Foodturistic '26

The Food Changemakers Report

KMZERO
THE FOOD CHANGEMAKERS

Fooduristic
THE FOOD CHANGEMAKERS REPORT

ORIGINAL IDEA
KM ZERO Food Innovation Hub

CONTENT
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CREATIVE DIRECTION
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in **The Food Changemakers Think Tank - Madrid 2025**

Table of Contents

An irresistible food revolution

In a world where everyone is talking about Artificial Intelligence, harnessing the power of Collective Human Intelligence feels counterculture. On the contrary, we deeply trust in the unique value, knowledge and energy generated when bringing people together. Following the herd has shown to lead to disastrous results. Investment has flown into the wrong pockets; trends have misled corporate innovation plans, and we continue to leave behind people without access to affordable and nutritious food. This is why we are confident with our decision **to use AI as a tool and not as a solution** to decide the future we want to create.

Reports on the state of the food system have something in common: a catastrophic narrative around the big, complex and global challenges we face. We have been there. Our past seven reports covered the evidence around the negative impact of our sector in society and the environment: the excessive use of land and water; greenhouse gas emissions; diet-related disease; rates of malnutrition and inequality; concerns about the generational shift in farming; etc. Even if all of this is true, **having the facts does not move the needle.**

"Things are not bad and getting worse. They are good and getting better... but not fast enough".
Jack Bobo, Executive Director Rothman Family Institute for Food Studies

Our Changemakers agree with this: **we need a new narrative that gets people excited about the future.** KM ZERO has been bringing together our network in different parts of the world since 2019 with the intention of accelerating the transformation. Our Think Tank has become a space for exchange, connection and solid relationships that drive growth and transformation in the food system.

The insights gathered in this report come from the conversations between **150 special individuals from 25 countries,** with vision, willpower and the ability to improve the world by managing capital in the right direction, making business decisions, researching, developing solutions, educating and cooking a delicious future for food. We are living in fun times. Fun times for those who embrace change; those who turn challenges into opportunities; those who are ready to question their beliefs and trust in humanity.

"Let us in this room make our revolution irresistible one bite at a time."
Julia Collins, founder of Planet FWD

From UPFs, GLP-1, biohacking, tech, national sovereignty and food security, to traditions, authenticity, flavor, regeneration and resilient supply chains... you will find reflections from some of the innovators at the forefront of change in the food system.

KM ZERO is on a mission to **accelerate the transformation of the food industry through knowledge, open innovation, and meetings.** We hope to support you in making sense and find clarity and purpose amidst all this noise.

Key takeaways

This year will continue to be marked by increasing volatility in supply chains, regulatory and financial pressure, more demanding consumers and an increasingly unstable climate and social environment. However, this context represents a historic opportunity to lead the transformation of the food system.

At KM ZERO we propose a new framework of action based on three pillars:

- Nutritious, accessible food adapted to different cultural contexts.
- Efficient production systems, where food goes from being a cause of degradation to a driving force for the regeneration of the environment.
- People at the center, guaranteeing decent conditions and profitability for all actors involved in the chain.

Inaction increases financial, reputational and operational risks, while companies that align their strategy with the well-being of people and work in harmony with resources will strengthen their resilience, competitiveness and future relevance.

1. The context has changed radically

The food system operates in a scenario marked by geopolitical conflict, climate crisis, logistical disruption and economic pressure. Dependence on a few origins, concentration of suppliers, and the fragility of global chains expose companies and countries to systemic risks.

We propose a transition from reactive models to strategic planning based on:

- Diversification of suppliers and regional production.
- Creation of critical food maps.
- Coexistence between internationalization and national food sovereignty.
- Resilient infrastructures and flexible supply chains.

2. Incremental change is no longer enough

The magnitude of the challenges calls for a profound transformation of the food system. Industry can no longer limit itself to marginal improvements in efficiency or impact reduction.

Fooduristic'26 highlights that:

- Food is one of the biggest drivers of emissions, biodiversity loss and water stress.
- Modern life and diet are generating unintended consequences on people's health.
- Convenience, price and taste continue to be the most important purchasing factors.
- Public spending on health is becoming unaffordable for Western countries. "Food as medicine" proposes an answer for the prevention of diet-related diseases.

Organizations that act with strategic ambition will gain competitive advantage and leadership.

3. People's well-being at the center

The food transition must be fair, inclusive and people-centered. The report highlights that without profitable crops, protected workers and informed consumers, there is no real transformation.

Priorities:
- Decent conditions and profitability for producers.
- Incentives for regenerative practices.
- Consumer education and empowerment.
- Access to healthy diets.

This approach is not only ethical, but strategic: it strengthens the confidence of investors, customers and regulators, and improves performance in the medium and long term.

4. Technology and AI as enablers of change

Artificial intelligence emerges as a key catalyst in:

- Optimization of production processes.
- Reduction of waste, water and energy consumption.
- Acceleration of product development and launch times.
- Biomarker monitoring for personalized nutrition.
- Reformulation: improvements in the nutritional profile of products.
- Supply chain optimization.

However, technology must be at the service of human decisions, maintaining taste, emotion and sensory experience as differential factors.

5. Advanced nutrition as a strategic driver

Personalized nutrition, longevity and prevention are consolidated as pillars of the future of food. However, the sector faces:

- Information saturation.
- Lack of comparable scientific standards.
- Limited access to affordable and convenient solutions.

The convergence between clinical data, accessible technology and clear narrative will be decisive in scaling these models to mass consumption.

6. Proteins of the future: diversity and resilience

The future of proteins is based on diversification and complementarity:

- More sustainable and stable production of animal proteins.
- Diversification of protein sources.
- Evolved vegetable proteins.
- Precision fermentation.
- Cultured meat.
- Hybrid models.

The goal is not to replace, but to build a resilient protein portfolio, aligned with strategic autonomy, available resources, and sensory acceptance. By complementing what is currently offered, we will be able to respond to health or supply crises without jeopardizing production.

7. Water, circularity and regenerative agriculture

The report identifies three critical axes for operational sustainability:

- **Water management:**
  - Efficiency, reuse and measurement of water footprint.
  - Stable infrastructures and innovative financing.
- **Circular economy:**
  - Recovery of by-products.
  - Collaborative biorefineries.
  - *Upcycling as a scalable model*.
- **Agriculture of the future:**
  - Digitalization and automation.
  - Genomic techniques.
  - Attracting new generations.
  - Profitability as a condition for sustainability.

8. Climate and sustainability as a competitive advantage

Sustainability should be understood as a strategic investment and not as a cost.

Key proposals:

- Bonus schemes for good practices such as carbon credits.
- Unified impact metrics.
- Understandable solutions for the consumer: such as a "Carbon Score" similar to the nutriscore.
- Microfinance funds to support farmers' transition.

9. Food Service & Retail: new consumption models

Consumption is evolving towards hybrid, emotional and experiential models:

- Food service as a laboratory of innovation.
- Convenience: the rise of prepared food.
- Retail as a consumer information platform.
- Integrated and user-centered digitalization.

10. Colaboración como estrategia estructural

The transformation of the food system requires new models of collaboration:

- Venture-client as a complement to the traditional investment model.
- Clear distribution of risks.
- Alliances based on trust and scalability.

Success lies in moving from discourse to real validation in the market, not only among startups and corporations but with new formulas that help consolidated companies to address pre-competitive factors together: talent, quality, innovation and technology, efficiency, internationalization, etc.

Fooduristic'26 sets out a clear action framework for companies, investors and food system actors:

- The risk of not acting is greater than the cost of transforming.
- Future resilience depends on aligning human health, nature, and social justice.
- The organizations leading this transition will define the new standard of the food system.

At KM ZERO we propose a structural and irresistible revolution, where every business decision can become a driver of positive impact, profitability and purpose.

The food of the future will be varied, delicious and accessible. It will improve people's lives, adapting to their tastes and needs in each context.

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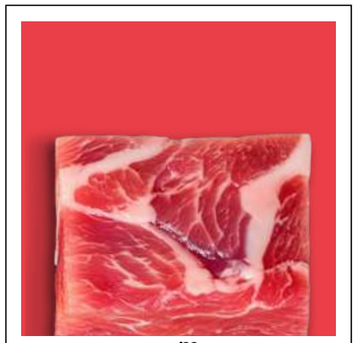

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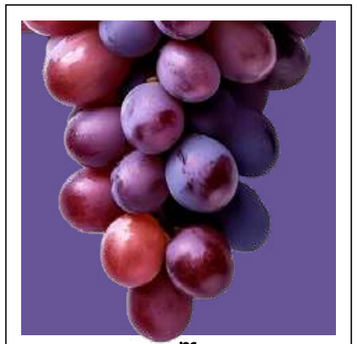

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National Food Strategy for Spain: the stages of the journey

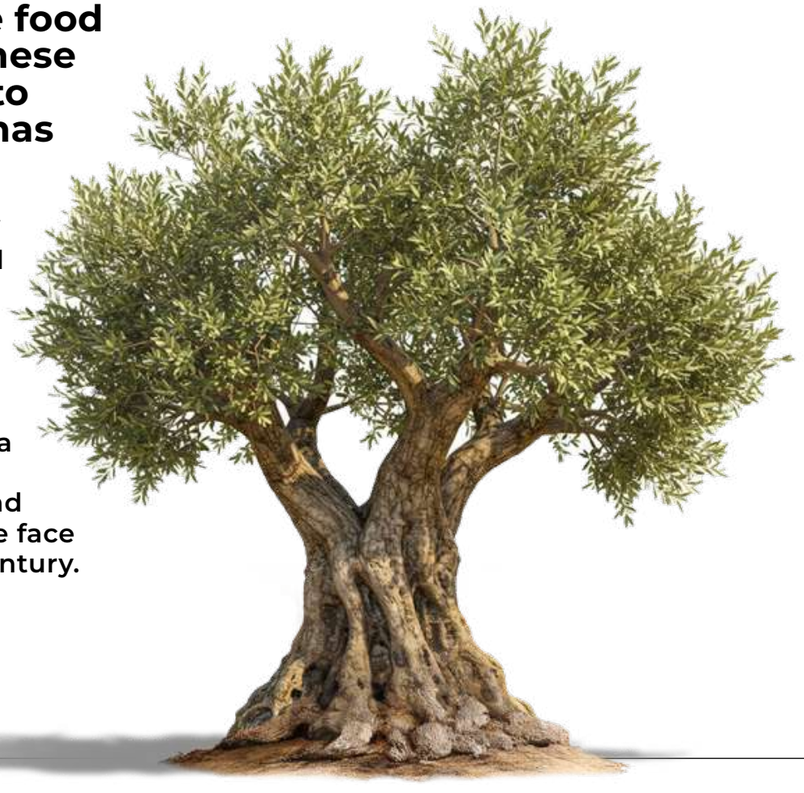
Spain is positioned as a global powerhouse in food. With fertile land, an extensive coastling and a gastronomic culture that has conquered the world, our country leads in quality and sustainability, and the numbers back it up: we are leaders in agricultural income within the European Union, seventh in the world exporter of agri-food products and first in terms of farming area in the EU. In addition, the food industry is the main one in the country and the fourth in terms of turnover in the entire European Union.

But this leadership does not guarantee the future. Spain faces an environment marked by climate change, market volatility, unhealthy eating habits, rural depopulation and imbalances in the food chain. In the face of these challenges, the need to adapt and transform has become imperative.

The response of the Ministry of Agriculture, Fisheries and Food has been clear: to create the National Food Strategy (ENA). After a process of dialogue with all the players in the food chain – producers, industry, distributors and gastronomy – a comprehensive plan has been designed that acts as a map and GPS to guide the country in the face of the challenges of the 21st century.

The purpose of the ENA is ambitious: to consolidate Spain as a world benchmark in food excellence, capable of meeting the present and future needs of the population, while promoting the development of rural and coastal areas, essential for agri-food and fisheries production.

The strategy has the mission of articulating a comprehensive, sustainable and competitive food system, rooted in the territory, based on diversity and the production of healthy, accessible and high-quality food, recognized and valued globally.



The ENA is structured into six major challenges that mark the way forward:

1. Guarantee the entire population, inside and outside Spain, the strategic supply of food, through mechanisms that ensure availability and stability of food supplies.

2. Promote the sustainability of the food system, through practices that protect the environment, in particular climate change, and ensure the conservation of natural resources.

3. Strengthen rural and coastal areas highly dependent on fishing by supporting producers and strengthening the rural and coastal economy.

4. To promote healthy and quality food among the population, with the consequent improvement in the quality of life of citizens.

5. To promote innovation and technology, through the promotion of research and technological development, as well as innovative practices that improve the efficiency and competitiveness of the agri-food and fisheries sector.

6. To stimulate the transparency and accessibility of food information for consumers in order to facilitate informed and responsible purchasing decisions.

The destination of this ambitious journey is to build a world reference food system: fair, resilient, sustainable and competitive. A diet that not only nourishes, but also reflects the best of Spain, projecting our international prestige and taking care of our environment and our people.

With the National Food Strategy, Spain not only protects who we are, but also defines how we want to feed ourselves and the world in the coming decades.

GOBIERNO DE ESPAÑA
MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN

ENA
ESTRATEGIA NACIONAL ALIMENTACIÓN

_01
Feeding a Complex World: Geopolitics and Food

Global food security is going through a critical stage marked by the convergence of geopolitical, climate and economic crises. **Conflicts, trade blockades and extreme weather events have tested the stability of a highly interconnected and dependent system.** Today, resilience is measured by the ability to anticipate, adapt and cooperate in the face of uncertainty. Ensuring access to food requires diversifying sources, strengthening international cooperation by avoiding dependencies on countries, and redirecting financing towards a just and sustainable transition. Food is therefore established as a central element of global stability and a shared strategic priority.

Executive Director
ROTHMAN FAMILY INSTITUTE FOR FOOD STUDIES UCLA

Jack Bobo

An expert in global food systems, Jack directs the Rothman Family Institute for Food Studies at UCLA and is an honorary professor at the University of Nottingham. With an extensive background in food policy and sustainability, he has been an advisor to the U.S. Department of State on global food policy.

Corporate Director of Quality and Non-Quality
FAMILIA MARTÍNEZ

María Cardona

PhD in science, technology and food management and Bachelor's degree in chemical sciences. With more than 20 years at Familia Martínez, María's career focuses on quality, food safety and environmental management within the agri-food sector.

General Partner
1CC

Peter Herz

Electrical engineer by training and former entrepreneur in advanced technologies. Co-founder of Food System 6, driving the transition to regenerative agriculture in the U.S. Peter he invests in innovation to improve the human, environmental and social health of the food system.

Co-Founder & CEO
ALEPH FARMS

Didier Toubia

A food engineer and biologist, Didier has more than 40 patents and an extensive entrepreneurial career in biotechnology, being co-founder of companies such as IceCure, BlueTree and Yeap. At Aleph Farms he promotes the development of cultured meat.

Technical Director
ACCIÓN CONTRA EL HAMBRE

Luis González

Agricultural Engineer with more than 15 years of experience in the humanitarian field. At Action Against Hunger Spain, leads the technical strategy and coordinates teams in nutrition, water, sanitation and livelihoods, promoting innovative and sustainable solutions to combat hunger.

Emeritus Professor
UNIVERSIDAD POLITÉCNICA DE MADRID (UPM)

José María Sumpsi

PhD in Agricultural Engineering and has held high-level positions in national and international institutions, including FAO Assistant Director-General. José María has extensive experience in agricultural policies, rural development and food security.

Professor
JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH

Martin Bloem

Public health and nutrition specialist with extensive academic and international experience. Martin has held leadership positions at the World Food Program and Helen Keller International, promoting policies and programs to improve nutrition and global food security.

Founder
GREEN BRONX MACHINE

Stephen Ritz

South Bronx educator recognized for integrating sustainability and learning through the Green Bronx Machine. Stephen has created the world's first edible classroom and grown more than 325,000 pounds of food, transforming education and health in his community. Author of *The Power of a Plant*.

Area Coordinator Support Unit
General Directorate of Food
MAPA

Mercedes Gilgado

Veterinarian, with more than fifteen years of experience in communication and agri-food promotion. At the Ministry of Agriculture, Fisheries and Food she has led projects such as *"Food from Spain, Richest Country in the World"* and currently coordinates the National Food Strategy.

CEO
HELADOS ESTIU

María José Felix

María José has a solid track record of more than 27 years in Helados Estiu, boosting its growth to become a national benchmark, strengthening innovation, operational excellence, expansion and international projection.

CEO
FOODVALLEY

Marjolein Brasz

With a background in business and international experience in sustainable energy and materials, at Foodvalley Marjolein promotes systemic innovation for the transition to a sustainable food system, combining global vision, transformative leadership and a deeply human approach to change.

Global food systems depend on routes, agreements and balances that are currently in tension. Conflicts, trade blockades and extreme weather events disrupt the flow of crucial products such as cereals, oils or fertilizers. Resilience is no longer measured by efficiency or performance, but by the ability to adapt, diversify origins and maintain supply in the face of international instability.

Geopolitical clashes and resilience

The war in Ukraine and the conflicts in the Middle East demonstrated how interconnected and vulnerable the global food system is. For example, the partial closure of the Black Sea corridor and sanctions on Russia affected the supply of wheat, corn and fertilizers in more than 30 countries, especially in Africa and Asia. Logistical disruptions and rising transportation costs fueled a crisis that drove up bread prices in Europe.

"Startups are especially useful in closing some of the gaps that large food companies or even countries do not address, since the problems start out small."

Martin Bloem

This situation has shown that **efficiency without resilience is a weakness**. For decades, agriculture and distribution optimized every link in the global chain to reduce costs; but that extreme efficiency eliminated redundancies and room for maneuver. Today, a maritime blockade or drought in a single country can affect the entire value chain.

The answer lies in **diversifying sources and supply routes**. Mapping import and export flows allows you to identify vulnerabilities and design substitution and diversification strategies. One possible solution is to create a global food atlas with which to predict and adapt to different shock situations.

At the business level, diversification is also essential along the chain. Just as the supply of raw material must be distributed in different producers and countries, production becomes

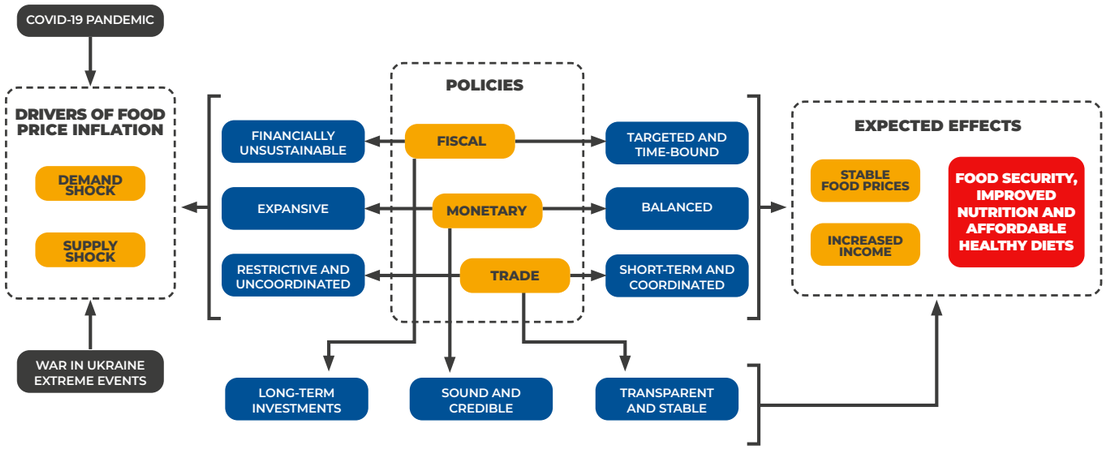
At least 36 countries import more than 50% of their wheat from Russia and Ukraine. Many of them are among the less developed countries or those with food deficits..

(1)

riskier if it is located in a single country. Nearshoring, or the relocation of part of production, comes as a solution to reduce risks, seeking to bring industrial transformation closer to consumer markets. This shortens distances, reduces emissions and reinforces strategic security. However, it requires investment, infrastructure and political stability to consolidate.

The strengthening of **strategic reserves and international cooperation mechanisms** is once again on the table. The European Union and bodies such as the European Food Security Crisis Preparedness and Response Mechanism (EFSCM) work on coordination frameworks to exchange information on stocks and prices in real time, in order to avoid market panics and unilateral export restrictions.

Cooperation and data sharing are the basis of a new food diplomacy. Regional alliances and free trade agreements should incorporate sustainability and food security clauses, ensuring that access to food is a shared priority and not a tool of geopolitical pressure.



Climate change and agri-food adaptation

Climate change acts as a risk multiplier for food security, exacerbating stresses on production, water and the stability of agricultural systems. Addressing this requires a comprehensive transformation of the agri-food system: territorial planning, water management and innovation throughout the chain.

A nivel mundial, se prevé que el 10 % de la superficie actualmente apta para los principales cultivos y la ganadería sea climáticamente inadecuada a mediados de siglo y entre el 31 % y el 34 % a finales de siglo en escenarios de altas emisiones.

(2)

Climate change is no longer a future scenario: it is the new normal that determines what, how and where we produce food. **The current challenge is not only to produce more, but to produce better**, in a context where climatic factors test the system's ability to adapt. For the first time in history, farmers are facing a paradox: they must increase production to feed a growing population while reducing or mitigating their environmental impact.

Climate change alters the fundamental balances of the food system. Changing temperatures, heat waves, floods and droughts reduce yields, affect the nutritional quality of crops, destroy infrastructure, wash nutrients from the soil, force crops to be relocated or to resort to groundwater or other resources. These chained disruptions translate into greater price

instability, greater risk of shortages and social pressure, mainly in rural areas.

The impact of climate change is not evenly distributed. While some regions are becoming infertile due to drought or soil degradation, others are becoming suitable for cultivation thanks to changes in temperatures or other conditions. **This new scenario forces us to rethink what and where we grow,** exploring alternatives and diversifying production with foods that are currently rarely grown or consumed on a large scale.

We currently have diets that are highly dependent on specific ingredients, some of which are in danger of being in short supply and others face such a high demand that the supply cannot keep up.

The world has more than 50,000 edible plants. Just three of rice, maize and wheat provide 60% of the world's caloric intake.

(3)

Over the past 30 years, an estimated US$3.8 trillion in crop and livestock production has been lost due to natural disasters, corresponding to an average loss of US$123 billion per year, or 5% of annual global agricultural GDP.

(4)

Diversifying what we consume, where we grow it and, above all, preventing the food base from depending on a single country is essential to reduce vulnerabilities. **Concentration generates fragility and accelerates crises when there are interruptions in supply**. Expanding our diet and supporting a greater variety of crops means that a one-off disruption does not become an emergency, but a simple food adaptation.

The integration of innovation and technology is and will continue to be crucial for adaptation, resilience and productive capacity. Remote sensing and artificial intelligence make it possible to anticipate climate risks and adjust irrigation or planting decisions with precision. But adaptation is not only technical: it is also cultural and social.

We are faced with the **need to strengthen communication and the climate narrative, overcoming the polarization that holds back cooperation**. Sustainability education and the creation of common frameworks between science, politics and citizenship are essential to achieve a just transition.

The future of food and food security will depend on the ability of countries to **adapt their agriculture to planetary boundaries and the changes that the system is facing**. Crop diversification, adaptability and resilience will mark the difference between countries and their food security.

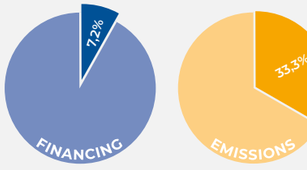
"Today one of the main problems of the food system is that it is very concentrated. We have few crops and few animal products, which also tend to be concentrated in specific geographical areas. We could reduce the impact of the global crisis and supply chain disruption by decentralizing the food system, diversifying food production, and localizing production more with new types of food and new technologies."

Didier Toubia

Access to good food and governance

Ensuring global food security requires more integrated governance. Food has become a tool of power and vulnerability, so international cooperation is essential. The challenge is to balance national sovereignty with international collaboration and ensure that food trade is a vehicle for stability, not conflict.

Climate finance allocated to agri-food systems as a percentage of the global total



Between 2021 and 2022, only 7.2% of global climate finance went to food systems, despite the fact that they generate a third of emissions. Increasing this proportion is key to ensuring a just and equitable transition.

(5)

Food governance is at a turning point. **Global interdependence has shaped a system in which the decisions of one country have an immediate impact on many others.** When a nation restricts exports or hoards critical inputs, the effects are multiplied on a global scale. The year 2022 showed that the simultaneous closure of several agricultural frontiers can destabilize prices and supply, and that the concentration of the supply of certain foods in a few countries aggravates crises. For the most import-dependent nations, this posed a serious threat to their food security.

"We shouldn't just isolate the food chain or what we do with geopolitics in agriculture, rather we need to put it in the broader context of what's happening in the world."

Martin Bloem

For this reason, international institutions are working on more agile coordination mechanisms. The World Trade Organization (WTO) and the FAO are promoting new frameworks to prevent trade restrictions from compromising food security in third countries. Transparency in relation to stocks and the publication of real-time data on prices and trade flows are key tools to anticipate and prevent crises.

