



# AgFunder Agri-FoodTech

INVESTING REPORT

# '19

— YEAR IN REVIEW



## **AgFunder is a digitally-native venture capital fund**

We invest in bold, transformational  
foodtech & agtech founders

AgFunder is one of the world's most active foodtech and agtech VCs. We're rethinking venture capital for the 21<sup>st</sup> century. We were born online, and with our publication (AFN) we've built a global ecosystem of 75,000+ subscribers. This gives us one of the most powerful networks to help build impactful and important companies. This report, now in its sixth year, is our love letter to the industry. ❤️

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# Agri-FoodTech: 2019 in Review

Venture capital investment across all industries dropped 16% in 2019 against a backdrop of global uncertainty related to the US-China trade war, Brexit, and a weakening Chinese economy, according to the VenturePulse report.

It was the same for agri-foodtech, particularly affecting the US and China, but not to quite the same extent. In fact, investment in upstream technologies increased year-over-year and posted the strongest H2 on record, bolstered by alternative protein startups – thank you Beyond Meat IPO! -- and some large indoor ag deals.

The drop in funding overall was largely a result of a 56% decrease in investment to consumer food delivery apps as the more mature players extended their dominance in an over-saturated marketplace with ever-larger fundraisings.

While there was a pullback in both deal activity and funding for agri-foodtech's largest global markets, many regions posted significant increases. Europe continued its trend for growth across VC industries posting a 94% increase in agri-foodtech funding, while Latin America had a breakout year, closing \$1.4 billion in agri-foodtech funding across 40% more deals than in 2018; that's more than the entire LatAm VC industry in 2017. Africa also more than doubled its funding in the space.

This increasing global diversity of agri-foodtech was notable in the make-up of investors too; the leader board is much more diverse this year, with more generalist investors than specialist funds taking top positions. SoftBank and Temasek were notable additions to the top investors list, both investing across geographical borders; we also noted increased international investment from US funds.

All in all, the trajectory for our industry is fantastic, with 250% growth over the past 5 years. Feedback & questions always welcome.

**Louisa Burwood-Taylor, Head of Media & Research & The AgFunder Team**



# Sources & Methodology

## Data Sources & Curation

Utilizing new advanced machine-learning algorithms and artificial intelligence to help identify and categorize agri-foodtech startups, our knowledgebase has grown to over 29,939 companies, with new startups and historical data being added each day.

The raw data for the AgriFood Tech Funding Report comes from Crunchbase, which gathers publicly available information such as press releases and US Securities and Exchange Filings, as well as crowdsourcing directly from the industry. AgFunder contributes data from its own collection methods that include private communications with investors and companies. We collect data from partners across the globe (see page 7) to ensure we have the most comprehensive and accurate data set in agri-foodtech investing.

The raw data is painstakingly curated by the AgFunder team (usually taking several months) to ensure they are relevant, accurate, up-to-date, complete, and categorized according to AgFunder's proprietary tagging system for inclusion in our report.

We update and improve our dataset continuously throughout the year, meaning total figures from previous years' reports will shift as our dataset becomes more complete.

We believe our knowledgebase represents the most comprehensive and curated knowledgebase of agri-foodtech companies globally.

While we are happy to share our findings, we reserve all rights with respect to AgFunder research and this report and we require it to be fully and accurately cited when any of the data, charts or commentary is used.

## Undisclosed Financings

Of the 1858 financings in our curated data set, 584 had undisclosed financings, which could not be determined through research or direct sources or were confidential. We excluded undisclosed financings when computing averages and median values. In some cases, we were able to confidentially obtain financing figures directly from the the investors, on the condition that they only be included in the aggregate figures.

## Multiple Financings

In some cases, Crunchbase displays multiple financings for the same company in the same year. This can be because a company closes subsequent rounds in the same year, but it can also be the result of several closes of the same round. We try to combine these where possible but when they are clearly separate closes, we have kept them separate.

# Sources & Methodology

## Categorization

AgFunder's categorization system is designed to capture broad themes across the complex agri-foodtech value chain (*see page 4 for a list of categories*). The agri-food sector has a wide supply chain spanning inputs and industrials, farming, logistics, wholesale distribution, processing, retail distribution and the consumer. In many cases, technologies such as marketplaces connect different links in the supply chain and so in this report we've chosen to focus on high-level themes. To assist with the categorization and to avoid subjectivity, AgFunder first employs over 150 machine learning and artificial intelligence models to suggest category placement and to help tag the company according to the technology and its place in the supply chain. Finally, the AgFunder team manually reviews the suggestions for each company, often with significant research and debate among our team.

In 2019, we added a new category, Cloud Retail Infrastructure, to relieve the Midstream Tech category of "later-stream" deals we felt no longer fit. Cloud Retail Infrastructure includes the growing number of technologies enabling companies to provide customers with on-demand, at-home dining such as ghost kitchens and last mile delivery services including delivery robots.

We've also taken a stricter stance on cannabis and CBD-related startups; there needs to be clear proprietary technology involved. We will not include pure CPG or pure production, as we wouldn't include pure production in any other crop. If we believe the growing facilities are particularly hi-tech or utilize proprietary technology, we will still include it in the Novel Farming System category. The same goes for processed products; if the extraction technique is particularly innovative, we'll include it as a Biomaterials or Midstream startup. Large vertically-integrated cannabis companies are also excluded.

## Special Acknowledgement

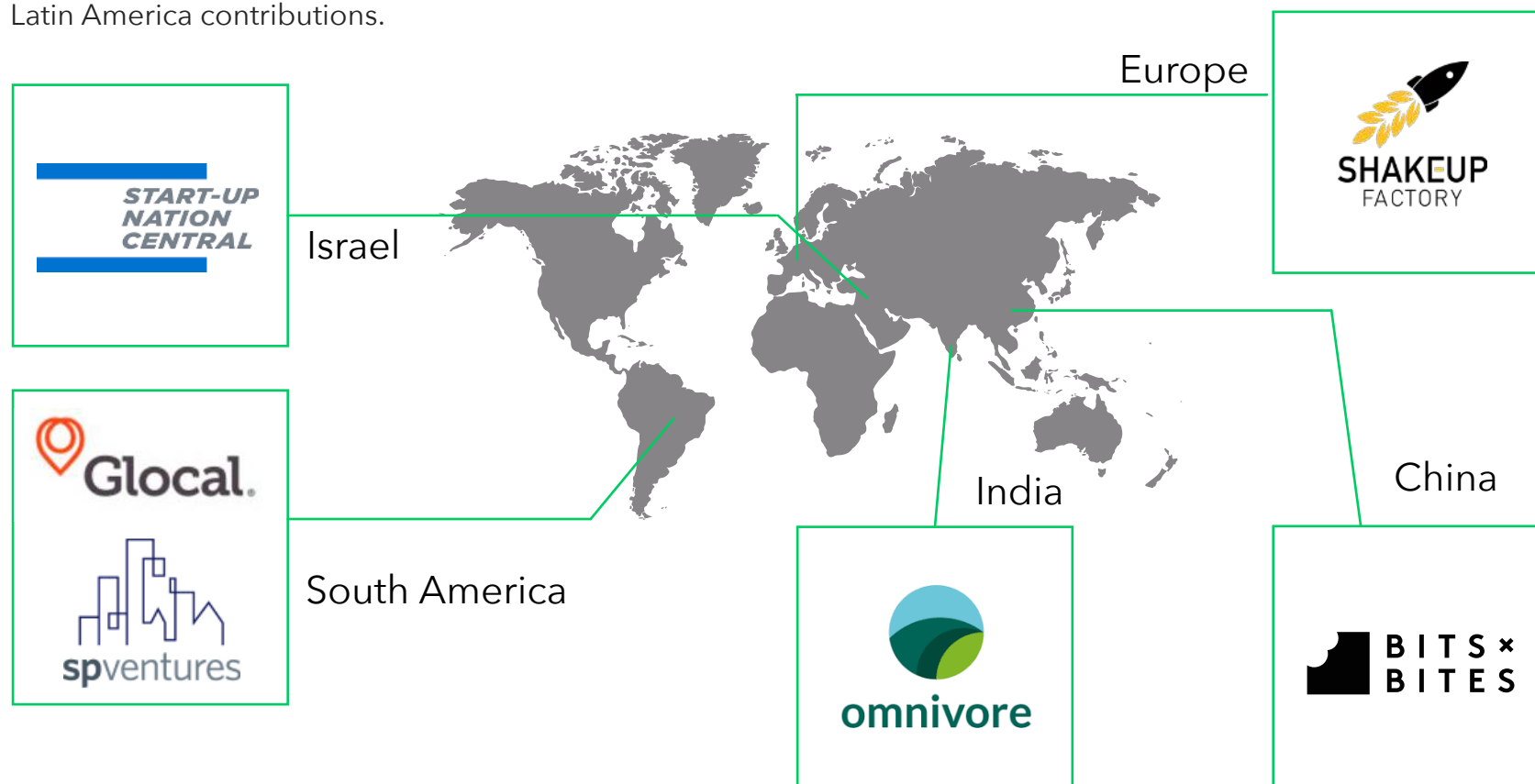
Special thanks to Tim Li, Ellen Ehram and the rest of the Crunchbase team for their support and assistance.

data powered by

**crunchbase**

# Our International Data Partners

In addition to our partnership with **Crunchbase**, we've partnered with several groups from around the world to help us collect more international data at the local level to ensure we can present the most comprehensive data set in the industry. Our partners for the 2019 report include Start-up Nation Central in Israel, SP Ventures in Brazil, Glocal in Argentina, Bits x Bites in China, ShakeUp Factory in Europe, and Omnivore in India. Thanks also to Sofia Ramirez for her Latin America contributions.



# Cover & Section Images

Special thanks to our portfolio companies who contributed images to this year's report.



**MycoWorks** produces Fine Mycelium™ leather. Its first product *Reishi* is crafted from natural mycelium and refined for luxury fashion and beyond.

[Learn More](#)



**Brightseed** discovers edible, plant-based nutrients that are scientifically-proven to improve health and wellness. Its mission is to make food as medicine a reality.

[Learn More](#)



**Root AI** is an ag robotics company developing an intelligent and dexterous robots for picking fruits and vegetables in greenhouses.

[Learn More](#)



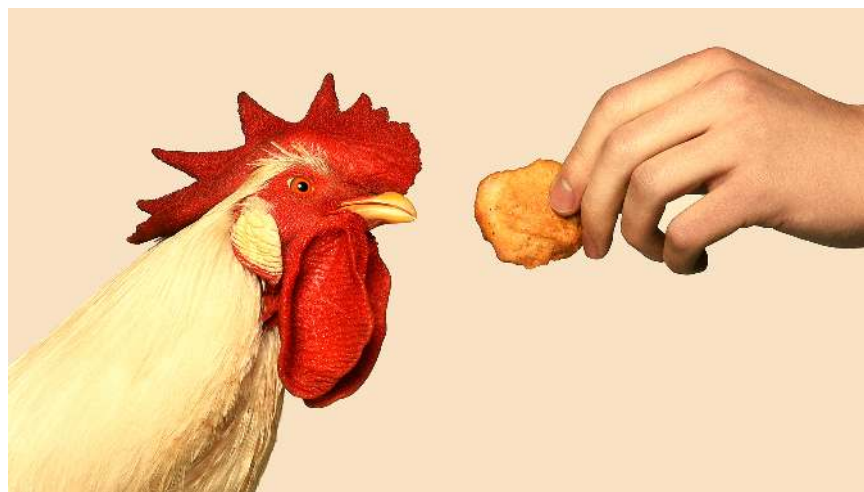
**Trace Genomics** uses advanced genomics and artificial intelligence to analyze the soil microbiome and provide prescriptions that improve soil health and increase yield.

[Learn More](#)



**Aerobotics** provides early pest and disease detection enabled by drone imagery and artificial intelligence.

[Learn More](#)



**NUGGS** is a foodtech startup using innovative protein technologies to create a tender and meatier nugget that is more advanced than an animal-based nugget. [Learn More](#)



# 2019 Overview

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# Agri-FoodTech Funding Breakdown 2019

**\$19.8bn**

**INVESTMENT**

**1858**

**DEALS**

**-4.8%**

**INVESTMENT  
GROWTH**

**-15%**

**DEAL  
GROWTH**

**2344**

**UNIQUE  
INVESTORS**

**\$1bn**

**LARGEST  
DEAL**



## Upstream

Ag Biotech, Farm Management SW, Farm Robotics & Equipment, Bioenergy & Biomaterials, Novel Farming, Agribusiness Marketplaces, Midstream, Innovative Food

**\$7.6bn**

**INVESTMENT**

**+1.3%**

**GROWTH (\$)**

**1039**

**DEALS**

**-7%**

**GROWTH (#)**

**1336**

**UNIQUE INVESTORS**

**\$400m**

**LARGEST DEAL**

## Downstream

In-store Restaurant & Retail, Online Restaurants, eGrocery, Restaurant Marketplaces, Home & Cooking

**\$12bn**

**INVESTMENT**

**-7.6%**

**GROWTH (\$)**

**781**

**DEALS**

**-24%**

**GROWTH (#)**

**1130**

**UNIQUE INVESTORS**

**\$1bn**

**LARGEST DEAL**

# Key Insights for 2019

## 1. Downstream Drop Pushes Down Totals

For the first time since 2016, investment in downstream food technologies declined in 2019, driven by a 56% drop in funding to Restaurant Marketplaces. The more mature players continued raising large rounds to increase their dominance in the over-saturated category, but it wasn't enough to maintain overall funding volumes against a 57% decline in deal activity.

eGrocery also suffered a 7% decrease in funding across fewer deals as the economics of delivery services cause challenges – Walmart reported a \$1 billion loss on its e-commerce offering. eGrocery innovation remained active in China where the ongoing coronavirus threat could make these services increasingly important for consumer access to food. China's MissFresh, one of the leaders, raised one of the year's largest rounds to try and stay ahead of the competition.

But despite this pullback in funding for consumer-facing delivery services, we believe brick & mortar stores and restaurants will still try to claw back business by offering their own delivery options, using a new category of enabling and white label technologies. Dubbed "*Cloud Retail Infrastructure*" this new category includes ghost kitchens and last mile delivery services.

## 2. Upstream Bucks VC Trend with Strongest H2 on Record

While investment to Upstream startups increased just \$100 million over the course of the year, it posted its biggest H2 on record, bringing in \$4.6 billion between July and December. This bucked the overall VC-industry trend where H2 funding was lower than in 2018, according to the VenturePulse report.

The alternative protein industry played a significant role as Beyond Meat's highly successful IPO flung the segment further into the spotlight; strong performance in the public markets pushed the company's valuation as high as \$9 billion at one point during the year as investors scrambled for ESG-related investments. Investing for positive impact beyond financial gains is increasingly a must-have as opposed to a nice to have in the investing community globally and 2019 saw a surge in rhetoric and strategy around environmental and social issues from some of the world's largest investors. Investment in Innovative Food startups, which are mostly alt protein plays, doubled year-over-year to \$1 billion, bolstered by Impossible Foods' \$300 million bridge round and a 17% increase in the number of deals.

A big round for robotic insect farm Ynsect, as well as AeroFarms and Infarm, drove a 38% increase in the Novel Farming Systems category, despite 16% fewer deals.

# Key Insights for 2019

## 3. Some Geographies Post Significant Growth

While the decline in headline funding is in line with overall VC industry for 2019, it was a good year for agri-foodtech in multiple geographies globally. Europe's VC industry continued to mature, and it was noticeable in agri-foodtech as investment increased 94% year-over-year to \$3.3 billion. The UK was the leader in the region and the fourth biggest globally with \$1.1 billion raised across 112 deals, although it did experience a small dip in the number of deals closed. While food delivery is still the strongest category in the UK and Europe, the region is diversifying across categories, with leading startups in other areas like Novel Farming Systems, alternative proteins, fintech for ag, and Agribusiness Marketplaces.

Many startups with operations across Africa are headquartered in the UK, however those based on the continent doubled their funding in 2019, aided by a large deal for fintech startup Opay out of Nigeria that enables consumers to transfer money, pay bills and order groceries.

It was a strong year for Latin American agri-foodtech as the region raised \$1.4 billion, up 32% year-over-year; that's more than the whole VC industry of the region raised in 2017. While a massive \$1 billion, SoftBank-led round for Colombian Cloud Retail Infrastructure startup Rappi pushed

up the total, activity was demonstrably greater with 40% more deals closed during the year than in 2018.

## 4. Global Generalist Investors Enter Space

Agri-foodtech's investor base is more diverse than ever, with generalist, global and corporate investors making multiple bets in the space. Foodtech and agtech are no longer the red-headed stepchild of the VC world as sustainability becomes a 21<sup>st</sup> Century megatrend. The investor leader board for 2019 includes many more generalist investors and fewer agri-foodtech specialists. Many of these generalist investors are joining retail tech deals that will feel more similar to other sectors, and the same could be said for the alternative protein space, which will look and feel a lot like CPG for some investors, or even cloud computing, as agile co-packing networks make it easy to spin up new brands with little CAPEX.

