



FOODSCALE HUB

The ultimate guide

24 Serbian businesses
leading the game
in agtech and foodtech

STARTUP CATEGORIES



01 Agro Budget System, Agriness ThreeEnergy

02 Smart Watering Solutions, DuvanNET, Beehold, Atfield Technologies, Agremo, Terra Digital Hub

03 Eat Me App

04 EWD Technology, ATAR, Coming Computers Robotics

05 BFRESH TECHNOLOGIES, SOMA WELLNESS, Bifrost Bioplastic

06 N Solilab, BioCombact D00

07 lotartic (Project Io3T) consortium with EN-IO from Turkey

08 Meet your Farmer

09 FeJuice

10 Golden bee d.o.o.

11 Terra Consulting

12 Go Digital

INTRODUCTION

WHO WE ARE

Foodscale Hub is an **Impact Venture Studio** with offices in Greece and Serbia, working to accelerate the shift towards tech-enabled innovations in the agrifood sector.

At Foodscale Hub we believe that *by choosing the food we eat today, we decide what our world will look like in the future*. Our commitment to building and improving scalable solutions, as well as creating disruptive business models that reshape the agrifood sector and have a positive impact on society is the essence of who we are. We are harnessing the power of technology and entrepreneurship to prepare a fair, resilient, and sustainable future for Europe's agri-food sector while building a prosperous ecosystem of partners.

By participating in numerous research and innovation projects, we are shaping the future of food systems and supporting founders to gain access to funding, knowledge and a broad network in Europe and the USA.

WHY THE STARTUP GUIDE?

Investing in startups is risky, but if you do your research and invest in a company you believe in, you may be able to see significant rewards in the future. To help founders connect with investors and funds, we have created a guide to Serbian agtech and foodtech startups, featuring all the start-ups (and some scale-ups) in one comprehensive list.

Disclaimer

This startup guide is based on our own research and the experiences of selected startups. Inclusivity is the key value of this startup guide, and we tried to collect input from as many startups as possible. In case you haven't found your startup in these pages, please feel free to contact us! We are really looking forward to meeting you and your innovation and include your company in the next edition of our startup guide.

We are at your disposal for any further information. Contact information: **info@foodscaleshub.com**

STARTUP CATEGORIES

- **Agribusiness Marketplaces:** Commodities trading platforms, online input procurement, equipment leasing
- **Farm Management Software, Sensing & IoT:** Ag data capturing devices, decision support software, big data analytics
- **Food Waste App**
- **Farm Robotics, Mechanization & Equipment:** On-farm machinery, automation, drone manufacturers, grow equipment
- **Bioenergy & Biomaterials:** Non-food extraction & processing, feedstock technology, cannabis pharmaceuticals
- **Ag Biotechnology:** On-farm inputs for crop & animal ag including genetics, microbiome, breeding, animal health
- **Smart greenhouse Management Software, Sensing & IoT:** Ag data capturing devices, decision support software, big data analytics
- **eGrocery:** Online stores and marketplaces for sale & delivery of processed & unprocessed ag products to consumer
- **Innovative Functional Food**
- **0149 - Breeding of other animals:** beekeeping
- **Consulting and advisory services in Agriculture and Agrobussines**
- **Other areas of expertise In-Store Retail & Restaurant Tech:** Shelf-stacking robots, POS systems, food waste monitoring IoT

METHODOLOGY

24 Startups participated in in this guide. To make sure this guide is as inclusive as possible, we followed these 5 simple steps:



Collected info about all officially registered companies in Greece in the agri-tech and food-tech sectors



Sent an email with questionnaire to startups, to get info on their innovation, future plans, and mission



Collected and edited all submitted materials



Sent final text to all participants for approval



Collected finalised material and gave it to our graphic designer to do their magic!

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Agro Budget System

About the startup

Agro Budget Systems is a startup located in Sombor, Vojvodina, Republic of Serbia. It was founded in 2020 and its main activity is the development of digital solutions for the financial optimization of the process of organising agricultural production. Their mission is to be the first choice of farmers by providing them with relevant and affordable solutions through innovations in digital agriculture. Their vision is to connect farmers and supplier companies with the best solutions in a functional and efficient way, without wasting precious time.

Flagship products /services

The AGRO BUDGET SYSTEM SaaS solution creates the Farmer's Digital Guide for investing in agricultural production based on a fully automated process of selecting the most favourable offer created by the company-supplier directly on the ABS digital platform, according to the farmer's production plans. This solution allows companies - suppliers to gain insight into the individual production plans of farmers and, based on that, create personalised offers of goods and services directly on the platform.

Field of expertise:

Agribusiness marketplace

Date of establishment:

25/11/2020

Team members: **6**

Webpage:

<https://agrobudget.com/en/homepage/>



The plan to revolutionise the agri-food industry

Our plan is to connect farmers and suppliers, helping both groups save time and money. Our solution saves farmers over 100% of the time needed to research suppliers and over 30% in input costs, while providing companies with the ability to view production plans. This creates a win-win situation and prevents a loss of profit to farmers by more than 15%.

Goals for the future

In 5 years, the aim is to be the go-to choice for farmers and suppliers in agricultural production. They want to be easily recognizable in the market, with 25% of the market share and over 10 million EUR in revenue.

1.1





Agrines

Field of expertise:
Agribusiness Marketplaces
Date of establishment:
12/10/2021
Team members: **>10**
Webpage:
<https://cooperationm.com/>

About the startup

Agrines is a team of experts in grain trading and has significant experience in creating software solutions in the agricultural and food industries.

Flagship products/services

They developed an innovative solution/application called Agrines, providing logistical support to traders of cereals and oilseeds, while making business simpler, faster, and more affordable for warehouses, cooperatives, millers, and processors. It facilitates communication and relationships with clients, through an efficient electronic system.

The plan to revolutionise the agri-food industry

Their app enables farmers to connect with stakeholders, view their offers and negotiate purchases. They can also quickly and easily conclude sales contracts and receive up-to-date industry news on their smart devices, making it easier than ever to stay ahead of the curve in the agriculture industry.



Goals for the future

Agrines is looking to expand their company in order to provide a better environment for their employees and customers. Their software could be a game changer, allowing us to improve food placement and make the world a better place.



Field of expertise:
Agribusiness Marketplace
Date of establishment:
06/03/2023
Team members: **3**
Webpage: -

About the startup

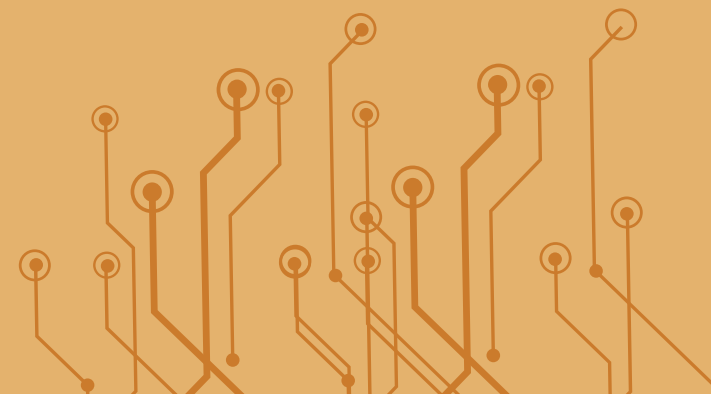
Family-run 3nergy is a venture devised by technology and economic engineers, whose goal is to raise environmental consciousness, foster the use of renewable energy sources, boost the local economy, and generate extra income in agriculture. The biomass pellet plant they plan to establish will create an ecologically advantageous product that will help conserve the environment and improve energy efficiency.