"Food security is not about closing borders, but about improving national food security and also about improving global food trade and collaboration.

That is the challenge of a national food strategy: if you only try to solve the problems, you will never succeed; If you create a vision of where we want to go as a society and are flexible about how to get there, without telling them what to do, you can get a lot more people to support you."

Jack Bobo

On the other hand, r**ising food prices or shortages lead to food insecurity, and with it, political and social instability.** Throughout recent history, most urban riots have arisen from abrupt increases in the cost of food.

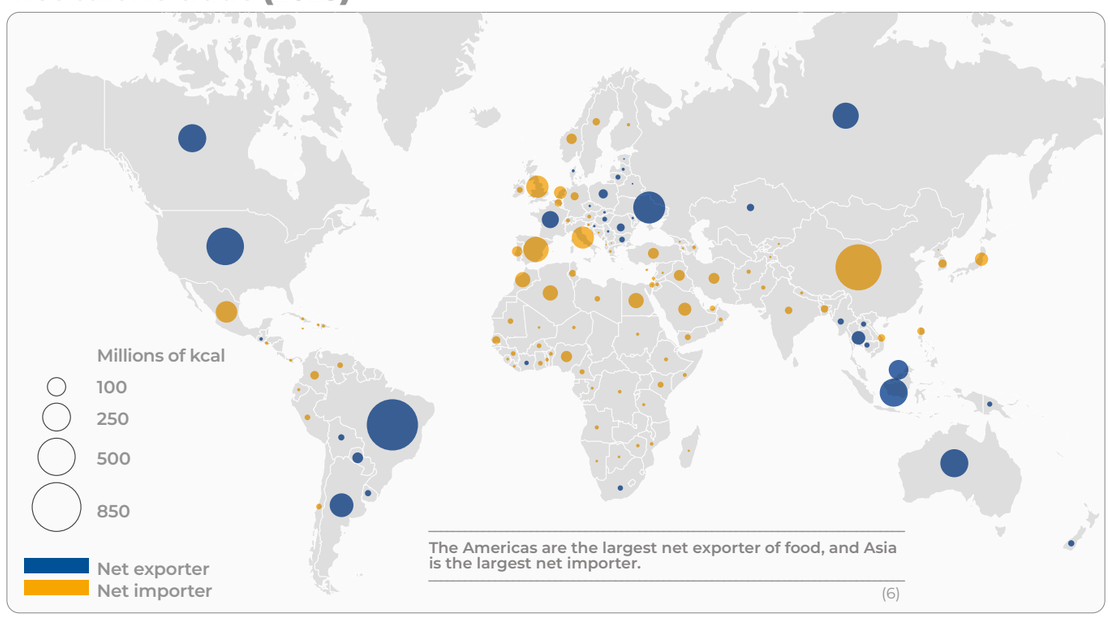
Integrated climate and food finance is another fundamental concept. The creation of international funds that connect agriculture, adaptation, and mitigation will boost the efficiency and resilience of the system. **Although innovation has the potential to transform global food systems, lack of financing remains one of its main obstacles.**

However, the **global narrative continues to be short-term.** Geopolitically, countries tend to see themselves as rivals, rather than allies with a common goal: to build a stronger and more stable food system. Crises are approached as isolated events, but reality shows that the challenges are interconnected. When geopolitical conflicts, climate crises or pests threaten food security, the structural fragility of the system and the urgency of transforming it profoundly are revealed.

Currently, 673 million people (8.2% of the world's population) are experiencing hunger, compared to 733 million the previous year (9.1%). While there is a decline globally, the numbers remain alarming in regions such as Africa and conflict zones.

(5)

Net calorie trade (2023)



The Americas are the largest net exporter of food, and Asia is the largest net importer.

(6)

When it comes to food security, we are all in the same boat. Division only compounds problems: cooperation is the only way to a truly resilient food future.

Case studies

Alsec
Advanced Functional Powder Ingredients
Alsec develops nutritional and functional powdered ingredients (such as high-absorption milk proteins, microencapsulated fats) to overcome health, environmental and nutritional challenges, and has even collaborated on space projects.
(Colombia) https://alsec.com.co/

Fabumin
Aquafaba converted into functional protein
Fabumin converts legume cooking water (aquafaba) into a functional powder that replaces egg albumin in the food industry, with a circular economy proposal that reduces waste, water and animal dependence.
(Israel) https://www.fabumin.com/

Savor
Animal-free fats
Savor produces "real" fats without livestock farming or traditional crops, converting CO_2 and hydrogen into ingredients such as vegan butter. Its approach addresses the volatility of agricultural chains and the environmental footprint linked to animal production, offering solutions for an industry less exposed to geopolitical tensions and limited resources.
(USA) https://www.savor.it/

Acción contra el hambre
Access to employment to escape food insecurity
International humanitarian organization that fights against the causes and effects of hunger in the world. In Spain, they facilitate access to employment for people in vulnerable situations as a tool to flee food insecurity, a situation in which more than 6 million people live and due to which they do not have access to enough nutritious food on a regular basis due to economic limitations.
https://accioncontraelhambre.org/es

Planet A Foods
Cocoa-free chocolate by fermentation
Planet A Foods develops ingredients through precision fermentation, with a special focus on ChoViva, its cocoa-free alternative to chocolate. Its technology makes it possible to create products that are scalable, more sustainable and less dependent on vulnerable crops or unstable supply chains.
(Germany) https://planet-a-foods.com/

Green Bronx Machine:

Stephen Ritz's Education Revolution Against Hunger and Inequality

Stephen Ritz is an internationally recognized educator, bestselling author of *The Power of a Plant*, and founder of **Green Bronx Machine**, a platform that promotes healthy and sustainable eating among young people, especially in vulnerable contexts. Known as "America's Favorite Teacher" and a Top 10 finalist for the **2015 Global Teacher Prize**, Ritz has turned education into a direct pathway to improving food security and community well-being.

His big milestone was creating **the world's first edible classroom** in the South Bronx, transforming learning into cultivation, nutrition, and real access to fresh food. Together with his students, he has produced **more than 165,000 pounds of vegetables,** demonstrating that school can also be a space for food resilience. This work was recognized by the White House during Obama's presidency.

The impact of the Green Bronx Machine has expanded to a large scale: a replica of his classroom was installed in the **U.S. Botanical Gardens**.

In Washington, D.C., and hundreds of schools in the United States and abroad, from Colombia to Dubai, and from Canada to Cairo, Doha, and beyond. His work has been widely covered in international media outlets such as Forbes, Fast Company, The New York Times, The Wall Street Journal, and USA Today, among others.

The project also grows with initiatives such as **Green Bronx Machine KIDS** and the documentary Generation Growth, and with projects such as **Babylon Micro Farms** and **Tower Garden**, which expand its educational and social reach. In 2025, Ritz received the **Social Impact Award at the KM ZERO Food Changemakers Awards**, presented by the NGO **Action Against Hunger**; a recognition that, according to him, reinforces his commitment to change the world "one child at a time, one classroom at a time", and recalling that the greatest natural resource is the potential that resides in the most marginalized communities.

_02

From Data to Plate: the Invisible Revolution of AI in Food

Generative artificial intelligence is helping to redefine the food industry: from how we understand health and well-being to how companies innovate, how factories operate, and how consumer trends are captured. AI is no longer a marginal tool – it is becoming a **structural accelerator** of the industry. Its value does not depend only on the models, but on the real ability of organizations to **use relevant data, translate it into decisions and implement those decisions quickly.**

The challenge is not to imagine new use cases, but **to create structures, governance, and capabilities that allow organizations to use AI to act with impact and speed,** building a less fragmented and more results-oriented ecosystem.

Consumer Insights Director
KANTAR

César Valencoso

With more than 25 years of experience in market research and consulting, César has developed his career at Kantar to lead the consulting division for Southern Europe. Author of three books on branding, innovation and consumer behavior.

Head of Growth Marketing
TASTEWISE

Nicolas Bemaman

A growth marketing leader with a passion for data-driven strategies, at Tastewise, he specializes in helping food brands leverage AI-powered insights to make smarter decisions around menus, pricing, and innovation.

Founder & CEO
ALLIE SYSTEM

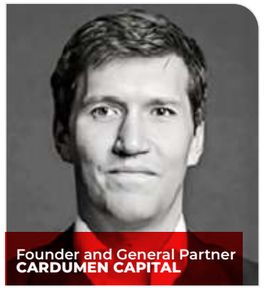
Alex Sandoval

He has more than 14 years of experience developing SaaS products for technology companies in multiple markets. Allie Systems powers autonomous industrial operations using AI to solve complex operations problems.

Co-founder & CEO
TASTELAB

Maruxa Quiroga

An agricultural engineer with a PhD in food innovation. Maruxa leads Sensesbit and TasteLab, pioneering technology companies in sensory analysis with AI that transform sensory data into strategic decisions for product, innovation and marketing.



Founder and General Partner
CARDUMEN CAPITAL

Gonzalo Martínez

Investor specialized in deep tech and AI with an extensive international career in venture capital. As founder and General Partner of Cardumen Capital, Gonzalo drives high-growth tech startups in Europe, Israel, and Asia.

CEO
FOOD REPUBLIK

Malwine Steinbock

Specialized in trends, qualitative and quantitative research, and innovation strategies, with extensive experience in major food brands. As founder of Food Republik, Malwine leads innovation projects and dissemination of trends in food and food tech.

Founder & CEO
THIMUS

Mario Ubiali

With over 20 years of experience scaling innovative companies, Mario developed T-Box, a platform that measures neurophysiological responses to food experiences, positioning Thimus as a leading reference in food tech.

Founding General Partner
PEAKBRIDGE

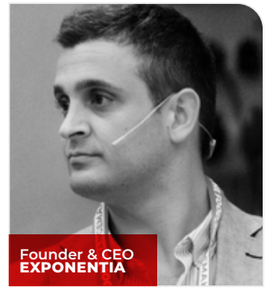
Nadav Berger

With decades of experience in the food industry and as an entrepreneur across innovation, distribution, and food applications, Nadav promoted initiatives such as FoodLab and the FoodLab Capital fund before co-founding PeakBridge, now a benchmark in foodtech investment.

Head of Spain
ML6

Rafael Llanes

Innovation-oriented, with experience in projects that combine technology, human talent and real impact. Rafael focuses on the transformative potential of AI to improve productivity and creativity.



Founder & CEO
EXPONENTIA

Juan García

Technology entrepreneur recognized by Forbes as one of the 23 Changemakers in Spain and included in the Nova 111 List as one of the 10 most talented young people in Software and Cloud. Juan has extensive experience as a professor, counselor and mentor.

Head of the Consumer Analysis Area
MINISTRY OF AGRICULTURE, FISHERIES AND FOOD OF SPAIN

Patricia Pertejo

With almost two decades of experience in public administration, specializing in food, agriculture and institutional relations, Patricia has held technical and international representation roles, including her work as counsellor in Central America and the Caribbean.

IT Consultant
HELADOS ESTIU

Narin Yilmaz

An IT consultant specialized in digital transformation and process optimization in the food industry, at Helados Estiu, analyzes technological needs, improves internal systems and leads digitalization projects.

AI is driving a shift from disease treatment to predictive prevention models, supported by biomarkers, wearables, and algorithms capable of integrating hundreds of physiological and lifestyle variables. The potential is enormous, but cultural, ethical, and privacy challenges remain.

IA para la nutrición personalizada

AI can transform the way we prevent disease and optimize health. With the rise of wearables and the exponential increase in real-time biometric data, preventive medicine is becoming more accurate and accessible thanks to predictive models that allow us to anticipate, rather than just react to, disease.

However, the complexity of the human body requires integrating very diverse data (sleep, stress, exercise, genetics, habits), to translate them into recommendations applicable to real life. Every second we are influenced by what we eat, how we sleep or the level of stress we accumulate; thousands of interconnected variables that only tools like AI can process. Added to this is the complexity of human behavior: people do not act solely based on logic. **That's why personalization can't be based on optimal scientific recommendations alone; it must align with real pleasure, culture, and habits.**

Another structural challenge is privacy. Models need sensitive information in order to function properly, but users and regulators impose strict limits. These limits have been amplified by the fear caused by cases of data being sold by some companies or the uproar caused by rumors of the DNA analysis

"Humans don't act based on rationality... AI must be rooted in what humans feel and want for themselves."

Mario Ubiali

About 71% of adults in the U.S. wear at least one wearable

(7)

platform 23andme. Added to this concern is the lack of technological unification: different wearables generate data with relevant variations, which forces the models to be adapted to each device.

In addition, **there is still no clarity on what the "minimum viable" is to customize:** whether basic metrics such as those obtained with a continuous glucose monitor and a smart watch are enough, or if more specialized sensors are required to obtain truly valuable recommendations.

Prevention has enormous economic potential: **it can reduce the pressure on healthcare systems and, with it, their structural costs.** Continuous measurement and personalized nutrition open up new opportunities to encourage healthy behavior that reduces public health costs: positive biomarkers, regular physical activity, healthy eating or good sleep patterns could be associated with tangible benefits for citizens, generating a virtuous circle between citizens' health and system sustainability.

Although AI is an enormously valuable tool, it cannot replace health personnel or human decisions. Its role is to support the design of more informed strategies and support for their implementation, not to set itself up as an absolute authority.

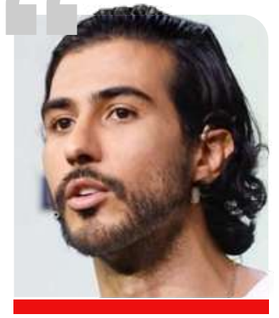
According to a study conducted by BEUC, The European Consumer Organization, the vast majority of people surveyed already use health platforms, from the highest rate of use in France (96%) to the lowest in Germany (70%).

According to the same study, less than half of respondents (between 39% and 49%, depending on the purpose) are willing to grant access to their health data to entities in other EU countries.

(8)

AI in the factory

The industrial potential of AI depends on one key factor: reliable, high-volume data generated directly on the factory floor. Without high-quality data, AI cannot optimize efficiency, reduce waste, or anticipate failures. Digitizing the factory is the first step to unlocking automation.



"Data is born in the factory. Without sensors and hyperspectral vision, the factory remains 'blind'".

Álex Sandoval

Although today there is abundant online content to train generative artificial intelligence models, **the truly valuable information for safety, quality and efficiency is in the physical world,** not on the internet. The great challenge currently facing the sector is to capture and structure operational data (temperatures, pressures, vibrations, energy performance, process parameters) directly from machines.

The opportunity is huge: **AI with good data can help to drastically reduce waste and energy expenditure, and optimize the overall efficiency of equipment and ultimately economic performance.** But this optimization requires overcoming internal barriers: organizational resistance, dispersed data, legacy systems, lack of talent... Many companies want to "do pilots" but aren't prepared to scale what works. In addition, while AI adoption is high, many organizations lack structured processes that turn data into measurable actions.

At the corporate level, there is also a constraint driven by the tension between collaboration and data protection. Some industrial companies are willing to share anonymized datasets to train more robust models, while others prefer to keep their data private. **On the one hand, collaboration and the use of models trained on shared data offer clear benefits; on the other, sharing data can be perceived as giving away a competitive advantage.**

Intelligent automation is not only a technological project, but a structural change in organizations. It requires training equipment, modernizing plants, and breaking down data silos.

A KPMG report indicates that 96% of the companies surveyed have experienced operational and efficiency improvements through AI, and 45% have already seen financial improvements.

But at the implementation level, 56% have faced data-related challenges when implementing AI and 40% are experiencing problems with their workforce in terms of skills or resistance to change; in response, 80% have invested in knowledge and skills training in their AI tools.

(9)

AI for consumer insights and r&d

AI is accelerating consumer research and innovation cycles, enabling the shift from "big data" to "right time data": actionable information at the exact moment a decision needs to be made. However, the challenge is no longer to gain insights, but to transform those signals into action before the trend changes.

"If today the trend is blue food, when the product reaches the shelves the trend becomes red food."

Nadav Berger

AI is radically changing how consumer trends are captured, interpreted, and applied. Companies are no longer just looking for data, but for time. Even when a company detects a trend, its processes take so long that the enters the market late. By moving from big data to right time data, we will see fewer dashboards and more natural language interfaces, capable of offering quick and actionable responses.

Here AI can shave months off the R&D cycle: generating concepts, modeling acceptance, anticipating preferences, and helping to prioritize which innovations are most likely to succeed. Companies no longer just want percentages and metrics, but clear answers that allow them to act with agility.

But technology alone does not solve structural barriers. Many teams are not prepared to make quick decisions based on data, and continue to be divided into slow and hierarchical processes.

More than one-third (35%) of executives in consumer industries are adopting AI and genAI initiatives in customer and consumer engagement, followed by 23% in operations and supply and 21% in innovation and growth, with good results.

(10)

The challenge now is to transform all this information into agile teams and processes that allow them to anticipate trends and capture the value they generate. Being relevant in the sector is increasingly difficult without taking advantage of the technology that is redefining the rules of the game.

In addition, AI democratizes capabilities that were previously only available to large corporations. Integrating sensory, emotional and cultural data could allow small companies for the first time to have a complete view of the consumer in all phases of the product: concept, prototype, quality control and market performance.

AI is redefining food innovation by delivering speed, accuracy, and a deeper understanding of the consumer. But its real impact will depend on the ability of companies to adapt, streamline decisions and break organizational inertia. Those who integrate technology, criteria and agility will be the ones who manage to anticipate trends and stay relevant in a market that no longer waits.

"Companies are not prepared to make decisions every day... they can't change everything so quickly."

Juan García

A global survey conducted by McKinsey in 2024 found that nine out of ten employees used generative AI for their work, and that 21% of them were frequent users.

(11)

AI has already come to revolutionize the food industry. But we must remember that it is only a tool: at the end of the day, AI must adapt to people and factories, not the other way around.

Featured cases

Exponentia
AI and automation for industry
Supports companies in the food sector (and beyond) in their digital transformation through artificial intelligence, blockchain, and process automation. Among its success stories is a product recommendation system for an agrifood trading company that helped increase revenues by up to €20 million.
(Spain) https://exponentiateam.com/

Allie Systems
Digital twins for smart factories
Develops AI solutions that connect machinery, cameras, and production systems to create digital twins of industrial plants. Its platform enables real-time process monitoring, identifies inefficiencies, reduces costs, and minimizes unplanned downtime, accelerating the shift toward more automated and resilient operations.
(Mexico) https://www.allie-ai.com/en

ComexSoft
Business intelligence for mass consumption
Advanced big data analytics platform that integrates real-time pricing, assortment, promotions, and competition information. Its solution allows manufacturers and distributors to visualize the market clearly, identify opportunities and adjust business strategies based on accurate and up-to-date data.
(Spain) https://comexsoft.com/es

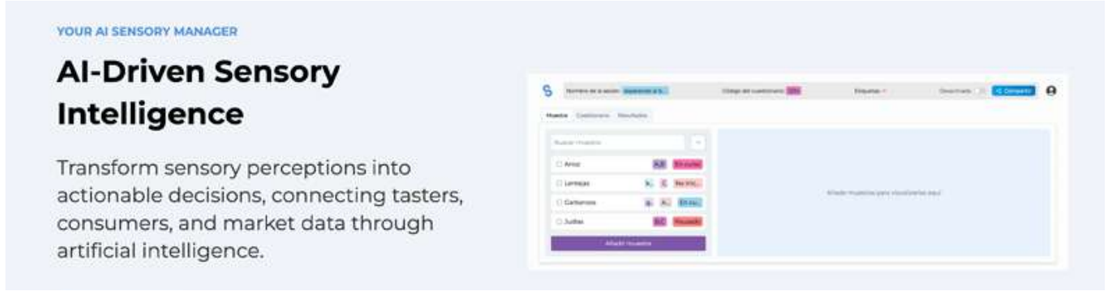
FlipFlow
Real-time market analytics
Offers a market intelligence suite that provides accurate and actionable data on pricing, assortment, trends, and competition. Its platform enables manufacturers and retailers to act quickly on market changes, eliminating the opacity of aggregated sources and facilitating business strategies based on up-to-date evidence.
(Spain) https://www.flipflow.io/

UNK
Intelligent cold chain management
Develops systems that monitor the temperature of products and preparations in real time, guaranteeing safety and reducing losses due to thermal deviations. Its solution optimizes operations in production, distribution and food services, helping to avoid waste and strengthen traceability in contexts where food safety is critical.
(Chile) https://unklatam.com/

Imperia
Advanced Supply Chain Planning
SaaS platform that applies predictive analytics to anticipate demand, optimize procurement and improve production efficiency. Its technology helps the food industry to reduce costs, avoid stockouts and plan more accurately, key in the context of increasingly complex supply chains.
(Spain) https://imperiascm.com/es-es

Sensesbit - Winner of the ftalksVLC25 Startup Awards for Sustainability
Sensory intelligence to predict preferences
Digitizes and automates sensory evaluation through a platform that combines scientific methodologies with advanced analytics. Its technology allows more accurate data to be obtained, R&D times to be reduced and the success of new launches to be predicted, providing an objective layer to the consumer's understanding and improving decision-making in product development.
(Spain) https://sensesbit.com/es/home

2025 BEST STARTUP IN INNOVATION



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Food Service & Retail: the Transformation of Consumption

Food service and retail are going through a rapid transformation. There is a lack of people to operate kitchens and dining rooms, the cost of delivery is putting pressure on profitability and consumers **are demanding more agile and personalized experiences.** Technology helps to relieve the pressure, but the challenge is to connect tools, improve the quality of data and have people capable of using them effectively to generate real impact.

Hybrid formats are emerging, where retail cooks and restaurants sell, combining convenience and brand. In sustainability, tight margins leave little room for waste, while the main challenge is concentrated elsewhere in the chain and in still inefficient consumer delivery logistics.

With ingenuity, innovation and technology, the future of food service and retail will continue to evolve, but success will depend on **maintaining the cultural and social aspect of food at the center.**

CEO
BEGOÑA LLUCH NUTRICIÓN DE VANGUARDIA

Begoña Lluch

Grand Diplôme Cordon Bleu Chef and Health Coach, directs gastronomic innovation and advanced nutrition projects. Recognized by the U.S. Government for her talent in Healthy Epicurean Food, she promotes a holistic view of health based on mindful eating and nutritional science.

Partner
MC WIN

Martín Dávalos

Martin leads the Food Technology division, driving investments in companies that transform the future of food. With extensive experience in private equity and fund management, he has participated in transactions worth over a billion dollars and in prominent global foodtech startups.

CEO
RELLENO

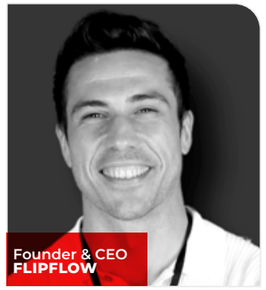
Oriol Reull

Oriol is an entrepreneur in food tech, specialized in scaling social impact companies. CEO of Relleno and former director at Heura, CloudKitchens, Choco and Too Good To Go. Investor in early-stage tech startups, he combines business expertise and innovation to transform the food system.

Head of Marketing Innovation
BETTER BALANCE

Olimpia Peyrona

A psychologist and consumer marketing specialist with over 20 years of experience in strategy, innovation and global communication. Olimpia combines consumer psychology and marketing to generate authentic connections between brands and people, promoting more conscious and sustainable decisions.



Founder & CEO
FLIPFLOW

Ricardo García

With more than 10 years of experience in technological innovation and technical management. Ricardo leads Flipflow, a market analytics and competitive intelligence platform that helps brands, manufacturers, and retailers optimize their business decisions.

Founder & CEO
THE (BEEMINE) LAB

Telmo Güell

An economist and designer, at The Beemine Lab, Telmo works on the reinvention of cannabis consumption and nootropics applied to the health and food of the future. He combines his creative and entrepreneurial vision with his work as an investor and business angel in innovative projects.

Corporate Innovation Director
FAMILIA MARTÍNEZ

Ramón Lacomba

R+D professional with extensive experience in product development for B2B and B2C markets at a national and international level. Ramón stands out for his practical, curious and flexible approach, combining strategic vision with solid leadership, communication and execution skills.

R+D Technician
PROFAND

Ion Torres

An engineer with a background in gastronomy, electrical engineering and project management, has worked in high-level kitchens and in innovation departments in the food sector. He combines technical and culinary expertise in the development of new food products.

RDI Director/General Secretary
FIAB

Eduardo Cotillas

Eduardo is an agricultural engineer and MSc in Food Science and Technology, with more than 25 years of experience in R&D in the agri-food sector. Following 15 years in the CDTI, he promotes strategic R+D+i projects at national and European level from FIAB and Food for Life–Spain.

Senior advisor
VINCES

Aurelio del Pino

Aurelio is a former senior official in the Spanish Government and former president of the Spanish Association of Supermarket Chains, with more than two decades of experience in economics, retail and sustainability. He is a specialist in supply chain, food regulation and strategic management in the fast-moving consumer goods sector.

