# Talking Points: FoodBytes! Digital

## *Insights From a New Global Connections Platform*

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## Summary

This month, we provide some initial insights from FoodBytes! Digital, Rabobank's new food and agriculture connection platform that some of my colleagues have been nurturing for the past year. To date, over 800 F&A startups have joined the platform, in search of greater exposure to the global F&A network of corporations and investors. Many of the startups have picked up on the trends that accelerated during the pandemic, mirroring the resurgence in interest in food technology.

## Introducing FoodBytes! Digital

Here at Rabobank, we always maintain that Food & Agribusiness (F&A) is the most interesting and exciting sector to work in. And if you need any further convincing, AgFunder News' latest annual report provided some solid data on the surging interest in F&A startups across the globe. According to their database, last year, global venture capital (VC) investment in F&A rose by a stunning 85% to USD 52bn. In total, there were about 3,000 deals, spread throughout the food system from animal health to farm robotics and from 'e-grocery' (online grocery shopping) to innovative foods (often disguised as burgers). Similarly, in a recent quarterly update Five Seasons Ventures described last year as an "exceptional year for innovation in the food chain," in which "more capital than ever went to fund more entrepreneurs at all stages." Ladies and gentlemen, what a time to be involved in our industry!

As we pass the halfway mark of 2022, given the tougher financial and operational environment the industry is now experiencing, it seems challenging to surpass last year's numbers, even with VCs like Anterra Capital closing on USD 260m. Arguably, one thing that will remain essential, if not more so, is making sure that promising startups find and connect with the right partners and investors.

This brings me back to Rabobank's FoodBytes! Digital platform, which aspires to develop an extensive global network to help facilitate such connections. For the hundred or so corporations (typically medium to large companies) and investors who have already signed up for the pilot, the platform is proving to be an extra set of eyes and ears on the market as they seek out solutions and investment opportunities. Initial feedback from our corporate pilot users focuses on how the site allows them to stay better informed on industry trends and gives them early access to verified startup companies entering the F&A space, including access to information that is not always readily available on their websites, such as pitch decks and videos. And for startups, this new platform provides a free resource to get exposure to a global F&A network of corporations and investors.

Although the platform is very much in startup mode too – it has only been running for about six months – my colleagues have been pleasantly surprised by the number and quality of the response from startups from over 80 countries. To date, over 1,500 startups have registered an interest and about 800 have been fully vetted and 'published' in the database. And the matchmaking has already begun.

## Startup Insights

Some initial top-level characteristics of the 800 verified startups actively looking for connections and investments on the site include:

- **Seed stage funding** – Some 40% of the startups were at the initial seed or angel round of funding, with another 10% describing themselves as pre-seed. Around one-quarter were at the Series A stage and 5% at Series B and beyond. For those who shared their figures, the revenue data told a similar story. About one-quarter of the companies were pre-revenue, 40% were making up to USD 500,000 and one-fifth over USD 500,000.
- **Growth stage** – Despite the early-stage funding, over half of the startups ambitiously described themselves as being in the growth stage, compared to 30% in launch phase, and about 15% in the prototyping stage.
- **60:40** – Some 60% of the startups viewed themselves in the food/foodtech space versus 40% in agtech.
- **Food ingredients dominate** – Breaking this down into categories, just over one-quarter identified as food and beverage ingredients companies, followed by 13% as farm management software businesses, 12% as food marketplace companies, and 10% as traceability companies. (We go into a little more detail below.)
- **First, fund me** – Despite the various callings, the reasons why startups signed up were very consistent. About 90% were seeking funding and over three-quarters were looking for partners, customers, and media exposure.
- **A global platform** – As we show in the next section, startups came from 80 countries across the world, with one-quarter coming from North America and 10% from the Netherlands (in part a reflection of the marketing to date), with notable representation from the UK, Australia, Israel and Singapore.

## Digging Into the Categories

We hope to continue to mine the treasure trove of data from the platform in future editions, but for now, here are some highlights based on how these companies chose to categorize themselves. Companies can select (more than one) from 15 categories and a further 100 subcategories (from cleantech to cloud kitchens, and from cultured meats to carbon tech, crop protection and city farming). Here, in order, are the five most common category choices:

### Category 1. – Food Ingredients

Clearly, ingredients used in food and beverages are a broad category, and the subcategories the companies identified with, ranged from alternative low-calorie sugars to fermentation, pet nutrition and upcycled products. More revealingly, most companies fell into the categories of functional ingredients, other, special diets, and plant-based proteins. Although consumers have always been interested in health and wellness, the pandemic has generated renewed interest in the so-called functional ingredients as the concept of 'food as medicine' has become popular again. Recall in the initial pre-vaccines period of the pandemic, there was a surge in interest in immunity-boosting ingredients, including familiar ones such as vitamins C and D as well as the mineral zinc. For food and beverage companies, these ingredients provide a source of fortification in their 'better-for-you' product portfolio, or help transform their regular products into more premium functional foods. More broadly, the startups we see on the platform mirror the

resurgent interest in food technology. According to AgFunder News, over 400 innovative food companies raised funds last year, including NotCo, Perfect Day, Future Meat, Nature's Fynd and Impossible Foods. Examples of the kinds of foodtech companies on the platform include taste technologies, processing technologies, flavor delivery systems, as well as novel food ingredients, including plant-based proteins. Here are some examples:

**I.   Functional ingredients**

Admittedly a broad and ill-defined category, but companies that identified with this label included:

- Upright – A US-based company producing instant oat milk.
- The Leaf Protein Co. – From Australia, commercializing green leaves, the planet's most abundant source of protein.
- Mitomarin – From Budapest, Hungary, aiming to be the first functional food globally with validated effects on cancer cell metabolism and mitochondria.
- Cupplement – 'Empowered' coffee from the Netherlands.