Flagship products/services

Pellet is a revolutionary, high-calorie, renewable biofuel that is obtained by collecting the residue from agricultural land after harvesting.

The plan to revolutionize the agri-food industry

Biomass as a fuel has a huge potential both in Serbia and throughout Europe, the energy efficiency is over 90%, it can be used for growing mushrooms as well as mats for the breeding of chickens and rabbits.



Goals for the future

In the future, they see the company developing and significantly improving production and supporting food producers across the country in various forms.

Nenad Magazin, P.hD, University professor | Vice dean for the development and cooperation with business sector

How did you contribute to the agrifood sector? (Present yourself in short, your work and participation in the sector)

I am university professor of fruit growing at University of Novi Sad, Faculty of Agriculture, tightly connected with agro production sector. Apart from being involved in production and services that are offered to to business sector from experimental farms of the Faculty, I often contribute to this sector thru studies, elaborates, consultancy and knowledge transfer thru workshops.

How science and the economy cooperate to create a brighter future?

The economy is oriented to gaining more income and profits while science can strongly support this process thru applicable findings and problems solutions. Brighter future is based on sustainable and environmentally acceptable solutions offered from science to the economy.

What is the best way to support startups and scaleups?

Startups often do not have the understanding of larger companies, establishments and institutions, that is, they do not trust them to be able to realize the ideas that are the basis of their establishment. I think that you should give your good ideas a chance and stand behind those startups through recommendations and letters of support.

Where do you see the development of agrifood in the coming years in Serbia?

More specialization, production of higher-value final products, association of small

“ Digital agriculture can only produce digital products. For real food, we still need farms and farmers. ”



producers, introduction of new technologies that replace the workforce, but inevitably also a decline in the number of entities in this sector, negative impact of climate change.

a) What kind of new technologies do you see merging with the agrifood sector in the coming years? New technologies are being developed in three directions:

- Technologies that collect and process information and provide services based on IT technologies
- Technologies that replace missing labor
- Technologies that protect production from external factors, i.e. enable fully or partially controlled production, independent of climate and soil.

b) What trends do you see in consumer habits when it comes to agrifood? Consumers are overwhelmed with information, often very inaccurate, and they cannot assess the truth of the information and make wrong decisions when buying food. With the increase in standards, the trend of demand for organic food and domestic autochthonous products is growing. In the future, the consumption of meat will decrease, while the demand and consumption of alternative sources of protein, as well as fruits and vegetables from the "superfood" category, will increase.





Field of expertise: **Farm Management Software, Sensing & IoT**

Date of establishment: **04/05/2018**

Team members: **6**

Funds: **215,000 euros**

Webpage: **www.smartwatering.rs**

About the startup

Smart Watering Solutions are a committed team of software and agriculture specialists who are passionately determined to develop the most precise autonomous irrigation software for drip irrigation. Their ambition is to empower farmers by providing them with the freedom and profitability that they need.

Flagship products/services

Modern farmers now have access to cloud-enabled hardware that can automate the drip irrigation process for their fruit-growing operations. By incorporating sensors into the farming fields and linking them to a mobile application, growers can save up to 30% on costs associated with irrigation and gain up to 90 hours of additional time each month to focus on other agricultural activities. This cutting-edge technology provides a stability to farmers.



The plan to revolutionize the agri-food industry

Smart Watering Solutions provide growers with the tools they need to automate their processes, allowing them to focus on the bigger picture. Their algorithm is designed to give farmers daily recommendations regarding the optimal amount of water and when it should be used to ensure the crops reach their full potential and remain healthy. This helps to create an ideal balance of water and nutrients, leading to greater yield and improved conditions for the plants.

Goals for the future

Smart Watering Solutions strive to become a hardware-agnostic solution leading to revolutionize the European smart and autonomous irrigation sector, enabling their clients to manage their watering systems confidently and efficiently, while providing them with the most effective and reliable irrigation solutions available.

2.2



About the startup

agroNET is a spin-off of DunavNET (www.dunavnet.eu), a global provider of turnkey solutions based on IoT and ML/AI technologies for several industrial sectors. Our agile, dynamic, and experienced team comprising software developers, data scientists, and agronomists, can quickly deliver high-quality results. We use standardised, enterprise-grade technologies and components, to deliver scalable, reliable and secure agTech solutions in collaboration with our partners (hardware vendors, communication network providers, cloud providers, agronomy consultants, etc.). We actively work with and contribute to the research and innovation community, while supporting young researchers and innovators.

Flagship products/services

agroNET is a farm management platform with a range of functional, end-user facing modules, that combines cloud and edge functionalities to provide an interoperability hub for farm operations enabling asset, activities and process management, monitoring, and visualisation. Value added data analytics services providing guidance and support to farmers based on the captured field data, embedded agronomy knowledge and inputs from external systems. Different pre-packaged configurations are tailored to crop and livestock production, silo management and machinery management. agroNET is now expanding its features to

provide secure access to farm data, in line with European data space architecture, and create the basis for farm data monetization.

The plan to revolutionize the agri-food industry

The food industry is confronted with the daunting task of catering to a rapidly growing global population while ensuring responsible use of land and natural resources, as well as upholding animal welfare standards. To achieve these objectives, the industry must leverage modern technology and data-driven solutions. agroNET offers a comprehensive set of tools and resources to support data-driven farming practices, optimizing operations for sustainability and unlocking the potential for additional revenue through the monetization of farm data.

Field of expertise:

Farm Management Software, Sensing, IoT and ML/AI

Date of establishment:

20/10/2018

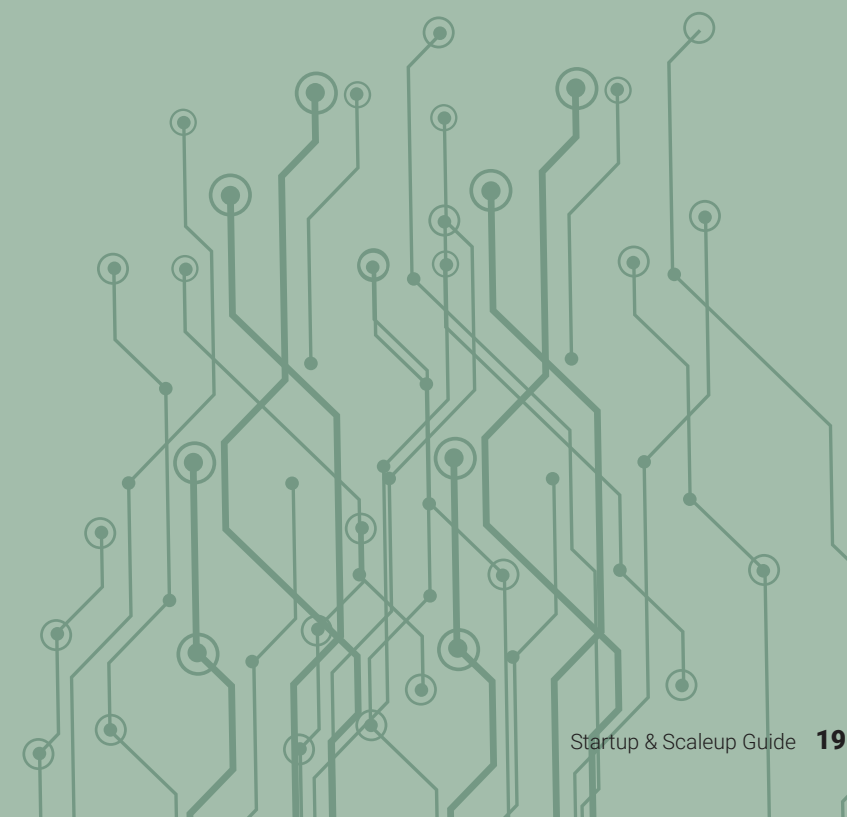
Team members: **18**

Webpage:

<https://digitalfarming.eu/>

Goals for the future

Become one of the leading global providers of high quality and monetizable ag/livestock data together with relevant ML/AI models, in a structured form, aligned with the European data space best practices to the agrifood supply chain stakeholders.



2.3



Field of expertise:

**Farm Management Software,
Sensing & IoT**

Date of establishment:

17/05/2021

Team members: **5**

Funds: **200,000 euros**

Webpage: <https://beehold.rs/>

About the startup

We are living in the digital age, but beekeeping is the same as 200 years ago. It is a labour-intensive job that requires a lot of knowledge and experience. Beehold is a unique Hardware and Software solution that completely removes the need for manual bee colony inspection. Beehold keeps up traditional beekeeping but allows beekeepers to monitor their beehives online and get advice from an AI-powered assistant anytime, anywhere with real-time data flow and analysis. Our vision is to digitalize every hive on the planet, so that bees are healthier and beekeepers' work is more efficient.



Flagship products/services

Beehold's main product is an AI-based beekeeper's digital assistant that provides accurate and timely information and suggestions for optimal beekeeping. Our patent-protected device offers a distinct benefit: it can provide continuous, real-time visual data like manual inspection, plus AI-enabled advice for optimal beekeeping.

The plan to revolutionize the agri-food industry

Approximately 30% of the world's food supply relies on bees for pollination. Unfortunately, bee populations are in danger of becoming extinct. Beekeeping is an incredibly detailed profession which requires a great deal of experience and insight. Sadly, current practices often result in a decrease in bee numbers and cause beekeepers to abandon their work due to low yields and efficiency. Beehold will: reduce manual hive opening by 80%; increase beekeepers' productivity by 50%; increase incomes by 20%; lower annual bee colony loss by 20%.

Goals for the future

In 5 years, Beehold aims to become a global leader in the precision apiculture software space. With the AI-based assistant that is helping beekeepers increase income, lower labour, decrease the annual bee loss, for healthier and more efficient beekeeping.

2.4



About the startup

Atfield Technologies profiles microclimates in vineyards and beyond. In doing so, they help vineyard managers reduce plant protective spraying up to 50%. This has direct cost reduction benefits, but it also has a positive impact on the environment, reducing water usage and CO2 emissions. On a personal level, the technology in use is simplifying the operations, reducing risks and increasing longevity of vineyards. If such an impact is achievable in viticulture, then the potential of this technology for broader agricultural applications is immense.

Flagship products/services

Their main product is the “Winessense(r)”. It is a combination of in canopy sensing and a suite of training and learning models that enable the user to indicate what, where and when to act in vineyards.

The plan to revolutionise the agri-food industry

They are applying the microclimate approach to broader agriculture to create a sustainable food chain, regenerate soil, and reduce water usage. This could change the way the agri-industry operates.

Goals for the future

They see themselves as a global leader in microclimate-based agriculture, becoming facilitators of agriculture that is thoroughly informed by data.

Field of expertise:

Farm Management Software, Sensing & IoT

Date of establishment:

23/05/2017

Team members: **10**

Webpage:

<https://atfield.tech>



2.5



About the startup

Agremo's mission is to provide accurate analytics to simplify the work of those in agriculture. We strive to make sensing-based precision agriculture tech universally accessible and practical, while providing the most accurate and useful information to our customers, helping them maximize crop production and optimize agricultural processes throughout the value chain.

Flagship products/services

Agremo is an AI-based software that uses satellite and drone imagery to monitor fields and crops, allowing for better decision-making, production, and research optimization.

The plan to revolutionize the agri-food industry

Together with their partners and customers, Agremo joins in a journey towards agricultural transformation and sustainable food production. Agremo data helps ag professionals stay informed of field conditions, enabling informed decisions that lead to improved crop performance and lower costs. Data-driven insights benefit the whole value chain, from growers to agronomists, banks, seed and chemical companies, and crop insurers.

Goals for the future

Agremo is gearing up to extend its global reach, with a particular focus on areas with a large customer base. To achieve this goal, the company is fortifying its distribution channels and expediting its research and development cycles. Agremo is also working on several exciting new product features, including enhancing their AI engines and algorithms, creating customized applications for a diverse range of crops, integrating with other systems, and introducing new software features and UX enhancements.

Field of expertise:

**Data Analytics; Precision Ag
Cloud-based software; AI, CV
& ML**

Date of establishment:

13/06/2018

Team members: **40**

Webpage: **agremo.com**





The plan to revolutionize the agri-food industry

Terra Digital Hub plans to change the agricultural sector by increasing the use of digital technologies in production, which will result in a reduction of environmental pollution and boosting client's economic success.

Goals for the future

Terra Digital Hub is poised to revolutionize the agricultural sector by promoting the widespread adoption of digital technologies in production. This approach not only reduces environmental pollution, but also enhances the economic success of their clients.

2.6

About the startup

Terra Digital Hub's primary goal is to facilitate the widespread adoption of digital technologies across all sectors of agricultural production. To achieve this, their mission is to educate and inspire stakeholders in the agricultural industry to embrace digital technologies and integrate them into their production processes.

Flagship products/services

Terra Digital Hub offers two core services: firstly, they identify the specific digital software and hardware requirements of their clients, and secondly, they provide software and hardware sales.



Field of expertise:
Farm Management Software, Sensing & IoT
Date of establishment:
09/01/2023
Team members: **0**
Webpage: -

Irena Dani, Head of Commercial Sector, La Linea Verde

How did you contribute to the agrifood sector? (Present yourself in short, your work and participation in the sector) Already in my early ages I was curious about what can be that ingredient what makes one final product tasty and in quality. In the direction of developing my curiosity, I enrolled in food technology of plant products at the University of Belgrade. Here I have become familiar with different processes of plant products, the creation of coffee, sweets, wheat and oil products, up to the processing of tobacco, examination of sensory characteristics, as well as the creation of appropriate standards and management in the food industry. Not long after my parents gave me the opportunity to start with developing marketing and finding new customers in our small food production. That was the moment when I developed a great love for sales. As a connoisseur of food products, it came naturally to me to work on promoting them on the market. Through the understanding of the creation of a finished product all the way to placing the product on store shelves and the smiles of satisfied consumers with tasty, fresh and practical products.