Founder & CEO
TRANSFOODMISSION

Julia Dalmadi

Founder of TransFoodMission and Secontaste, Julia is a leader in food upcycling. She develops projects that convert surplus into sustainable, value-added food, fostering circular innovation and promoting a new vision of resource utilization in the food industry.

Digitizing is no longer "creating an app". It's redesigning operations to work with less friction: automating the basics, stitching together data, and improving customer experience from start to finish. The biggest barrier today is not a lack of software, but fragmentation and data quality preventing AI from being applied and scaling meaningfully.

Digitalization and automation

The main difficulty in the sector is labor shortages, a reality that is driving automation not only for efficiency, but out of sheer necessity. The priority is now to resolve basic operations by optimizing repetitive tasks. In the kitchen, basic processes or the preparation of standardized products can be automated to free up staff for higher-value functions. In the dining room, queue management, fast payments and digital loyalty programs reduce downtime and increase satisfaction.

To achieve efficiency, tools must be connected. Restaurants and retailers operate with multiple non-integrated platforms: reservation management, inventory control, HR, delivery or analytics. This fragmentation complicates day-to-day management, slows down scalability and therefore makes investment difficult: it is like having different people on a team who do not speak the same language. **Priority should be given to favoring modular and integrated platforms, capable of centralizing data and automating transversal processes.**

Successful integration requires hybrid talent. It is not enough to "know about cooking" or "know about software". There is a need for people who understand the operation of the restaurant and the digital product to translate business needs into usable and measurable solutions. This "bridge" prevents a good project from being lost due to lack of context or adoption in operational teams.

Finally, **customer experience is the guiding principle.** Digitizing the entire journey, from ordering to payment and loyalty, improves flow and reduces bottlenecks. In addition, providing consumers with more information (origin, processes, attributes) through smart labelling/QR codes helps them make better choices and builds trust.

"It is not enough to know how to program or know how to cook; the future lies in those who can translate between both worlds."

Eduardo Cotillas

76% of restaurant operators say that using technology gives them a competitive advantage.

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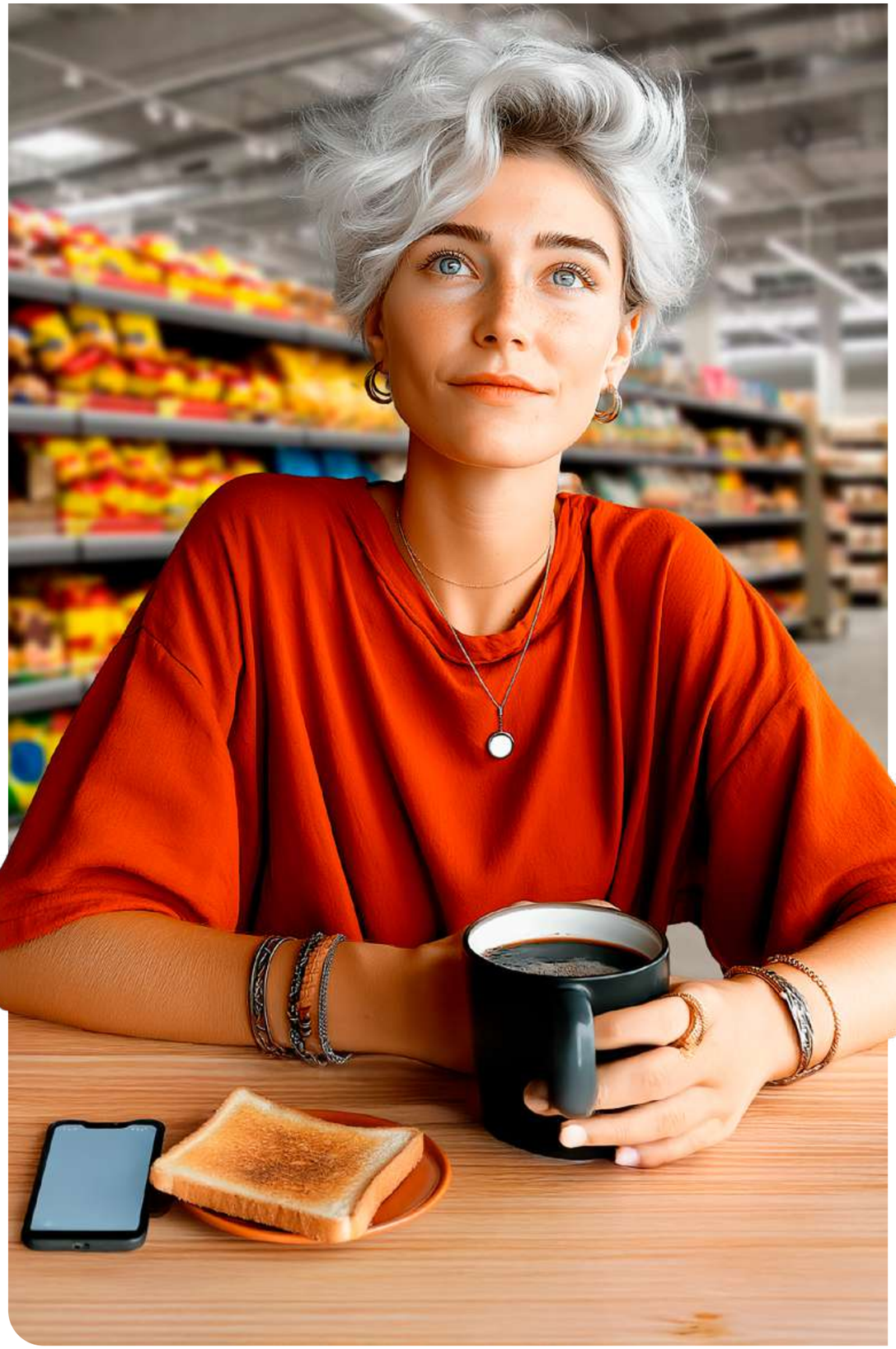


New business models

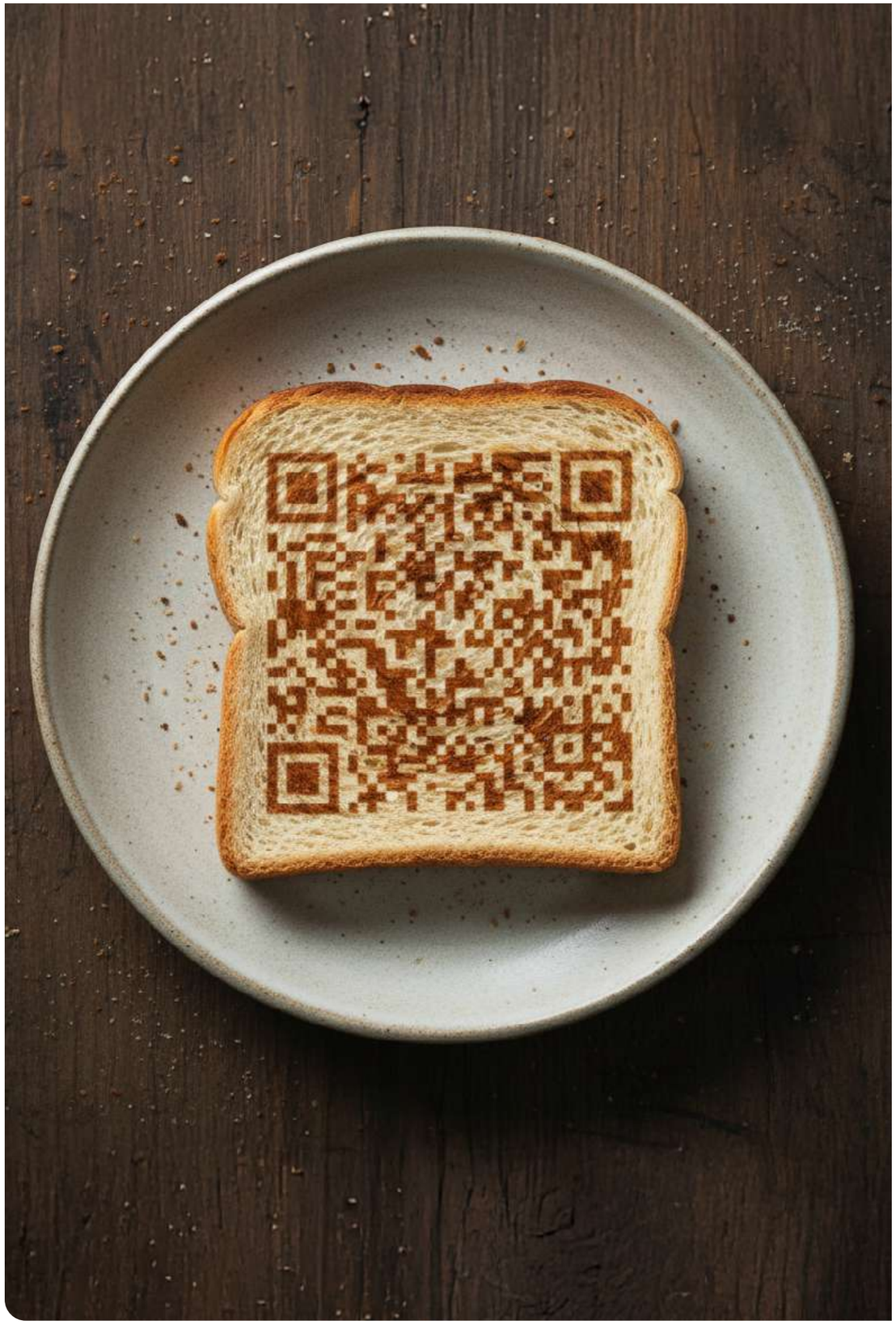
In food service and retail, there is no shortage of new proposals, but the real challenge is knowing which ones will succeed. In an environment where food has a strong social, cultural and emotional component, models that do not place the consumer at the center of the process are unlikely to last. Hybrid formats are emerging that combine convenience and experience: restaurants that sell and shops that cook and offer spaces to enjoy.

The last decade has been a real laboratory for food service. The case of dark kitchens leaves a clear lesson about the nature of the sector and the importance of understanding the consumer. During the pandemic, this model grew rapidly and many considered it the future of food service. But it failed to demonstrate long-term viability: high delivery costs, operational complexity, and a lack of emotional attachment to the customer limited its expansion. The customer is looking for convenience, but also connection. **Eating is still a social act, and food needs a face, a place, and a story to back it up.**

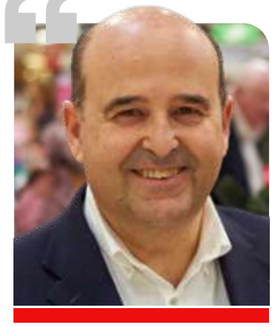
From this learning emerges a new paradigm: the hybrid model. Stores that prepare ready-to-eat food, platforms that offer personalized recommendations or restaurants that incorporate direct sales and own brands are already part of the same dynamic. This crossover of formats responds to a growing demand: to offer complete solutions that simplify the customer's life. Value no longer lies only in the product, but in the ability to solve a need from start to finish, in a single step.

"We assume that consumers are ready for fully digital experiences, but many are not. The future lies in hybrid and intuitive models that do not lose the human touch."

Julia Dalmadi



Delivery continues to be a key part of the business, but it faces a profitability challenge. In many European countries, the cost of an order can double its price, between six and seven euros in Spain, which squeezes margins and limits the expansion of the channel. Its economic and environmental sustainability depends on deeper automation: robots, electric fleets or even drones could make the last mile cheaper, although there are still years of technological development and regulatory adaptation ahead.

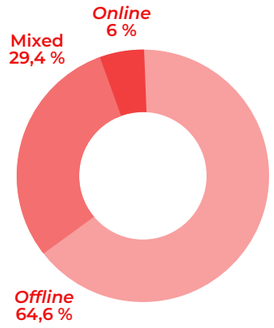


"Retail and food-service are becoming hybrid. The future belongs to those who offer complete solutions, not just food."

Aurelio del Pino

In this context, **foodservice remains the most fertile environment for food innovation.** It is here that consumers dare to try new things, which makes the restaurant a living laboratory for testing products, ingredients or formats before their arrival in retail. The consumer dares to try a new product in a restaurant, which they probably would not buy and prepare at home. **This function of bridging innovation and consumption positions food service as a strategic element for the validation of trends.**

Experience continues to be the deciding factor. Brands that maintain consistency between physical and digital channels are the ones that achieve higher loyalty. In the immediate future, the most solid models will be those that manage **to balance convenience and emotion: offering quick solutions, but also flavor, identity and trust.**



In Spain, online grocery shopping has risen by 6% in 2025 in Spain, after its post-pandemic fall.

(13)

Sustainability and efficiency

Sustainability is no longer an aspirational value or a marketing argument: today it is an essential condition for the survival and viability of businesses. In food service and mass consumption, it is no longer enough to reduce waste or offset impacts: sustainability must be integrated throughout the value chain, from the origin of the product to its delivery and consumption. Only in this way can truly responsible and resilient models be built over time.

When we talk about sustainability in food service, we almost always think of waste, but restaurants have been forced to be efficient by nature. The cost structure and competition make direct food waste minimal. **Menus are designed for cost-effectiveness, so they're optimized to avoid waste at all costs.** While these margins are low, it does not mean that sustainability has been achieved in this market, rather that the focus should be redirected.

However, the integral use and use of more sustainable ingredients continues to be another of the pillars of sustainability in food service. **Culinary creativity is one of the best tools to reduce waste**. Fermentations, extracts, broths or new preservation techniques allow parts of food that were previously discarded to be reused, such as skins, seeds or secondary cuts. The result is not only more sustainable, but also differential from a gastronomic point of view.

Solamente un 2% de los consumidores pagan un recargo por sostenibilidad cuando hacen la compra en el supermercado y un 4 % cuando salen cenar.

Sweetgreen abrió su primer restaurante que utiliza robots de cocina en 2023. La empresa afirma que puede reducir el tiempo necesario para preparar un bol en un 50 % y que el local que emplea el robot tuvo un 10 % más de facturación media, un rendimiento más rápido y una mayor precisión en los pedidos.

(14)

"In businesses with low margins, efficiency is synonymous with sustainability. In restaurants, waste will not exceed approximately 1.5%."

Martin Dávalos

Even so, the challenge is not only technical, but cultural. The average consumer tends to reject foods or preparations that are far from their traditional imaginary. The acceptance of repurposed or "upcycled" ingredients depends on how they are communicated and integrated into familiar dishes. **Most consumers are neophobic; they don't want to eat something they don't recognize.** But if it is integrated into a known format, they accept it without a problem. In this sense, sustainability also requires food education, transparency, sensory design and above all cultural adaptation. The goal should be that it tastes good, feels good, and is safe.

"The consumer might pay a little more for sustainability, but not more than 10–15%."

Manuel González

EIT Food's March 2025 study Waste to Want: Consumer Acceptance of Upcycled Food Products highlights that consumers are motivated to reduce food waste, but other factors take precedence when making purchases. For recycled food products to be successful in the market, it is essential to convey the right message.

If it is a "good product" there will be a greater probability that the consumer will buy the most sustainable option. Between 20% and 43% (depending on the category) could be persuaded to make sustainable choices if the products or services also meet other related and highly relevant nees.

(15)

Did you know...

Chef Ángel León, known as the Chef of the Sea, has revolutionized haute cuisine from his restaurant Aponiente (Cádiz) by demonstrating that sustainability can also be an avant-garde gastronomic experience. His cuisine uses forgotten marine species and traditionally discarded parts of fish – such as skins, viscera or heads – to create dishes of high culinary value.

In addition, his team has developed pioneering projects such as the use of marine plankton as a food ingredient and the exploration of "sea cereal", a grain obtained from the marine plant Zostera marina that can be grown without soil or fertilizers and absorb CO_2 instead of emitting it.

(16)

True innovation doesn't just lie in technology, but in how it's applied to create more sustainable, humane, and memorable experiences. In a sector where culture and the gastronomic experience are the soul, the key will not be to have the most advanced technology, but to know how to integrate it with meaning, coherence and real connection with the consumer.

Case studies

Relleno
Fresh pasta in mono-product format
A gastronomic proposal that is committed to fresh pasta as a high-quality mono-product, combining nine fillings and ten sauces of entirely Italian origin in an agile format for delivery and smart premises. Its model combines premium ingredients, fast service, and scalability, and it has already served tens of thousands of dishes in its first year.
(Spain) https://www.conrelleno.com/

Gundo
Tailor-made nutrition in your shopping basket
Food-tech startup that integrates its SaaS platform into food e-commerce channels, offering ultra-personalized nutritional recommendations to users who shop online. It uses scientific algorithms and artificial intelligence to analyze habits, shopping baskets and personal goals, and thus suggest healthier foods adapted to each profile, helping to transform the way we eat in a digital environment.
(Spain) https://gundo.life/

Food for Joe
Natural Pet Food
This startup offers dog and cat food recipes made with natural ingredients which meet human quality standards. Its subscription and online sales model allows you to customize portions and nutritional needs, providing transparency, freshness and a healthy alternative to traditional pet food.
(Spain) https://www.foodforjoe.es/

Plesh
Sweet snacks with no added sugar
Plesh reinvents sweet snacks through an alternative without added sugars: chocolate bars and sprinkles made with vegetable fibers, quality proteins and low glycemic index, aimed at those who seek pleasure without sacrificing their health. It was launched recently, enjoys the support of sports personalities and has ambitions to grow in national and international retail.
(Spain) https://myplesh.com/

Granolín
Functional cereals and clean label
Granolín makes granolas, cereals and functional bars with natural ingredients, high protein content and without additives or sugar. Its proposal, supported by compostable packaging and a healthy approach, has boosted its presence in Latin American retail. The brand is advancing in its internationalization with a view to consolidating itself in broader markets.
(Chile) https://granolin.cl/

Inaam
Natural and functional botanical sodas
Functional drinks from botanical extracts, with calorie-free formulas, without synthetic colors or sweeteners. Inaam's proposal combines science, flavor and well-being, aimed at consumers looking for more natural options in the beverage category. Sodas are positioned at the intersection between nutrition, lifestyle and functionality.
(Colombia) https://inaam.life/es/

Yunno
Quality and convenience in every serving
Offers nutritionally complete instant meals: blends of oats, amaranth, freeze-dried fruit, almonds, cinnamon and powdered milk, high in protein and free from additives and nutritional seals. Designed for busy people who want to have a quality start to their day. Yunno is also entering new lines such as instant chilaquiles in collaboration with major brands.
(Mexico) https://www.yunno.com.mx/

Yüit
Complete and practical plant-based food in the same packaging
"Smart food" that sells complete and nutritious plant-based food in convenient formats (powders and bars) adapted to today's pace of life. Its products offer protein, fiber and essential fats without added sugar, gluten free and with premium ingredients, and its vision is aimed at both daily consumption and healthy lifestyle on the go.
(Spain) https://yuit.eu/

Madrid Culinary Campus (MACC):

the hotbed of future talent promoted by Ferran Adrià

Ferran Adrià is the president of **elBullifoundation** and a chef who is internationally renowned for his pioneering role in culinary experimentation and innovation. He achieved worldwide fame as chef of **elBulli**, considered at the time the best restaurant in the world, and his vision transformed *haute cuisine* to become one of the most influential concepts in contemporary gastronomy. In 2004, *Time Magazine* included him among the 100 most influential people on the planet.

His career at elBulli began in the 80s and he quickly came to lead the restaurant. In 1987 he moved away from nouvelle cuisine to develop his own style that would give rise to the "techno-emotional" movement. Under his leadership, elBulli was recognized **five times as the World's Best Restaurant** in The World's 50 Best Restaurants.

After the closure of elBulli in 2011, Adrià turned his work to education and research through elBullifoundation, dedicated to preserving the restaurant's legacy, promoting innovation and generating knowledge for the gastronomic sector. Within this framework, he developed the **Sapiens methodology**, which connects knowledge from different disciplines, and has published more than 60 books, expanding his influence through collaborations with universities and industry in food, design and management.

This vocation for training is brought to life today at the **Madrid Culinary Campus (MACC),** an environment for training, creation and exchange with a comprehensive and multidisciplinary proposal that covers gastronomy, business and agronomy. At the **KM ZERO Food Changemakers Awards 2025**, Adrià and the MACC received the Future Talent Award, presented by the **Ministry of Agriculture, Fisheries and Food**. This award highlights his work in the dissemination of an innovative, conscious and culturally enriching gastronomic language that he now transfers to the classrooms to inspire new generations. Adrià collected the award together with the general director of the MACC, Antonio Obregón, thanking the "faith and trust" in a project that, in his words, is taking its first steps and that aspires to be a benchmark in the coming years.

_04

The Era of Advanced, Smart and Personalized Nutrition

The relationship between food and health is undergoing a profound transformation driven by advances in the microbiome, metabolomics, artificial intelligence and food formulation. The question is no longer whether advanced nutrition will be a central pillar of physical, cognitive, and emotional well-being, but how to accelerate its time to market while maintaining scientific rigor, accessibility, and public trust. **There is huge potential to create foods that improve key functions of the body,** but the absence of comparable data, consumer confusion, regulatory barriers, and R+D costs continue to limit scale.

Daniel Ramón Vidal

A leading international figure in probiotics and food metabolomics, Daniel is a microbiologist and food technologist with more than 170 publications that have led to the development of probiotic and postbiotic strains for human and animal nutrition. He is the founder of Biopolis, a biotechnology startup acquired by ADM.

Sophie Egan

Author and strategist in the field of food, health and climate, Sophie leads partnerships and content at the Food for Climate League and advises the FAO on communicating climate-smart diets.

Marta Laorden

A foodtech investor with 15 years of experience, at McWin Marta coordinates growth and venture tickets in companies such as Upside Foods or CookUnity. She is a member of European Women in VC.

Mariano Oto

Mariano is an economist and the CEO of Nucaps, a biotech startup that develops nano-encapsulated proteins and probiotics for next-generation functional ingredients.

Valeria Cobos

A health-coach and early-stage investor in Plug & Play, at Gut4U Valeria promotes the development of products that truly nourish, based on science and integral well-being.

Marta Bertomeu

With more than ten years of experience in innovation within the agri-food industry, at Helados Estiu Marta integrates sustainability into corporate strategy and leads open innovation projects, promoting the development of more responsible and competitive solutions.

Marta Pérez

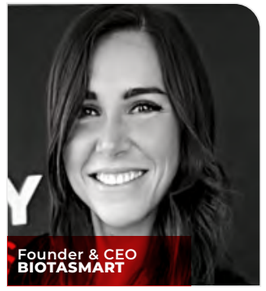
She has extensive experience in nutrition and food sustainability, and is in charge of several initiatives carried out by the Spanish Ministry of Agriculture, Fisheries and Food to promote the production and consumption of sustainable food.

Niklas Gustafson

An expert in dietetics and human nutrition, Niklas co-founded Natruly, a healthy snack and food brand. Author of Change What You Eat and You Will Change the World.

Luis Aranguren

Presidente del *holding* mexicano Arancia, con negocios en ingredientes, biotecnología y logística; tercera generación al frente de una compañía fundada en 1925.



Olga Carbonell

A biomedical engineer, Olga founded Biotasmart, a startup that combines science and technology to offer fully personalized advanced nutrition recommendations. Her mission is to empower people to improve their health in a conscious and sustainable way.

Eduardo Lobo

Eduardo is a chemical engineer specialized in food technology and environmental management. At Vicky Foods, he leads R&D projects and the innovation management system, integrating sustainability and continuous improvement in all processes.

Alejandro Navarro

Alejandro is a biotechnologist specialized in innovation and development of new foods. At B3TTER Foods, he promotes plant-based products and healthy solutions aligned with new consumer trends.

Javier de Llano

With more than 25 years of experience in leading multidisciplinary teams of results-oriented people, among other functions, Javier supports management in the coordination and execution of projects related to innovation, new products and sustainability.

The connection between food, microbiota and mental health is advancing rapidly, but it has not yet been translated into validated and accessible products. The evidence is promising, especially in anxiety, emotional well-being, and the gut-brain axis, although large data, education, and regulatory gaps remain. Without solving them, nutrition for the mind will not achieve mass adoption.

Cognitive and emotional well-being

Cognitive and emotional well-being has become one of the fields of greatest interest within advanced nutrition. There are currently three main barriers: lack of standardized evidence, consumer confusion, and limitations of the regulatory framework.

Current studies on the gut-brain axis and the effects of probiotics or postbiotics remain preliminary, with a strong need for comparable metabolomic data and harmonized clinical trials. Without this consistent data, it is difficult to link specific ingredients with demonstrable improvements in emotional well-being, stress reduction or anxiety.

The consumer is overwhelmed by confusing or contradictory messages. Insufficient nutritional literacy leads to poorly informed decisions and the adoption of unbased trends. This lack of clarity affects the industry as well: without a consumer who understands the real value, it becomes more difficult to invest in advanced formulations, clinical trials, or high-cost functional ingredients.

The third hurdle is regulatory. Currently, **there is no clear guide for claims relating to mental or cognitive health**, which generates legal uncertainty. Companies are afraid to invest in claims that cannot be proven later or that require high-cost clinical evidence, difficult for startups to assume.

