to predict the future is to create it. This is foodtech, the bet to create the future food system that is safer, more accessible, healthier and sustainable (socially, environmentally and economically).

At the recent Davos summit, Accenture Europe CEO Jean-Marc Ollagnier explained: "Another major driving force for change are the technological revolutions in many areas: digital, green, biotech, artificial intelligence and others. These are huge accelerators of change in many respects, from the organization of companies to the balance of power between states and, of course, people's lifestyles (...) The next ten years will represent an economic change greater than that which has occurred since 1945". Understanding this is the first step.

2. Willingness to be part of it, long-term commitment, continuity (of course, without neglecting existing models, helping them to optimize). Avoid the risk of falling into the "innovation circus". Seek out the niches of opportunity where we can really make a contribution.

3. Collaborative vs. competitive mentality, honest between regions, administrations, companies, actors.

4. Choose a few key segments, where you already have resources (talent, knowledge, companies) and/or high potential, and specialize (e.g. we have all the telecommunications companies, technology, etc. Many food companies). Facilitate cross-pollination between industries....

Expert opinion

5. We also need to think about the later stages, how to facilitate the step from the laboratory to a first commercial scale, to an industrial scale. Can we, as a country, play a role there, attract innovators from other hubs for those stages. I mean, if we are not playing - yet - in the premier league in the early stages of innovation, maybe our industrial conditions, labor conditions, talent, etc. can position us well to be scaling hubs?

6. We can also play a leading role in the Latin American region. Many startups look to the USA when they want to grow (Notco, for example). What can we do to make them prefer to come here (Innomy case, for example)? In what area? Perhaps in technologies such as AI or similar, Silicon Valley pulls too much, but there are other advantages we can play.

7. Regulatory. In some segments, there are already organizations representing the interests of new industries, but perhaps it would be interesting to go further along these lines. Europe is more protective than these markets, and that is not a bad thing, but we need to look at how to balance protection and security with innovation.

8. The food system has problems, but at the same time it is transforming. The concept of globalization and food security and sovereignty has changed in the last two years. (The aforementioned initiatives in the USA, Singapore… China also has plans to produce 95% of the pork it needs in 10 years - much of which comes from Spain… What are the big exporters going to do in this scenario…?) We have to prepare ourselves for these changes, and they are going to be faster than we expect.

What is your vision of how the foodtech sector will evolve in the next 3/5 years?

I believe that the plant-based sector will continue to evolve, especially in the B2B segment. To get closer to that promise of healthy and appetizing alternative foods, which we are not there yet. Price parity should be a matter of time and scale. I also believe that there will be a selection of players. Given the excitement around the fermentation world, we are going to see an explosion of products in the next couple of years.

The cell-based industry will accelerate in the coming years as a result of initiatives such as those in Singapore and the USA (FDA approval, Biotechnology Act, etc.). And it will polarize towards those hubs where commercialization is a reality or is closer.

Bio-tech markets are seeing specialization in segments of their value chain, specialization in enabling solutions for the fermentation or cell culture industry (growth factor, production technologies, bioreactors, etc.),

Alternative cultivation systems (indoor, vertical farming) for high added value products (we have seen examples in hops, vanilla, strawberry…), with strong support in technology and automation.

There is a lot of investment interest in solutions that improve food safety and shelf life, in line with the fight against food waste. Multiple technologies are pursuing these goals, from smart labels to sophisticated computer vision systems. The market and the opportunity for impact are vast.

Co-funded by the European Union

Expert opinion

Robotics and automation, yes, wherever the human factor is not key. Or as support and "reinforcement" for humans. And where "it is not seen or noticed". I see humanoid robots more as a "wow" effect.

There is a huge field to be developed in the application of AI to practically all segments of the chain, and we are going to see very important advances. Who is going to lead the way? At the moment, the USA and China are the most prominent in this race. What role do we want to play in Europe? This is not a country race... We have to be stronger together.

Estefanía Erro
Mktg and Innovation Director
CNTA

Estefania, what strategic areas do you consider to be priorities for the community? The areas. All of them are important. Here I would dare to say that Madrid, due to its size, capital city status and attraction of international people, presents greater opportunities for proposals more related to services, restaurants, etc. and even for food innovations. And perhaps, because of this as well as its food industry structure, perhaps less so for themes more related to agriculture, by-products, etc.
But this is subjective, in the end if we talk about Foodtech, you can have the example of Ekonoke which breaks what I am saying. So all in all, is it necessary to prioritize? Surely there are reasons for both yes and no. Smart specialization strategies have a lot to say about this

How have you seen the evolution of the foodtech sector in the last 3 years? The evolution is positive all over the world in general, in Spain and in Madrid in particular.
Six years ago it was unknown and now it is the fashionable concept. General investors are putting the spotlight on it. And unfortunate situations such as the war in Ukraine, the severe drought this summer or the increase in food prices are making us realize that the accessibility to food that we took for granted, is not. We must look for answers and solutions.