Temasek and SoftBank are notable entrants to the leader board this year, both investing across borders in a range of agri-foodtech startups.

S2G Ventures continues to lead the specialist agri-foodtech investor group while we at AgFunder further expanded our portfolio and dipped our beak into our first downstream investment during the year.



# Outliers

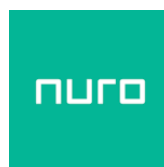
Venture capital is driven by outliers and the agri-foodtech sector is no exception. For the last couple of years, the largest deals were in the food delivery segment and as the category continues to mature, it was the same in 2019. Here are the biggest to be aware of as they skew the overall results. It's worth noting the role SoftBank is playing in this industry as much as others.

**\$1 billion**



Rappi is Latin America's leading on-demand delivery startup. Headquartered out of Colombia, and also operating in Argentina, Brazil, Chile, Ecuador, Mexico, Peru and Uruguay. It's also a graduate of Y Combinator. This SoftBank-led \$1 billion Series E round broke all records for Latin American venture capital at the time and coincided with a more general growth in VC funding for the region. Many see it as the start of a new era for entrepreneurship in LatAm.

**\$940 million**



Driverless delivery company Nuro raised this mega round from SoftBank at the beginning of 2019. This company fits perfectly into our new category Cloud Retail Infrastructure as an enabling technology for on-demand, and its partnership with US supermarket chain Kroger cemented its relevance to the food industry. Nuro has raised more than \$1 billion and this round valued it at \$2.7 billion.

**\$700 million**



It wouldn't be a list of outliers without a Chinese company raising an exorbitant amount of money to fund its rapid growth. Tencent-backed MissFresh, currently China's leading eGrocer, was also an outlier in 2018, but continues to need funds to keep up in a competitive, cash-burning category where online-offline retailers backed by Alibaba and JD.com continue to bite at its heels. This Changshu government-backed debt round is also funding new East China headquarters for MissFresh.

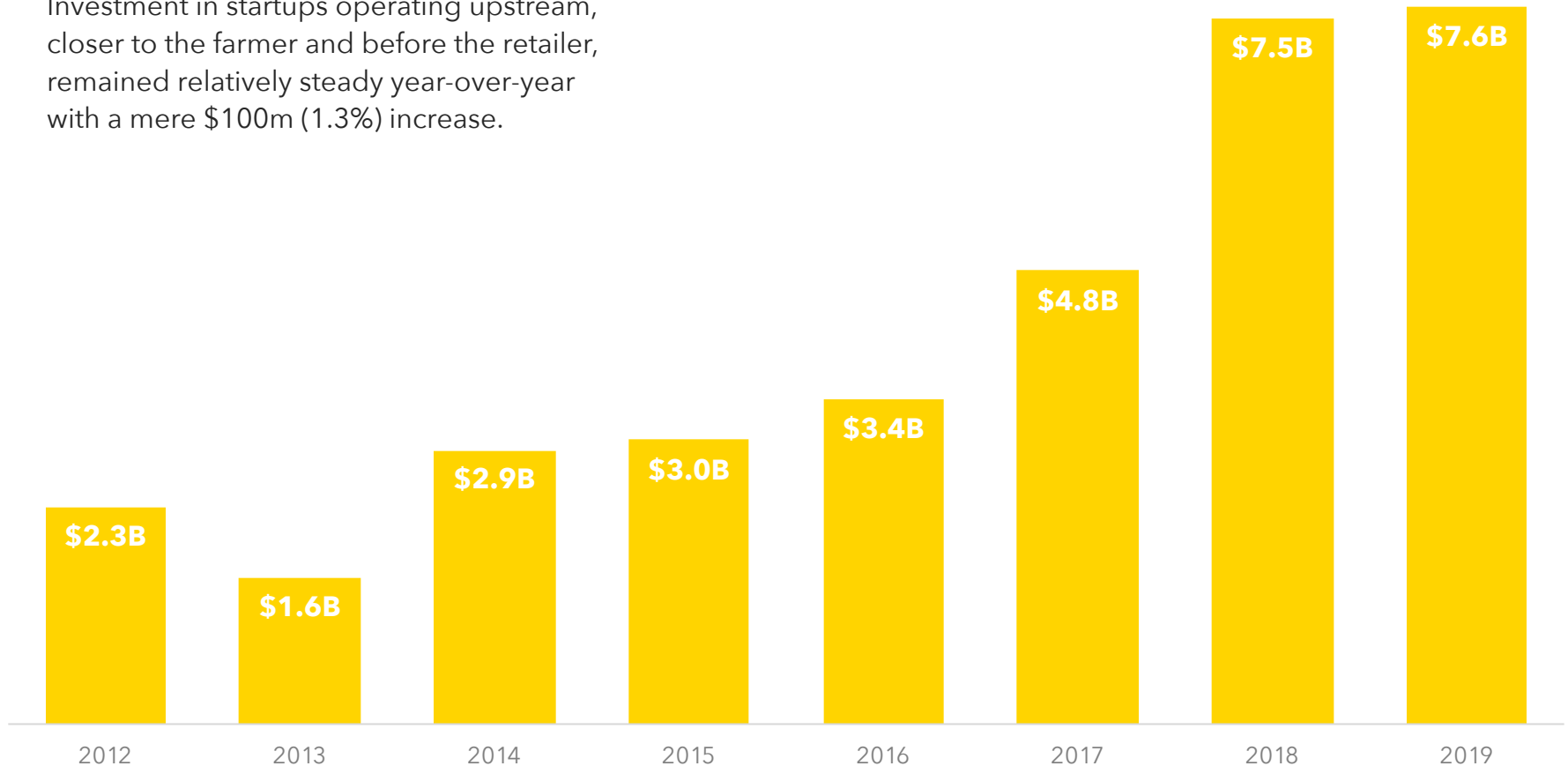
# Annual Financings | 2012-2019

Funding to agrifood tech startups dipped nearly 5% year-over-year to 2019 on the back of a decline in the rate of funding to food delivery consumer apps. However, as more data is made public for 2019, the 2018 and 2019 funding volumes may soon look similar.



# Annual Financings | 2012-2019

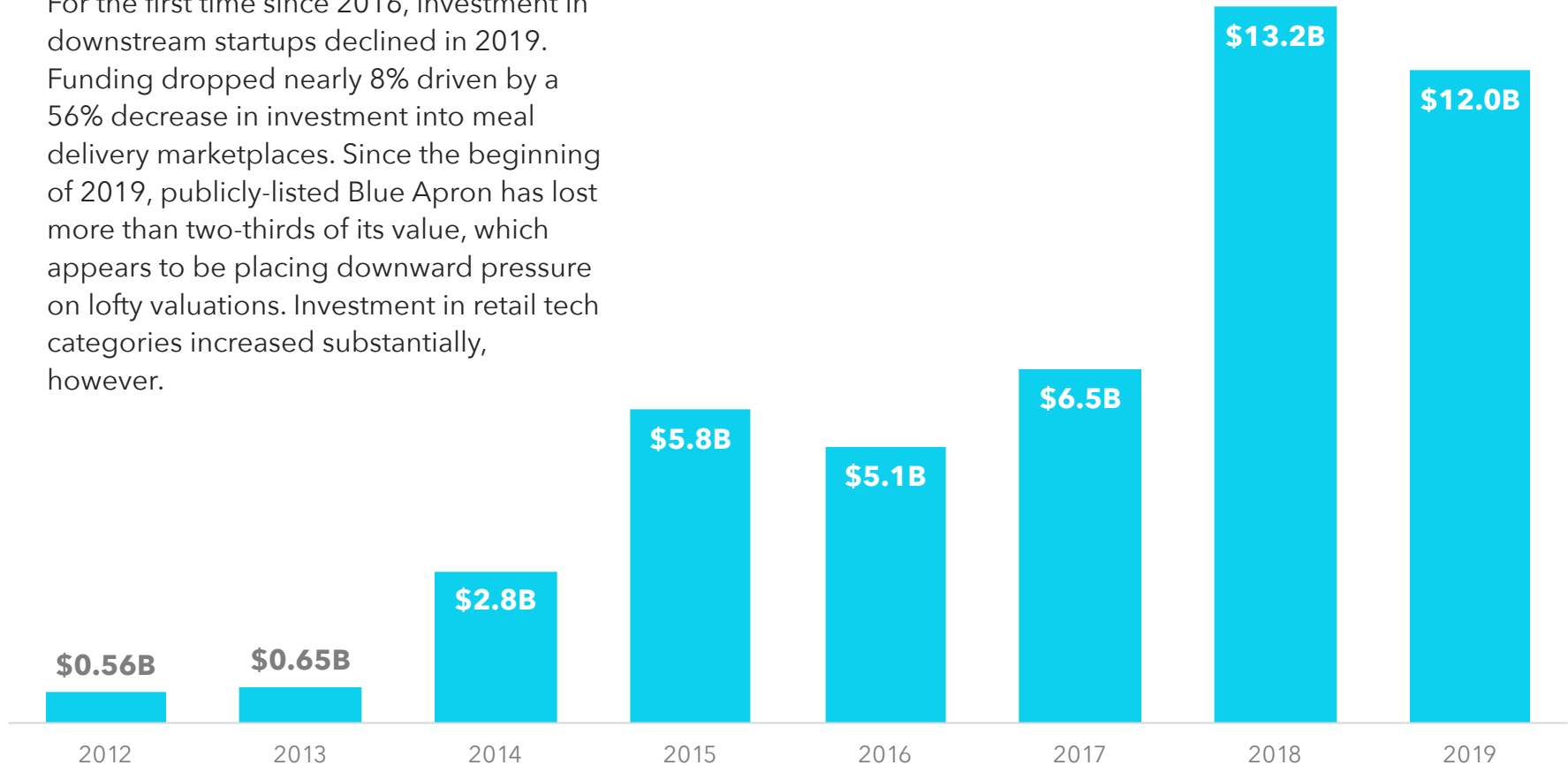
Investment in startups operating upstream, closer to the farmer and before the retailer, remained relatively steady year-over-year with a mere \$100m (1.3%) increase.



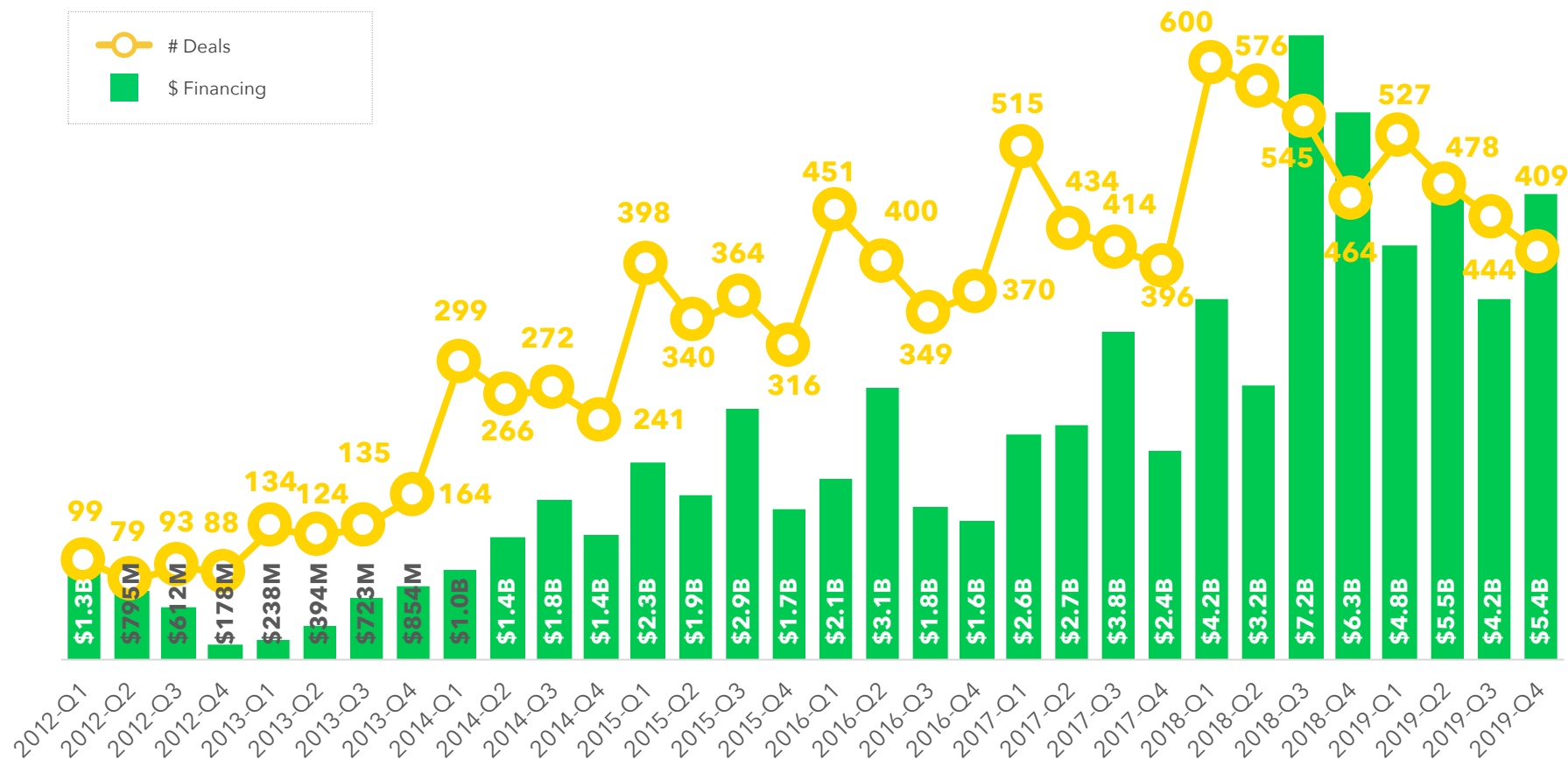


# Annual Financings | 2012-2019

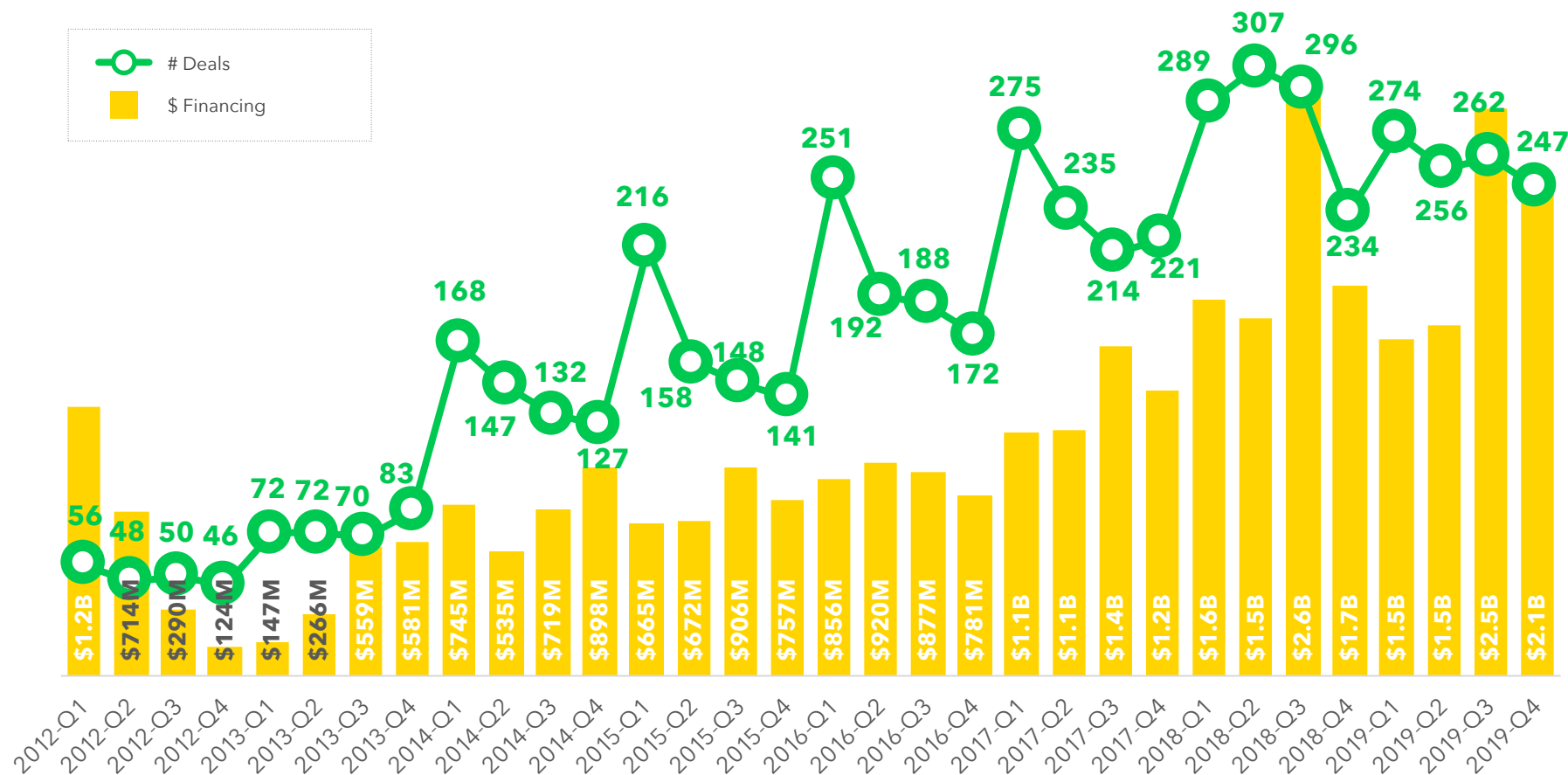
For the first time since 2016, investment in downstream startups declined in 2019. Funding dropped nearly 8% driven by a 56% decrease in investment into meal delivery marketplaces. Since the beginning of 2019, publicly-listed Blue Apron has lost more than two-thirds of its value, which appears to be placing downward pressure on lofty valuations. Investment in retail tech categories increased substantially, however.