"The consumer doesn't really know what affects their cognitive health, what they can do about it, and what they can improve."

Valeria Cobos

Despite these barriers, clear signs of opportunity were identified. Products such as functional gummies, microencapsulated or new generations of postbiotics show that the premium market is willing to pay for solutions backed by science. The challenge is to scale these models towards more accessible formats, maintaining stability, flavor and bioavailability.

To build a promising future for cognitive and emotional well-being, with diet and food as a driver and medicine, a solid foundation must be created that allows us to move forward with rigor and coherence. First, it is necessary to **standardize data and develop open repositories** that integrate microbiota, metabolomics, and clinical biomarker information, so that studies and ingredients can be compared transparently and consistently.

In parallel, **evidence-based consumer education must be strengthened**, through clear and reliable campaigns, away from the noise of marketing and ambiguous claims; this includes regulating disinformation on networks and ensuring that disseminators follow minimum scientific criteria. Finally, it is key **to clarify the regulatory framework**, providing stable rules for cognitive-emotional health claims that allow companies to innovate without uncertainty. With these three levers aligned, nutrition for the mind can become one of the great drivers of well-being in the next decade.

A 19% reduction in the risk of depression was reported in cohorts with high adherence to the Mediterranean diet.

(17)

Improving the nutritional profile

Optimizing nutrient profiles, from reducing sugars to incorporating bioactives to designing personalized diets, faces significant challenges: eroded claims, reformulation costs, difficulty in scaling, and lack of harmonized clinical data. Still, technologies like AI and advanced analytics open a clear path to healthier, more functional products.

Improving the nutritional profile is an area where consumer demand, science and industrial capacity are advancing at different speeds. Personalized nutrition continues to be limited to premium niches, in part due to the cost of diagnostics (microbiome, blood glucose kits, wearables) and the lack of homogeneous clinical protocols. The proliferation of lax claims has also eroded trust: many companies are hesitant to invest in functional reformulations because they fear that the consumer will not perceive a real differential value.

Currently, one of the great bottlenecks is data breaches. **There is still a need for a standardized framework to compare the results** of studies on metabolomics, microbiota, or glycemic response. This lack of common metrics prevents demonstrating the real effectiveness of innovative products.

Advancing in the improvement of the nutritional profile of foods requires starting with the **quality and accessibility of data**. It is essential for consumers to be able to interpret information in a simple and evidence-based way, and that startups and formulation companies have access to unified, reliable and non-contradictory data. To this end, it is

"No existe una dieta única válida para todos, sino que se necesitan soluciones personalizadas, basadas no solo en nuestra biología individual, sino también en nuestra realidad económica y nuestras preferencias personales".

Sophie Egan

urgent to have open and comparable repositories, supported by an **international protocol that standardizes clinical metrics and allows studies to be contrasted.**

On an industrial level, **reformulating products without compromising taste, texture or cost remains a challenge.** Incorporating probiotics, peptides, sweetness modulators or functional fiber requires technical reformulation, stability testing and sensory validation.

On the other hand, when it comes to personalized products, even when the science exists, bringing them into industrial production may not be economically viable. Therefore, an alternative is to use machine learning to **identify optimal combinations of ingredients according to population profiles,** reducing trial and error costs.

Technology must act as a catalyst. Digital **tools and artificial intelligence make it possible to accelerate the development of new products,** predict sensory interactions, reduce pilot tests and adjust nutrients to different population profiles with greater precision.

In turn, foodtech's narrow margins make it difficult to fund robust clinical trials without public support or risk-sharing partnerships.

It is necessary to promote **cost-efficient alliances between industry, scientific centers and the public sector,** capable of sharing the risk and cost of clinical trials and facilitating the validation necessary to generate data and health recommendations.

Personalized nutrition will not become widely available as a strictly individual model, but through families of nutritional profiles, broad enough to scale in price, logistics and sensoriality, but without losing the real health benefits.

Over a 20-year study period, 12.7% of the relationships between food and health were reported in a contradictory fashion.

(18)

Healthy aging

The accelerated aging of the population calls for nutrition as a strategic tool to preserve people's autonomy, prevent diseases and reduce health costs. The challenge is to transform longevity into a real opportunity for well-being and innovation, which requires specific clinical evidence for older people, regulation adapted to their needs and new alliances between the food and pharmaceutical worlds.

Demographic aging represents one of the greatest challenges, and a great opportunity, for the next decade. As life expectancy and the prevalence of age-related pathologies increase, health systems will need more effective preventive tools, and advanced nutrition has a central role. Nutrition for longevity is not only a consumer interest, but a public policy necessity.

Accelerating innovation in healthy aging requires building a stronger and more accessible scientific base. One of the keys is to move towards **open longevity data**. This information will allow us to understand the biological mechanisms that explain healthy aging and translate them into nutritional solutions that can be replicated at population level.

However, the available evidence remains limited. There is a lack of specific clinical studies in older adults, standardized biomarkers (frailty, bone density, chronic inflammation, cognitive function) and metabolomic data that allow us to understand which ingredients actually modulate aging processes. **Misinformation also has a significant impact on nutrition for longevity:** the proliferation of unsupported claims, pseudoscientific content

"If we do not already commit to preventive nutrition, spending on chronic diseases will devour the budgets of our grandchildren."

Daniel Ramón Vidal

Life expectancy increased by 6.4 years (66.8 to 73.1) from 2000 to 2019, but healthy life expectancy (HALE) has not kept pace, increasing by only 5.3 years (58.1 to 63.5).

(19)

from influencers, and extreme diets make it difficult for consumers to identify effective and safe solutions. Institutions such as the Buck Institute, dedicated exclusively to the biology of aging, are generating key findings and data that drive scientific advancement in this area.

There is currently great potential for hybrid models between food and pharma. Functional ingredients such as postbiotics or bioactive peptides show promising effects on inflammation, the immune system or muscle recovery. The regulatory boundary between functional food and nutraceutical, however, remains blurred; hence the importance of specific frameworks that allow certain ingredients to cross this boundary without being treated as drugs.

Progress also depends on closer collaboration across sectors. The convergence of foodtech and pharma can significantly accelerate the development of ingredients with clinical evidence, taking advantage of shared infrastructure, reducing costs and shortening validation times. Another avenue to gain information by testing and validating formulations and ingredients is pet food, which is used as a **rapid test bench for anti-aging compounds due to its shorter validation cycles.** This bridge between food and health is essential for new solutions to reach the market with rigor and credibility.

Finally, public dialogue about longevity needs to be transformed. Building a **public health narrative that equates "eat to live longer" with other preventive measures, such as vaccination or exercise**, will allow recommendations to be more understandable, aspirational, and culturally relevant. **Healthy aging represents one of the greatest future drivers of food innovation and a central element of the "silver economy".**

The global gut health supplements market is projected to grow from US$14,432 million in 2025 to US$32,390 million in 2035.

(20)

Advanced nutrition can transform health, but it still faces inconsistent data, ambiguous regulation, and misinformation. Opening and standardizing data, improving communication and clarifying rules will make it possible to turn science into products that have a real impact from the plate.

Case studies

CIRCE Scientific - Winner of the ftalksLATAM25 Startup Awards for Innovation

Co-crystals for enhanced bioactives

Biotech that applies crystalline engineering technology (co-crystals) to optimize the solubility, stability and bioavailability of high-value bioactive ingredients, with the aim of creating solutions in nutraceuticals and cosmetics focused on healthy aging and longevity.

(Spain) https://www.circescientific.com/es

Kresko RNAtech - Mention of honor at ftalksLATAM25 for Innovation

RNA-based functional ingredients

Biotechnology startup that develops functional ingredients based on dietary RNA, through its "Serkanto" platform, which combines artificial intelligence, bioinformatics and cell biology to identify, isolate and stabilize RNA molecules from food. Its technology makes it possible to create customized solutions for nutraceuticals, food and cosmetics, opening up a new category in the field of precision nutrition.

(Argentina) https://www.kreskornatech.com/

Genky

High-value natural antioxidants

Transforms wine by-products and other plant sources rich in antioxidants into functional ingredients and food products designed to combat oxidative stress. Its approach promotes circularity, using agro-industrial waste to develop solutions with added nutritional value. The company is positioned at the intersection of health, sustainability and food functionality.

(Spain) https://www.eternalgenky.com/es/

GreenVibes

Concentrated Vegetable Functional Blends

GreenVibes offers sachets and functional mixtures made with fruits, vegetables and concentrated bioactive compounds, designed to provide flavor, well-being and nutrition in practical formats. Its proposal responds to consumers who are looking for healthy, natural solutions that are easy to integrate into active routines, aligning nutrition with lifestyle.

(Mexico) https://greenvibesmx.com/

Glucovibes

Metabolic analysis for personalized well-being

Digital and metabolic analysis solution that monitors glucose levels, sleep patterns, nutrition and lifestyle to deliver personalized recommendations that optimize energy health, recovery and performance, both in individual users and elite sports environments.

(Spain) https://glucovibes.com/

Biotasmart

Deep analysis of gut microbiota

Biotasmart offers advanced microbiota testing using next-generation sequencing, assessing both bacterial composition and its potential impact on digestion, metabolism, and overall well-being. The company complements the results with personalized recommendations, placing the microbiota at the center of precision nutrition.

(Spain) https://biotasmart.com/

Gut4U

Comprehensive well-being from gut health

Comprehensive wellness platform that combines personalized nutrition, gut health, and holistic coaching to align body, mind, and soul. Scientifically based on food biology and a person-centered methodology, it offers resources, training and products that address food sensitivities, lifestyle habits and the emotional link with food.

(USA) https://www.igut4u.com/

Padam Bienestar

Functional foods with super-ingredients

Develops functional foods that combine superfoods, adaptogens, probiotics, and specialized fibers to promote holistic wellness. The company's approach unites science, taste and naturalness in accessible formulations aimed at improving daily nutrition. The startup has grown in Latin America with proposals that respond to the demand for healthy and functional products.

(Colombia) https://padambienestar.com/

_05
The New Protein Paradigm

The transition to new sources of protein can profoundly transform the food system. Faced with the environmental impact of livestock farming and the growth in global demand, science and technology are redefining **how we obtain this essential nutrient to seek to balance sustainability, taste and accessibility.** The challenge is not only technological, but also cultural: to build trust, scale efficiently, and build models that integrate innovation, regulation, and purpose.

Public Affairs Manager - Spain
GOOD FOOD INSTITUTE

Carlos Campillos

After spending time at the Ministry for Ecological Transition, where he dealt with the international impact of the twin crises of biodiversity and climate, Carlos is now working to boost the alternative protein sector in Spain.

Chief Commercial Officer
THE MEDITERRANEAN FOOD LAB

Liat Cinamon

Liat has a background in both technology and business, and has worked for biotech, agritech, and foodtech companies. She now leads the development of sales and marketing at MFL, along with strategic planning for the European market.

Co-founder & CEO
FORWARD FOODING

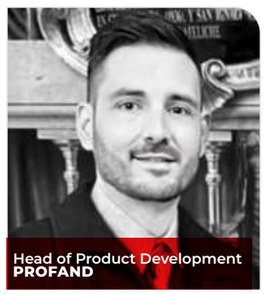
Alessio D'Antino

Alessio fosters innovation in foodtech through collaborations between companies and startups. He works with government-backed organizations, food companies and investors to translate technology into sustainable growth and impact.

Founder & CEO
AI BOBBY

Dominik Grabinski

With extensive experience in ingredients and biotechnology, and a deep understanding of protein functionality, formulation challenges, and industry bottlenecks, Dominik founded AI Bobby, a platform designed to transform protein development with AI.



Head of Product Development
PROFAND

Alejandro Rodrigo

Alejandro designs new seafood solutions that connect convenience, health and new consumption habits. He develops innovative solutions to bring seafood products closer to different segments and markets, creating new formats that are accessible, versatile and high-value.

Corporate Affairs
ALIMENTOS SANYGRAN

Roselyne Chane

Roselyne's work involves promoting vegetable proteins in Europe and encouraging a profitable circular economy model. She is also President of the FATE - Food Agri Tech Europe association, which was created to give its own voice and strengthen companies in the sector.

Founder & CEO
MOA FOODTECH

Bosco Emparanza

Biochemist by training, he co-founded MOA Foodtech, transforming agro-industrial by-products into high-value ingredients thanks to biotechnology and biomass fermentation. He is a member of the board of directors of ASEBIO, the Spanish Association of Biotechnology Companies.

Vice President Strategic Alliances, Leadership and Impact
THE CULINARY INSTITUTE OF AMERICA (CIA)

Robert Jones

Robert has more than 20 years of experience in communication and public affairs. In his role at the CIA, he supports the development of strategic planning, strengthening the institute's global presence and expanding its influence in the culinary, food, beverage and hospitality sectors.

Co-founder & CEO
INNOMY BIOTECH

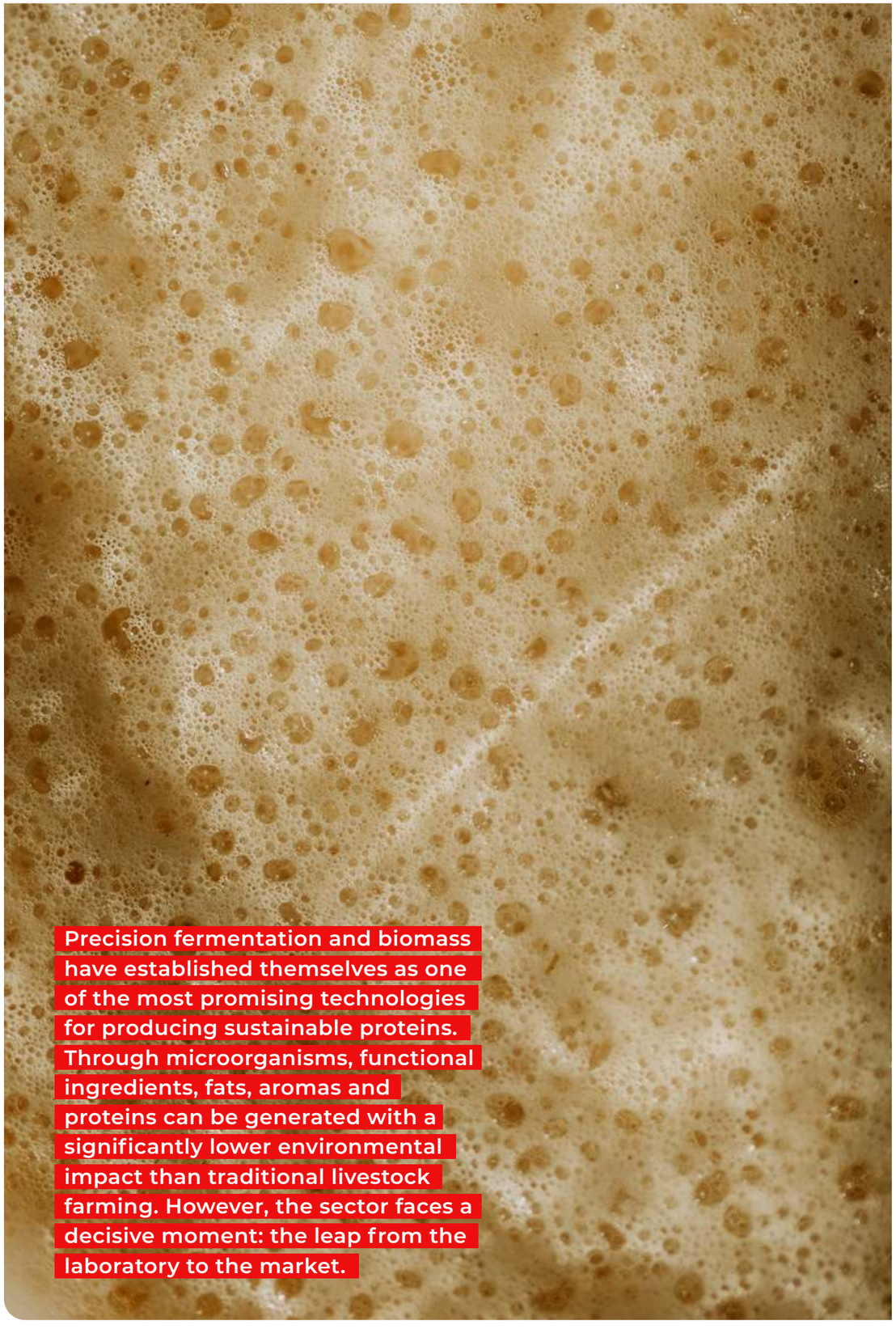
Juan Pablo de Giacomi

An entrepreneur passionate about innovation, technology and sustainability, Juan Pablo leads Innomy Biotech, a pioneering company in food biotechnology that recycles food by-products to develop mycelium-based protein ingredients.

Egg products Plant Manager
GRUPO HUEVOS GUILLEN

David Palmero

With 5 years of experience in quality department management and 7 years in plant management, David is responsible for managing all areas of development in the plant, as well as the execution of projects related to Research and Innovation.



Precision fermentation and biomass have established themselves as one of the most promising technologies for producing sustainable proteins. Through microorganisms, functional ingredients, fats, aromas and proteins can be generated with a significantly lower environmental impact than traditional livestock farming. However, the sector faces a decisive moment: the leap from the laboratory to the market.

Fermentación de precisión y biomasa

Fermentation has accompanied humanity for millennia, from bread to wine; but today it has been reborn as an advanced biotechnology. Its power lies in the ability to convert simple raw materials or agro-industrial waste into proteins, lipids and high-value bioactive compounds. Precision fermentation, which uses synthetic DNA to program microorganisms and produce specific proteins, and biomass fermentation, which multiplies fungi or microalgae, are highly efficient solutions. But its technical and commercial scalability remains an obstacle: demand is still limited and production costs are high.

In addition, **the regulatory framework is unstable and heterogeneous.** In Europe, the approval of fermented ingredients depends on novel food regulation, a long and complex process. This contrasts with markets such as the United States or Singapore, where regulatory agencies are pushing for more agile frameworks. Added to this is the challenge of **consumer acceptance:** many perceive these products as artificial or strange, and changing this narrative is key to mass adoption.

"At its core, it all comes down to the price, taste and cultural relevance of these products. And we have failed miserably in most of those parame-ters for the new proteins."

Robert Jones

For this reason, **fermentation should not compete with agriculture but be integrated** into it: be a biological tool that complements the food ecosystem and makes it more resilient. The future of the sector could lie in the **hybridization of matrices**: combining fermented proteins with vegetable or even animal bases, creating hybrid products that optimize texture, flavor and sustainability. It could also involve creating **functional fermented foods**, new ingredients that provide additional benefits such as antioxidant peptides, fibers or vitamins. Precision fermentation as an enabler, not just as a "copy" of an animal product, breaks more ground.

Around 75% of precision fermentation companies in the industry concentrate on the production of proteins, mainly dairy proteins. The remaining 25% focus on ingredients such as fats and oils, flavorings, palm oil and cocoa butter.

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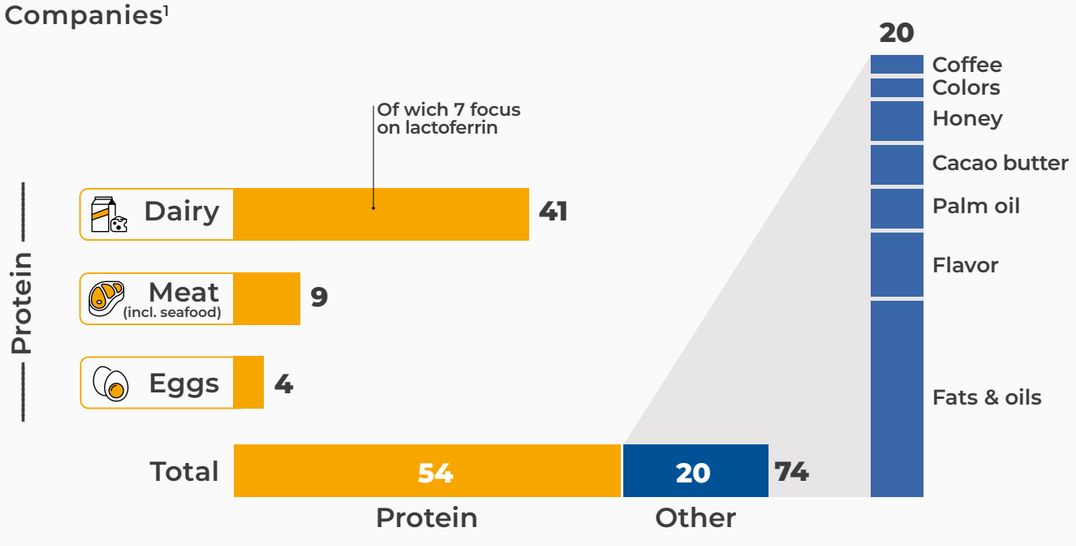
Current market activity in F&B indicates proteins as a key area

Companies[1]

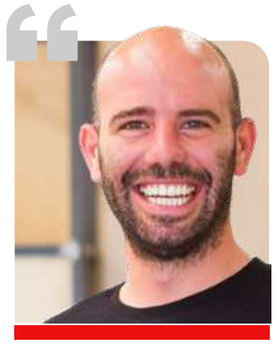


[1]Companies with dominant focus on precision fermentation - Furthermore, excluding bioinformatics and process companies.
Source: The Good Food Institute company database

(22)

Evolution of plant-based proteins

The rise of plant-based proteins was the first major movement in the global protein transition. However, after explosive growth between 2018 and 2021, the sector is experiencing a phase of readjustment. Market saturation, lack of differentiation and the perception that many products were "ultra-processed" have slowed down their expansion. This scenario marks a new stage: that of quality over quantity.



"We need to stop treating alternative proteins as an isolated solution and start positioning them as part of the protein portfolio of the future."

Alessio D'Antino

The recent history of the plant-based protein sector is a paradigmatic case of technological enthusiasm followed by accelerated maturity. Between 2018 and 2021, the world experienced a boom in startups seeking to replicate meat, milk or cheese based on legumes and cereals. But many of these products **did not meet the sensory or nutritional expectations** of the consumer. Since the introduction of the first plant-based products around 2014, the category has slowly advanced in terms of adoption. Today, it accounts for only the equivalent of 1% of total U.S. meat sales: it has taken the industry a full decade to reach that small market share.

The **stigma of ultra-processed foods** has damaged the reputation of the sector. Many consumers associate plant-based alternatives with long lists of ingredients and additives, a contradiction in the face of the naturalness discourse. European **food culture** adds another challenge. Unlike in Asia or America, where soy and tofu are part of the traditional diet, in Europe the consumption of products with vegetable proteins requires a profound cultural change.

Communication and transparency therefore become essential to regain credibility. In response, at the scientific level, the strongest companies are backing **genetic improvements in seeds**, which allow proteins with a better amino acid profile and better culinary functionality to be obtained, as well as less aggressive extraction processes and cleaner and more nutritious formulations.

The future lies in a **second generation of products with plant-based proteins**, which is cleaner and has natural textures and formulations that prioritize whole ingredients. The trend points towards proteins with a "local surname": Mediterranean lentils, Nordic beans or regenerative European soybeans. Innovation will grow again, but on more realistic bases: taste, price and nutritional coherence.

The EAT-Lancet report proposes a planetary diet: a diet rich in plant foods and with fewer foods of animal origin, which provides health benefits and allows you to stay within planetary limits. In addition, it sets goals for intakes by food groups and the need for substantial dietary transformations by 2050.

(23)

The role of large corporations and investors

Large corporations and institutional investors have the ability to turn innovation into systemic transformation. However, in Europe, open innovation is still limited: corporate conservatism and a lack of public-private partnerships have slowed down the adoption of new food technologies. It is essential to consolidate a new protein model: companies must move from observing disruption to driving it. Only in this way will it be possible to guarantee a more diverse, close and resilient production in the face of global crises.

The complementary protein value chain is at a turning point. While scientific innovation is advancing rapidly, corporate and financial support remains fragmented. **Open innovation**, which should be the bridge between startups and large groups, is underutilized.

In Europe, many corporations maintain a low-risk culture and long decision cycles, which contrasts with the dynamism of the Asian or US ecosystem. As a result, numerous pioneering projects die in the scaling phase. **Public-private partnerships are needed** to accelerate technology transfer and reduce the financial risk of agri-food innovation.

Israel imports 88% of its beef. A single ship blocked by geopolitical conflict is equivalent to 32 million lost portions. 5% of agricultural investment in cultured meat would cover 40% of domestic demand in 5 years.

(24)

However, change is underway. The concept of **strategic food autonomy** emerges as a geopolitical priority: reducing dependence on imported soy or meat is as much a matter of sustainability as it is of sovereignty. Europe seeks to develop local protein chains capable of resisting climate crises, pandemics or logistical blockages. Giants such as Nestlé, Unilever and ADM have begun to invest in food biotechnology, while funds such as Blue Horizon and PeakBridge are leading the financing of fermentation and hybrid protein startups. These initiatives point to a new paradigm: market-intentional companies, which create solutions based on real needs and not on technological fads.