How science and the economy cooperate to create a brighter future?

The two industries are interdependent and often collaborate to create innovative solutions. Science and technology enable the economy to deliver resources, goods, and services more efficiently, while economic investment and funding fuel the development of scientific advances. By working together, science and the economy can market their strengths to create better products and services for the benefit of societies worldwide. With the right investments, this cooperation between science and the economy can help create a more prosperous, sustainable future.

What is the best way to support startups and scaleups?

One of the best ways to support startups and scaleups is through providing mentorship and networking opportunities. Introducing founders to experienced professionals in their field

“ A well-coordinated team and good organization always lead to confident outgrowth. Love what you do and you won't work a day in your life. ”



allows them to start building connections and relationships that can help them grow. Investing in startups can provide a great return on investment and can be a great way to support growing businesses. Another way to support startups is to volunteer your time and expertise. By doing this, you can provide valuable resources for the company and help form a strong community of supporters.

Where do you see the development of agrifood in the coming years in Serbia? In the coming years, Serbia is expected to see continued growth in the agrifood sector as the country continues to pursue a market-oriented agricultural policy. The government and private sector are investing in new technologies, enhanced production and marketing methods, and infrastructural enhancements within the sector. This, combined with increased access to global markets, is helping to improve the competitiveness and profitability of the Serbian agrifood industry. Further integration with Europe and increasing investments in agrifood research, development and innovation will also support the sector and its growth.

- a) **What kind of new technologies do you see merging with the agrifood sector in the coming years?** In the coming years, we can expect to see digital technologies such as Internet of Things (IoT) devices, Artificial Intelligence (AI), blockchain platforms, and robotics merging with the agrifood sector. Technologies such as these can help to optimize farming techniques, improve pest control, and increase the efficiency of food distribution and traceability. They can also help to grow higher-quality produce by monitoring factors such as soil moisture and climate fluctuations. In the near future, technological innovation has the potential to revolutionize the entire industry from farm to fork.
- b) **What trends do you see in consumer habits when it comes to agrifood?** Consumers are becoming more conscious and selective when it comes to the food they purchase. They are seeking out locally grown, organic and sustainable options, as well as exploring alternative diets, such as vegetarian and vegan. They are also looking for food that is free from artificial ingredients, preservatives, and pesticides. Transparency about ingredients and production processes is becoming more important for companies as consumers demand more information about what they are buying. Technology also plays an increasingly important role in the agrifood sector, with apps such as food delivery and meal kits providing easy access to groceries. I am very proud that the company what I present on the market is part of this healthy movement.

3.1



About the startup

Eat Me App is a mobile application that helps reduce food waste and feed the planet. They create a marketplace for unsold food at discounted prices, connecting consumers with retailers. Half of all wasted food comes from households, costing retailers billions each year. With responsible resource flow the app could feed 3 billion people, and reduce food waste in line with SDG 12.3, cutting food waste to half by 2030. Their vision is fresh, affordable food for all, with zero food waste tolerance.

Field of expertise:

Food Waste App

Date of establishment:

24/05/2021

Team members: **2**

Webpage:

<https://www.eatmeapp.me/>



Flagship products/services

Eat Me App brings fresh, edible food close to expiration at a discount. In collaboration with Swedish Pricer, our users get real-time alerts when prices drop. Plus, we can deliver or pick up your food. They also serve as your Smart Kitchen Assistant, registering food that comes to your home and sending notifications about expiration dates. To make things even easier, the app suggests daily menus with the ingredients you have. Lastly, you can share food with other users if you don't want to use it yourself.

The plan to revolutionize the agri-food industry

Connecting smart tech with food waste apps, it becomes possible to determine real consumers needs, with less food waste cost and less household food waste. This means by targeting and matching food consumption needs, they can optimize and build an effective plan of the supply chain. This leads to less waste, less expenses, better resource flow, higher quality of customer satisfaction, and real green CSR. For the Eat Me App, this opens a big opportunity for creating customized loyalty offers to their users, to target and match their real need and to be able to follow them over time.

Goals for the future

Eat Me App will be a global leader in food waste management. Their success is driven by partnerships with stakeholders on all continents and a focus on a circular economy. Through their system-oriented approach, they are working to redesign a broken food system. Their goal is to create a paradigm shift in the system, emphasizing our B2C segment and consumer network effect.



4.1



Field of expertise:

Farm Robotics, Mechanization & Equipment

Date of establishment:

26/05/2022

Team members: **15**

Webpage:

www.ewdtechnology.com

About the startup

EWD Technology is engaged in research and development of innovative products in the field of agriculture, for controlling weeds in an ecological way. They bring together experts from different fields and backgrounds for the goal of developing a global solution for removing weeds. The product currently being developed is "Ambrozor", it uses radio frequency and electricity to remove weeds all the way down to the roots. They don't use chemical compounds and pesticides; the technology is completely environmentally friendly.

Flagship products/services

"Ambrozer" is a green way to destroy weeds from the roots. This device uses radio frequency and electricity to kill weeds without using chemicals or pesticides. Frequency levels are adjustable to eliminate different types of weeds. During treatment, biochemical and biophysical processes occur in the plant, causing it to wither and stop growing. It can be used for spot treatments on a tractor, truck, lawnmower, or a hand device for households and parks.

The plan to revolutionize the agri-food industry

Prof.Dr. Miloš Stanković is the inventor of "Ambrozer", the eco-friendly device that uses specific frequencies to control weeds. It has been tested against 180 types of weeds, meeting EU environmental standards. It is suitable for agriculture, organic production, gardens, public utilities, and City Greenery services.

Goals for the future

The agrifood and environment branch of FINT to become a separate entity with a portfolio of IoT products and solutions in the markets of food production, food processing, traceability and waste management/circular control with revenues close to 2M half of which coming from exports and a team of 15 people. One third of them will work in the RnD division.



4.2



About the startup

ATAR is a startup company with a mission to help farmers produce healthier food. Their first product is ATAR Smart Sprayer, a solution that can reduce herbicide usage drastically while keeping the same effect on unwanted crop weeds.

Flagship products/services

ATAR Smart Sprayer is an ML-powered system that quickly and accurately identifies weeds in crops and optimises herbicide application by reducing herbicide use by 70-80%. The solution combines computer vision system technology and software, enabling precise detection of weeds in crops and spot application of herbicide only where needed by using single nozzle on/off control. It is easily retrofitted to any type of existing conventional tractor sprayer and implementation time takes just 2 days. Field-tested and validated, the system optimises costs and brings the full value of the new technology to users.



The plan to revolutionise the agri-food industry

They believe all farmers should have access to advanced AI technology and their mission is to make that possible and affordable.

Field of expertise:

Farm Robotics, Mechanization & Equipment

Date of establishment:

07/12/2020

Team members: **3**

Webpage:

<https://www.atar.ai/>

Goals for the future

In the future, they see their company as a leader in smart spraying in this region, and with enough data and experience to start developing new AgTech solutions utilising AI technology.