# Quarterly Deal Volume and Activity

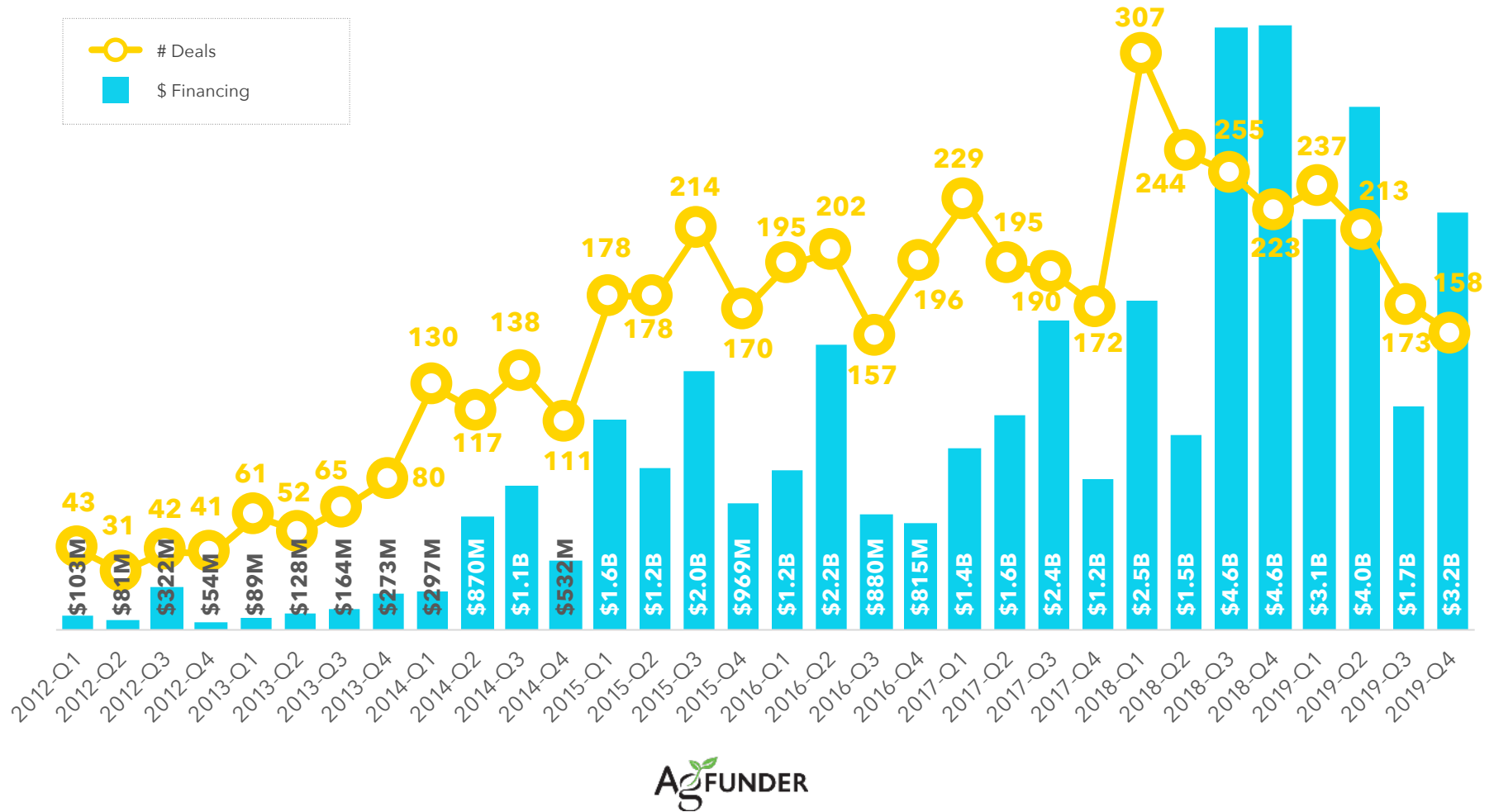


# Quarterly Deal Volume and Activity





# Quarterly Deal Volume and Activity





A large, irregular pile of bright yellow, granular material, possibly seeds or soil, is scattered on a dark purple background. The material is piled in the center-left, with many small clumps and individual grains scattered across the surface. The lighting creates strong shadows, emphasizing the texture of the granules.

# Deals by Category

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Image Courtesy of Brightseed  
Photography by Nicola Paris



# Key Insights - Category

1. We added a new category this year for the developing ecosystem of enabling technologies in the on-demand economy. Cloud Retail Infrastructure includes startups that enable food retailers and restaurants to offer consumers an on-demand, at-home service. Largely this equates to cloud or ghost kitchens that enable anyone to start a delivery-only restaurant, and last mile delivery services; think autonomous food delivery robots and courier matchmaking services. While a significant drop in funding to Restaurant Marketplace and Online Restaurant startups signifies an oversaturated ecosystem, we believe brick & mortar stores and restaurants will still work to gain some of their business back by offering their own delivery options using some of these essentially white labelled tech services. And to compete with the larger fast food chains that are developing tools in-house. Some mega deals from Colombia's Rappi, California's Nuro and Uber founder Travis Kalanick's new startup CloudKitchens skewed the total for this category.
2. The Innovative Food category, which is mostly alternative protein startups, experienced explosive growth in 2019, doubling the funding it received in 2018. No doubt Beyond Meat's dazzling 30x oversubscribed IPO and public listing that soon reached a valuation of over \$9 billion, promoted the sector. Although substitutes for red meat have been the primary focus, attention is now being paid to replacements for poultry, pork and even seafood. Interest in cultured meat remains steady although it trails far behind plant-based innovations in terms of commercialization.
3. Interest in grocery delivery startups declined this year except in China where demand remains high. The economics of bringing groceries direct to a consumer's doorstep remain challenging, particularly with perishable items. Walmart, for example, reported a \$1 billion loss on its e-commerce business. Innovations like GPS location services to alert retailers to a customer's arrival and robots to help pick and pack orders are helping retailers reduce friction in their offerings.
4. Investment in Upstream technologies remained steady in 2019, increasing a small amount (\$100m) year-over-year, but there were declines in funding and deal activity for the Ag Biotech, Farm Robotics, and Midstream Tech categories. These categories dominated early stage seed activity, however, which is a positive sign.

# Agri-FoodTech Category Definitions



## Ag Biotechnology

On-farm inputs for crop & animal ag including genetics, microbiome, breeding, animal health.



## Agribusiness Marketplaces

Commodities trading platforms, online input procurement, equipment leasing.



## Bioenergy & Biomaterials

Non-food extraction & processing, feedstock technology, cannabis pharmaceuticals.



## Farm Management Software, Sensing & IoT

Ag data capturing devices, decision support software, big data analytics.



## Farm Robotics, Mechanization & Equipment

On-farm machinery, automation, drone manufacturers, grow equipment.



## Midstream Technologies

Food safety & traceability tech, logistics & transport, processing tech.



## Novel Farming Systems

Indoor farms, aquaculture, insect, & algae production.



## Miscellaneous e.g. fintech for farmers



## Innovative Food

Cultured meat, novel ingredients, plant-based proteins.



## In-Store Retail & Restaurant Tech

Shelf-stacking robots, 3D food printers, POS systems, food waste monitoring IoT.



## Restaurant Marketplaces

Online tech platforms delivering food from a wide range of vendors.



## eGrocery

Online stores and marketplaces for sale & delivery of processed & un-processed ag products to consumer.



## Home & Cooking Tech

Smart kitchen appliances, nutrition technologies, food testing devices.



## Online Restaurants and Meal Kits

Startups offering culinary meals and sending pre-portioned ingredients to cook at home.

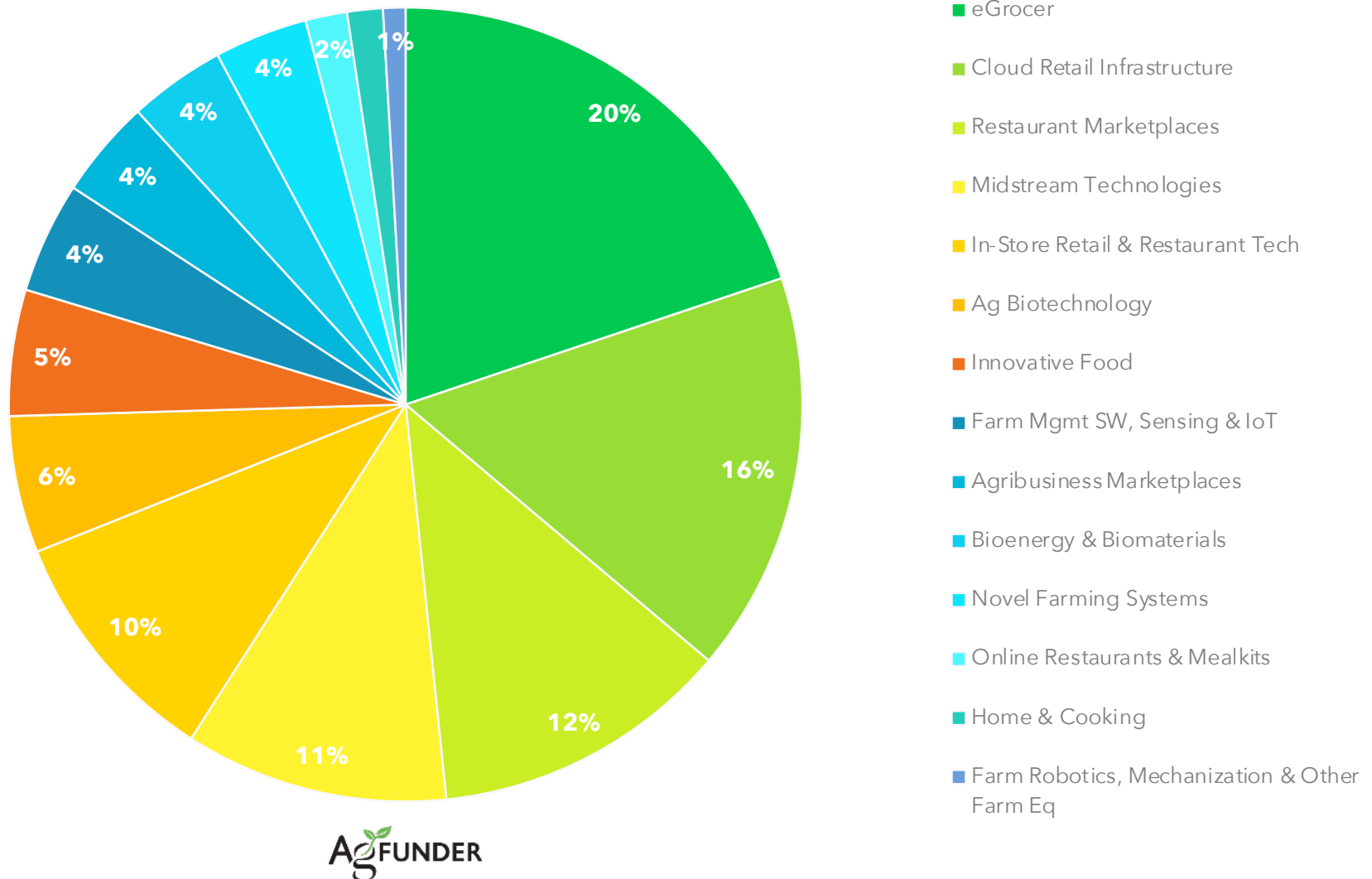


## Cloud Retail Infrastructure

On-demand enabling tech, ghost kitchens, last mile delivery robots & services



# 2019 Agri-FoodTech Investment





# Deal Volume and Activity by Category

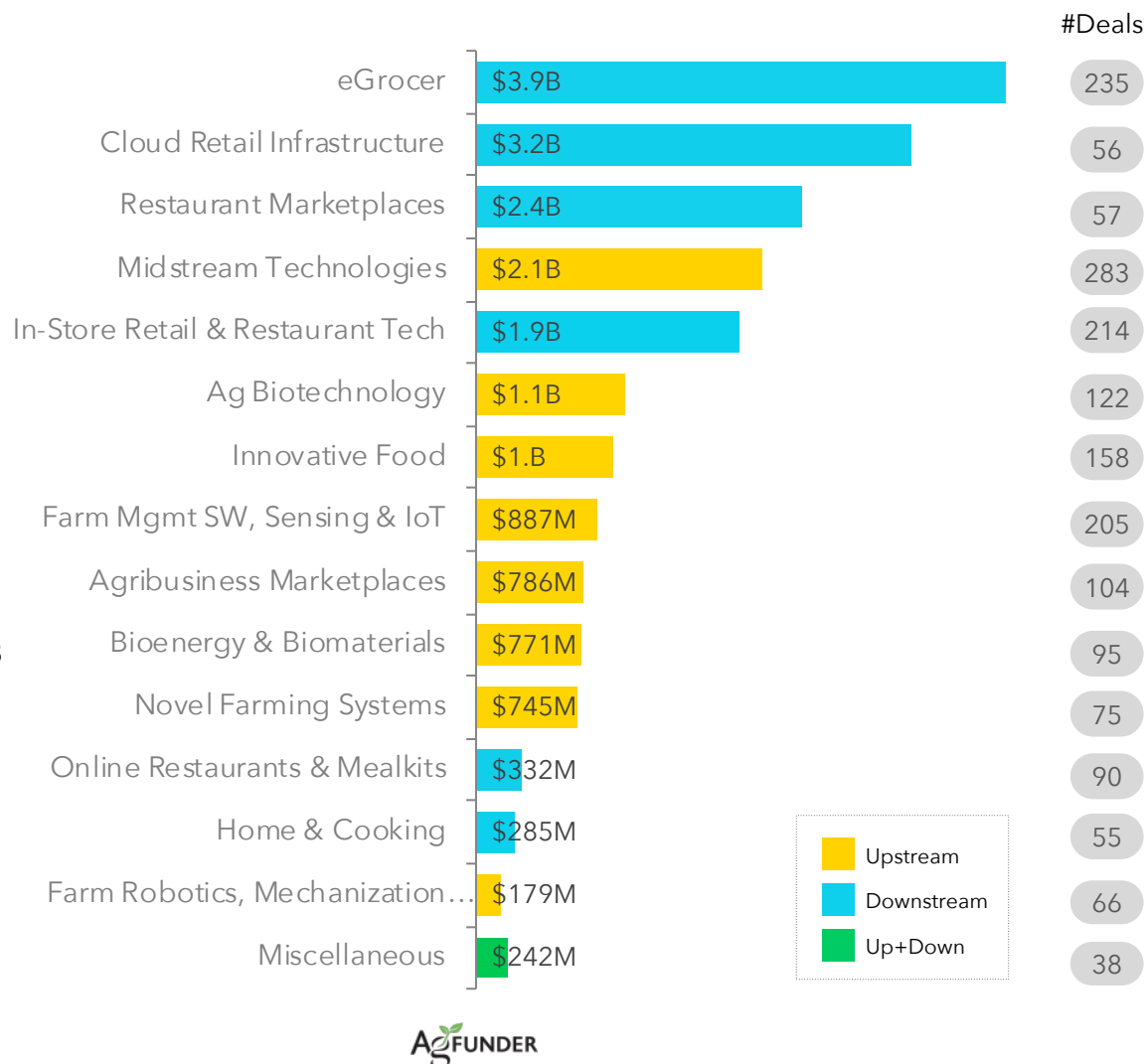
Despite a 7% decrease in funding to eGrocery, it was still dominant, driven particularly by activity in China. Cloud Retail Infrastructure, Innovative Food and Novel Farming Systems posted the biggest gains, in that order.

Innovative Food investment doubled on 2018, driven in large part by Impossible Foods' \$300m bridge round but also a 17% increase in deal activity.