The future of proteins will depend on cross-collaboration between science, capital and policy. Investing in innovation is not just a market opportunity, but a necessity to ensure global food security in an uncertain world.

The evolution of new proteins will depend on the ability to resolve their functionality, taste and cost, as well as to integrate them into viable production chains and support them with clear regulatory frameworks. If the sector manages to align technology, industry and consumer, these solutions can be consolidated as a sustainable pillar of the food system of the future.

Case studies

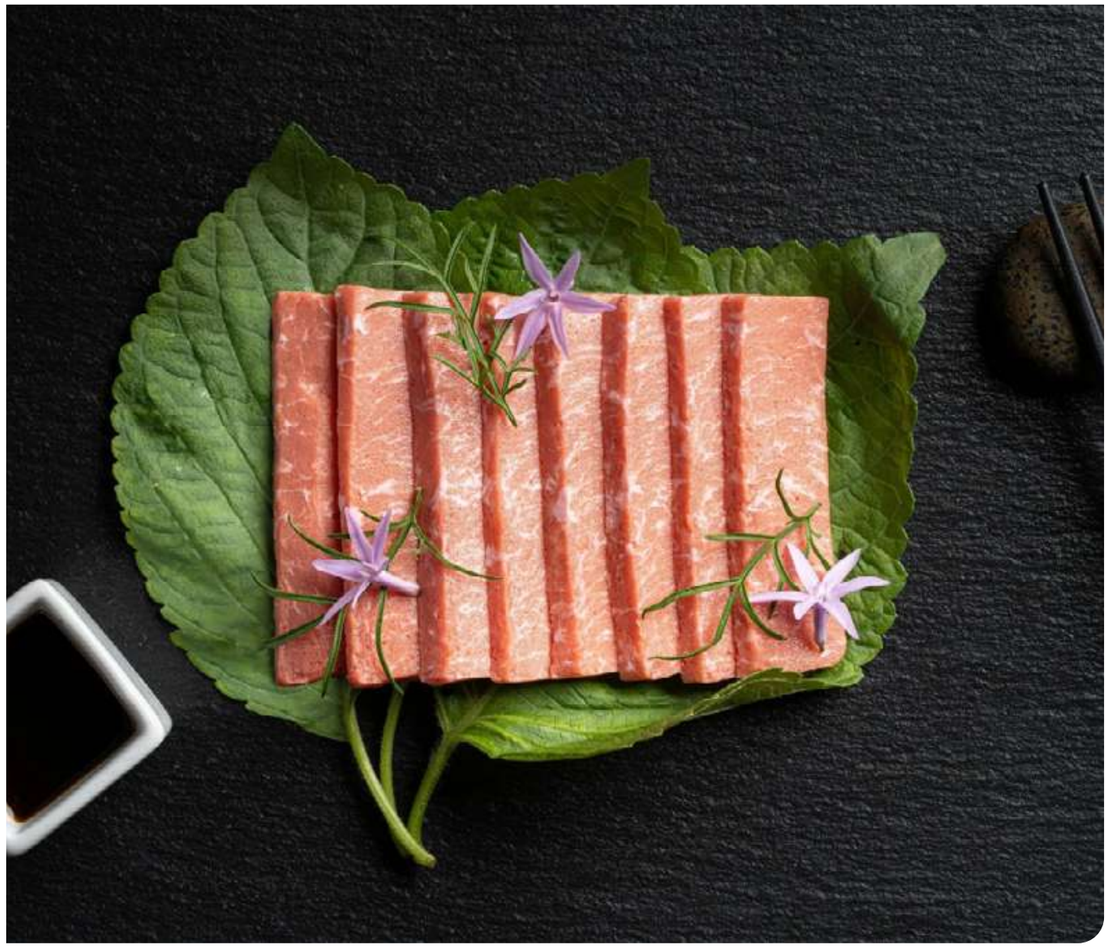
Velozbio
Complex proteins using molecular farming
Complementary protein biotech that uses a molecular farming platform to produce complex, animal-free proteins in less than six months using discarded fruit and vegetables as biofactories. Its technology offers functionalities similar to traditional egg or dairy proteins with lower environmental impact, lower costs, and an accelerated route to the global market for sustainable alternatives.
(Mexico) https://www.velozbio.com/

AI Bobby
Generative AI of new proteins
Technology company that uses generative intelligence to accelerate innovation in complementary food proteins. Its platform is aimed at the development of new functional ingredients in the food sector, reducing development times, optimizing formulations and supporting the growth of more sustainable products.
(France) https://boby.ai/

The Mediterranean Food Lab
Natural fermentation for plant-based products
This company employs solid-state fermentation and advanced analytics to create natural, clean-label culinary ingredients for the food and meat alternatives industry. Starting from cereals, legumes or agro-industrial by-products and combining science, cooking and technology, it develops flavors for plant-based products, and has already obtained a significant round of funding to scale its platform.
(Israel) https://www.med-food-lab.com/

Fungívora
Sustainably grown gourmet mushrooms
Grows specialty gourmet mushrooms in controlled environments and with sustainable methods, transforming agricultural waste into high-value ingredients. Its proposal goes beyond simple production: it offers fresh and processed products, as well as culinary experiences that explore the texture, umami flavor and functional benefits of mushrooms.
(Mexico) https://www.fungivora.com/

BlueNalu
Seafood production without fishing
Startup that produces cell-based cultured seafood, offering a sustainable alternative to conventional fish or aquaculture products. Its technology makes it possible to create products such as farmed bull bluefin tuna without catching fish directly from the ocean, reducing pollutants, overfishing and dependence on imports. The company is preparing for its commercial launch and reinforces its position as a pioneer in "blue-tech" cellular aquaculture.
(USA) https://www.bluenalu.com/



_06

Decarbonizing the Future of the Food Industry

It is clear that **climate change has an impact** on the entire food chain, harvests, prices and the food that reaches our table. **Responsible for about a third of global emissions**, the food system has an enormous opportunity for mitigation and regeneration. Droughts, floods and soil degradation put the productivity and stability of the system at risk, making it urgent to move towards more resilient, regenerative and sustainable models. Achieving this means integrating climate action throughout the chain, combining innovation, incentives and a new food culture.

Chairman
ACCION PLANETA

Juan Antonio Mondragón

A researcher and environmental activist with international experience in climate change, Juan Antonio participated in the creation of the Climate Change Law in Mexico and currently promotes a model of sustainable community with water-efficient food banks.

CEO
AWA FARO SR

Roberto Ridolfi

A specialist in finance for sustainable development, Roberto advises international projects aimed at impact investing. He has extensive experience in EU and global organizations, promoting innovation, sustainability and economic transformation initiatives aligned with the SDGs.

Deployment Chief Manager
EUROPEAN CLUSTERS ALLIANCE

Jorge López Conde

Lidera la aceleración o transformación de ecosistemas industriales y territoriales, acompañando a empresas, administraciones públicas o fundaciones en la creación y gestión de estrategias, consorcios y proyectos con fondos o políticas europeas.

Project Manager ESG
FORÉTICA

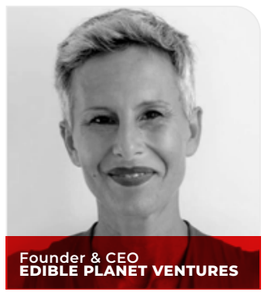
Camila Kauer

Camila has international experience in agriculture and climate action projects in LATAM and Africa. Now with Foretica, she is currently promoting initiatives such as the Climate Change and Sustainable Food Systems Cluster.

Director, Growth & Innovation
HOWGOOD

João Brites

João has 15 years of experience at the crossroads between economics and ecology. An entrepreneur and agroforestry specialist, he works to help food companies measure and improve their environmental impact through technological solutions based on sustainability data.



Founder & CEO
EDIBLE PLANET VENTURES

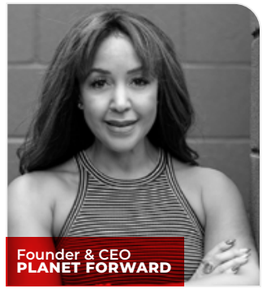
Sharon Cittone

Recognized by Forbes and Food Tank, Sharon leads international initiatives of food innovation and sustainability. She is driving the transformation of the global food system by participating in the World Agriculture Forum, advising investment funds and collaborating with organizations such as WFP Italy.

Founder & CEO
MAS SALMONES

Laia Mas

A former member of the Executive Committee of Danone Iberia, Laia has more than 15 years of experience in marketing, strategy and sustainability. Currently, Mas Salmones helps companies to integrate sustainability as a competitive advantage and transform their businesses towards positive impact models.



Founder & CEO
PLANET FORWARD

Julia Collins

Pioneering foodtech entrepreneur who promotes sustainable innovation and diverse leadership. Founder of Moonshot, the first climate-neutral snack brand she sold to Patagonia, Julia was also the first black woman to create a company valued at more than $1 billion.

Co-founder & CEO
DARWIN

Manuel Porcar

An applied microbiologist, pioneer in synthetic biology and entrepreneur, Manuel is head of the Biotechnology and Synthetic Biology laboratory of the I2SysBio Institute of the University of Valencia.

Co-founder & CEO
DCYCLE

Juanjo Mestre

Juanjo leads Dcycle, a management solution for non-financial data already used by more than 1,500 organizations in Europe. Previously, he was Director of Innovation and UX at FLUOR Lifestyle, recognized as the best innovation agency in Spain.

Key Account Manager
WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT (WBCSD)

Christa Essig

At WBCSD, Christa supports relationships with leading organizations that drive the transition to a net zero and nature positive future. She has extensive experience in sustainability, food systems and global environmental health.

Director of Programme Delivery
EIT FOOD

Elvira Domingo

At EIT Food, Elvira promotes the connection between entrepreneurs, companies and universities to face the challenges of the agri-food sector. With more than ten years of experience in innovation and sustainability, she leads strategies that transform ideas into real impact.

Corporate Affairs and Sustainability Director
PEPSICO

Marta Puyuelo

Marta is an agricultural engineer with more than 20 years of experience in the food industry. At PepsiCo, she leads the sustainability strategy in Spain, Portugal and Italy, including the packaging, emissions, water and products agenda.

Head of Nutrition & Sustainability
GRUPO COMPASS

Beatriz De Diego Blanco

With a degree in Food Science and Technology, a diploma in Human Nutrition and Dietetics from the University of the Basque Country and more than 25 years of experience in collective catering, in her role at Compass Group Beatriz leads the Spanish sustainability project "One Great Planet".

Agriculture is both one of the main causes of and one of the greatest solutions to climate change: it represents the largest source of emissions from the food system, but it is also the space with the greatest potential for carbon sequestration. Decarbonizing the land means turning farmers into climate allies, rewarding regenerative practices, and making sustainability not only necessary, but also profitable.

Decarbonized agriculture and carbon sequestration

The first step is to redefine the value of the land. Land does not just support cultivation, but is a living natural infrastructure, capable of storing carbon, regenerating nutrients and sustaining biodiversity. In this context, practices such as crop rotation, the use of vegetation cover or the application of biofertilizers should not be seen as an additional cost, but as an investment that strengthens resilience and profitability in the long term. However, its implementation requires initial investment that many farmers cannot afford without support. While these practices increase productivity and improve soil health over time, financial returns often come later, and traditional financial institutions rarely offer the patient capital that this transition requires.

"Currently we measure the impact of an apple. But the apple depends on where it is grown, how the farmer grows it. Not all apples have the same impact."

João Brites

For the transition to be viable, sustainability must no longer be perceived as a cost and must become a source of income. Payment mechanisms for ecosystem services allow carbon sequestration and soil regeneration to be remunerated. Every fertile hectare can translate into additional income, creating an incentive system that drives change. This "do-good bonus" approach generates greater adoption and economic stability than punitive models.

Another crucial challenge is the measurement of real impact. Monitoring and verification (MRV) systems are still expensive and inhomogeneous. To democratize access to them, it is proposed to develop open measurement tools and standardize carbon indicators. Shared data platforms, powered by satellite technology or soil sensors, would make it possible to create a common reporting language.

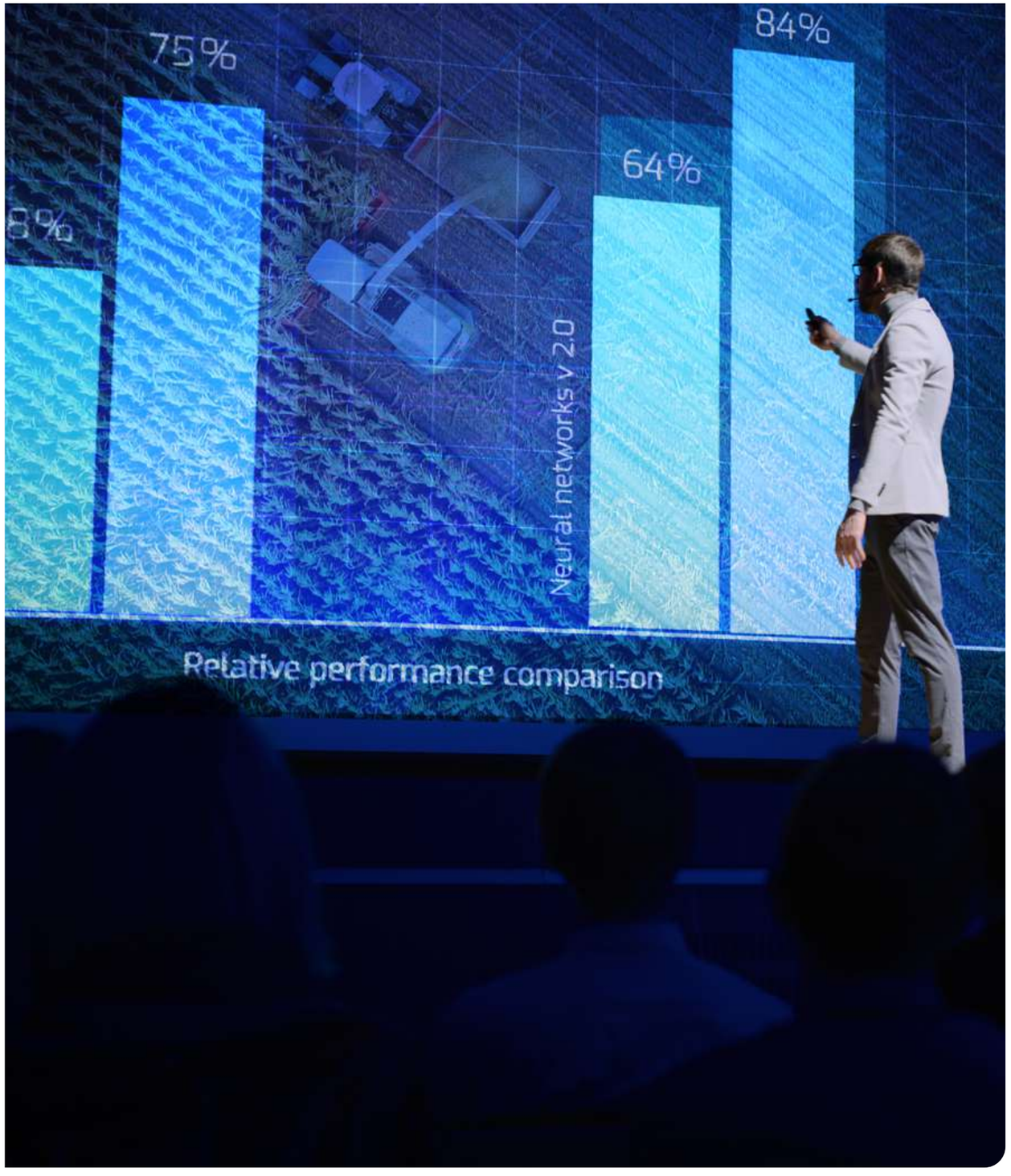
Agriculture accounts for around 80% of the climate impact of most food, placing it at the front line of action to reduce emissions. However, its role in the transition to regenerative agriculture continues to be limited by economic, institutional and technological barriers.

(25)

The digitalization of agriculture also opens up new opportunities. Agricultural sensors, data analysis and artificial intelligence make it possible to predict harvests, optimize resources and quantify the carbon footprint of each crop. Access to accurate information links good practices to financial incentives and fairer and more accessible carbon markets.

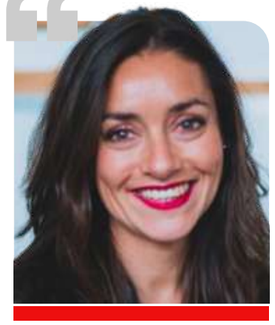
Finally, education and technical support are essential to scale change. **Training agronomists, cooperatives and local agents capable of transmitting practical knowledge is key to multiplying the impact.** Sustainability cannot depend solely on political or corporate actions: it is built on the ground. However, sustainability training continues to be concentrated in the institutional, corporate or academic spheres, without really reaching those who work the land. Thus, those who, in the final analysis, are the ones who implement (or not) the agreed practices are excluded from knowledge and decision-making.

The future of low-carbon agriculture will be based on cooperation between producers, companies and governments. Decarbonization will not be the result of imposed regulation, but of an ecosystem of incentives where sustainability is an economic opportunity and not a sacrifice.



Public policies and incentive frameworks

The food system's climate transition requires coherent policies, fair incentive frameworks and clear rules for measuring and financing change. Regulation should not punish but enable. Achieving this involves simplifying processes, guaranteeing data traceability and balancing global goals with the economic reality of producers and consumers.



"The most effective climate policies are those that transform sustainability into opportunity, not obligation."

Elvira Domingo

Public policies are the framework that determines the speed of transition. **When regulation accompanies innovation, change accelerates; when it imposes burdens without offering alternatives, sustainability stagnates.** The challenge is to build rules that facilitate change, offering incentives and certainties to those who take the risk of transforming their model.

Policy coherence is one of the biggest challenges. Multiple standards (carbon footprint, water, biodiversity and energy) currently coexist and the lack of coordination between countries and sectors generates costs and confusion. The creation of a common language and shared indicators would make it possible to measure and compare results under the same framework. For example, a Digital Product Passport (DPP), which would integrate environmental and social information on agri-food products.

Although technological innovation has made measurement and traceability more viable, the available software is still expensive and complex to operate. To measure, many producers must hire external agencies, which involves an unaffordable expense for most. Free or subsidized Life Cycle Assessment (LCA) software could democratize these processes and expand their application to the entire chain, including smaller producers or those with fewer resources.

Financial incentives also need to be reformed. **Climate and agricultural funds continue to be concentrated in large companies**, while smaller producers face obstacles in accessing them. Redistributing incentives through green microcredits or automatic tax refund mechanisms for sustainable practices would allow the scope to be expanded and the impact multiplied.

Public-private collaboration is another key driver. Governments can act as anchor buyers of rural carbon credits, stimulating the creation of local markets and reducing uncertainty, which incentivizes private investment. They can also replicate programs that reward the energy transition or regenerative production through climate bonuses or tax deductions.

Climate education complements structural change. Incoporating sustainability content into agricultural and business training will allow the standards to be translated into real action. Climate policy must not only legislate but also educate: frameworks are of little use if those who must implement them do not understand them or do not know how to comply with them. Discussions cannot remain at conferences whose participants are not those who work the land and can apply the solutions.

In short, the new regulatory framework must be coherent, accessible and results-oriented. **Climate action is not built only with goals, but with clear guidelines that facilitate their fulfillment.** Success will depend on the ability of governments to turn sustainability into a factor of competitiveness and collective well-being.

Market and new business models

Climate change has transformed, and continues to transform, the entire food system, driving its actors to adapt and evolve. Sustainability ceases to be an added value or a business model to become an essential condition: the basis on which to build resilience, competitiveness and legitimacy in a market that demands coherence between purpose, impact and action.

Companies in the agri-food sector are forced to adapt and take sustainability as a strategy for resilience to change. Innovation becomes essential in the process of change and adaptation. New solutions to these questions are emerging: How will we continue to feed a growing population with diminishing resources? How can we drive the consumption of sustainable products over products that are not? How do we make the best decisions with so much information, but so much lack of knowledge?

Technological innovation is driving this transformation. Digital platforms allow sustainable agricultural practices to be recorded, results to be verified, and auditable carbon certificates to be generated. This traceability makes regeneration an attractive financial product for companies and investors looking to offset their footprint.

"Consumers and businesses have too much information, but they don't really know what the important information is. You have to keep it simple and understandable."

Christa Essig

Circular models are gaining prominence. More and more agricultural companies are integrating waste treatment with the production of energy, biogas, biomass or compost, reducing emissions and generating rural energy independence. This synergy between waste and clean energy turns environmental liabilities into productive assets.

To foster demand for sustainable products, it is necessary to communicate their benefits in a tangible way. Although environmental conservation is a strong argument, many people do not perceive it as a direct motivation. Including individual benefits, such as nutritional improvement, can strengthen the connection with the consumer.

Currently, both consumers and corporations have abundant information, but they lack the tools to interpret it and make appropriate decisions. The proliferation of greenwashing strategies and contradictory messages generates confusion and mistrust.

Smart labels and environmental footprint systems allow us to know the real impact of what is purchased. However, in Europe there are more than 200 different environmental labels, which measure everything from carbon footprint to social impact, which generates saturation and lack of clarity. **We urgently need to simplify communication through unified and understandable tools**, to generate a "CarbonScore" system, an equivalent to the nutritional NutriScore, which evaluates the environmental impact of each product. The unification of different environmental aspects and the application of a range allow the consumer to better understand the impact and also to understand that the products are not good or bad due to having or not having a seal.

Transparency doesn't just improve reputation; it also drives sales and investment. Consumers and impact funds are demanding that companies demonstrate, with verifiable data, that their growth does not depend on environmental degradation. This is promoting new alliances between farmers, industries and technological platforms, based on the creation and sale of environmental value.

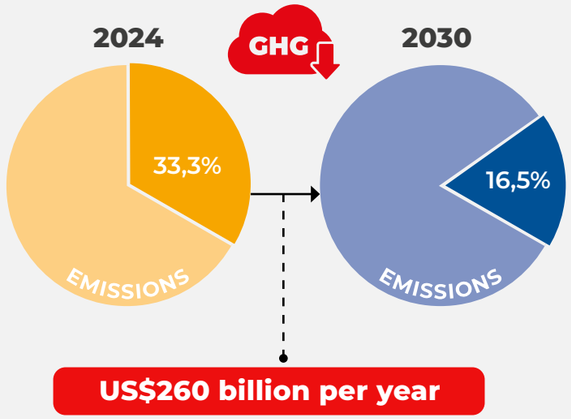
Modern agriculture has reduced the nutritional density of fruits and vegetables by 25% to 50% in the last 50 to 70 years, having an impact on people's health.

(26)

One of the challenges for corporations is access to traceable information by their suppliers. Even with a desire for transparency, the loss of data in the chain limits its compliance. To address this, companies can establish incentive schemes that reward supplier traceability and transparency, while also allowing them to communicate their progress in sustainability and access the benefits derived from it.

Finally, the change in business models is not only economic, but also cultural. Companies that integrate sustainability into their operational core, and not just their discourse, will be the ones that endure. **Decarbonization is no longer a department but a strategy for growth, resilience and differentiation.**

Emissions and investment gap



The agri-food system generates almost a third of global GHG emissions (~16 Gt per year) and reaching net-zero would require investments of ~US$ 260 billion per year, an estimated return of up to US$ 4.3 trillion in benefits by 2030.

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The resilience of the food system will depend on our ability to turn sustainability into opportunity. From the field to the markets, decarbonization will only be possible if innovation, education, and policy work in the same direction.