4.3



Field of expertise:

Farm Robotics, Mechanization & Equipment

Date of establishment:

01/01/2024

Team members: **4**

Webpage:

<https://agarrobot.com/>

About the startup

The Coming Computers Robotics is a future spin-off from Coming Computer Engineering. The spin-off company will be providing affordable robotic solutions for precision agriculture. Aiming to decrease investment and operational costs for farmers and increase robot use in agriculture. Their mission is to deliver modular, universal mobile robots to small and medium-sized farms. Coming Computer Engineering experts have completed over 1000 information and communications technology projects for industry and public institutions, from product/service ideas to market placement.

Flagship products/services

AgAR is a universal, battery-powered, equipped with ROS based software robotic Unmanned Ground Vehicle designed for precision agriculture. Capable of remote control, autonomous movement, and predefined path navigation, this rugged, high torque Unmanned Ground Vehicle can carry various payloads over rough terrain and steep slopes.

The plan to revolutionize the agri-food industry

The AgAR offers key advantages to system integrators and end users:

- Single, universal platform with standardized interfaces, multiple user high-power sources and compatible attachments, enabling lower investment costs, compared to existing robotic systems.

- Ability to alter clearance from ground, allowing adaptation to different crop heights and precision agriculture operations.
- Wheels can be repositioned to match crop row distances.
- Platform can be levelled up to 30° in lateral and transverse directions for greater attachment integration/control, that will increase stability of the robot and reduce the possibility of overturning/falling of the load.
- Rugged design and powerful drivetrain allow for rough terrain with steep gradients.
- Improved autonomy from 230 Ah, 48V LiFePO4 main battery, plus possibility to install additional batteries for longer run time. 5 min battery swap tech maximises operational time.

Goals for the future

The goal for the future is continuing the development of tested, functional, certified robotic Unmanned Ground Vehicle as integration platforms for precision agriculture system integrators, minimizing development time and costs and faster market release.





B-Fresh Technologies

About the startup

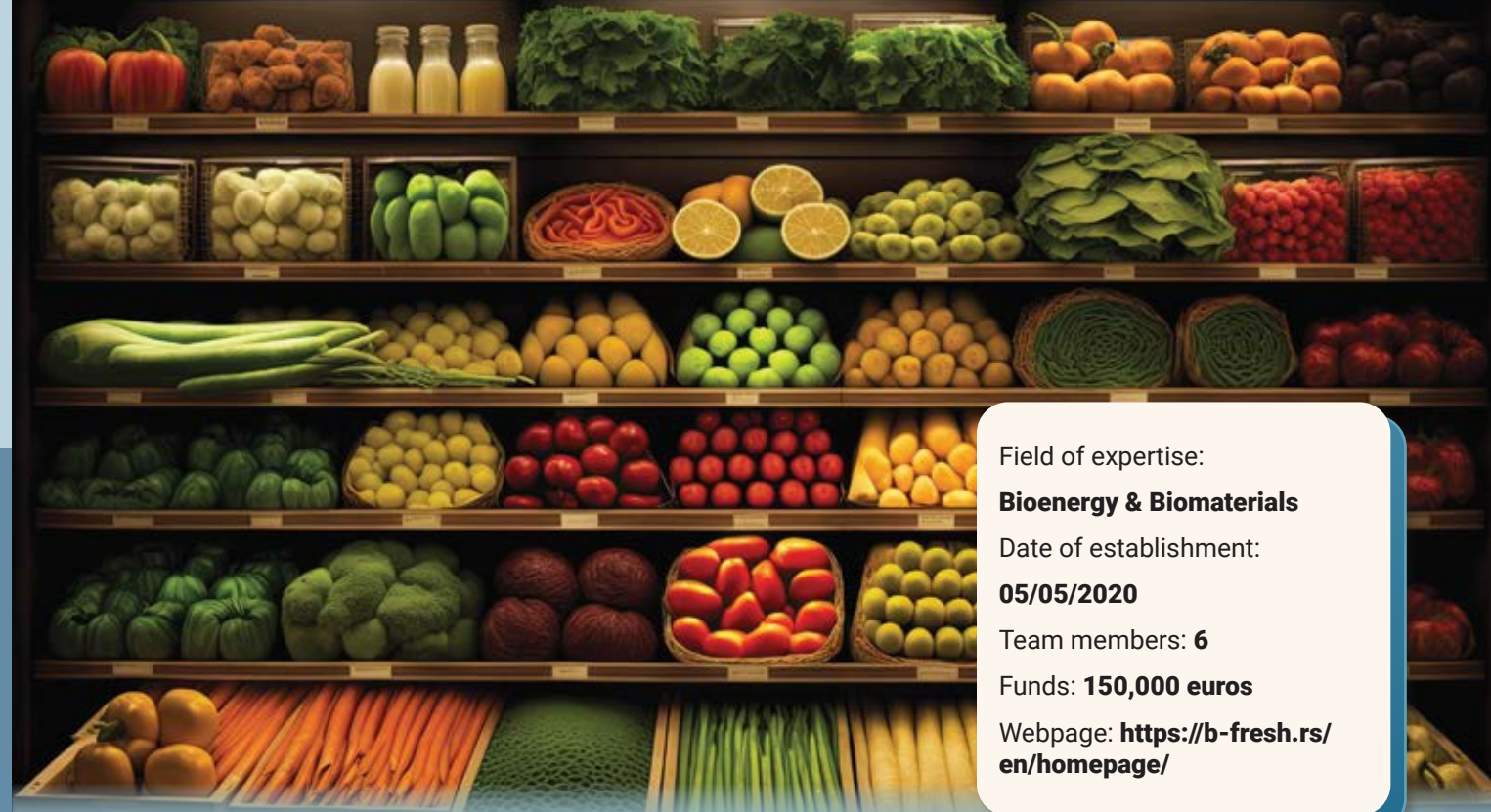
B-Fresh Technologies d.o.o. was founded with the goal of commercialising its patented innovation, B-Fresh spray, which extends the shelf life of fresh fruits and vegetables. They signed an exclusive licence with the University of Belgrade and are on a mission to provide a simple and affordable solution to the global food waste problem. Solution that will be affordable to all: food producers, food distributors, retailers, and every household. Their product is a unique solution that not only reduces food waste but also provides an alternative to environmentally harmful packaging materials. Our vision is a world without food waste.

Flagship products/services

B-FRESH offers a unique form of biopolymer emulsion with active components (essential oils and metal salts) that protect food from rotting and spoilage. The emulsion can be sprayed on any existing packaging material, such as paper, cardboard, plastic, wood, etc. Certified laboratories have confirmed its 100% extended shelf-life and non-toxic components make it ideal for organic food packaging. All components are GRAS (Generally Recognized as Safe), unlike many chemical-reliant competitors. This is a revolutionary approach to active packaging and there is nothing else like it on the market.