**II.   Plant-based proteins**

- VegOut Fungi – From the UK, mushroom-based meat alternatives including a vegan fat that browns and crips.
- Sophie's Bionutrients – From Singapore, producing microalgae-based alternative proteins, including a dairy-free cheese made in partnership with Ingredion.

**III. Other**

- Bugsolutely – Cricket pasta and other edible insect products from Thailand.
- Opertech Bio – Making sense of taste through their TāStation® technology, which merges human taste perception and machine-based analytics. Based in the US.
- Kemanji – From Italy, this company has developed Appeaty, a smartphone application that in addition to all the usual features of ordering food online, matches allergens and considers users' health and food preferences.

## Category 2. - Farm management software and precision agriculture

Almost a decade after Monsanto (now part of Bayer) bought Climate Corporation, farm management software remains a hot area for investment, accounting for about 10% of deals in 2021. According to my prized colleague, Sam Taylor, this elevated level of interest (including precision agriculture, which has become increasingly mainstream) is down to a confluence of factors. These range from greater consumer interest in what's going on down on the farm (transparent supply chains), to the wider availability of broadband in rural areas making such technologies more accessible to farmers (for example, by enabling cloud computing). Add to this the current high commodity environment, where famers are likely to be more open to making the necessary capital investments in those products and services that add value to their operations. Within the platform, the most popular sectors were big data analytics, decision support software, and ag data capturing devices such as sensors. These four companies are representative:

- Agtools – From the US, providing real time information on 76 variables from farm to distribution centers that impact the global supply chain.
- Agriyoda Innovations – From the Netherlands, CoffeeTrace, a block-chain based NFT marketplace (a digital platform for buying and selling non-fungible tokens) for specialty coffee.
- WIAGRO – From Argentina, using IoT technology to control grains inside silo bags (Smart Silobag) and their transport (Smart Barge), reducing food losses worldwide.
- Canopy Guard – From Indonesia, improving the sustainability of palm oil production through their 'pollen vectoring' technology.

## Category 3. - Food marketplace technology

Just as we saw with food ingredients, the pandemic has proven a great impetus to the growth of this segment, which covers 'cloud kitchens' (commercial facilities producing food specifically for delivery), restaurant marketplaces (hubs for virtual restaurants), 'last mile delivery' and meal kits. But by far the most common subcategory was e-grocery. AgFunder News also reports on the explosion of interest in this industry. According to their annual report, e-grocery attracted about USD 18bn, a third of the total funding in F&A in 2021, more than any other category. Here are three examples from the platform:

- Fyrtel market – An e-grocery marketplace from Poland that promotes local retailers and their products.
- FoodSys.io – From Chile, an AI-optimized B2B food marketplace. One that is capable of organizing the food supply chain to reduce food loss.
- Foodwalas – An India-based technology-enabled platform that empowers mom-and-pop food makers to reach a big, national audience.

## Category 4. - Traceability technology

With all the supply chain disruptions affecting F&A, traceability has come to the fore. Startups are providing solutions to companies that have come to understand the greater importance of tracking all the moving parts along their supply chains. Not surprisingly, within this grouping – which included blockchain and ingredient sourcing as subcategories – most startups identified with logistics and transport tracking, including these:

- Craton-Roche – From Brazil, aiming to provide a safer and faster food supply chain management platform.
- Chainparency – From the US, develops solutions such as GoTrace to help companies achieve transparent and responsible supply chains.
- ZoomAgri – From Spain, is building a platform for physical quality and varietal purity determination of different agricultural commodities, from pre-planting to post-harvest with a database of more than 100 million unique images of various grains and oilseeds.
- DayDone – From Nigeria, an e-commerce platform that allows "farmers to just farm while we handle marketing, distribution and collection of payment for them."

## Category 5. - In-store retail and restaurant technology

Robots and 3D printers have always generated a lot of buzz and excitement at past FoodBytes! pitching events. Certainly, the platform attracted a number of companies in the areas of robotics, 3D food printing and dynamic pricing, but interestingly, the most popular entry was food waste technology including:

- Nettle T.O.C. – From the Netherlands, prototyping a new biodegradable composite material out of nettle fiber.
- Kitchen Robotics – From Israel, on a mission to take the commercial kitchen into the most efficient future of food production.
- KITRO – From Switzerland, simplifying food waste management through an automated food waste data collection and analysis solution that can be adopted by food and beverage outlets worldwide.

# Imprint

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