Case studies

Darwin
Microbial developments for industry
A biotechnology company that transforms microbial diversity into innovative biosolutions for industry, integrating the One Health approach to improve processes, products and sustainability through the use of microorganisms and advanced bioprospecting technologies.
(Spain) https://darwinbioprospecting.com/

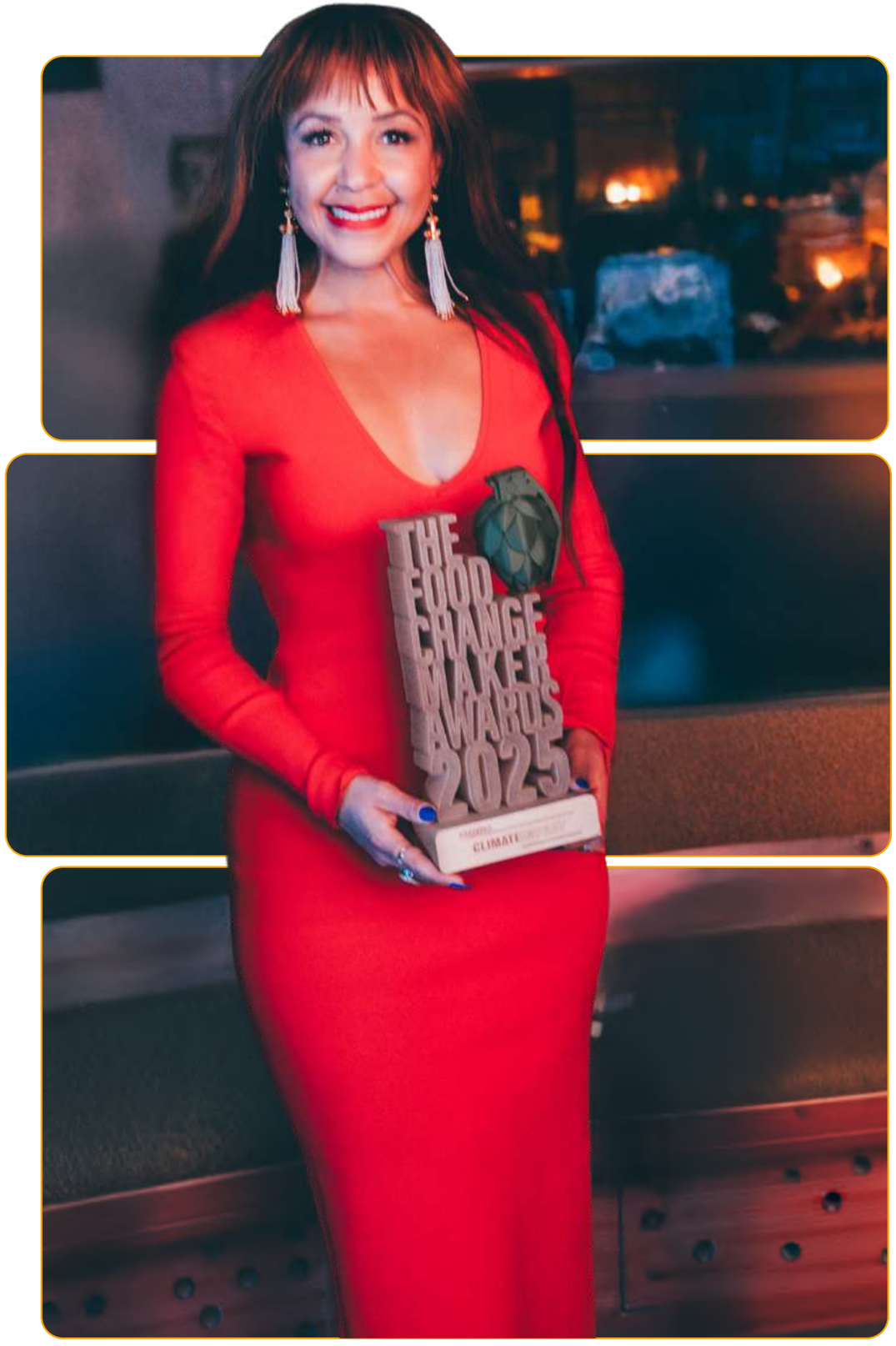
Dcycle
Microbial developments for industry
A biotechnology company that transforms microbial diversity into innovative biosolutions for industry, integrating the One Health approach to improve processes, products and sustainability through the use of microorganisms and advanced bioprospecting technologies.
(Spain) https://www.dcycle.io/es

Coolx
AI and satellites for deforestation-free traceability
Climate-tech startup that uses artificial intelligence and satellite technology to analyze and map agricultural plantations (such as coffee, cocoa, soybeans) in order to ensure deforestation-free supply chains and comply with regulations such as the European Union's EUDR. Its solution operates for importers, exporters and global agri-food players.
(Spain) https://coolx.earth/

Gradhoc
Cooling 5.0 with AI and IoT
Manufacturer and developer of digital solutions based on artificial intelligence, specialized in the adaptive monitoring, control and optimization of refrigeration systems. Their experience allows them to guarantee the food safety of both the product and the process, while reducing energy and personnel costs. Through AI-powered digital solutions, it helps companies optimize energy efficiency and minimize maintenance costs of their refrigeration systems, offering an efficient, safe, and sustainable approach.
(Spain) https://gradhoc.com/es/

Clear Leaf
Biological protection without toxic residues
Agritech has created "GotaBlanca", a biological solution to protect crops against fungi and bacteria without leaving harmful residues. Its technology already has registrations in several Latin American countries and offers a sustainable alternative to conventional fungicides and bactericides, contributing to safer and more resilient agriculture.
(Costa Rica) https://clearagro.com/cr/

Biointellectus
Compostable bioproducts from agricultural waste
Circular bioeconomy startup that develops compostable materials and sustainable bioproducts from agricultural waste (such as coconut fiber, coffee, orange peel) with the aim of replacing traditional plastic.
(Mexico) https://biointellectus.com/



Planet FWD:

Julia Collins' platform to decarbonize the food sector

Julia Collins is the founder and CEO of **Planet FWD**, a leading decarbonization platform for the consumer industry that is redefining how brands design sustainable products. With proprietary data and software, Planet FWD reduces the cost and complexity of creating climate-responsible products, helping companies measure and decrease their carbon footprint in line with the goals of the Paris Agreement.

The platform is inspired by Collins' own entrepreneurial experience with **Moonshot**, the first "climate-friendly" snack brand, launched in 2020. Based on her experience, Planet FWD accompanies other brands in the development of more climate-friendly products. Moonshot was acquired by **Patagonia Provisions**, in a landmark transaction for Patagonia, the first in more than two decades.

A serial entrepreneur, Julia previously co-founded **Zume Pizza**, becoming the first black woman to create a venture-capital-backed tech company valued at more than $1 billion (unicorn). In addition, Collins has held leadership positions in various gastronomic companies and offers continuous support to women entrepreneurs and other groups from her role as an investor in triple impact initiatives.

At **KM ZERO's Food Changemakers Awards 2025**, Julia Collins was recognized in the Climate Impact category for her leadership in decarbonizing the food sector. She stressed that this award celebrates Planet FWD's work to move towards a more regenerative future, thanking KM ZERO for amplifying the mission and connecting them with a European community committed to the transformation of the food system.

_07
From Waste to Resource: the Circular Revolution in Food

Food waste is **one of the greatest challenges of the global food system**: it is not only an environmental crisis, but also an economic, social and ethical one. In a context of scarcity of resources and inequality in access to food, **Zero Waste** emerges as a strategic necessity. The challenge is not to produce more, but to produce better: to redesign the food system under the principles of the circular economy and regeneration to take advantage of each resource.

Managing Partner
THE FOODTECH LAB

Juan Cividanes

An investor with more than 15 years of experience in venture capital in Spain, Juan has promoted some of the first national investment funds and, since 2021, has led a team specialized in AgrifoodTech, supporting innovation and sustainability in the food sector.

Partner
SWANLAAB VENTURE FACTORY

Claudia Jiménez

An active investor with more than 15 years of experience in venture building and investment, Claudia's focus is on the scalability of science-driven high-tech companies, especially in the biotechnology and agritech sectors.

Responsable de la división de ovoproductos
HUEVOS GUILLÉN

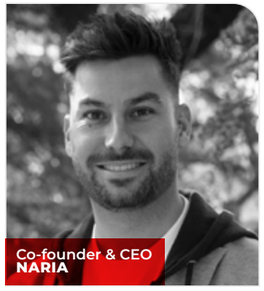
José Ramón Reig

Cuenta con más de 10 años de experiencia en el procesamiento industrial del huevo, desde la gestión de la planta hasta la transformación y elaboración de nuevos formatos de consumo. Impulsa la eficiencia, la innovación y el aprovechamiento sostenible de los recursos en la industria avícola.

Global Head of Sustainability
KERRY

Juan Aguiriano

Juan has more than 30 years of experience driving corporate sustainability strategies in the food and chemical sector. At Kerry, he leads the transformation towards sustainable business models, integrating innovation, environmental and social impact into the company's global strategy.



Co-founder & CEO
NARIA

Kilian Zaragoza

An industrial engineer by training, Kilian promotes the digitalization of the social sector through projects that connect companies, citizens and voluntary sector entities to reduce food waste and generate positive social impact.

Director of Innovation
AINIA

Andrés Pascual

An agricultural engineer specialized in agri-food industries, with extensive experience in environmental R&D and bioenergy, at AINIA he leads strategic food sustainability and circular bioeconomy projects at national and European levels.

Co-founder & CSO
BIO2COAT

Farayde Matta

A food engineer specialized in biodegradable materials made from natural sources, Farayde develops edible packaging and coatings that replace conventional plastics, combining materials science and food technology to reduce waste.

Co-founder
REBREAD

Katarzyna Młynarczyk

Katarzyna promotes collaboration to transform food waste into new products, promoting innovative solutions to reduce bread waste globally. She has been recognized among the Top European Women in Agri-food Industry 2024 for her leadership in sustainability and circular economy.

Director of the Department of Agri-Food Research
IMIDRA

Gregorio Muñoz

With a PhD in agricultural engineering, Gregorio develops projects focused on the use of food by-products. His work combines science and innovation to generate more sustainable and healthy food with greater added value.

Deputy General Director of Food Quality and Sustainability
MINISTRY OF AGRICULTURE, FISHERIES AND FOOD OF SPAIN

Ana Díaz

Ana coordinates the national strategy for the reduction of food waste and the application of the new regulation that promotes more sustainable food systems committed to the responsible use of resources.

Director of Corporate Innovation
PROFAND

Javier Allué

Javier leads and promotes innovation projects that connect sustainability, technology and purpose in the field of seafood. He develops the solutions that will shape the fish and seafood of the future: healthier, more responsible and convenient products.

Food content creator and foodtech entrepreneur

Fabian León

Known for his time on MasterChef, Fabian promotes a more conscious cuisine, combining innovation and sustainability in his projects. From initiatives such as FU.BA. or the Club Que Aproveche, he gets down to work to educate, spread and create the food of the future.

Turning waste into functional ingredients and new products is no longer an emerging trend, but a strategic way to increase profitability, reduce dependence on raw materials and strengthen the sustainability of food chains. The goal: for each waste product to find a new purpose and for waste to stop being an inevitable externality and instead become the engine of a regenerative diet.

Recovery of food by-products

The move from a linear to a circular model in the food industry begins with a fundamental question: what do we consider waste? Currently, a large part of agri-food by-products still ends up in landfills or is destined for low-value uses, such as animal feed or compost. However, these residues hide enormous biochemical potential. They contain bioactive compounds, proteins, fibers and sugars that can be reused through biotechnology to generate functional ingredients, nutraceuticals or biodegradable materials.

One of the main challenges is in the supply chain. The lack of standardization and the dispersion of waste streams make it difficult to manage waste efficiently. The creation of local collection centers and regional processing plants could optimize logistics and ensure more consistent quality. Also being discussed is the integration of valorization into intersectoral chains – cosmetic, pharmaceutical and energy – generating a model of industrial symbiosis that maximizes the use of each molecule.

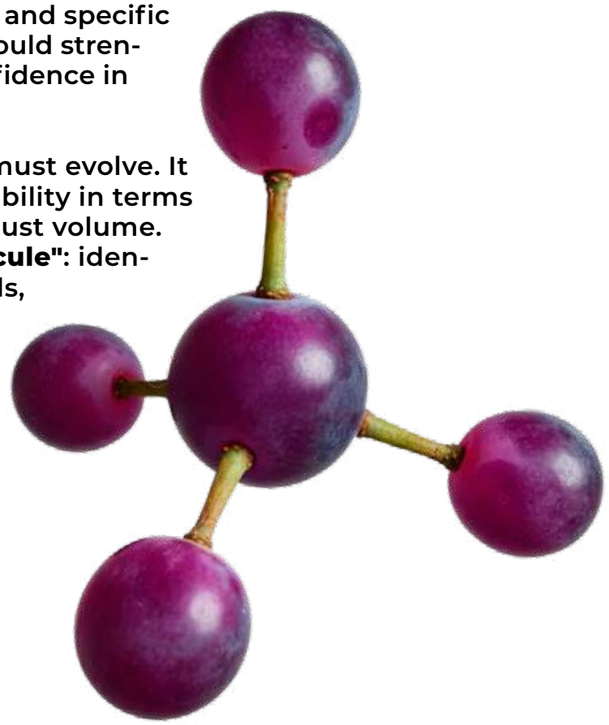
Technological scalability is another key challenge. Many upcycling solutions still operate on a small scale, unable to supply the global industry. It is necessary to invest in biotechnology, artificial intelligence and sensors to standardize processes and improve traceability. Innovation will increase yields, reduce costs and ensure the stability of new ingredients.

"There is no waste. There are only products waiting to be used by someone. Your waste is my resource. The secret lies in the integration of the value chain."

Juan Aguiriano

At the same time, **consumer education** becomes essential to legitimize upcycled products. Changing the poor perception of waste requires transparency and clear communication about its origin, nutritional value and environmental contribution. Sustainability has gone from being added value to a requirement, especially among the new generations. Traceability seals and specific labelling of "upcycled food" would strengthen its acceptance and confidence in the market.

Finally, the economic model must evolve. It is necessary to rethink profitability in terms of impact and efficiency, not just volume. The key is in **"value per molecule"**: identifying high-return compounds, such as antioxidants or bioactive proteins, that can be integrated into multiple industries.



Did you know...

For decades, whey (a liquid byproduct of cheesemaking) was seen as a worthless waste that was expensive to dispose of. In the case of most cheeses, producing 1 kg of cheese requires about 10 kg of milk, generating about 9 kg of whey that was previously discarded or used as feed. However, the vision of the dairy industry changed radically thanks to advances in biotechnology that showed that this by-product could be transformed into pure proteins for the food, sports and nutraceutical industries. Today, whey is considered a strategic raw material to extract functional proteins, peptides and bioactive compounds with great nutritional value. What was once a problematic waste product has become a source of income with margins even higher than the sale of cheese itself.

There are five fundamental conditions for upcycling to be scalable and economically viable:

- Volume availability
- Homogeneity of raw materials
- Competitive cost compared to conventional alternatives
- Verifiable environmental benefit
- Consumer acceptance

Collaboration across the value chain:
a holistic solution

The transition to a zero-waste food system requires deep cooperation between all links in the chain. Producers, processors, distributors and startups must work in an integrated way to share resources, knowledge and infrastructure. Only through balanced and lasting partnerships will it be possible to transform waste into value and build a truly circular food economy.

Collaboration is at the heart of the circular economy. In an interdependent system, each actor generates material flows that can be harnessed if suitable channels are in place. However, there is a structural disconnection between sectors with compatible waste – for example, agribusiness and cosmetics – that do not have joint exchange or logistics platforms. The "collaborative biorefinery" model appears to be a viable answer: these facilities allow neighboring industries to share infrastructure, waste, and profits. On the other hand, it is necessary to promote the diversification of value chains: the same waste can be transformed into proteins, fibers or bioactives, with a cascade use approach.

The starting point is to overcome the current fragmentation. Primary producers, industry, distribution, and the HORECA channel typically operate with disparate metrics, information systems and objectives. They must be aligned through shared data platforms that allow surpluses to be anticipated, redistributed and by-products to be recovered in real time. Technologies such as AI and blockchain facilitate a secure and efficient exchange of information, creating collaborative ecosystems where every decision is based on shared and traceable information.

"The key to zero waste is not to have more technology, but to better connect resources: to know where the by-products are, who needs them and how to make them circular".

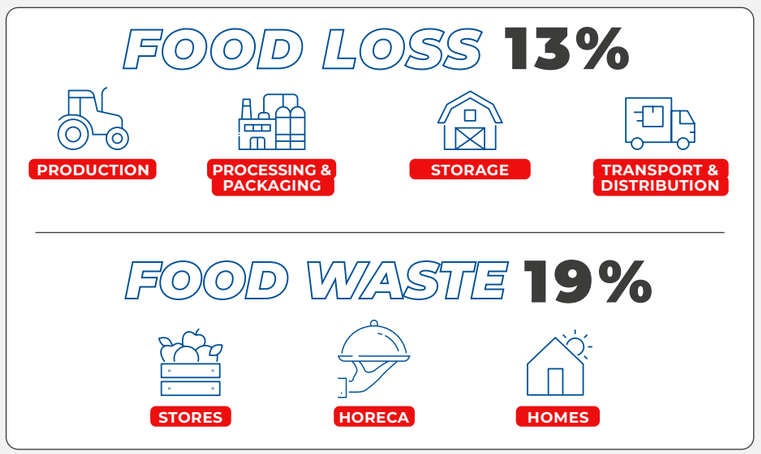
Andrés Pascual

For these initiatives to thrive and the collaboration to be effective, they must be addressed by equitable models of cooperation. On the one hand, balancing the relationship between large companies and startups with joint venture models which allow technological and commercial capacities to be integrated in an equitable way. On the other hand, supporting blended finance: recovery projects require long cycles and a gradual return; therefore, combining grants, debt and private investment, together with public-private co-investment policies, reduces risk and facilitates scalability.

"We need ecosystems, not isolated heroes."

Claudia Jiménez

Food loss and waste



Globally, about 13.2% of food produced is lost after harvest and before it reaches retail stores. In addition, an estimated 19% of total global food production is wasted in households, food services and retail as a whole.

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New policies and regulations to minimize waste

Building a zero-waste food system requires coherent and ambitious public policies. Only through integrative and progressive regulation will it be possible to establish a culture of total use and move towards a truly regenerative food model.

The legal framework for the reduction of food waste is in a moment of transition. Although there are national and European strategies, such as the National Food Strategy in Spain or the European Green Deal, most policies are still based on voluntary commitments and not on binding obligations.

The challenge lies in the **lack of concrete incentives** for companies that are committed to sustainable models. Often, the cost of implementing leveraging technologies outweighs the tax or reputational benefits. Therefore, structural alliances and coordinated policies are required that align incentives, data and regulation along the entire food chain. For example, it is proposed to introduce **food waste reduction credits**, similar to carbon credits, that reward those who demonstrate effective waste reduction.

Another barrier is the **regulatory disconnect between sustainability, food security and nutrition**. Legislation tends to advance independently, generating inconsistencies: an innovation can be positive for the planet, but clash with food safety or nutritional composition regulations that have not been adapted to the new circular production models. The lack of an integrated regulatory vision holds back the adoption of innovations that could significantly reduce food waste.

Although meat and dairy products have a relatively low volume of loss and waste (around 20%) compared to other foods such as fruit and vegetables (which reach close to 50%), their environmental impact is significantly higher. In fact, they represent around 50% of the total environmental impact associated with food waste in the European Union, due to the high footprint generated by their production.

Globally, about one-third of food produced is wasted or lost. The highest rates of waste are 40–50% for tubers, fruit and vegetables; 35% for fish; 30% for cereals, and 20% for oilseeds, meat and dairy products.

(29)

"Zero waste is not achieved by one company or one law: it is built with a network of actors who share data, objectives and responsibility."

Ana Díaz

The consumer also has an indirect regulatory role. The new regulations will only be effective if they are accompanied by **informed and engaged citizens**. Without food education and understanding of the impact of their decisions, the rules lose practical effectiveness. Therefore, integrating the consumer into the regulatory strategy – through awareness campaigns, clear labelling and redistribution platforms – is key to making waste prevention a shared responsibility between governments, industry and society.

Cooperation between industry, administration, technology centers and citizens is essential to scale the circular economy and ensure that sustainability is economically and operationally viable.

Turning waste into resources and building collaborative ecosystems defines a new way of creating value. The key is not only to innovate, but to integrate circularity into the business strategy, from agriculture to consumption. Advances in biotechnology, digitalization and traceability offer the necessary tools; the challenge now is to scale, connect and measure the real impact.

Case studies

TransFoodMission

Collaborative upcycling to reduce waste and scale innovation

Driving the transformation of underutilized resources, by-products, capabilities and infrastructures into new value-added products through an upcycling-as-a-service model, the company facilitates collaboration between companies and agents in the food chain to activate circular projects, reduce waste and scale solutions by leveraging existing assets.

(Hungary) https://www.transfoodmission.com/

BioBlends - Mention of honor at ftalksLATAM25 for Sustainability

Shelf life extension using gaseous biopreservatives

Develops gaseous biopreservatives capable of extending the shelf life of fresh and baked goods by preventing microbiological spoilage. Its technology helps reduce waste, improve quality and offer a sustainable alternative to traditional preservatives. The startup stands out for its ability to adapt to different food matrices.

(Argentina) https://bioblends.bio/

CHEERS

Circular bioeconomy for beer by-products

European circular bioeconomy project to revalue underused by-products of the brewing industry. Coordinated by Mahou San Miguel, CHEERS develops sustainable transformation processes using innovative biological platforms inspired by nature to transform beer by-products into industrial bioproducts with high added value.

(European Union) https://cheers-project.eu/

Upcycled4Food

Collaborative transformation of food by-products

A FoodValley initiative that seeks to drive demand and guide food service providers, retailers, and manufacturers towards a circular food system. It acts as a collaboration platform between companies, research centers and startups to transform food by-products into new ingredients and commercial applications.

(Netherlands) https://foodvalley.nl/en/initiative/upcycled4food-initiative/

Migma - Winner of the ftalksVLC25 Startup Awards for Sustainability

Personalized antioxidants using AI

Biotech startup that combines artificial intelligence and advanced chemistry to design custom antioxidants capable of extending the shelf life of food, petfood and cosmetics. Its platform uses AI to design antioxidant blends tailored to specific products, reducing waste and improving quality.

(Argentina) https://www.migma.co/

Mav-a

Natural wraps that preserve food

Developing natural, practical, and sustainable wraps that help preserve food longer. Its products create a biodegradable barrier that maintains the freshness of fruit, vegetables and other foods, reducing waste and avoiding the use of conventional plastics. With 100% ecological materials that can be adapted to different formats, the startup promotes functional solutions aligned with a healthier and more environmentally friendly lifestyle.

(Mexico) https://mav-a.com/

Gambooza

AI to measure waste in kitchens

Gambooza applies artificial intelligence and computer vision to measure and control food waste in kitchens and horeca environments: it identifies from images the portions served, ingredients and possible excesses, allowing costs and resources to be optimized. Its objective is to reduce waste and improve profitability in the hospitality and catering sector.

(Spain) https://gambooza.com/

Keepcool

Technology to preserve fresh products

Creating preservation solutions for fresh fruit, vegetables, flowers and proteins using ethylene absorbers and proprietary air purification systems. Its technology extends shelf life during transportation and storage, reducing waste and improving quality without the need for invasive processes or additional refrigeration.

(Spain) https://keep-cool.es/

_08

The Future of Farming:
Resilience, Talent, and Technology

Agriculture is at a **historical crossroads**. The sector faces the challenge of feeding a growing population while combating the effects of climate change, soil degradation and water scarcity. At the same time, **digitalization, biotechnology, and new business models** are redefining the way we grow, manage, and connect with food. In this scenario, innovation is not a luxury, but a structural necessity. The **ability to adapt** will condition food security, economic stability and the health of the planet.

Co-founder & CSO
ETHICHUB

Gabriela Chang

Social entrepreneur and co-founder of EthicHub, a pioneering platform in regenerative finance that facilitates financial and market access for microfarmers through blockchain technology, revolutionizing the way agriculture is financed in emerging economies.

Co-founder & Managing Director
MOXE FOODS

Juan Carlos Garavito

With an international track record in innovation and business development, Juan Carlos has held management positions in Latin America and Europe in both the public and private sectors. He currently leads Moxe Foods, promoting a sustainable "bean to bar" cocoa model.

International Programs Europe Lead
FUNDACIÓN PEPSICO

Andrea Pont

Andrea runs programs that help generate a lasting impact. With extensive experience in corporate sustainability, she seeks to combine social innovation, balance with nature and sustainable growth on a global scale in her projects.

Founder
TOP 50 FARMERS

Analisa Winther

Consultant and creator of Top 50 Farmers, a platform that highlights the leaders who are transforming European agriculture. She supports the connection between technological innovation and regenerative practices, promoting a new narrative about the future of rural areas and their protagonists.

Head of Impact and Sustainability
CROWDFARMING

Cristina Domecq

Cristina leads the monitoring of the social and environmental impact of the Crowdfarming platform, which directly connects organic farmers with consumers, promoting a consumption model based on traceability and the human value of the products.

Former CEO
GRUPO ATLÁNTICA

Marta Gutiérrez

An expert in business transformation and digitalization of companies, with more than 20 years of international experience in the industrial, technological and agrochemical sectors, Marta stands out for promoting innovative solutions for farmers, guaranteeing a healthy food ecosystem at a global level.

Head of Business Development
REGENERATION ACADEMY

Jerónimo Romero

With an extensive background in entrepreneurship and business development, Jerónimo is responsible for attracting new opportunities for the Regeneration Academy, coordinating the implementation of regenerative practices in rural areas and leading local programs for the training of farmers.

Co-founder & CEO
PENTABIOL

Goyo Sanzol

Goyo promotes biotechnological solutions that integrate science and nutrition, aimed at improving animal health in the agri-food sector: the company develops postbiotics that strengthen the immune system, thus reducing the need for antibiotics.

Co-founder & CEO
ODOS

Alejandro Vergara

With a background in sustainability and engineering, Alejandro is developing ODOS: a platform that monitors the carbon footprint and biodiversity of producers in the agri-food sector and helps them comply with regulatory demands on sustainability.

Sales Director Europe
XFARM TECHNOLOGIES

Giovanni Causapruno

Giovanni helps food companies and agricultural machinery manufacturers in the digital transformation of their supply chains, promoting the use of data and technology as a driver to accelerate the transition to a more resilient and low-carbon agriculture.