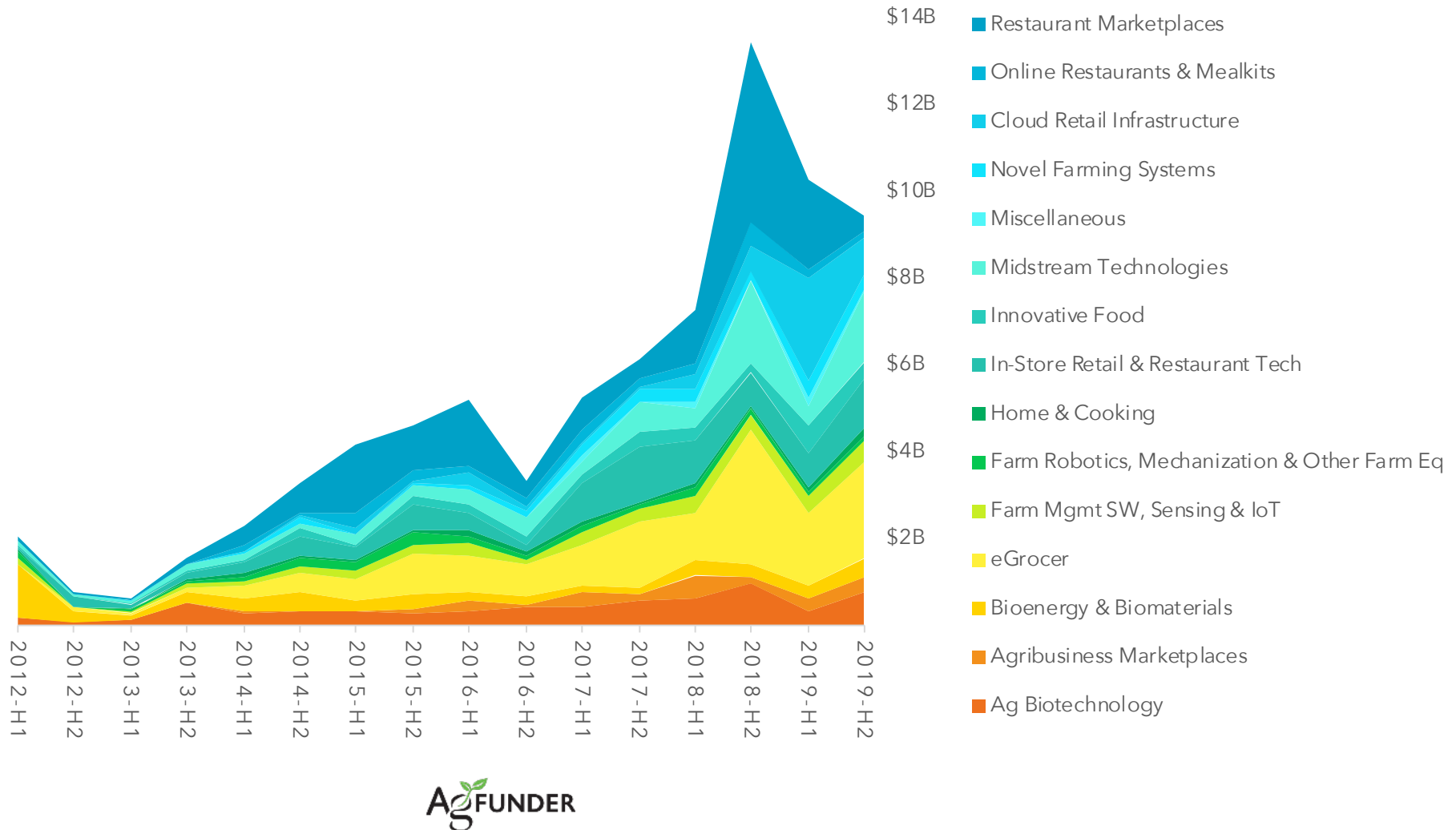
Investment in Novel Farming Systems increased 38% but with 16% fewer deals as the more mature startups raised later stage rounds. Deal activity in the Cloud Retail Infra category was identical to 2018 as the likes of Travis Kalanick's CloudKitchen drove the 250% increase in funding.

Ag Biotech deal activity dropped 22% year-over-year while dollar investment declined 33%.

Midstream Tech funding dropped 11% from 2018 with a small 3% decline in deal activity.



# Investment by Category 2012-2019

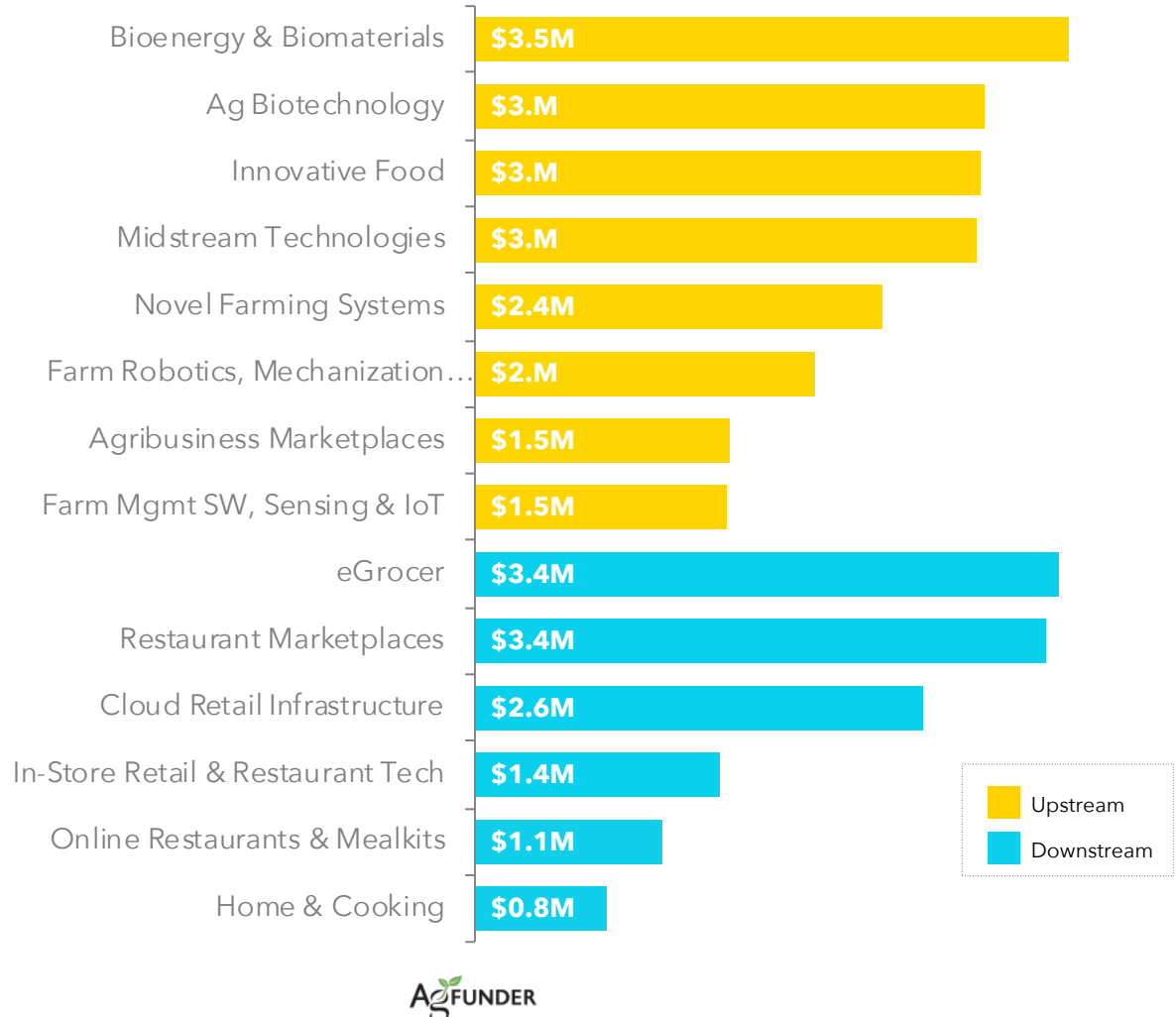


# Median Deal Size by Category

eGrocery operations are labor-intensive and marketing spend has become a nightmare as steep competition erodes market share and fickle customers flitter among many similar offerings.

Innovative food offerings saw meteoric growth this year and faced challenges increasing supply to meet explosive demand, calling for larger rounds to ramp up production.

As consumers show less interest in dining in, technologies supporting food delivery and pickup are gaining traction. Most investment in this space goes to finding subtle ways to diversify the offering to capture consumer loyalty, like Uber Eats' test run of airport gate-side delivery. A capital intensive category, ag biotech lost its spot as number one for median deal size but still remains high compared to other categories.



# Top 20 Innovative Food Deals



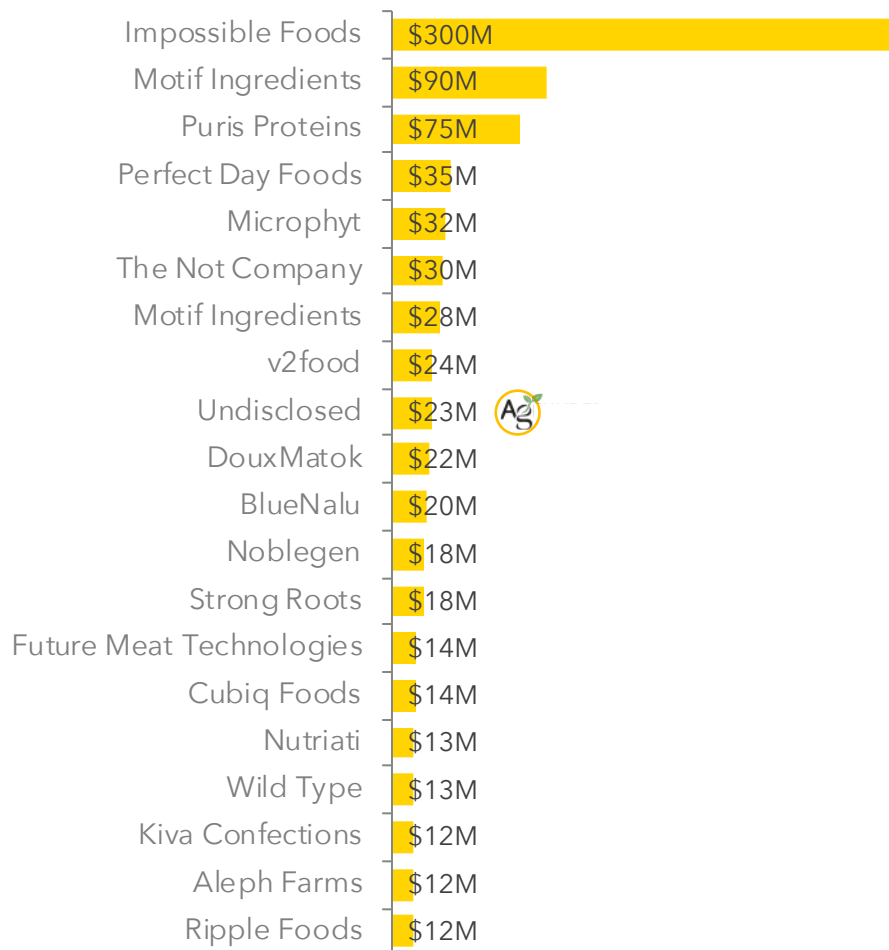
Beyond Meat's dazzling IPO no doubt spurred investment overall and in its core ingredient pea protein; supplier Puris Proteins raised funding from Cargill to scale.

Alternative dairy gathered pace with Perfect Day releasing its first product, a cultured ice-cream, during the year. Chilean startup NotCo raised funding from Jeff Bezos' VC for its egg-free mayo and dairy-free milk products, while Ripple Foods took sales to almost \$50m during the year.

Newly spun out from Ginkgo Bioworks, Motif raised its Series A from a group of high profile investors including Bill Gates and Richard Branson-backed Breakthrough Energy Ventures and New Zealand dairy cooperative Fonterra to focus on novel forms of protein for the animal-free space.

Cultivated meat startups also featured heavily, including BlueNalu, Future Meat, Wild Type and Aleph Farms.

Algae-based offerings also gained steam thanks to Microphyt, and Noblegen.



AgFunder Portfolio Company 



## **Invest in the Alternative Protein Revolution**

Minimum Investment: \$1m Individuals/\$5m Corporates

Close: Summer 2020

Learn More: <http://agfunder.com/protein>



# Top 20 Novel Farming Systems Deals



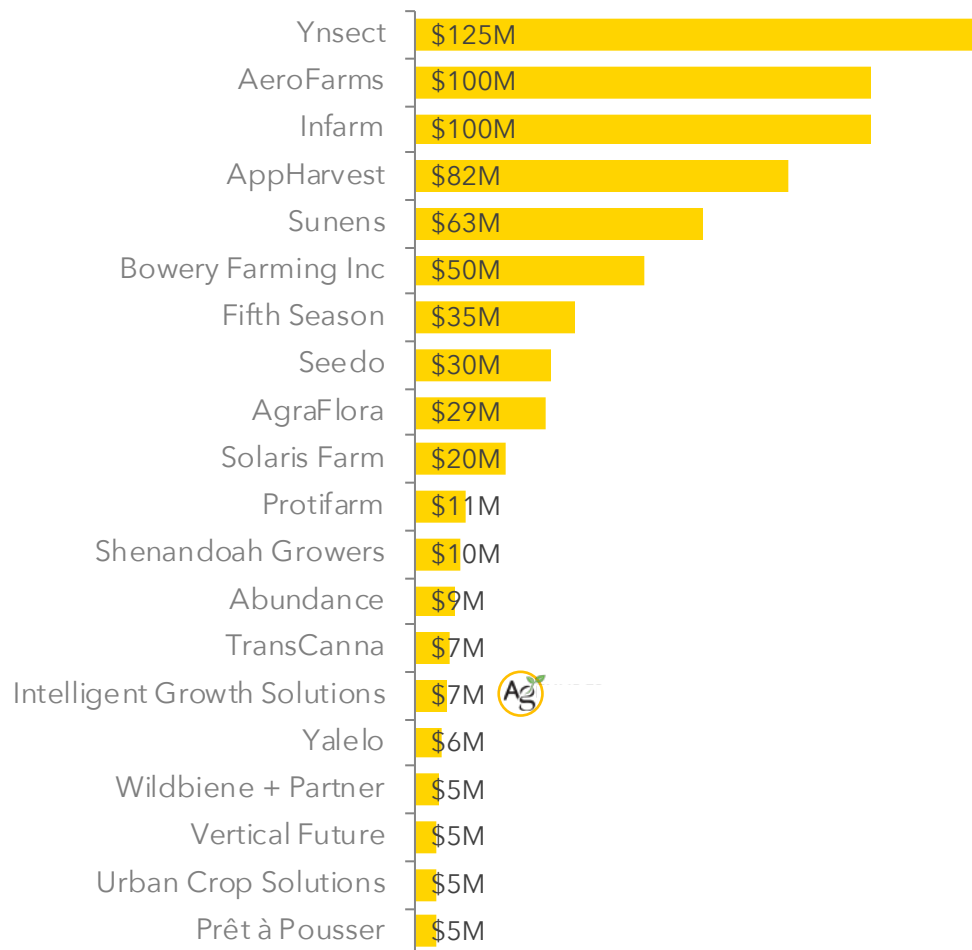
Novel Farming Systems startups enjoyed a 37% increase in funding year-over-year as the category's most mature startups raised larger rounds.

Ynsect's robotized mealworm farming tech broke records with this Series C led by UK-based impact fund Astanor. Also in insect farming, Holland's Protifarm raised Series B funding.

While plant factories have dominated media and funding attention in the past, distributed business models are gathering pace; Germany's Infarm deploys its connected growing cabinets in supermarkets.

Fifth Season came out of stealth with a system that uses 40 robots.

Bowery wasn't looking for more capital when it closed this Series B extension but will use the funds to construct a third facility near Baltimore.



AgFunder Portfolio Company 

# Top 20 Ag Biotechnology Deals

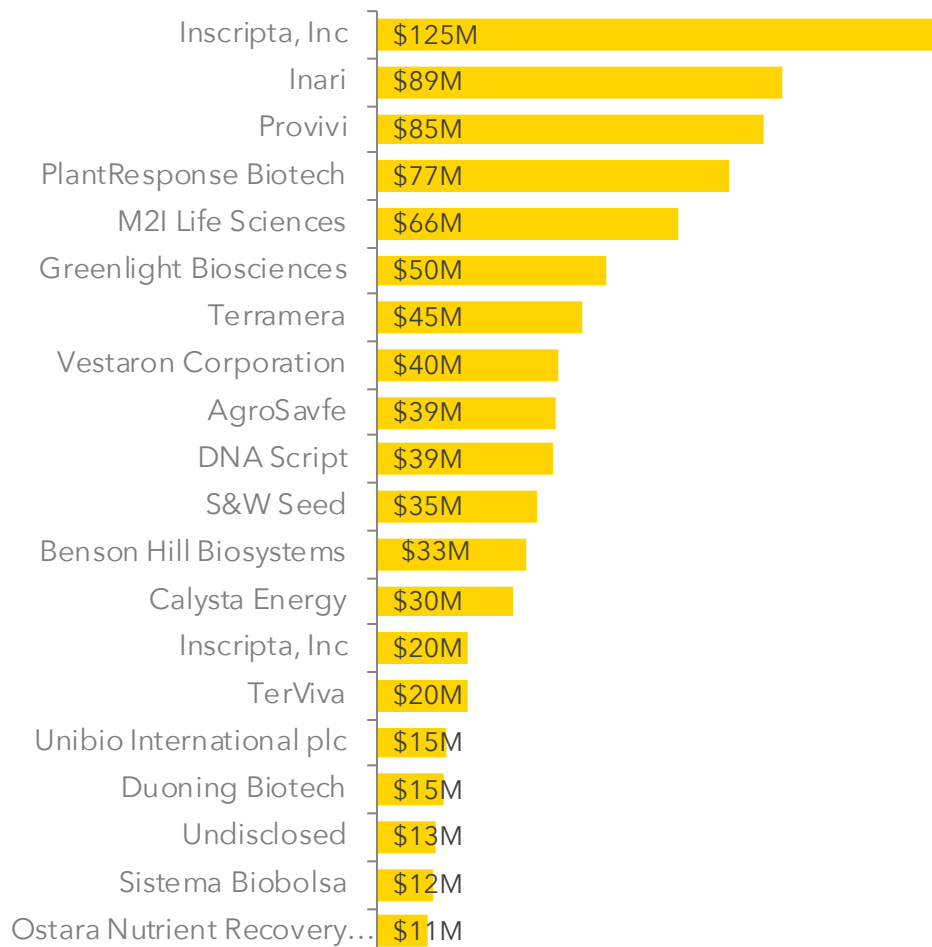
Gene editing took the stage for Ag Biotech, with the two largest deals.