The plan to revolutionise the agri-food industry

Food waste causes massive losses of \$1.2 trillion annually, and 40% of this relates to fruits and vegetables. Such wastage is not



Field of expertise:

Bioenergy & Biomaterials

Date of establishment:

05/05/2020

Team members: **6**

Funds: **150,000 euros**

Webpage: <https://b-fresh.rs/en/homepage/>

only economically detrimental, but also has humanitarian and environmental impacts; enough to feed the planet's undernourished people several times over. It also contributes to 8% of global greenhouse gas emissions. To tackle these issues, B-Fresh is the perfect solution. Their invention, in the form of a spray, can be applied to any packaging, and its natural, non-toxic components are on the GRAS list (Generally Recognized as Safe). It leads to an extended shelf life of fresh fruits and vegetables up to 100% by preventing development of common causes of rotting and spoilage. All this at an affordable price that provides significant savings to customers.

Goals for the future

Producing eco-friendly, affordable, and non-toxic packaging is a challenge. B-Fresh active packaging provides a solution, utilising biodegradable biopolymer materials. This start-up has already made a mark on the domestic market, and aims to expand to foreign markets, particularly those with climates conducive to food spoilage, in the next 5 years. B-Fresh also plans to expand their product range to biopesticides and repellents, ultimately reducing the use of harmful pesticides.



Goals for the future

SOMA is driven by a forward-looking vision to lead the charge in biotechnology innovation. Their goal for the future is to maintain a position at the forefront of the industry, pushing boundaries and pioneering new technologies and practices that drive progress towards a more sustainable and efficient future.

Field of expertise:

Bioenergy & Biomaterials

Date of establishment:

22/09/2020

Team members: **3**

Webpage:

<https://www.soma.eco/>

5.2

About the startup

SOMA is dedicated to developing and producing cutting-edge supplements and biomaterials derived from agricultural waste. Through their innovative approach, they are able to transform these underutilized resources into high-value products that offer numerous benefits to consumers and the environment alike.

Flagship products/services

At the forefront of their product lineup are two flagship offerings: Biosporin, a revolutionary and environmentally-friendly alternative to traditional styrofoam, and vegetable-based chitin and chitosan. These innovative products showcase SOMA's dedication to sustainability and their commitment to finding novel uses for agricultural waste. By offering eco-friendly solutions that outperform conventional materials, SOMA is paving the way for a more sustainable future.

The plan to revolutionize the agri-food industry

Looking towards the future, SOMA has ambitious plans to integrate circular biotechnology principles into the agri-food sector. Their ultimate goal is to leverage innovative technologies and sustainable practices to transform agricultural waste into valuable materials and resources, thereby closing the loop and reducing waste. By driving progress towards a circular economy in the agri-food industry, SOMA is leading the charge towards a more sustainable and efficient future.





5.3

About the startup

It's impossible to ban plastic use completely in today's world, but there is a potential solution to plastic pollution: biodegradable plastic made from industrial hemp. This technical solution, produced by Bifrost Bioplastic, could help reduce the environmental impact of single-use wrappings and containers.

Flagship products/services

Bifrost offers a technical solution that produces a biodegradable and 100% natural material, such as packaging, plates, cutlery, or agricultural products from industrial hemp. This is an efficient process that shortens the single-use supply chain.

The plan to revolutionize the agri-food industry

Usually, the food we buy comes in disposable packaging. Up to 70% of single-use packaging is non-recyclable, contributing to toxic emissions, heavy metals, particles and wastewater pollution. Bifrost is here to change this industry for the better with our production system of eco-friendly hemp-based packaging. With new regulations set in place, the public is pressuring companies to change for single-use packaging to an eco-friendlier kind. Bifrost's main mission is to reduce carbon emissions and create a 100% biodegradable, biomaterial-made packaging solution.

Field of expertise:

Bioenergy & Biomaterials

Date of establishment:

01/11/2022

Team members: **0**

Funds: **100000 euros**

Webpage:

<https://bifrostbioplastic.com/>

Goals for the future

Bifrost is poised to introduce its innovative replanting cups, called OKI, as a pilot project, paving the way for obtaining all the necessary certifications for their materials and processes to be compliant with the food industry standards.





Field of expertise:

Ag Biotechnology

Date of establishment:

24/02/2020

Team members: **3**

Funds:

10000 euros, 20000 dollars

Webpage: <https://nsoilab.rs/>



6.1

About the startup

NSoilab is an innovative biotech startup committed to revolutionizing the agricultural industry through sustainable practices. By developing microbial alternatives to traditional agrochemicals, they aim to improve soil quality and provide custom-made bio-products for optimal plant nutrition and protection. In addition, their high-water retention products help to maintain soil moisture levels, resulting in healthier crops and higher yields. With a focus on R&D, NSoilab offers comprehensive services, including active component selection, production process optimization, formulation development, and pilot-level production. Their ultimate vision is to ensure a sustainable food supply for future generations by promoting the preservation of soil quality.

Flagship products/services

FertyColl is a unique microbial fertiliser with an advanced formulation based on biopolymers. It's designed for conventional, integral, organic, and regenerative agriculture to improve plant growth, boost immunity, improve soil quality, reduce irrigation, and protect biodiversity. Its application minimises agrochemicals use and facilitates inorganic fertiliser uptake by plants. NSoilab's target is to develop custom-made products for specific vegetable crops, i.e. FertyColl T (tomato), P (potato), PP (pepper), C (cruciferous crops) and L (leguminous crops).

The plan to revolutionize the agri-food industry

As the demand for sustainable food production increases globally, the trend of organic and regenerative farming gains momentum. Minimizing the use of agrochemicals has become a recognized solution for sustainable agriculture. Global initiatives, such as EU's Farm2Fork (aiming for 25% organic farming by 2030) and UN SDGs 2 and 14, highlight the importance of sustainable food production. In response to these challenges, NSoilab offers custom-made, bio-based products that can supplement or replace agrochemicals. This innovative approach ensures an economically viable and sustainable food supply for future generations.

Goals for the future

In the next five years, NSoilab has set its sights on becoming one of the top companies in Serbia for biological products, specializing in plant protection and nutrition. With the aim of expanding worldwide, their product range will include a diverse range of microbial-biochemical fertilizers, biopesticides, soil amendments, inoculants, starter cultures for composting/silage, and products for soil water retention. Not only will they provide exceptional products, but they also aspire to be recognized as a leading R&D provider for microbial-based products in sustainable agriculture, with a state-of-the-art biocatalyst bank and services for pilot and industrial-scale production of microbial products for integral, organic, and regenerative agriculture.

6.2



Field of expertise:
Ag Biotechnology
Date of establishment:
12/11/2021
Team members: **2**
Webpage: <https://combact.rs/>

About the startup

BioCombact Ltd. develops Smart Bio Fertilizer, a synergistic mix of microbes and minerals that boosts a variety of crop yields and improves farming sustainability, including organic farming. They created an eco-friendly and healthcare-safe blend of compost and biocharcoal, substituted by biological components of selected bacteria and algae, for use as fertilizer and pesticide. These components alone have a positive impact but combined they provide multiplied synergistic effects. Their product can be produced in large quantities and at an affordable cost. They are striving for a global impact on any local endeavour.

Flagship products/services

SBF offers plant fertilizing and protecting solutions to all farmers, regardless of size or location. Their technology increases crop yield and resilience to pathogens, using existing agricultural equipment. It is cost-effective and competitive, with high margins and potential for commercialization. This smart compost system for targeted crops eliminates adverse effects of pests and pollution and produces quality products for better human health and soil quality.