Managing Director
IMIDRA

Mónica Martínez

With extensive experience in agri-food innovation, at IMIDRA (Madrid Institute For Rural, Agricultural & Food Research And Development) Mónica promotes the transfer of knowledge and applied research in agriculture for the sustainable development of rural areas.

EMBASSY OF THE NETHERLANDS IN SPAIN

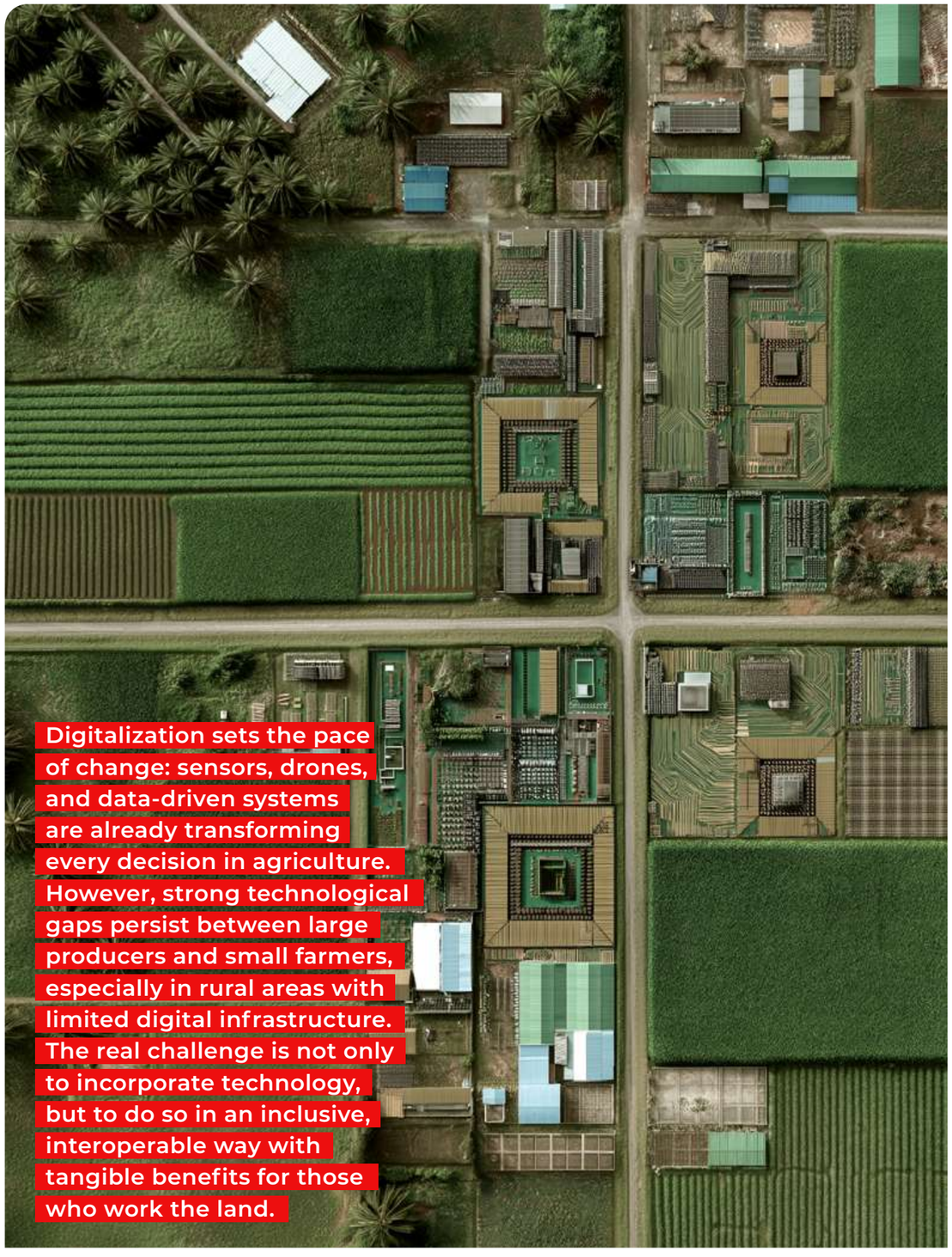
Machiel Kommers

Minister of Agriculture, Nature and Food Quality for Spain and Portugal. With extensive experience in agriculture, agribusiness and rural development, Machiel fosters public-private partnerships that support the exchange of knowledge, promoting projects that strengthen the connection between politics, business and territory.

Partner
THEFOODTECHLAB

Roni Eiger

Roni facilitates strategic alliances that connect Israeli innovation with the Spanish market. With extensive experience in investment and business development, she drives innovation in the agri-foodtech ecosystem, connecting startups, corporations and investors to accelerate solutions with a global impact.



Digitalization sets the pace of change: sensors, drones, and data-driven systems are already transforming every decision in agriculture. However, strong technological gaps persist between large producers and small farmers, especially in rural areas with limited digital infrastructure. The real challenge is not only to incorporate technology, but to do so in an inclusive, interoperable way with tangible benefits for those who work the land.

Technology & digitalization in agriculture

Artificial intelligence and robotics are accelerating the transformation of a traditionally conservative sector towards a more precise, sustainable and profitable one. However, the pace of change is not uniform. Low digital connectivity in many rural areas remains a structural barrier limiting adoption of and access to these tools. Without a solid infrastructure, the promise of smart agriculture will remain a pilot and will not reach real scale.

"The future of digitalization should not be a burden for farmers."

Roni Eiger

At the same time, the sector faces a **generational challenge** that conditions its ability to adapt. With an average age of more than 57 years, many farmers lack the technical support necessary to incorporate new technologies into their day-to-day lives. The lack of succession and specific training slows down the transition.

Another key barrier is **technological fragmentation**. Today there are hundreds of applications and platforms that operate in isolation: for irrigation, pest prediction, traceability or carbon calculation... This dispersed ecosystem forces farmers to duplicate records, manage data across multiple systems, and face complexity that ends up discouraging its use: technology, instead of

More than 30% of Europe's agricultural areas lack stable access to high-speed internet..

(30)

simplifying, adds burden. Overcoming this fragmentation requires **integration and simplicity**, with interoperable solutions, open data architectures, and tools adapted to real rural habits.

Likewise, the digitalization of agriculture cannot be measured only in the number of sensors or installed applications, but rather in terms of the real value it generates for those who produce. **Agricultural data is the new asset for rural areas**, but most farmers still do not control or benefit from the information they generate. Technology will only make sense if it enhances farmers' ability to make better decisions and delivers tangible returns: ad-hoc recommendations, access to carbon credits, or financing linked to sustainable practices. The digital future of farming will not depend so much on hardware or software, but on farmers feeling part of (and not customers of) the technological system that transforms their way of life.

Climate change and agricultural resilience

Agriculture is simultaneously a victim and protagonist of climate change. Extreme events are reducing productivity and making agricultural activity more unpredictable. However, the sector also has enormous potential to become part of the solution.

The climate crisis has become the main threat to food production. Increasingly frequent droughts, floods and heatwaves put crop stability and farmers' incomes at risk.

This vulnerability is compounded by **structurally low profitability and high financial volatility.** Agriculture works with very narrow margins and increasing exposure to climate risk, but insurance and financing systems do not yet reflect the new reality of those extreme events. Without mechanisms that reward prevention or innovation, many farmers lack incentives to invest in technologies or practices that increase their resilience.

The transition to resilient agriculture must not be approached reactively, but rather through planning: redesigning agricultural landscapes, diversifying crops, recovering soils and building support networks that strengthen farmers' resilience to climate change. To this end, **climate digitalization** will be decisive. Predictive models based on artificial intelligence make it possible to anticipate droughts, optimize irrigation, and plan crops more accurately, while satellite imagery makes it easier to track soil health. But technology alone is not enough: **territorial collaboration** is crucial. Sharing knowledge between regions with

"Agriculture is the only sector where the producer is the weakest link in the chain".

Gabriela Chang

Approximately 25% of greenhouse gases worldwide come from agriculture.

(31)

similar climatic conditions accelerates collective learning and reduces errors. The way forward is **to combine big data** (showing trends by season or country) **with local farm data**, transforming the information into concrete decisions about what to grow, where and how to manage it.

Achieving agricultural resilience requires combining **scientific knowledge, local knowledge and technological innovation, combining the accuracy of data with the experience of farmers**. Biotechnological innovation, in particular **New Genomic Techniques**, opens the door to crops that are more resistant to drought, heat or pests, reducing dependence on agrochemicals and improving the stability of yields. The future of agriculture will depend on our ability to integrate science, technology and community for the same purpose: to produce without destroying.

The use of new genomic techniques allows DNA to be modified more precisely and efficiently, offering solutions against pathogens, droughts and stress in crops. In addition, it drastically reduces development times: a new variety could reach the market in 3-4 years, compared to the current 12-15.

(32)

Generational renewal and the future of agricultural work

Generational renewal is one of the most critical challenges the sector faces. The low profitability and disconnection between the rural world and younger generations threaten the continuity of the agricultural sector. Without a new narrative, agriculture runs the risk of being left without farmers.

The rural exodus and the lack of generational renewal are symptoms of a structural disconnection: the countryside is perceived as an unattractive environment, with few opportunities for personal growth, lack of services, connectivity and attractive life options for new generations. The result is a loss of agricultural talent and accelerated aging of the agricultural population.

To reverse this trend, the sector needs a **new narrative: to make agriculture "sexy" and show that the farm can be a space that unites creativity and technology**. Automation and digitalization can transform agricultural work. A model of "agriculture as a factory" is envisioned, which seeks to reduce the physical burden on farmers and free up time for higher-value tasks: planning, soil regeneration or strategic decision-making.

The modernization of the countryside also involves redefining the role of the farmer and dignifying a profession essential for the future of humanity. To do this, **modern agronomic training must combine tradition and innovation**. It is not a matter of replacing the ancestral knowledge of farmers, but of updating and enhancing it with new tools.

Currently, the average age of a farmer in the EU is 57, and only 12% are under 40 years old.

(33)

Rural incubation programs and agro-tech accelerators are emerging, connecting young people with opportunities in regenerative models, including digital tools and added value. The message to those who arrive is not "do the same as your parents", but "take their knowledge and adapt it to a new era". But it is also necessary to **open the sector to new profiles**: entrepreneurs, technologists or creators who, even if they do not come from farming families, bring fresh ideas and help transform the way of producing and managing farms.

But progress will not only be technological: it must also be social and territorial. For the countryside to be a space for the future, it must have the capacity to **create lively rural communities and attract talent**. The agriculture of the future will not only be a set of more efficient farms, but a network of young, diverse people committed to the planet. They will be the true architects of change.

Did you know...

With advances in machine learning technology, ecoacoustics has become a powerful tool for monitoring soil biodiversity: with a meter that records the sounds of invertebrates in the topsoil, data on soil health can be collected without the need to send samples to the lab.

The future of agriculture lies in simplifying farmers' experience and giving them back control over data and knowledge. From there, resilience is built by combining appropriate technology, continuous support and cooperation between all actors in the chain.

Case studies

MicroIn - Winner of the ftalksLATAM25 Startup Awards for Sustainability

Advanced microencapsulation for bioinputs

MicroIn develops microencapsulation technology as it increases stability, efficacy and ease of use of microorganisms used in agricultural bio-inputs. Its platform improves the durability and efficiency of biological solutions in agriculture, reducing dependence on agrochemicals and promoting regenerative practices with less environmental impact.

(Mexico) https://microinbio.com/

Top 50 Farmers

Empowering Regenerative Farmers

Acceleration platform that seeks to make visible and connect farmers who are leading the transition to regenerative agriculture, building an ecosystem in which "making the farmer famous" is as important as for an haute cuisine chef. Analisa Winther, leader of the project, has already interviewed more than 100 experts in the food revolution and collaborates with large companies to drive this systemic change.

(USA) https://www.top50farmers.org/

Regeneration Academy

Hands-on training in regenerative agriculture

Foundation that trains young people, entrepreneurs and farmers in regenerative agriculture and ecosystem restoration. Through practical courses, consultancies and research projects, it promotes practices that improve soil health, biodiversity and water resilience in semi-arid landscapes. Its mission is to empower a new generation of agri-food leaders towards sustainable and regenerative production.

(Spain) https://www.regeneration-academy.org/

Ascribe Bio

Bioprotectors derived from the soil microbiome

Agricultural biotechnology company that develops crop protection solutions based on small molecules derived from the soil microbiome, with the aim of offering more sustainable alternatives to conventional pesticides. Founded in 2017 from research by the Boyce Thompson Institute (Cornell University).

(USA) https://ascribebio.com/

Puna.bio

Bioinputs based on extremophilic bacteria

Startup that takes advantage of extremophile bacteria from the Puna region to develop bioinputs and biological stimulants that regenerate degraded soils, improve agricultural yields (increases of 10-15%) and contribute to a more sustainable and regenerative agriculture. It was funded by the Bill & Melinda Gates Foundation and is among the companies with the highest impact in Latin America.

(Argentina) https://ascribebio.com/

Grape.ag

Smart sensors for precision agriculture

Precision agriculture that offers wireless sensors and artificial intelligence to monitor micro-climates and soils in vineyards or crop fields, providing real-time data and allowing more informed and efficient interventions to be configured than traditional weather stations. Its mission is to enable each plant to "speak" and be optimally managed.

(USA) https://www.grape.ag/

Nambawan

Biocultures to produce functional proteins

A spin-off of Nomad Bioscience, Nambawan is an innovative company specializing in sweetening proteins such as thaumatin and brazzein. With advanced technology and patents, it offers healthier and more sustainable natural solutions than sugar. Its team works on safe, effective and environmentally friendly products.

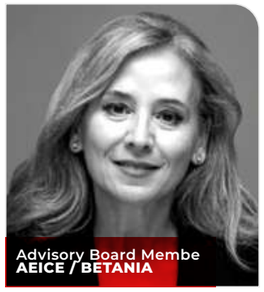
(Spain) https://namba-wan.com/

_09

Every Drop Counts:
Sustainable Water Management

Water has become a critical element for the resilience of the food system. Although **agriculture is the largest "consumer" of drinking water**, much irrigation is still carried out using inefficient techniques, and the industry continues to face challenges of stability, quality and availability of reclaimed water. **Climate pressure, soil degradation and aquifer depletion** have accelerated the need to transform how water is produced, managed and reused throughout the food chain.

There is a significant gap between the technologies available and the actual capacity of farmers and small industries to adopt them. Innovation advances, but **economic accessibility, lack of common infrastructure and the absence of flexible regulatory frameworks** limit the scale of change.



Belén Villoria

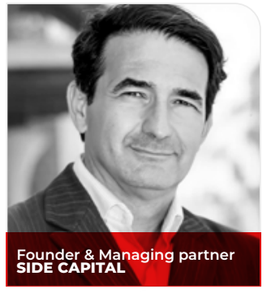
After two decades in large corporations and more than ten years driving movements and communities of change, Belén collaborates as an advisor in organizations dedicated to sustainability and social impact, in addition to supporting global initiatives such as TED, Climate Reality and the SDG agenda.

Paloma Zanelli

A biotechnology engineer who has worked on sustainable development initiatives at the UC Institute for Sustainable Development, at Ainwater Paloma is dedicated to biotechnology R&D projects, searching for funding and pilots, in addition to leading the company's expansion in Spain.

Francisco Yong

An expert in finance, acquisitions and due diligence, with extensive experience leading multinational food groups, at Syon Capital, Francisco invests in the field of consumer goods, food and agribusiness.



Pedro de Álava

With extensive experience in venture capital, Pedro manages the Tech Transfer Agrifood Fund of Clave and SIDE Capital, and leads Big Bang Investors, a leading network of private investors in Spain. He is also a member of the board of companies such as Sepiia, Quibim, Kerionics and Aerox.

Sònia Hurtado

With more than 20 years of experience in different areas of the food industry, Sònia has a broad perspective that combines R&D and marketing. She leads Poseidona, a foodtech company that offers a sustainable and ecological algae-based alternative to animal and vegetable proteins.

Pablo Crespo Moya

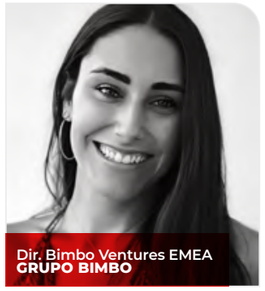
Passionate about innovation and integration of advanced technologies to optimize the use of water in food production, at Agrow Analytics, Pablo leads the way towards a water positive future through solutions based on artificial intelligence.

Marissa Cuevas

Marissa is an entrepreneur, engineer and defender of the environmental who promotes circular economy solutions for water. Microterra produces a functional ingredient for the food industry from the aquatic plant lemna.

Fernando Escribano

Fernando is a researcher with more than 30 years of experience in animal nutrition, food safety and environmental impact assessment, collaborating with industry and academia. The Ocean Born Foundation creates planet-friendly brands, donating 100% of its profits to restore the health of the oceans.



Marta Fernández-Golfín

Marta leads the search for startups and alliances in Europe and Israel, promoting disruptive projects and strategic collaborations. She also leads Bimbo's CVC, which has more than 50 direct and indirect investments.

Manuel González

An entrepreneur and professor with 25 years of experience in business strategy and negotiation, Manuel has advised CEOs and managers on strategic planning and implementation. He is the author of more than thirty cases and technical notes.

Javier Carmona

A graduate in Business Administration and with a Master's Degree in Commercial Management and Marketing, Javier has extensive experience in the agri-food sector. He has led marketing, communication and CSR departments in companies such as La Unión Corp. and Plátano de Canarias.

The agricultural sector accounts for the highest consumption of fresh water and faces a structural dilemma: producing more food with fewer water resources. Although there are proven technologies, such as drip irrigation, sensors, precision and regenerative agriculture, their adoption is still held back by costs, technological inequality and lack of clear metrics that allow the consumer to assess the water effort behind each food.

Efficient agricultural management

Agriculture is at the heart of the water challenge. The sector's dependence on water, the burden it generates on water resources and in many cases its mismanagement, make agriculture a central element of the challenge and therefore of the possible solutions. .

Water efficiency becomes essential and must combine environmental, technological and economic criteria. We face the need to promote precision irrigation systems that optimize the use of water based on real data. Soil moisture sensors, prescriptive irrigation platforms and AI-supported systems can reduce consumption, mitigate risks, and stabilize productivity, especially in the face of uncertain climate scenarios. **Digitalization makes it possible to define the real water footprint of each crop exactly.**

Regenerative agriculture is a key approach. Not only does it reduce water demand, but it improves infiltration, soil moisture-holding capacity, and resilience in periods of water stress. Crop rotation, biodiversity recovery and reduced tillage create more stable systems that decrease dependence on intensive irrigation. **The implementation of these techniques, apart from benefiting the environment, can also offer greater resilience and better economic returns in the medium term.**

"Water is not just a resource, it is a reflection of how we manage our entire food system."

Marissa Cuevas

Another decisive element is collaborative planning of water use. Watersheds require shared governance between producers, industry and administrations, especially when climate risks increase resource variability. **Water management cannot be individual: it needs coordination and common criteria.**

The problem is not exclusively agronomic: it is social and economic. **Farmers depend on water to produce the food that society demands, but the market is rarely willing to pay the cost of preserving this resource.** There is a contradiction between consumer expectations and their actual behavior: sustainability is demanded, but the consumer does not want to pay for the extra cost of sustainability.

We are faced with the need to create frameworks that recognize the sustainability efforts of farmers. Environmental labelling, if it manages to avoid "water washing", could justify high price margins. This would allow water efficiency to translate into economic value and not just additional cost.

72% of all freshwater withdrawals are used for agriculture.

(34)

Producing enough food for one person each day requires between 2,000 and 5,000 liters of water in a year.

(35)

Reduction & recyclability in industry

The food industry faces a paradox: it needs to reduce its water use, but the quality and stability of reclaimed water is still insufficient for processes that require precision. Added to this are technological limitations, unstable flows and poorly adaptive regulation that hinders the adoption of recycling solutions and the circular use of water.

"You can't scale if the water arrives differently every day. We need stability."

Paloma Zanelli

The food industry is in **the midst of a transition towards models of lower water consumption and greater circularity, but the path is full of technical and regulatory obstacles**. One of the biggest challenges is the instability of reclaimed water: it does not always have the same composition or flow, preventing its use in environments where quality or consistency is required. This variability especially affects processes such as industrial cleaning, heat treatments, etc.

The available technology is not homogeneous either. Systems such as ceramic filters, which look promising, do not work well if the water changes in quality every day. The same is true of atmospheric water generation technologies: their flow rate is insufficient for industrial needs, although they can play an important role in communities or small applications.

It is not enough to treat water. It also needs to be stabilized. The industry needs infrastructures that guarantee quality and constant flow, especially for critical processes. This implies investment in storage, homogenization,

advanced tertiary treatment and predictive digitalization, which allow fluctuations to be anticipated and processes to be adjusted automatically.

An essential point is to classify water according to its criticality. A distinction must be made between "technical water" (exterior cleaning, cooling, irrigation of green areas) and "contact water", which requires higher standards, but not always total potability. **This differentiation would allow circular uses to be adopted in many processes that today depend unnecessarily on drinking water.**

Reducing water pressure implies acting on two fronts: process efficiency and waste reduction. Every time a batch does not meet the quality criteria and is discarded, millions of liters associated with the production cycle are lost. A revision of sorting standards, without compromising food safety, could significantly decrease waste and, by extension, the sector's water footprint. Along the same lines, we find the obstacle of regulation. **Regulations on water reuse are still strict and not very adaptive.** While they aim to ensure health safety, greater flexibility would allow the adoption of recycling technologies to be accelerated without compromising standards.

Israel recycles up to 90% of treated water, while in Spain, although it is the European leader, the figure is between 7% and 13%, with notable exceptions such as the Region of Murcia where recycling has also reached 98%.

(36)

The future lies in the alliances between science, industry and regulators; financing stabilization technologies; and digitizing processing systems to ensure operational predictability.

Strategic vision, technology and investment

Although advanced technologies exist to improve water management, their adoption is still limited by economic and scale barriers. Innovative financing models, shared infrastructures and public-private consortia capable of making water innovation accessible to smaller producers and companies are required.

"The technology exists, but the problem is who can afford it."

Manuel González

The strategic vision on water points to a new paradigm: **solutions exist, but they are not accessible to everyone**. Advanced sensors, smart irrigation systems, AI tools, and recycling or desalination technologies are available, but their input depends on the investment capacity and size of the farms.

This phenomenon is especially visible in crops such as almond, olive or avocado, where extreme technification (trellised plantations, water and nutritional control through sensors, predictive models) is only viable when there are large buyers who guarantee volume and price. For smallholder farmers, investment is difficult to justify without structural support.

Water innovation needs new economic models. One possible solution is **"water bonds"**: mechanisms that allow companies to finance efficiency in the field in exchange for verifiable water credits. This approach not only reduces consumption but also creates an economic incentive for farmers to adopt precision technologies.

The **creation of public-private consortia** is another fundamental component. These alliances would make it possible to share infrastructures, reduce costs and scale solutions that are currently developed in a fragmented way. More specifically, to develop low-cost pilot plants adapted to the rural context that function as spaces for testing, validation and technology transfer.

Water connects agriculture, industry, biodiversity, climate and energy, so investment should be directed to systems as a whole, not isolated solutions. This implies rethinking incentives, coordinating actors, and designing long-term strategies that allow technologies to be scaled equitably.

The increase in population and the new demand for food that comes with it will imply an increase in freshwater consumption of up to 30% by 2050, a serious challenge in a world where 40% of the population already suffers from water scarcity.

(37)

Guaranteeing the future of water is guaranteeing the future of food. We already have solutions, but they will only have a real impact if we manage to make them accessible, bankable and scalable. Water resilience requires cooperation between farmers, industry, science and policy, as well as a new culture that values water as a strategic asset. Transforming how we manage it is not only an environmental necessity: it is an opportunity to build a more stable, fair and accessible food system.

Case studies

Agrow Analytics

AI for irrigation and water management

Agrow Analytics develops precision agriculture platforms focused on the efficient use of water. Its technology integrates AI, sensors, remote sensing and soil, weather, and irrigation data to generate automatic recommendations on where, when, and how much to irrigate. The solution helps reduce the water footprint, improving productivity and optimizing resources on farms.

(Spain) https://agrowanalytics.com/

Nob166

Long-lasting antimicrobial additives

Nanotechnology company that develops long-term antimicrobial additives for textiles, plastics and surfaces, using a recyclable active substance that offers extended protection against microbes and odors, improving the durability, hygiene and quality of products.

(Spain) https://nob166.com/

Néboda

Vertical farming with AI and robotics

Néboda grows aromatic herbs and leafy vegetables using automated vertical farming that integrates hydroponics, robotics and artificial intelligence. The model reduces water consumption, eliminates pesticides, and enables local, scalable production throughout the year, driving a new generation of high-efficiency farms.