Inscripta's Series D came just months after an extended Series C closed on around \$100m. The Boulder, CO startup aims to democratize gene-editing by selling equipment to researchers and giving away enzymes for free.

Inari's Series C marked the largest funding round secured by a female CEO in Ag Biotech so far. The Flagship-founded company brought in Dubai's sovereign wealth fund, Asia's EDBI and Acre Venture Partners as investors in the round.

Novel crop protection is another growing segment in the category (Provivi, Vestaron, AgroSavfe, and Greenlight).

Plant Response recently merged with Koch Biological Solutions and acquired Pathway Logic in the first of a planned series of rollup deals to better position itself in the developing ag biologicals market.



# Top 20 Midstream Tech Deals

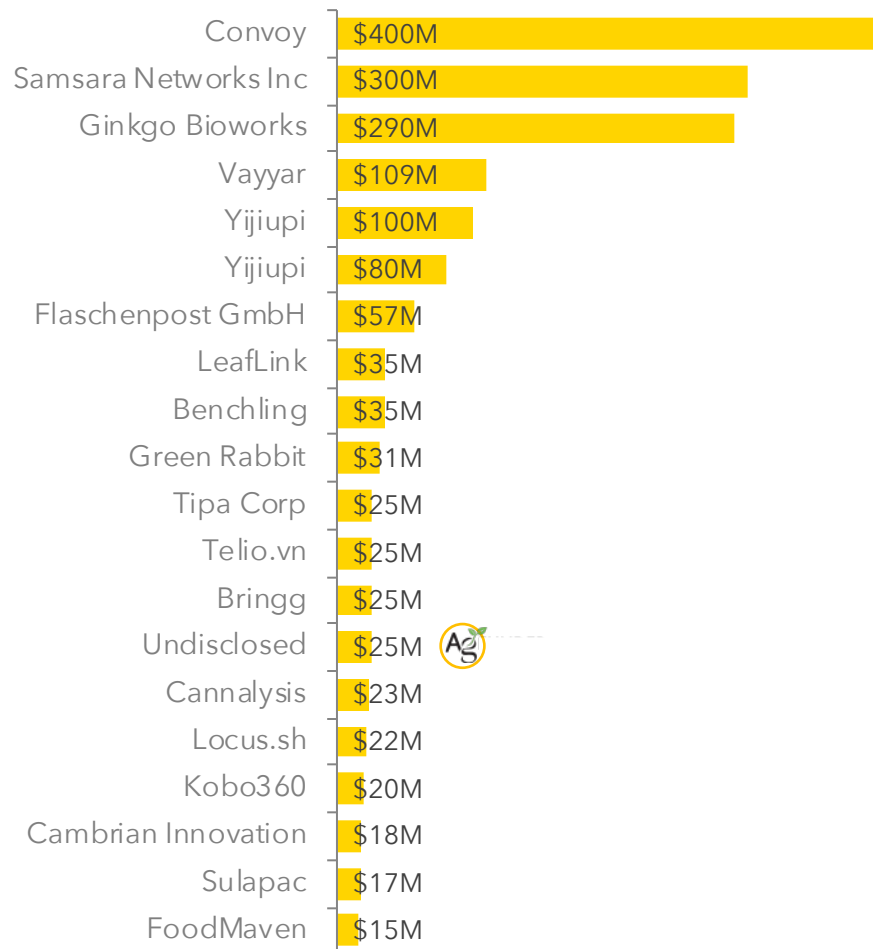


Investment in post-farmgate technologies and those in the middle of the supply chain remained strong this year, with total dollars invested dipping only slightly to \$2bn from \$2.3bn.

Convoy hopes to disrupt the trucking industry with software and apps imitating Uber. The ex-Amazon exec-led company attracted investors like Al Gore's Generation to top off existing backing from Jeff Bezos and Bill Gates.

Ginkgo Bioworks raised a Series E to expand its synthetic biology platform and spun out its food business during 2019, Motif FoodWorks, which is focused on creating ingredients for alternative animal proteins using Ginkgo's fermentation tech.

Other companies in this group provide food and beverage procurement services for restaurants, traceability, food freshness tech, food safety and testing, packaging, and ingredient discovery.



AgFunder Portfolio Company 

# Top 20 Ag Marketplace Deals



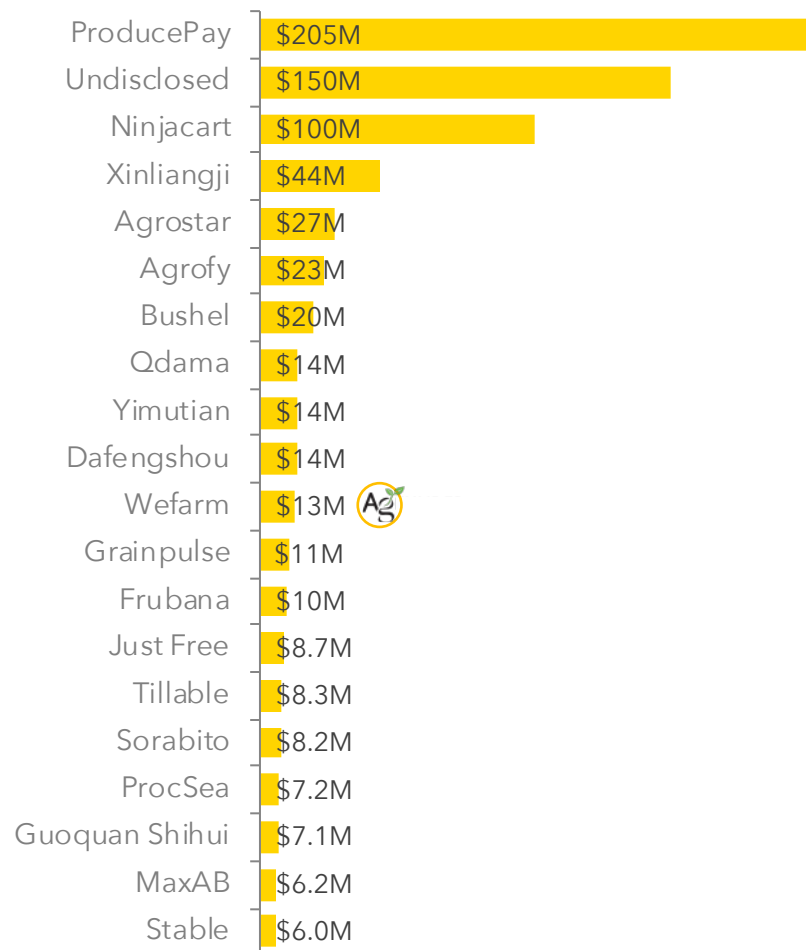
Ag marketplaces connect farmers with resources like financing, agronomic support, and marketing.

It's worth pointing out that Produce Pay's category-leading raise was a debt facility to fund its upfront payments to farmers selling their produce through its platform.

Ninjacart, which also helps farmers trade their produce, snagged India's largest ever farm tech deal to-date. Indian farmers need access to markets to sell their produce but also purchase inputs. Agrostar helps with the latter.

Argentina's Agrofy closed the largest agtech deal on record for LatAm at the end of the year for its diversified ag products marketplace while Wefarm (AgFunder portfolio company) closed a Series A to develop a marketplace for African farmers to access much needed, quality inputs.

In the US, FBN, Bushel, Tillable and Stable offered a variety of services from rentals to grain trading, to seed and chemical sales.



AgFunder Portfolio Company 

# Top 20 Farm Management SW, Sensing & IoT

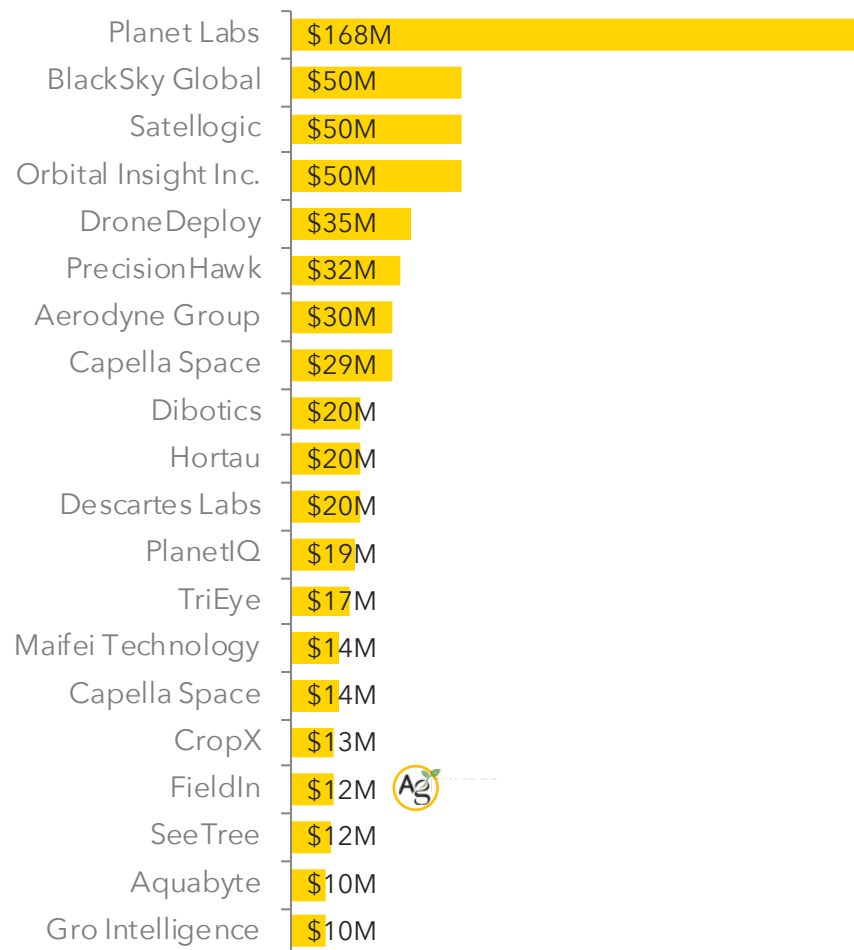
Remote sensing dominated this category in 2019.

Planet's Series D straddled 2018-2019 and was prematurely reported last year before it's full close. We have moved the deal to 2019.

Satellite-powered intelligence company BlackSky secured debt financing from Intelsat to boost its Earth observation constellation. Argentinian Satellogic's Series C also fuelled expansion with the goal of capturing Earth at 1-meter resolution weekly.

While many drone tech startups have pivoted away from ag, put off by the complexity and challenge of creating value for farmers, a few first movers remain, including PrecisionHawk, which raised a Series D to build AI-powered aerial data analytics, and DroneDeploy, which raised a Series D backed by Bessemer VP, albeit to expand into new industries.

While farm management SW is an increasingly crowded space, Israel's FieldIn (AgFunder portfolio company) stood out to us for its in-depth offering in fresh produce and nuts.





# Top 20 Biomaterials & Bioenergy Deals

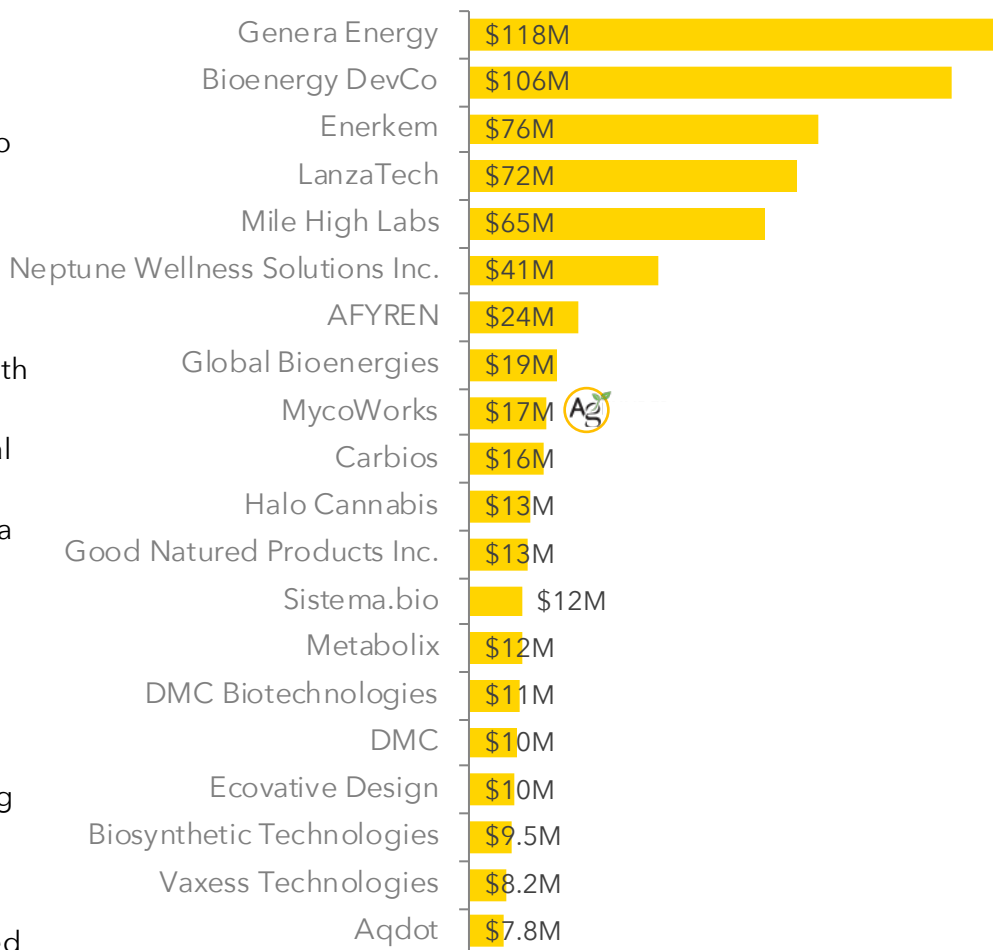


This increasingly-diversified category was typically dominated by bioenergy in the past, but as cheap fossil fuels killed the biofuels dream, many startups pivoted into other types of biomaterials. Genera now manufactures fiber-based paper and packaging products, for example.

Developments in synthetic biology have also spurred innovation in this category with Afyren creating bio-based consumer products to replace petroleum with natural micro-organisms, while MycoWorks (AgFunder Portfolio company) is creating a leather alternative from natural mycelium. Ecovative Design also offers an alternative textile product.

Anaerobic digestion tech appears in this category with Bioenergy DevCo acquiring BTS Biogas to operate as an affiliate during the year and added to its footprint of over 200 anaerobic digesters globally.

Novel cannabis extraction and hemp-based products also feature.