The plan to revolutionize the agri-food industry

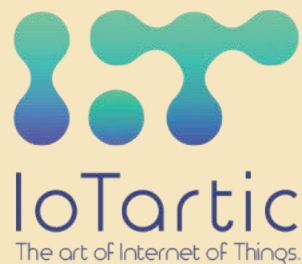
They prioritize improved management and recycling of plant residues and reducing nutrient discharge into the environment to improve soil health. Interdisciplinary design processes create soil improvers and valorize plant

by-products and beneficial microbes. The European Green Deal, Farm to Fork and Bioeconomy strategies, and FOOD 2030 research and innovation policy support circular bioeconomy. Considering current EU and Serbian regulatory legislation, they will evaluate strategies, monitor performance, and create societal awareness by bringing together public authorities, multiple stakeholders, researchers, media, NGOs, and citizens to foster food system circularity.

Goals for the future

BioCombact's model currently focuses on improving existing products and developing new ones, while outsourcing production. Many potential partners exist globally, and margins are sufficient for sustainability. The assessed margins are more than adequate to cater to that type of operation while providing sustainability and maintaining the capacity to develop new product variations tailored to different geographical areas and plants. Future goals include further product development, requiring investments in fixed assets (premises, labs, testing chambers, etc.) to improve shelf life and application.





Field of expertise: **Smart greenhouse Management Software, Sensing & IoT**

Date of establishment:

09/04/2019

Team members: **3**

Funds: **100,000 €**

Webpage: <https://io3t.org/>

About the startup

Their vision and mission is to make a better and healthier place for life. The world's first sustainable and feasible Smart Plant Protection System.

Flagship products/services

ENIO Environmental Technologies and IoTartic independently field tested the Plant Protection System, consisting of a protector (ozone generator and high-pressure fogging system) and a control tower, along with sensor modules and a cloud platform. This solution provides sustainable plant protection through data-driven automation and earth observation, and is also tested against airborne diseases in a field trial.



The plan to revolutionize the agri-food industry

The Io3T Consortium provides smart solutions and innovations in greenhouse production. From complete automation and plant protection based on ozone spraying that protects plants without using pesticides. Innovative IoT and ML based solutions offer to save resources like water and energy, reduce pesticide use (for organic food) and create ideal conditions for growth.

Goals for the future

They see their company as one of the drivers of sustainable and smart production in the future.





Field of expertise:

eGrocery

Date of establishment:

15/11/2022

Team members: **3**

Webpage:

meatyourfarmer.app

About the startup

Meat your Farmer revolutionizes the food industry by bridging the gap between urban consumers and traditional farmers. Through our app, we enable customers to easily connect with farmers who raise antibiotic-free animals using innovative probiotics like HiraVet (InvetLab), and adhere to strict certifications for animal health monitoring. By choosing Meat your Farmer, customers can trust that they are supporting sustainable agriculture while enjoying high-quality, healthy meat that is free from harmful chemicals and additives.

Flagship products/services

Their concept: Customers in the city will order animals that they want the farmers to raise, paying a monthly subscription (card/direct payment); Farmers will have pre-sell goods, eliminating sales so they can focus on production. Customers will receive the animals at home (whole or in instalments) in 3-4 months. Products include chickens, piglets (3-4 months, up to 60 kg live weight), RentAkoka (renting a koka for 12 months, that will deliver 10 eggs every 14 days). They will add in the future Moravaka pigs, ducks, lamb, calves/beef ect. Farms will be able to add their winter crops, jams, sweets that will be branded. Motto: QUALITY, CONTINUITY, TRANSPARENCY.

The plan to revolutionize the agri-food industry

Meat your Farmer is spearheading a transformation in the agri-food industry by bridging the gap between traditional farmers and urban consumers through their innovative app. By facilitating direct communication and providing access to high-quality, antibiotic-free meats raised with cutting-edge probiotics like HiraVet (InvetLab), Meat your Farmer is leading the way in sustainable, healthy, and socially responsible food production.

Goals for the future

Their future ambition is to expand their reach and establish a presence in the global market, setting new standards for their industry and delivering their innovative solutions to a wider audience.

8.1



Ivana Simić, General secretary | National Association "Serbia Organica"

How did you contribute to the agrifood sector? (Present yourself in short, your work and participation in the sector) As one of the founders of the National Association of Serbia Organica, I mainly manage activities aimed at the development of organic production in Serbia at all levels, as well as raising public awareness of the importance of organic production in the context of environmental protection.

I have been trying for years to gather stakeholders with the aim of establishing a permanent mutual dialogue, as well as conveying their needs to the relevant state authorities.

I also believe that by advocating and lobbying with public authorities in order to adopt better support measures, and the institutional framework (mainly MoAWF), I have contributed to building capacities of the organic sector, better and more adequate positioning of organic production, as well as its recognition both in Serbia and abroad.

How science and the economy cooperate to create a brighter future? I am not an adequate interlocutor for the topic of the general economy, but my opinion is that still in Serbia, scientific achievements and solutions are not sufficiently applied in the agri-food sector, as well as that scientific achievements are often not visible and transferred in an adequate way to their potential users.

Certainly, that the shifts are more visible, and science, with its innovations, can contribute to the necessary transformation of the food system, in order to more optimal use of natural resources and sustainable development in general.

What is the best way to support startups and scaleups? By investing in young brains can significantly move them forward with their multifunctional approach.

Where do you see the development of agrifood in the coming years in Serbia?

a) **What kind of new technologies do you see merging with the agrifood sector in the coming years?**

- Develop and promote sustainable production methods like that are organic, regenerative agriculture based on environmentally sound technologies in order to less use synthetic- chemical preparation. Organic production can also become one of Serbian trademarks.
- Development of short food supply chains and local food markets. In order to do that we should create Biodistricts which would accelerate this process.

“ The shifts in the agrifood sector are more visible, and science, with its innovations, can and has to contribute to the necessary transformation of the food system and organic sector, in order to make more optimal use of natural resources and sustainable development in general. ”

- Development and promotion of all value added products.
- Push public-private partnership. I recognize the considerable potential in the active involvement of business in the international food safety agenda, as well as in ensuring sustainable food system.
- Food loss and waste. In order to reduce food loss and waste, as well as the environmental impact of agriculture, a number of actions are needed. The first is an adequate understanding of the issue in the local context, so as to tailor the needed response. Policy framework will have to be strengthened, as well as knowledge and awareness of the issue among all stakeholders has to be improved. Adequate capacities are critically needed to separate, collect and valorize organic waste of both farms and families. On the consumption side: public educational programs on conscious household food consumption, storage and use are also needed, alongside the development of targeted interventions such as community fridges, food banks and cooperation with supermarkets and restaurants with civil society organizations. Restaurants, supermarkets and food stores should be trained to analyze and optimize the requirements to the procedure of assigning the shelf life to food products in order to exclude the possibility to consider good quality food products as waste.
- Digitalization. Development of international cooperation on digitalization of agriculture and innovations. We should focus on deepening the exchange of experience in the use of innovative and digital technologies in agriculture in order to ensure a technological breakthrough and accelerate economic growth in agriculture. Without digitalization, agri-food system will confront serious issues at production, processing and market level.
- Veterinary and phyto-sanitary cooperation. Further development of international cooperation in the field of veterinary and phyto-sanitary by promoting effective balanced operational response to trans-border epizootics and plant diseases.
- Creation of a multi-sectorial mechanism. Establishment of continuous form of local dialogues to plan and coordinate actions in developing balanced and inclusive food systems in Serbia.