(Spain) https://www.nebodafarms.com/es/

Wayout

Modular systems for local drinking water

This startup has created modular "plug & play" systems to produce drinking water locally, without plastic bottles, through water treatment units that transform various sources (even difficult-to-treat water) into clean and mineralized water, with a business model aimed at reducing single-use plastic and decentralizing water supply.

(Sweden) https://wayout.com/

_10

Creating the Future of Food Together:

Collaboration as a Strategy

Open innovation has established itself as a **strategic pillar to accelerate the transformation of the food system**. In a context of technological disruption and climate urgency, alliances between startups, corporations, investment funds and the public sector are essential to accelerate real solutions. However, collaboration still faces **structural frictions**: risk asymmetries, opposing cultures, and poorly adapted financial models. The challenge is to build bridges that combine entrepreneurial speed with industrial capacity, generating economic, social and environmental impact at scale.

Global Foods Sustainability Lead
UNILEVER

Dorothy Shaver

A dietitian and food sustainability expert with 20 years of experience in the food industry, Dorothy leads the sustainability agenda of some of the world's leading food brands, including Knorr, Hellmann's, and Horlick's. She is a founding member of the board of directors of the Food for Climate League.

Head of Ventures & Competitive Intelligence.
GIVAUDAN

Alexandre Bastos

Alexandre has a solid track record in strategy development and digital transformation and more than 20 years of experience in the food industry. As a leader in emerging food technologies, he drives collaborative innovation at Givaudan.

CEO & Founder
MAOLAC

Maya Ashkenazi

Winner of the Forbes 30 Under 30 award, Maya brings her expertise in biomedical and pharmaceutical engineering to lead the innovative work of Maolac, a company dedicated to applying biotechnology to the development of precision protein formulations.

CEO & Co-Founder
IMPERIA

Álvaro Bernabé

Álvaro is an industrial engineer specialized in business analysis and software development. With a strong focus on digital transformation, he has led Imperia to develop innovative solutions that improve planning, management, and overall performance within supply chains.

Founder
RN VENTURES

Ranny Nachmias

Ranny is former Managing Director of Intel Ignite Tel Aviv, Intel's deep tech accelerator, selected as number one in Israel. He is currently a member of the board of directors, advisor, mentor and Business Angel of several startups in the technology sector.

VP of Communications and Founder
INTREPIA

Beatriz Romanos

A journalist and author specializing in foodtech, Beatriz combines more than 15 years of experience in the technology sector. Founder of Intrepia (formerly TechFood Magazine), a pioneering Spanish magazine in foodtech, she advises startups and organizations as an innovation coach.

Partner
ACRE VENTURE PARTNERS

Sam Kass

Chef and White House policy advisor under Obama, Sam's goal is to make healthy foods more accessible and appealing. He is currently a partner at Acre, where he focuses on venture capital in the food and agribusiness sectors.

CEO & Co-founder
BIOME MAKERS

Adrián Ferrero

An economist by training with an entrepreneurial spirit and specialized in innovation, Adrián is recognized as one of the main entrepreneurs in Spain by the Spanish government, the European Commission and the MIT Technology Review magazine.

CEO & Founder
EUROPISTACHIOS

Josep Casas

Josep combines his MBA and civil engineering background to promote and manage innovative digital platforms in the food sector. At Europistachios, he advocates sustainable nut cultivation and innovation in agricultural technology.

Head of Incubation EMEA
TETRA PAK

Emma Laurin

Emma is an angel investor and founder of Visionalley, with more than 15 years of experience in cross-sector strategic consulting on an international scale. She is specialized in venture building for impact, innovation in food and agritech, and the creation of purposeful ecosystems.

CEO
TOPIAN (NEOM)

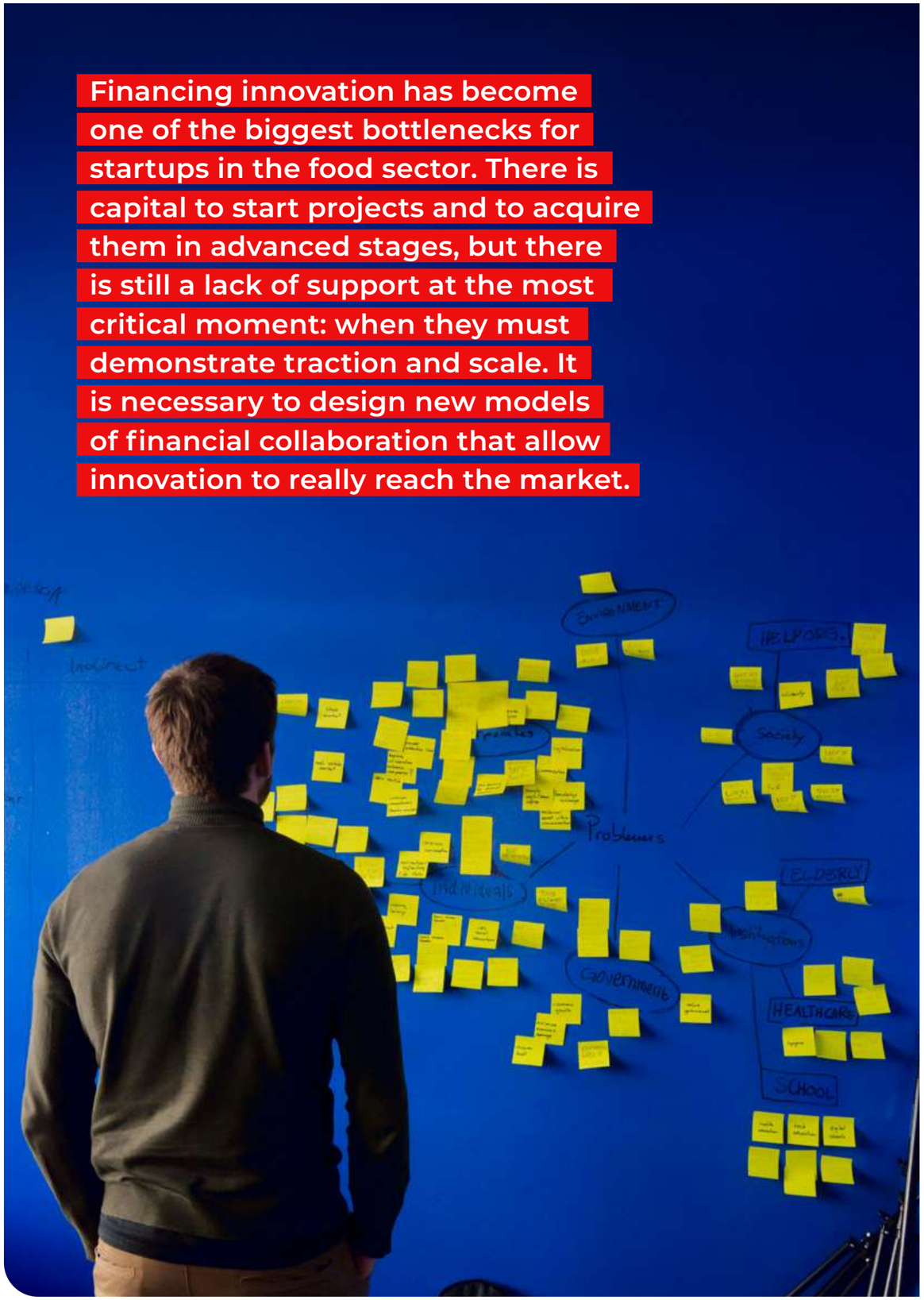
Juan Carlos Motamayor

Juan Carlos is a global leader in the food industry with more than two decades of experience driving innovation in agriculture, aquaculture, novel foods and sustainability. He has advised governments and organizations on sustainable food production.

CEO
BLUE TREE

Michael Gordon

Michael is an agronomist, entrepreneur and business leader dedicated to transforming the future of food. With extensive experience in agri-food technology, he combines his scientific knowledge with his strategic leadership to drive innovation in healthy food solutions.



Financial collaboration models for startups

The success of an innovation does not depend only on its technological potential, but on its ability to find the right financial partner at each stage. Today, the entrepreneurial ecosystem faces a structural problem: in innovation, risk is poorly distributed. Venture capital funds expect corporations to take risk; corporations delegate it to startups; startups, for their part, try to transfer it to public funds or grants.

This game of perpetual handover generates fragile projects, without a solid economic model. **The first step towards effective open innovation is to establish co-responsibility mechanisms and clearly define who assumes what type of risk in each phase of the project's development.**

Added to this asymmetry is a temporal mismatch. There is abundant seed capital that allows projects to start, and corporate capital for acquisitions or mergers, but **there is a lack of specific financing to scale up before they are profitable**. Without that financial bridge, many startups disappear just when they start making an impact. This gap, also called the "missing middle", is not filled by more traditional investment, but by hybrid structures that align incentives between client, startup and investor.

For years, many corporations that engaged in open innovation knew startups and, in order to develop pilots together, the corporate assumed an investor role in the early stages. But this role is usually not adequate: when the corporate invests in the startup at the beginning, its demand for exclusivity or control ends up

"Today everyone is trying to transfer risk to another entity, so the real challenge is to define how we want to share risk collectively within the ecosystem".

Sam Kass

slowing down the scalability of the startup. Corporate collaboration works best when the solution is already validated and needs to be consolidated in the market. In the early stages, corporations must assume an operational rather than a financial role.

Given these challenges, the venture client model emerges as an efficient solution. Instead of investing directly, the company acts as a client of the startup: the corporation's focus shifts from asking for pitch to asking for product. Actual orders validate technology, generate revenue for the startup, and reduce risk for the corporation, fostering a mutually beneficial relationship of trust based on tangible results. In addition, startups that manage to sell to a corporate client provide more credibility than those that only raise funds: it validates the market and reduces the risk perceived by future investors.

In addition, the public sector needs to better define where its support is truly transformative and generates real impact. Many public funds end up covering risk that private funds don't want, but without a coordinated strategy, perpetuating ecosystem disconnection. For public financing to be effective, it must be aligned with models where risk and reward are shared in a balanced way, and where public capital acts as a catalyst for market traction, not as a substitute.

For public funding to be effective, it must align with models where risk and benefit are shared equally, and where public capital acts as a catalyst for market traction, not as a substitute.

The desire to discover unknown business opportunities is the most popular goal driving companies to work with startups (46%).

(38)

Collaboration models between startups & corporates

The success of open innovation does not only depend on capital, but also on the culture of collaboration. Many alliances fail because they do not respond to a specific operational problem, to a real business need. For a collaboration to thrive, there must be a concrete need and organizational culture that combines startup agility with corporate structure: innovation only flourishes where there is shared purpose, clarity, and trust.

One of the most common mistakes when initiating collaborations between startups and corporations is to assume that leadership from the corporate level should always fall on the innovation team. **When the initiative comes from the operational area, there is a clear problem to be solved and a greater probability that the pilot will become long-term adoption**, so the most effective internal promoter of the project usually comes from the department that really needs the solution: R&D, marketing, supply chain, etc. On the contrary, when a collaboration is driven by innovation without the commitment of the areas that must execute it, pilots die after the PowerPoint presentation. The innovation team can facilitate the process, but it cannot replace the willingness of the area responsible for implementing the solution.

Another recurring obstacle is the **dual culture**. Startups operate with urgency, limited resources, and an experimental mindset. Corporations, on the other hand, have slow processes, hierarchies,

"The food and beverage industry is a very emotional industry – trust is very important, so in a way, you need to taste your partner".

Michael Gordon

and regulatory compliance demands. This clash generates mutual frustration: startups perceive slowness; corporations, chaos. Successful collaborations occur when there are compatible cultures in both organizations.

The key to success is to have **hybrid profiles within corporations**, professionals who know how startups work and who can translate their dynamics to the corporate context. These profiles reduce friction, adjust expectations, and ensure that processes move forward without structural collisions.

It is necessary to try to **avoid contractual blockages**, such as premature exclusivities or equity conditions that limit the scalability of the startup. These practices not only slow growth but also prevent the startup from collaborating with multiple players in the sector, which is key to validating technology and reaching critical mass. In addition, in open innovation, collaboration should not be owned, but should be a shared laboratory. **Successful collaborations require care and time**: they are not born out of urgency, but out of perseverance. Both startups and corporations must work with transparency, protecting trust and understanding that open innovation is not a one-off exchange but a long-term partnership.

89% of companies that managed collaborations through a dedicated business unit always achieved their goals.

55% of companies used external intermediaries to manage open innovation projects, and their involvement significantly increased the success of the projects.

(39)

COLLA-BORA-TION

The success of open innovation depends above all on the ability to integrate collaboration within the core of the business. Corporations and startups must opt for relationships that create shared value, building long-term relationships.

Case studies

MyFoodWell

Generating a national ecosystem of entrepreneurship for Health and Nutrition

Platform created by CAPSA Vida to promote startups in health and nutrition with up to €2M in investment and mentoring. In 2025, the program received 36 applications and selected 10 for MyFoodWell Day in Asturias. The initiative seeks to invest up to €4M to improve nutritional health through innovative solutions.

https://myfoodwell.es/

Tastech by Sigma

Transforming the business to prosper through innovation

Open innovation program of the multinational Sigma Alimentos launched in 2019. It focuses on new business models, sustainability, food of the future, and efficiency. It has analyzed 2,000 startups, developed 50 pilots, and collaborated with 11 business areas within Sigma.

https://www.tastechbysigma.com/

Unilever Foundry

Collaborating with the entrepreneurial ecosystem to be more sustainable and resilient

Global open innovation platform that connects startups with internal Unilever teams. The program has led to the management of more than 100 pilots in sustainability, circular packaging, and food technologies. Present in 40 countries, it promotes solutions applied to net zero and the circular economy within the company.

https://www.theunileverfoundry.com/home.html

Barilla & xfarm

Measuring and improving the impact of basil production

Collaboration between Barilla and startup xFarm to digitize the basil supply chain. The project makes it possible to measure emissions, improve efficiency and offer complete traceability to the consumer. Since 2023, it has involved 25 companies and cooperatives, digitizing 310 hectares of the crop.

https://www.xfarm.ag/es
https://www.barillagroup.com/en/who-we-are/blufuture/

KM ZERO Open Innovation Program

The leading Open Innovation program for the food sector in Spain and LATAM

At KM ZERO, we have developed **KM ZERO Open Innovation**, the leading open innovation program in the food sector, in which seven food industries launch their short-, medium- and long-term challenges to the innovation ecosystem in order to make their businesses more sustainable, resilient and efficient. This year, the program has included **Grupo Arancia**, a leading Mexican company with 100 years of history in the production of ingredients; **CAPSA Food**, an Asturian group in Spain which is a leading producer of dairy products; **Familia Martínez**, Spain's leader in meat products and ready meals; **Huevos Guillén**, Spain's largest egg products company; **Helados Estiu**, a Valencian company that develops ice cream for the domestic and international markets; **Profand**, Spain's leading fish retailer; and **Vicky Foods**, a company specializing in the development of pastries and baked goods, with a new focus on developing healthy products. These companies have collaborated with more than 25 startups to solve challenges related to consumer knowledge, improving the nutritional profile of their products, extending shelf life, AI-related tools to improve the company's production processes, new packaging, reducing carbon emissions and reducing the environmental impact of their production processes. **250 startups** applied to this edition of the program, of which 25 have been selected to move forward with the implementation of technology in these industries.

In this new edition of the program, we are working with an open call in which entrepreneurs can continuously apply to try to solve the challenges posed by corporations. After a quick selection process, a connection is made between the solution and the corporation; a joint project is defined with the key buyer persona within the corporation and the startup's management and is then executed according to the timelines and objectives of both organizations. This new collaboration model, combined with a new approach that moves away from product innovation and focuses on improving the food system through improvements in efficiency, sustainability, profitability and nutritional profile of products, has been a huge improvement for both the startups and corporations in the program. It is still too early to see tangible results, but there is no doubt that this new collaborative model will maximize the number of successful projects originating from these open innovation initiatives.

https://www.kmzerohub.org/

KM ZERO

At KM ZERO Food Innovation Hub we help to understand the big challenges of the food system and turn them into real opportunities, making it easier for companies not only to transform and grow, but to endure and leave a legacy. We are a lively meeting point where knowledge is shared without barriers, open innovation is activated with purpose and alliances are turned into action. Our mission is to accelerate the transformation of the food industry through knowledge, open innovation and meetings.

We do this together with our community of **Food Changemakers**: leaders and organizations around the world that research, create new businesses, invest, produce, cook and educate to build a healthier, tastier, fairer and more sustainable future. With them we question current challenges, detect trends and promote solutions that scale thanks to collaboration and investment. Because we believe that the true impact is the one that transforms the system today and leaves its mark for generations to come.

Team

PACO MARTÍNEZ
FOUNDER

RAÚL MARTÍN
CEO FAMILIA MARTÍNEZ (PATRON OF KM ZERO)

NORA ROMERO
CO-FOUNDER

BEATRIZ JACOSTE
CEO

CATALINA VALENCIA
DIRECTOR OF COMMUNITY AND MAJOR EVENTS

JUAN REQUENA
DIRECTOR OF INNOVATION AND VENTURE

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LUDIVINE RATEL
FOOD INNOVATION PROJECT MANAGER

LILIANA RAMÍREZ
DIGITAL MARKETING

EMILIO ROMERO
ART DIRECTION

CARLOS PRADA
FOOD DESIGNER & CONTENT MANAGER

IRINI FOURNIER
GROWTH & PARTNERSHIPS

MÓNICA PRADA
FOOD INNOVATION PROJECT MANAGER

JUAN CUQUERELLA
BUSINESS DEVELOPMENT

SALVADOR ALBERT
ASSISTANT

PILAR CABANILLAS
ADMINISTRATION AND ACCOUNTING

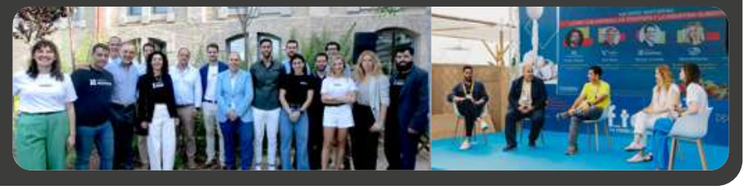
FRANCISCO GRESES
DIGITAL STRATEGY

Track record

11 FTALKS FOOD SUMMIT EDITIONS

2 THE FOOD CHANGEMAKERS EDITIONS (THINK TANK)

4 KM ZERO OPEN INNOVATION PROGRAMS

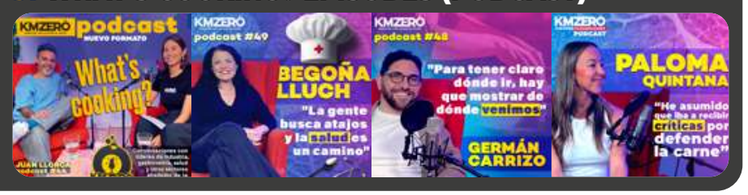


1 THE FOODTECH CHALLENGE EDITION (EDUCATION)

4 GASTROGENIUS EDITIONS (EDUCATION)

8 FOODURISTIC EDITIONS (ANNUAL REPORT)

51 WHAT'S COOKING? EPISODES (PODCAST)



Ecosystem Map

PARTNERS

PUBLIC INSTITUTIONS

UNIVERSITIES AND TECHNOLOGY CENTERS

CONTRIBUTORS

MEDIA PARTNERS

CORPORATES

LAZARO · EURO Pistachios · DANONE ONE PLANET. ONE HEALTH · Egatesa · Faerch · GRUPO BIMBO ALIMENTAMOS UN MUNDO MEJOR

Grupo Atlántica Natural Company · BOLLO NATURALFRUIT · Risi · Zamora company · Givaudan · TOPIAN. NEOM

Nestlé Good food, Good life · focusplaza de kracht van verbinding · Viscofan · better balance · BM · General Mills

BÜHLER · COMPASS GROUP · HR Hijos de Rivera · PEPSICO

INVESTORS

ACRE · AgFunder · Agrolimen · aldebaran. · FIRST DROP · Angel Ventures

AC VENTURES · arpegio · BIG IDEA VENTURES · CARDUMEN CAPITAL · collateral good

COLLIDE CAPITAL · ECBF · Fen Ventures. · FSV FIVE SEASONS VENTURES · Good Startup · ICOS CAPITAL · McWin Capital Partners

Unovis Asset Management · NEW CROP CAPITAL · NX FOOD · KAMAY VENTURES · PeakBridge · PLUGANDPLAY · GULLSPÅNG rexfood

REGENERA VENTURES · REPLATE VENTURES · SANTATERA CAPITAL · Ship2B Ventures · Sonae · Source · SUPPLY CHANGE CAPITAL

Swanlaab Venture Factory · TECH TRANSFER AGRIFOOD · tftl thefoodtechlab · THE YIELD LAB LATAM · Unitatea · WA4STEAM Women Angels for STEAM

ZINTINUS · zubi capital · QUADIA CAPITAL REGENERATED · FONDO BOLSA SOCIAL · 1st Course Capital · Edible Planet Ventures

SOCIAL IMPACT ORGANIZATIONS/PROJECTS

moxe XOCOLATL·COLOMBIA · ocean 52 · EthicHub · Ocean Born · GREEN BRONX MACHINE · pepsico foundation

Top 50 Farmers · Regeneration Academy

STARTUP ECOSYSTEM

Consumer Packaged Goods

DELICIOUS & SONS A FAMILY OF FLAVORS · ADULT CANDY CLUB OSITOS CON ALCOHOL · Relleno · AIRES DEL PEDREGAL · snoq · BIOTECH SUPERFOODS · Del Salto

Granolin · upraising · heura · let it v no hype just plants · griYUM · BLUANA · Vrave

GIMME SABOR · Que Vana · Vanetta · Pink Albatross · VÄCKA · Propel foods · ESENCIA FOODS

Sanygran · Mommus · LIBRE · PLANT SQUAD. · LEAF · TOMORROW FOODS · benji

.relash · LÖV FERMENTS · MIWI REAL DRINKS · KEWATER Kéfir de Agua Orgánico · PROASIS PROTEIN & PROBIOTICS · Bifid·ice

Real Kids · Fully Kids · PETIT ONS THE GOOD SNACK · NATRULY. · POWMIX · groovies · yunno!

FRÜVETHY · Fungívora · 2050 meal · B3TTER · PLESH · INAAM · yuit

KAI CAO · Green Vibes · +NUTRI Co · D·ORIGEN COFFEE ROASTERS

New ingredients

Poseidona · NOVAMEAT · EVERY · Al Bobby · Zuustento · UOBO · MOA FOODTECH · LIVESTOCK LABS · INNOMY · ERGO BIOSCIENCE · MEATHICAL · COMPOUND · COPAL SCIENTIFIC · ALEPH FARMS MEAT GROWERS · Kresko · CIRCE Health Science · Mosa Meat · VELOZBIO · FOODTURO · migma · NUTRIMEZCLAS · NAMBAWAN · THE MEDITERRANEAN FOOD LAB · MFJ · MAOLAC · Genky · Bread Free · HAPROBA

Primary sector and climate

PLANET→FWD · 6DOS · SYNTROPIA · Ainwater · kran · KILIMO · AGROW · ARABLE · GROINN · BIOTANGO · tierra FOODS · BIOME MAKERS · ALIS · MICROTERRA · ISIFARMER · EcoScience Lab · grape.ag · Massa Greens · CrowdFarming · FARM · Dcycle · GEXUS · Biointellectus · ClearLeaf · MicroIN · verde compacto · SoilTronix INNOVATION · gapy · AgroData Connect · FACTIC · néboda farms · INGEOMAP · agerpix · COOLX · SEPOC · supree · HowGood

Packaging

PACK2EARTH · BZero · BIO2COAT · SIROPE LAB · bioplastics4health · reaquila · Oscillum · Va-Nano · Bioplastix · MAV-A

Zero waste

glop · naria Tecnología + humana · OH! GREENS · Day 8 · KIGÜI · ingredalia Improving Naturally · Bene BONO · AVOLUTIONLAB · onima · IMPACT Upcycled Foods · RENEWAL MILL · Leanpath · chum chum! · LAKS · TERRA BIOINDUSTRIES · Residua · MOSQUITA FEED · GENIUS FOODS · REBREAD · BioBlends · transfoodmission · Nästa

Health and nutrition

Bluefree · ETERNA DIAGNOSTICS · ibions Instituto Biomédico Nutrición y Salud · Oorenji · EBH3 HEALTH TECHNOLOGY · Genbioma · myrealfood · darwin Bioengineering Excellence · nucaps · The(BEEMINE)Lab™ · LEVPROT BIOSCIENCE · FU.BA · BIOTASMART · gut4u · lipiwell · PentaBiol Animal Health

Digitization and tech

allie · flipflow · humand · WORKSIBLE · COMEXSOFT · Solved · Docuten · ALGORI · imperia · easnip. · lune · MACCO · Shopery · yalutec · thinus humanizing neuroscience · tastewise · biomixing Leaders in bioreactor mixing · UNK · exponentia · GUNDO · Abydos Bioscience · NOBIAC · WAYOUT · COCUUS · TRAMABLE · Verve Market · TASTELAB

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