AgFunder Portfolio Company 

# Top 20 Farm Robotics Deals

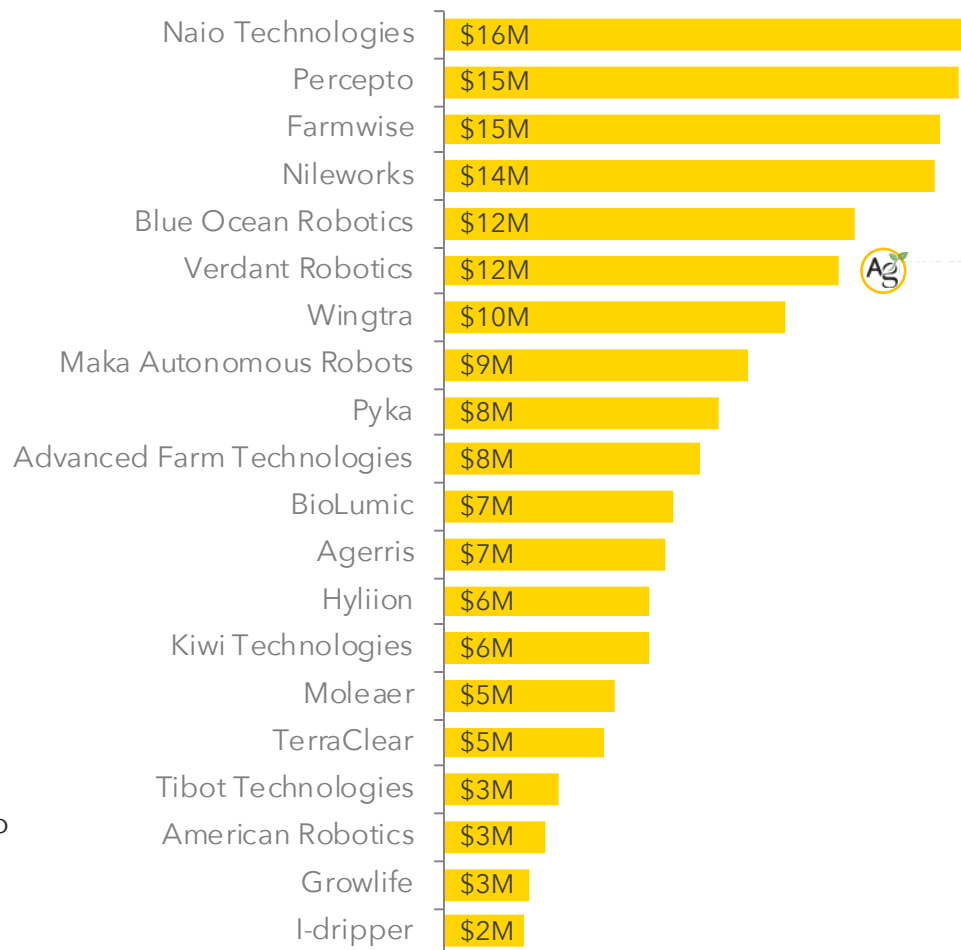


Rounding out upstream deals as the smallest category, robotics saw a 46% drop in funding across 8 fewer deals than 2018. With a number of single-digit deals, skepticism over farm robotics efficacy and durability remain. Current offerings are narrow in their application such as strawberry harvesting or weed pruning.

French startup Naio led the pack with its Series A round led by France's national investment bank Bpifrance for its weeding robots. Cavallo Ventures-backed FarmWise is also in the weeding robot market.

Percepto's Series A was joined by strategic investor Hyundai. It's planning a rapid expansion of its facility-monitoring autonomous drones.

Despite its nascent stage, farm robotics continues to show promise when it comes to addressing the continued and growing labor shortages in agriculture as well as taking over tedious and time-consuming jobs around the farm to free up labor for more meaningful work.



# Top 20 Retail & Restaurant Tech Deals

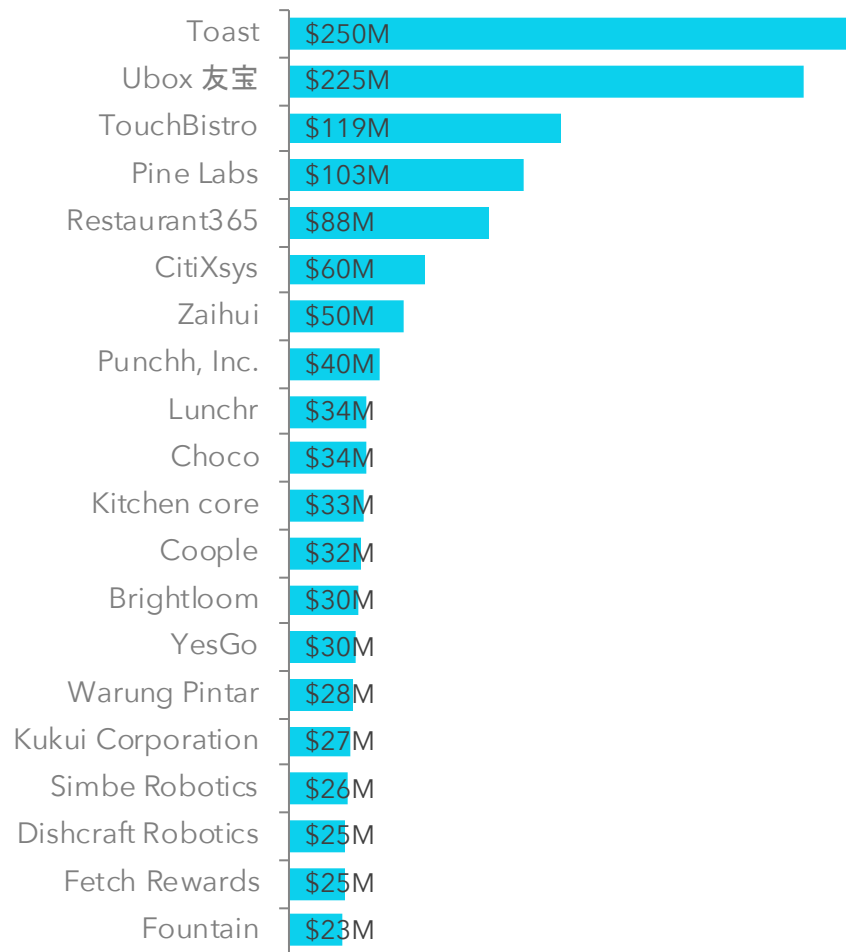


Technologies geared towards optimizing grocery and restaurant operations showed a slight boost in overall funding this year despite a decline in deals. Restaurants are feeling the heat from food e-commerce so innovators are helping them to up the ante in-house to keep foot traffic coming through the door with digital tools aimed at promoting customer loyalty, providing a better service experience and ideally increasing their turnover.

Brightloom pivoted from a robotic restaurant to a digital service provider enabling automation in restaurants. There was a noticeable increase in robotic tech for both restaurants and grocers.

Point of service startup Toast closed a Series E at a valuation of \$2.7bn and TouchBistro following suit with funding from Ontario's public pension (OMERS).

Despite the fall-out for unmanned stores and vending machine tech in China in 2018, funding came in for some like Ubox, which raised from Alibaba through Ant Financial.



# Top 20 Cloud Retail Infrastructure

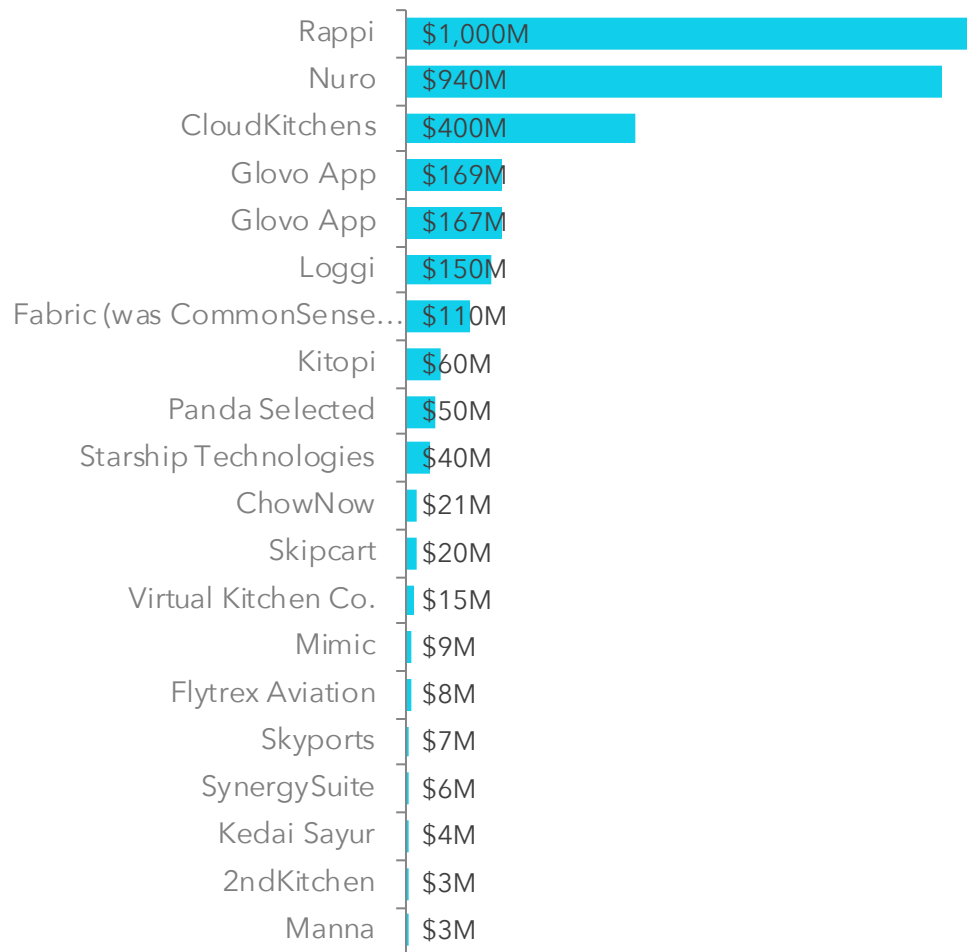
Previously most of these startups would have been in our Midstream Tech category, but because some of the tech is consumer-facing, it felt appropriate to split it out.

Most of this category is enabling the burgeoning on-demand and at-home consumption economy. These aren't actual retailers themselves or marketplaces, but enablers for those services.

Rappi broke all records in Latin America with this Soft Bank-led Series E to connect consumers with a range of third parties. Spain's answer to Rappi, Glovo, raised both a Series D and Series E of very similar sizes during 2019.

SoftBank also led self-driving delivery robot startup Nuro's Series B.

CloudKitchens is Uber founder Travis Kalanick's new venture which raised a whopping \$400m in Series A funding. Saudi Arabia's sovereign wealth fund backed the deal valuing the 2016-



# Top 20 eGrocery Deals

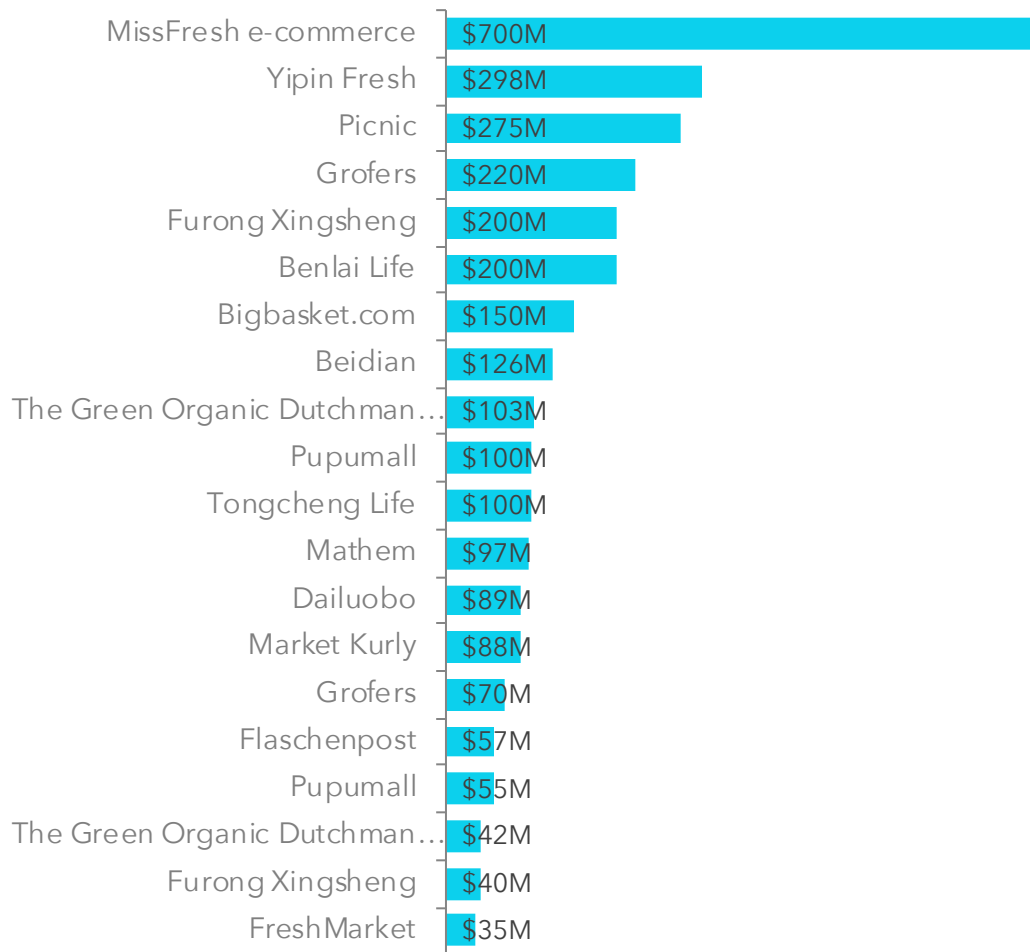


China dominated the eGrocery category in 2019 as services promised to offer Chinese consumers better access to produce, often organizing them into local buying groups to streamline the country's fragmented supply chains.

YpiniFresh, a fresh grocery discount shop, raised funding to launch a new business line.

In India's largest online grocery deal to date, Grofers attracted funding from SoftBank and Tiger Global at Series F to expand its supply chain operations. South Korean investment firm KTB Ventures reupped along with Sequoia Capital. It announced a \$70m Series F tranche later in the year.

The news of Grofers' investment came a few weeks after Alibaba invested in major rival BigBasket's Series F. Both companies are racing to stake territory in the Indian online grocery space.





# Deals by Stage

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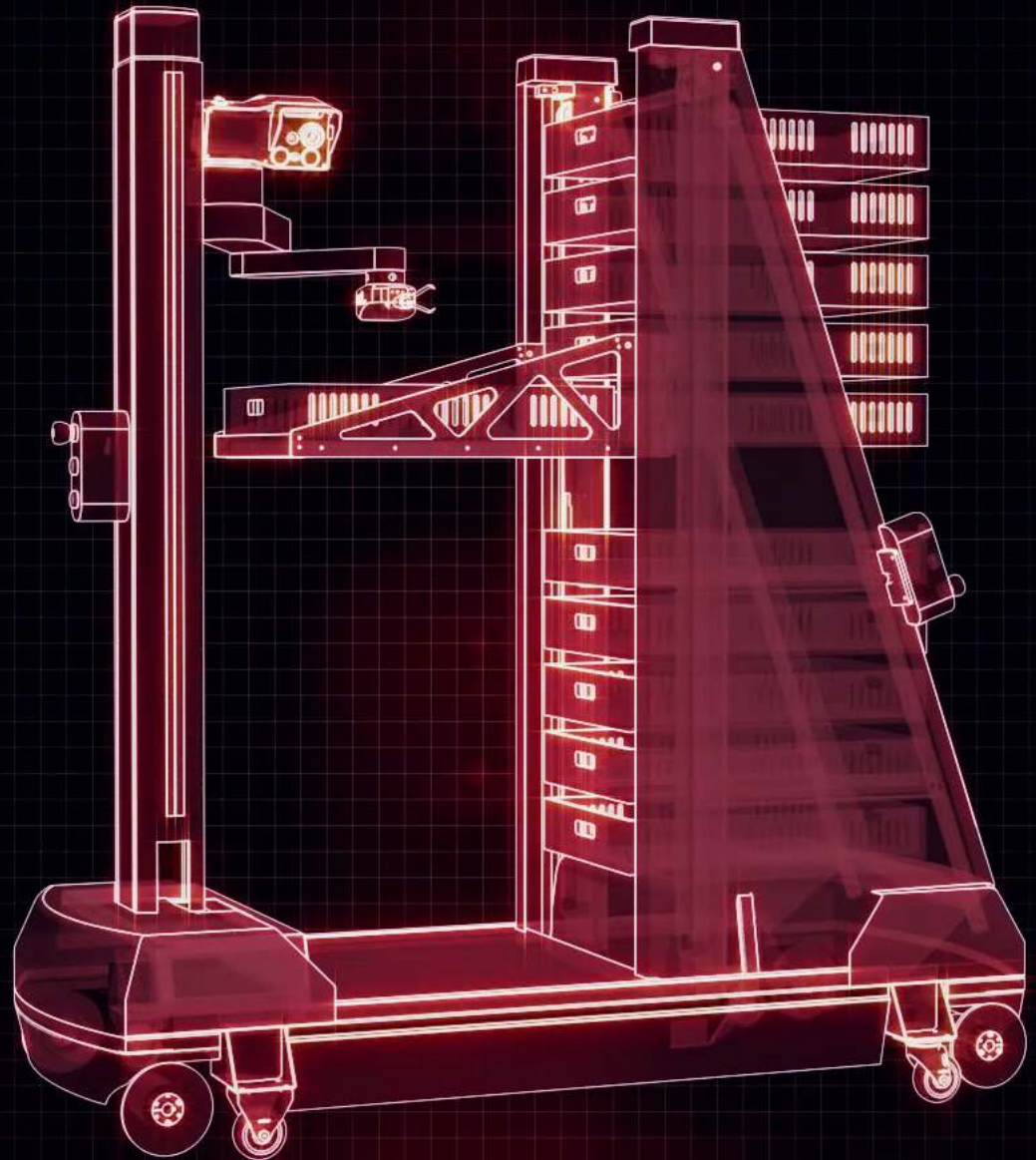