b) **What trends do you see in consumer habits when it comes to agrifood?**

Greater demand for safe and value-added products, i.e. organic





FORCES
OF NATURE
& SCIENCE

Field of expertise:

Innovative Functional Food

Date of establishment:

23/12/2020

Team members: **3**

Webpage:

<https://fejuice.eu/>

About the startup

FeJuice is a deep-tech, award-winning, female-led start-up, the team of scientists and entrepreneurs that has developed a novel, natural, scientifically proven nutritional formula to prevent and treat anemia. Iron deficiency anemia (IDA) affects 2.1 billion people worldwide and FeJuice is striving to create a healthier and happier world by providing access to natural, side-effect free solutions. FeJuice dietary formula is a tool of choice for healthcare providers and individuals, empowering women across the globe to overcome IDA symptoms and its traditional iron supplement side-effects.

Flagship products/services

FeJuice Nutritional Formula, rich in bioavailable iron, is proven in vitro and in vivo to be effective against anemia (IDA) without side effects. Consisting of dehydrated fruits and vegetables, formula can be used for production of various dietary products. It prevents and treats mild IDA, reduces side-effects of iron supplements in severe cases, and is 100% natural. Its efficiency is scientifically proven, meeting the growing demand for natural medical solutions.

Goals for the future

The global functional nutrition bars market is projected to reach \$1.7 billion by 2025 (BCC Research), making it an ideal market to launch FeJuice, with its unique USPs and scalable B2B model. The targeted countries in the EU and MENA region have a strong interest in natural healthy food, particularly bars/beverages with health benefits. FeJuice plans to attract half a million users worldwide in 5 years, through licensing their technology to international B2B partners in food and pharmacy industries to manufacture and distribute bars/powder/juices and other healthy foodstuffs.

The plan to revolutionize the agri-food industry

FeJuice team seeks to provide people, mostly women and children, with quality nutritional formula to prevent and treat anemia. Patenting technology supports the WHO's Global Nutrition Target to reduce IDA in women of reproductive age by 50% by 2025. The solution eliminates side effects of traditional methods, providing the first natural product scientifically proven to treat and prevent anemia. It reduces pressure and costs on health services, increase productivity and cognition, and improve the well-being of up to 27% of the global population.





Field of expertise: **0149 - Breeding of other animals**

Date of establishment: **24/03/2017**

Team members: **2**

Funds: **50,000 dollars**

Webpage:

<https://www.goldenbee.in.rs/>

About the startup

Golden Bee d.o.o. was founded on 24.3.2017 and specializes in the selection, production and distribution of bee queens and swarms. By considering the natural processes of bee colonies, their cycle development and controlled production, the company has been able to make great improvements in beekeeping. Its primary focus is on the domestic market, but it hopes to expand its reach to include conventional users worldwide. To this end, Beeamond has been developed as a system that enables anyone to cultivate bee colonies and produce bee products and apitherapy services, except in areas where bee colonies cannot

10.1



survive due to extreme climatic conditions. The company's goal and vision is to increase awareness of the importance of bee colonies to society on a global level.

Flagship products/services

The company produces queen bees, bee colonies, and bee products. It specializes in instrumental insemination and is a registered queen bee selection centre. They are now diversifying and introducing their multifunctional Beeamond system. It is the first of its kind and is meant for preservation of biodiversity, medical, educational, and aesthetic purposes in the beekeeping industry and for homeowners. This will be a core product for their future business.

The plan to revolutionize the agri-food industry

Their Beeamond system improves local crop pollination and bee preservation. Pollination is vital for plants and more than 250.000 species of flowering plants depend on it. Insect pollinators are essential to a healthy environment and the planet's survival. Their system promotes biodiversity and crop pollination, and through the multifunctional system providing a new indoor pet. Honey is a luxury, but bees are essential: without them, humankind would starve. Their system can be used in any areas with suitable climatic conditions for bees, covering most of the planet.

Goals for the future

In the future they strive to be one of the leading companies in the world for preserving biodiversity, bees, and the planet. Their goal is to install the Beeamond system all over the world wherever the conditions exist, while raising awareness about the importance of bees, because without them there is no life.





TERRA
CONSULTING

About the startup

Founded in Novi Sad, Serbia in 2012, Terra Littera offers farmers advisory services for proper use of rural development funds, while closely working with farmer to adopt good practices in sustainability and environmental protection. They educate producers on the benefits of digital technology and have completed over 300 projects related to agricultural development. Terra Littera also participates in projects that diversify agricultural holdings and develop rural tourism.

Flagship products/services

Terra Littera specializes in consulting services for the development of agribusinesses, offering both financial and business advice, as well as project development and investment project management in agriculture. In addition, they provide invaluable support to clients in the preparation of documents for tenders, including business plans, subsidy documentation, and project implementation monitoring.

Field of expertise: **Consulting and advisory services in Agriculture and Agrobussines**

Date of establishment:

01/06/2017

Team members: **3**

Webpage:

www.terraconsulting.rs

The plan to revolutionize the agri-food industry

Terra Littera plans to change the agri-food landscape by tailoring services to customers' needs, development goals, and economic abilities. Their comprehensive solution offers business and projection insight for future growth.

Goals for the future

The company aspires to establish itself as a leading consulting firm in the agricultural investment sector. By participating in critical projects, they aim to solidify their position as a key player in European fund implementation, further elevating their reputation in the industry.





Go Digital

About the startup

Go digital is working on the development of an application for ordering and digitization of processes within restaurants and fast-food restaurants. Their goal is to reduce costs associated with human errors and food waste.

Flagship products/services

The app centralizes ordering and pickup of food from restaurants and fast food, which includes integrating with clients' business systems of clients - restaurateurs. It connects owners and managers with users, eliminating paper and pencil and optimizing business processes, leading to improved efficiency and effectiveness.

The plan to revolutionize the agri-food industry

The app aims to digitally transform phone ordering and food retail businesses, resolving perceived inefficiencies and reducing costs. It integrates with existing software to give users (restaurants) analytics for better decisions, ordering, stocking and more. Benefits include lower consumables, fewer errors, and less idle time, plus time saving and optimized processes.

Field of expertise:

In-Store Retail & Restaurant Tech

Date of establishment:

21/10/2021

Team members: **4**

Funds: **25,000 euros**

Webpage: -



Goals for the future

In the next period, after completing the final version, a marketing campaign is planned with defined channels. They will enter the market of the Republic of Serbia through two channels: B2B sales and digital and social media marketing. Using the B2B channel, the focus would be through services like GoogleAds, YouTube, and Facebook ads. They would need 50-100,000 euros for this commercialization plan, while they would invest the same amount of money.

“By choosing the food we eat today, we choose how our world will look like in the future.”



www.foodscalehub.com