What are the levers of success that have brought us this far?
Technology is one of the big levers. So many researchers, technologists are developing applications that they would not have thought of before. They are being joined by many business profiles to complement and make those applications find a go-to-market strategy and adoption.
This is being facilitated by the number of initiatives that are being developed to facilitate this: acceleration programs, funds, incubators, congresses-fairs, financial lines, etc. This would be the second major lever.
The third would be the business opportunity it represents; it attracts the attention of corporations and investors. And with this breeding ground, the fourth lever I would mention would be the media and their increasing interest in the sector. Not forgetting also the public component and its willingness to help the sector.
This generates a breeding ground that is facilitating the creation of more and better start-ups every day. In Spain, the seed-early stage still has a greater seed-early stage component than in other countries, but we are progressing at a good pace. It is also noteworthy that many startups have a technological component that enables them to offer a differential value proposition in the international arena.

Expert opinion

And we believe that this could be a crucial aspect for the development of Spain as a pole of reference. This is demonstrated by startups such as Cocuus or MOA, which have just won the Santander X prize or received investment from international funds.

Do you think that Madrid's universities play their due role in the community's foodtech ecosystem?
Technology transfer is a great challenge pending in our country. Universities, Technology Centers and Companies must find new ways and formulas to achieve it. There are international models that can inspire us, but it is true that adapting them to our reality is neither obvious nor easy. Culture, experience and legislation make a great deal of difference. It will take time, dedication and resources to find the models. Eatex Food Innovation Hub by CNTA was created for this purpose.

How will the foodtech sector evolve in the next 3/5 years?
Future evolution. Everything leads me to believe that it will continue to be positive, but there is no doubt that 2023, full of uncertainties, will be key to see whether the growth trend will slow down or stop and for how long. Food tech has much higher capital requirements and technological development timescales than other X-tech (Fintech, proptech) more related to digital. 3-5 years is almost too short for this sector

06

Conclusions and next steps

Conclusions

Strengths of the Community of Madrid

- **Emerging sector with more than 100** agrifoodtech **start-ups** identified in this report. In the last 2-3 years, the number of pre-seed startups has increased a lot, meaning there is a good pipeline of future scale-ups.
- **High weight of the food industry, with a focus on the Food Service sector** with many startups in the restaurant-tech and delivery categories.
- **Powerful network of Universities and Research Centers,** specializing in fields with great potential such as health and biosciences (personalized nutrition, health, cell culture, fermentation…).
- **Singular territory, with a high concentration of public institutions and headquarters of relevant ecosystem actors** (corporations, innovators, associations, investors, as well as infrastructures).
- **The City Council is committed to launching the Madrid Food Innovation Hub**, a source of incubation for new projects.

Conclusions

Areas for improvement in the Community of Madrid

- **Madrid's agri-foodtech sector has not yet unleashed its full potential**.

  a. Low average investment per startup, which means few resources for entrepreneurs, and in many cases, startups disappearance.
  b. Few agri-food corporations with Open Innovation initiatives.
  c. Very low spin-off rate
  d. Greater determination is urgently needed to boost agrifoodtech as a strategic sector in the face of food systems challenges.

- **The primary and processing sector is virtually non-existent**, resulting in dependence on other regions for supplies.

- **Collaboration between public and private actors** and institutions must be further promoted.

- **It is necessary to speed up and design more specific support** for the creation and development of start-ups and spin-offs.

Recommendations

Opportunities in the Community of Madrid

- **Identification of strategic areas** of the Community and creation of a public-private action plan. Opportunity to boost high-tech sectors in the areas of biosciences, the intersection between health and food, or innovation in urban farming.

- **Promote connection and interaction with other** regional and international ecosystems, Opportunity to develop the connection with the ecosystem in LATAM.

- **To create a meeting point for the sector** in the Community of Madrid. Opportunity to organize an international congress.

- **Create more specific support for startups and streamline procedures**

- **Creation of an investment vehicle to promote spin-offs** from the University.

- **Designing a more sovereign and sustainable urban food system** Opportunity to promote synergies between the countryside and the city, with innovative projects.

Final conclusion

A lot of work has been done, but much remains to be done.

We are experiencing a climate emergency and the foodtech sector is one of the strategic levers for the necessary transformation.

The Community of Madrid, with +6m inhabitants and numerous assets, can be a driving force in this sector.

Methodology and acknowledgements

Criteria

For the preparation of this report we have considered agrifoodtech startups to be those companies that have their European headquarters or head office in the Community of Madrid, with a maximum of 10 years since their creation (from 2013 and until December 2022), with a relevant activity and an active online media presence, that are at the intersection of technology with the Agriculture, Food or Nutrition sectors, and with a relevant level of innovation in science, technology, concept or business model.

Being such a dynamic sector, we apologize in advance if we have forgotten to mention any entity in the ecosystem. We intend this to be a living report that is regularly updated and improved.

Sources

Crunchbase, Dealroom, FTDN (Food Tech Data Navigator), Parque Científico Madrid, Published reports, Own sources.

Partners

A very special thanks to all the actors in the ecosystem who have collaborated with us in the interviews, edited or not in this report, for their immense and disinterested help. They have been a very necessary counterpoint to understand, from all perspectives, the current situation of the AgriFoodTech ecosystem in the Community of Madrid, and a great source of inspiration for the identification of improvement initiatives, aimed at the development of the sector, to turn the Community into the space of reference that corresponds to it, deploying its full potential.
We would also like to acknowledge the Community's entrepreneurs, who fight tirelessly and tenaciously every day to make our food system a better world.

Interactive Map

You will find all the information about the AgriFoodTEch ecosystem in the Madrid Region on the Interactive Map, where you can access free of charge, obtain the most updated information and add new actors. .

https://ivoro.ventures/foodtechmap

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