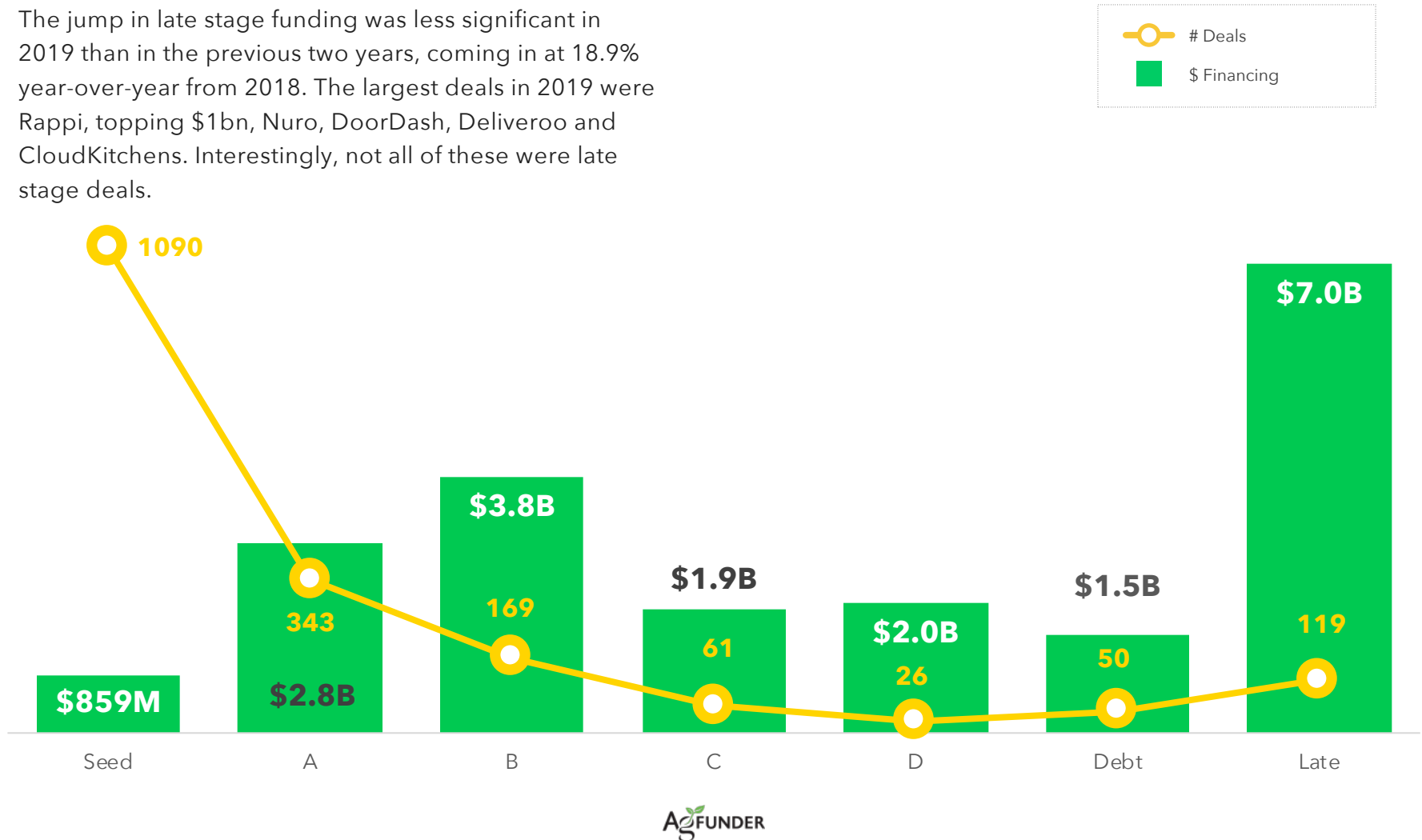
Image Courtesy of Root AI

# Key Insights – by Stage

1. Overall agri-foodtech deal count decreased by 15% to 1,858 deals in 2019. Most of that drop occurred at Seed and Series A stage.
2. Seed stage deal activity decreased by 19.2% year-over-year from 2018. Seed funding reached \$859.4m across 1,090 deals, representing a 7.1% year-over-year drop in dollar volume.
3. Upstream companies dominated 2019 Seed stage deals, taking in \$563m across 609 transactions, compared to downstream companies, which only raised \$281 million across 452 deals. The top 10 seed stage deals all raised \$10m or more, more than 10x the median Seed stage deal size in 2019.
4. Overall, early stage deal count (Seed and Series A) dropped significantly (19.2% and 23.6% respectively) while dollar volume dipped only slightly. CloudKitchens' \$400m Series A raise radically skewed the results of the Series A funding class, whose median deal size in 2019 was only \$6m. Combined with Beidian, Motif FoodWorks and Dailuobo, the top four Series A deals absorbed \$705m, or 25%, of \$2.8bn in Series A funding.
5. Growth in funding was largest at the Series B stage, which increased a whopping 90% over 2018 (\$3.8bn compared to \$2.2bn in 2018), with only a 15% increase in the number of deals at that stage. Nuro, which raised \$940m for its Series B round, skewed the data. The top eight Series B deals in 2019 raised \$100m or more – well above the \$12m median deal size for that stage.
6. Series D and Later stage deals increased 18.9% by deal activity in 2019 but decreased 23.5% in dollar volume. The top three deals claimed \$2.3bn, or 25.5%, of the \$9bn transacted at these later stages. And unlike early stage deals, downstream companies dominated Late stage funding, signifying downstream companies' ability to raise more funding and raise it faster than their upstream peers. Only four upstream companies made the Top 15 Late stage funding rounds.
7. In all, the balance of upstream versus downstream funding favored downstream companies at all but the Seed stage, even though upstream companies accounted for a larger share of deal count at every stage.

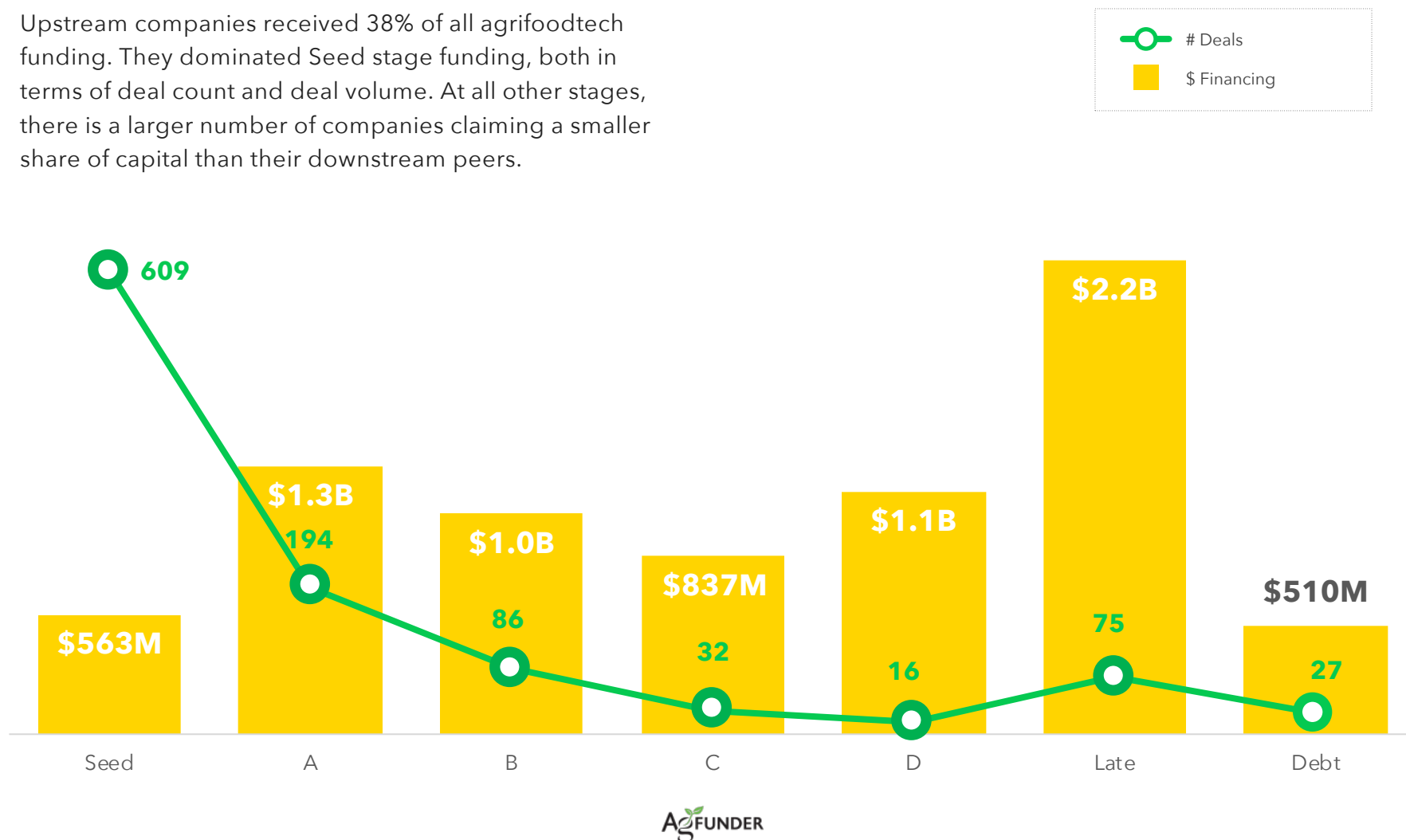
# Overall Deal Volume and Activity by Stage

The jump in late stage funding was less significant in 2019 than in the previous two years, coming in at 18.9% year-over-year from 2018. The largest deals in 2019 were Rappi, topping \$1bn, Nuro, DoorDash, Deliveroo and CloudKitchens. Interestingly, not all of these were late stage deals.



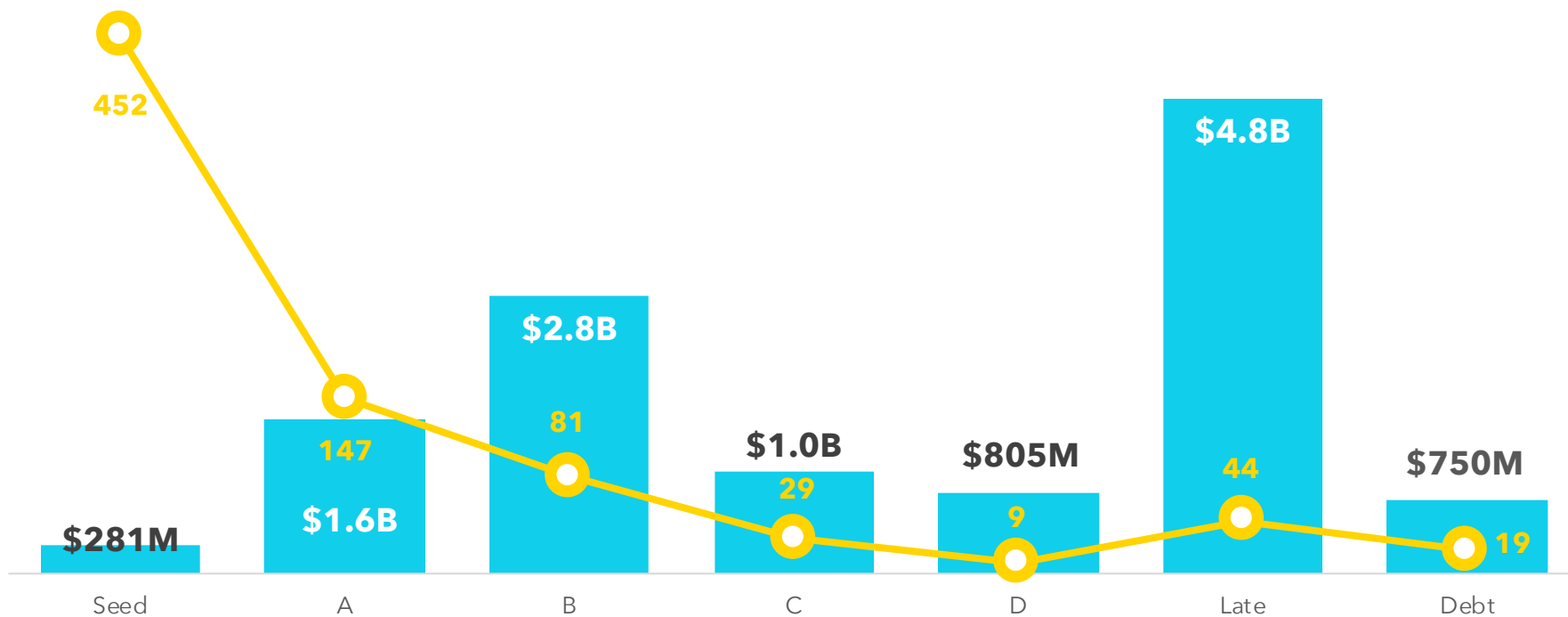
# Deal Volume & Activity by Stage

Upstream companies received 38% of all agrifoodtech funding. They dominated Seed stage funding, both in terms of deal count and deal volume. At all other stages, there is a larger number of companies claiming a smaller share of capital than their downstream peers.



# Deal Volume & Activity by Stage

Downstream companies received 62% of all agrifoodtech funding, spread across fewer deals as they generally raise larger rounds than their upstream peers. Downstream companies also skew deal data: the reason some of these funding levels are so large is from outliers like CloudKitchens and Nuro. In fact the \$400m Series A raised by CloudKitchens, exceeds the total raised by the 452 downstream Seed stage startups.

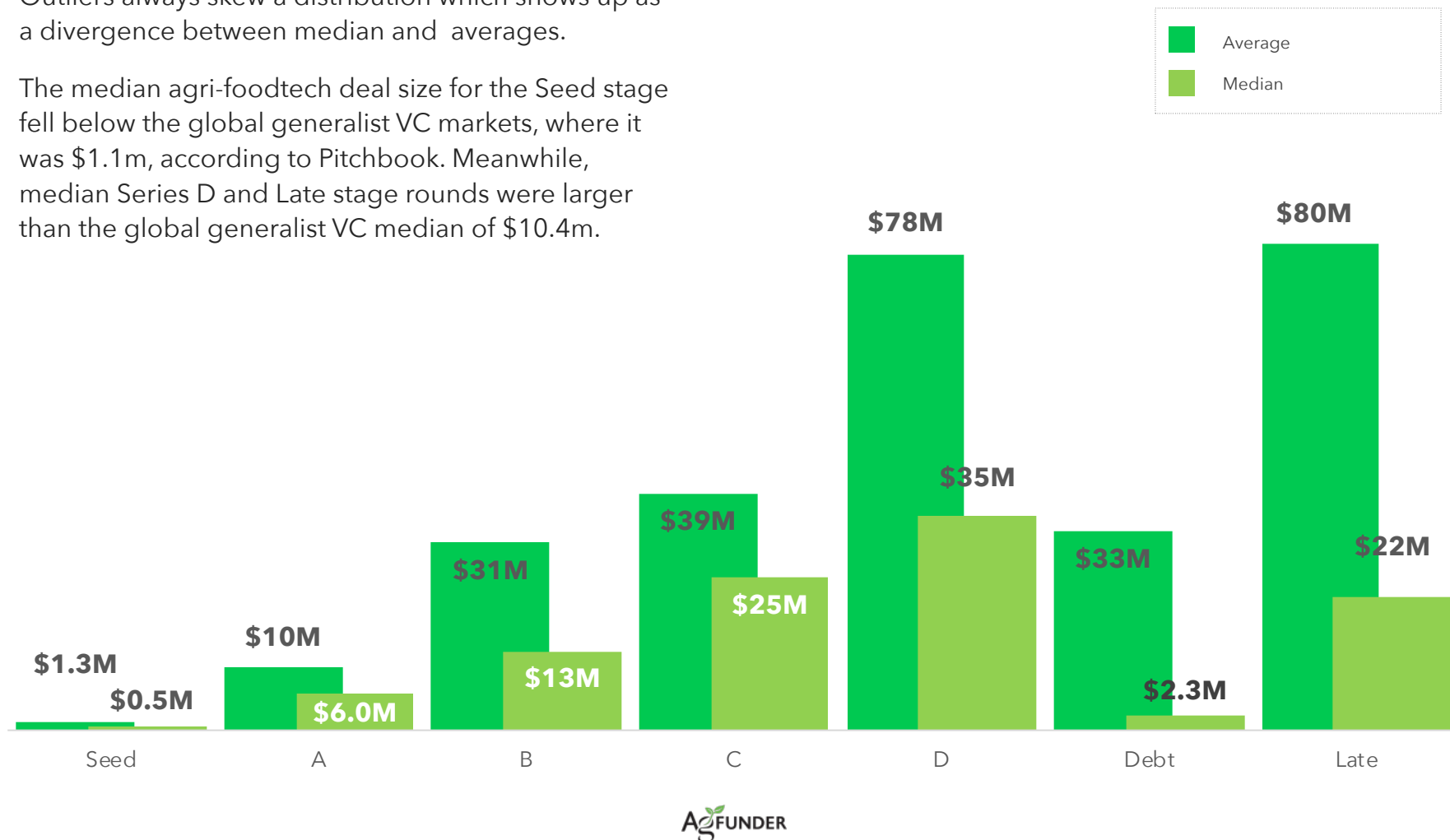




# Deal Average and Median by Stage

Outliers always skew a distribution which shows up as a divergence between median and averages.

The median agri-foodtech deal size for the Seed stage fell below the global generalist VC markets, where it was \$1.1m, according to Pitchbook. Meanwhile, median Series D and Late stage rounds were larger than the global generalist VC median of \$10.4m.



# Top 15 Seed Deals

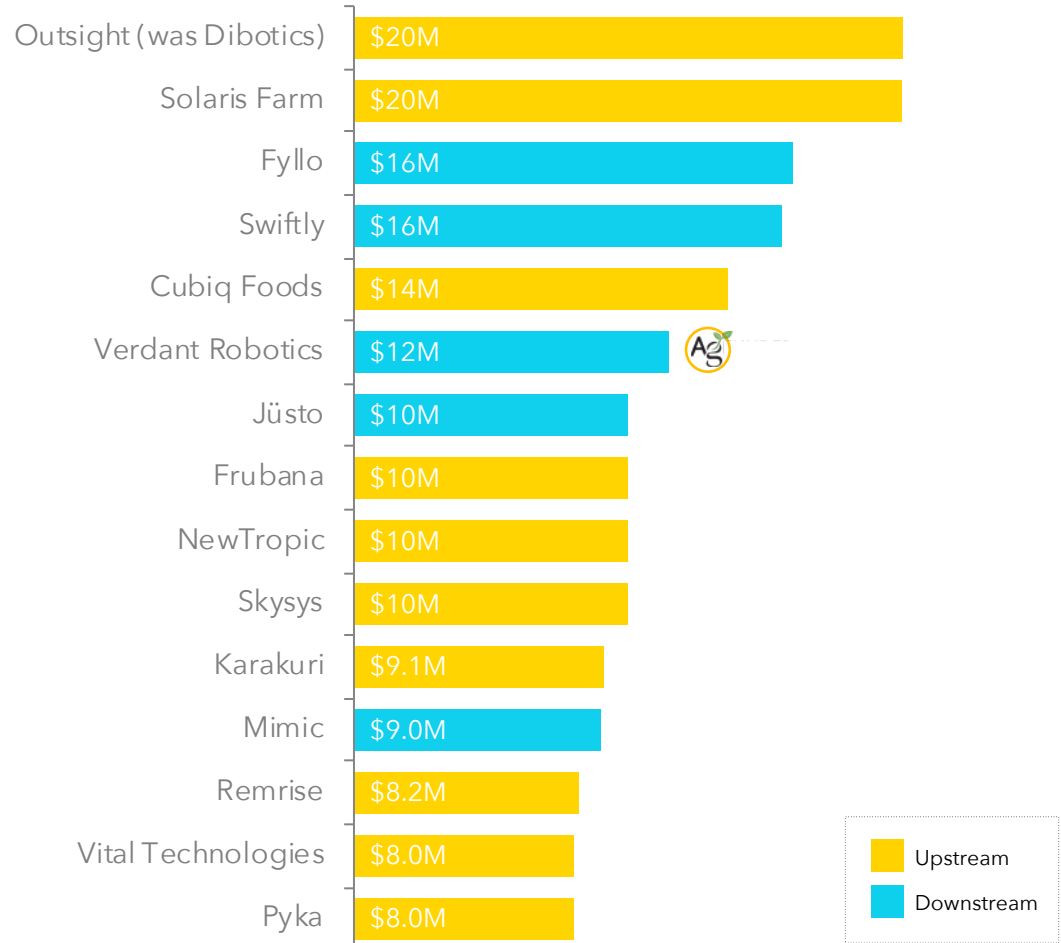
Upstream companies dominated deal activity at the seed stage, with 609 upstream companies raising \$563m compared to 452 downstream companies raising only \$281m.

In the top 15 list, the upstream companies secured investor backing for smart sensors, cannabis-tech, cellular ingredients, robotics, autonomous vehicles and on-farm logistics. France's Outsight (formerly Dibotics) makes sensors for data analytics while US-based Solaris Farm is a high-tech, greenhouse-based cannabis grower.

Downstream companies raised for in-store and offsite retail tech, online grocery and egrocery.

Three of the top Seed deals—Frubana, Justo and Mimic—are focused on food logistics in Latin America.

All top 15 deals raised far more than the median Seed stage round of \$0.3m.



# Top 15 Series A Deals

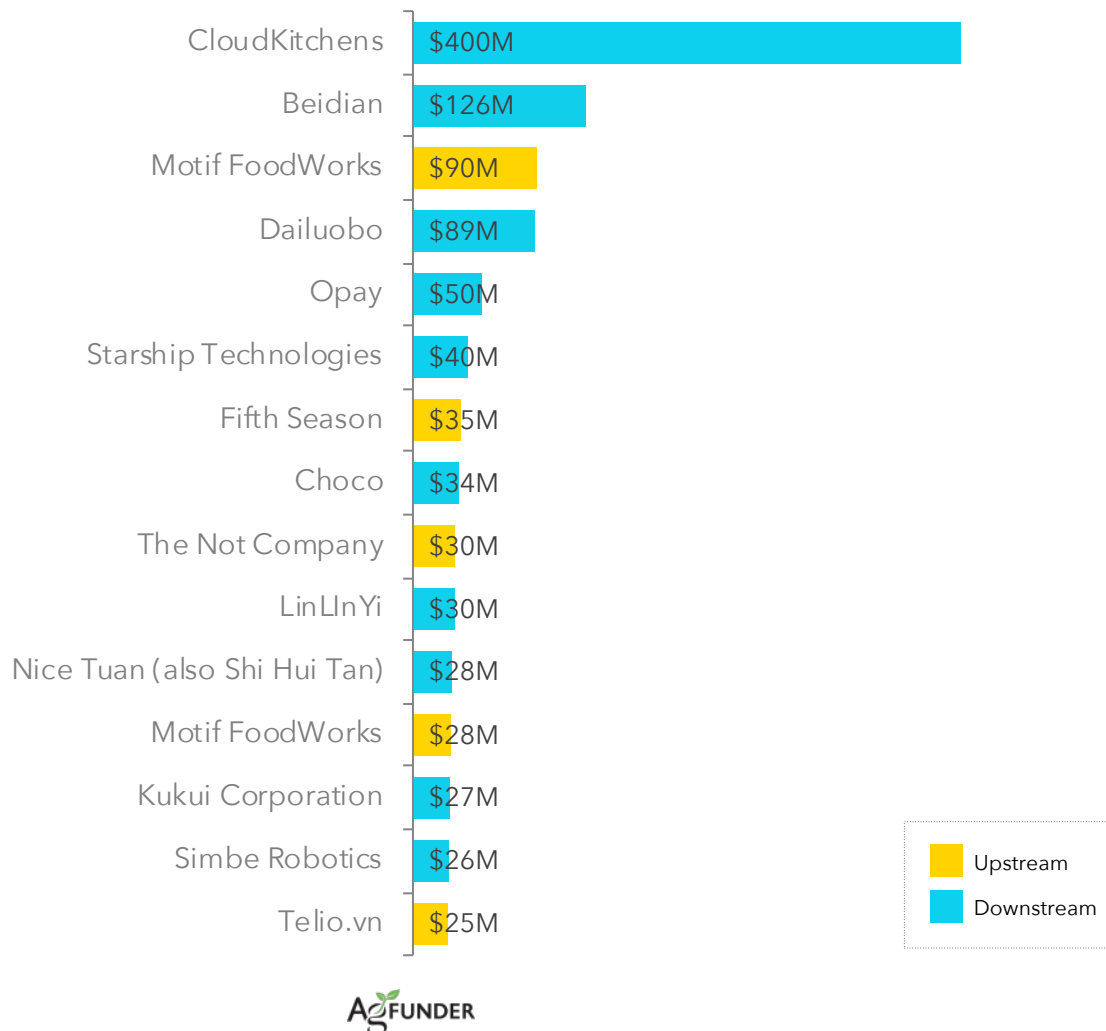
The Upstream sector's dominance stops at the earliest stage of funding. From Series A and up, downstream deals take the lead.

Skewing the Series A aggregate deal data is US-based CloudKitchens, Uber founder Travis Kalanic's new startup.

Motif (US) is a plant-based ingredients company spun out of Gingko Bioworks. The company raised its \$90m round in February, then secured an additional \$27.5 in August from a new crop of investors.

US and China-based companies ruled Series A funding. Nigeria's digital payments company Opay claimed the fifth spot, while Germany's Choco, Chile's Not Company, and Vietnam's Telio also made the list.

The fifth largest deal, Opay, is a OPay Nigeria-based mobile payment service that allows customers to transfer money, pay bills and order groceries..



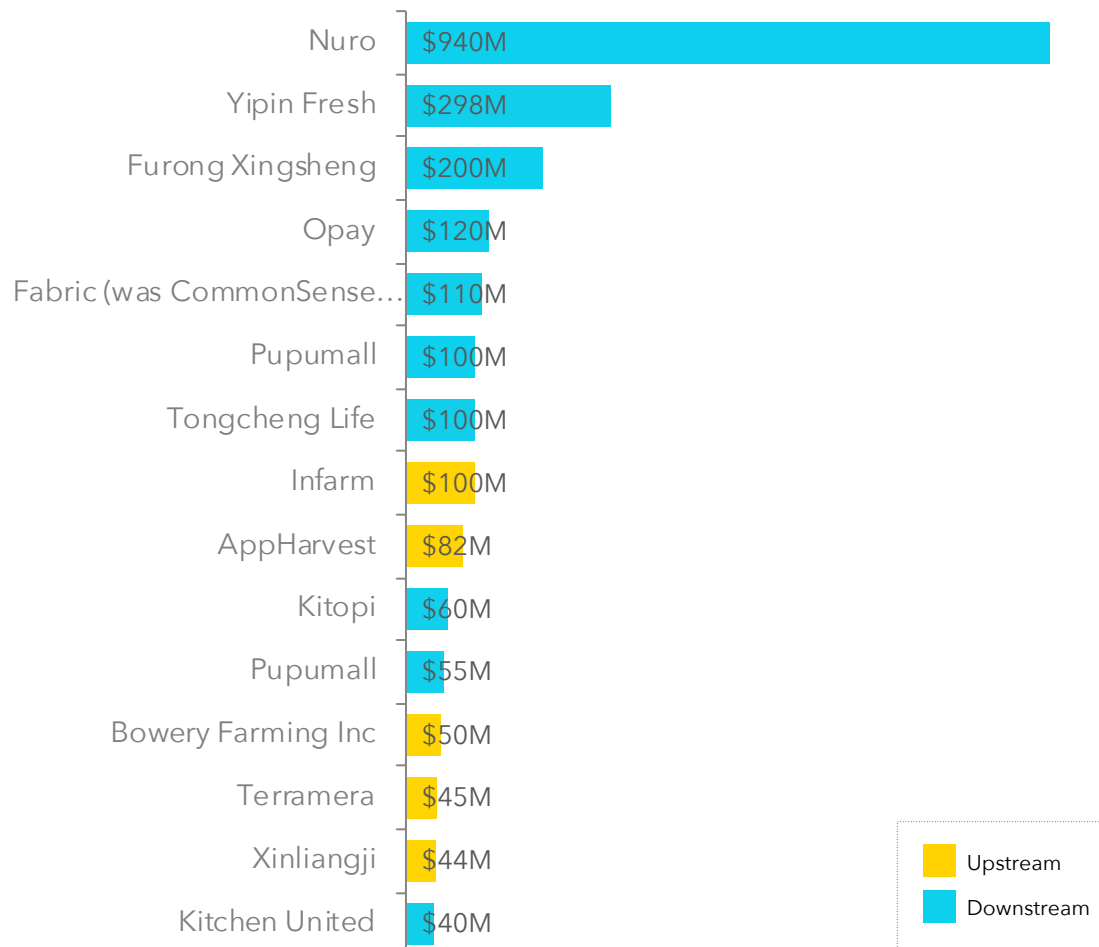
# Top 15 Series B Deals

Like the Series A funding data, Series B data is skewed by a significant outlier. US-based autonomous delivery vehicles company Nuro raised its nearly ten-figure round led by SoftBank's Vision Fund in February. It's not a pure agrifood play: the company's vehicles are designed for transport of food but not exclusively for the agrifood sector.

Two eGrocers in China, Yipin Fresh and Furong Xingsheng, claimed the top two and three spots in the top Series B rounds.

In the fourth spot, Nigeria-based Opay followed its Series A round in July with a \$120m in a Series B in November.

While downstream companies captured two-thirds of the spots on this list, three of the upstream companies (AppHarvest, InFarm and Bowery) are indoor farming ventures. China's Xinliangji is a seafood supplier.



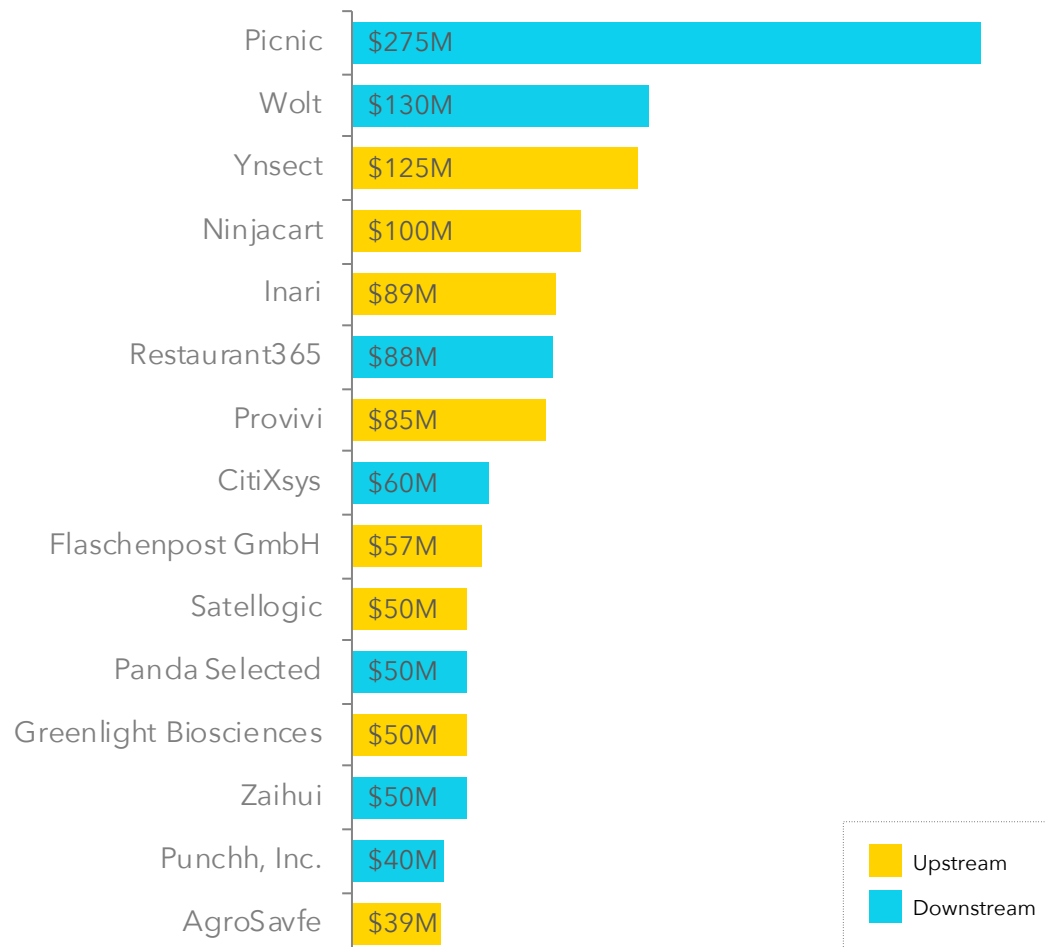
# Top 15 Series C Deals

There were only 61 Series C deals in agrifood tech VC, and the top 15 account for 68.4% of total Series C funding.

European companies showed up in force. Two European delivery companies topped the list: Netherlands-based Picnic and Finland-based Wolt. France's Ynsect and its insect-based farming operations claimed the third spot. Companies from Switzerland (Flaschenpost) and Belgium (Agrosavfe) also made the list.

Three companies on this list raised Series C funding for software solutions for the restaurant and hospitality sector: US-based Restaurant365 and CitiXsys and China-based Zaihui. There were also a number of biotech companies: US-based Provivi and Greenlight Biosciences and Belgium's Agrosavfe. Also in the US, Inari is focused on plant-breeding.

India's direct-from-farm delivery giant Ninjacart is the only company to make the list from outside the US, Europe and China.

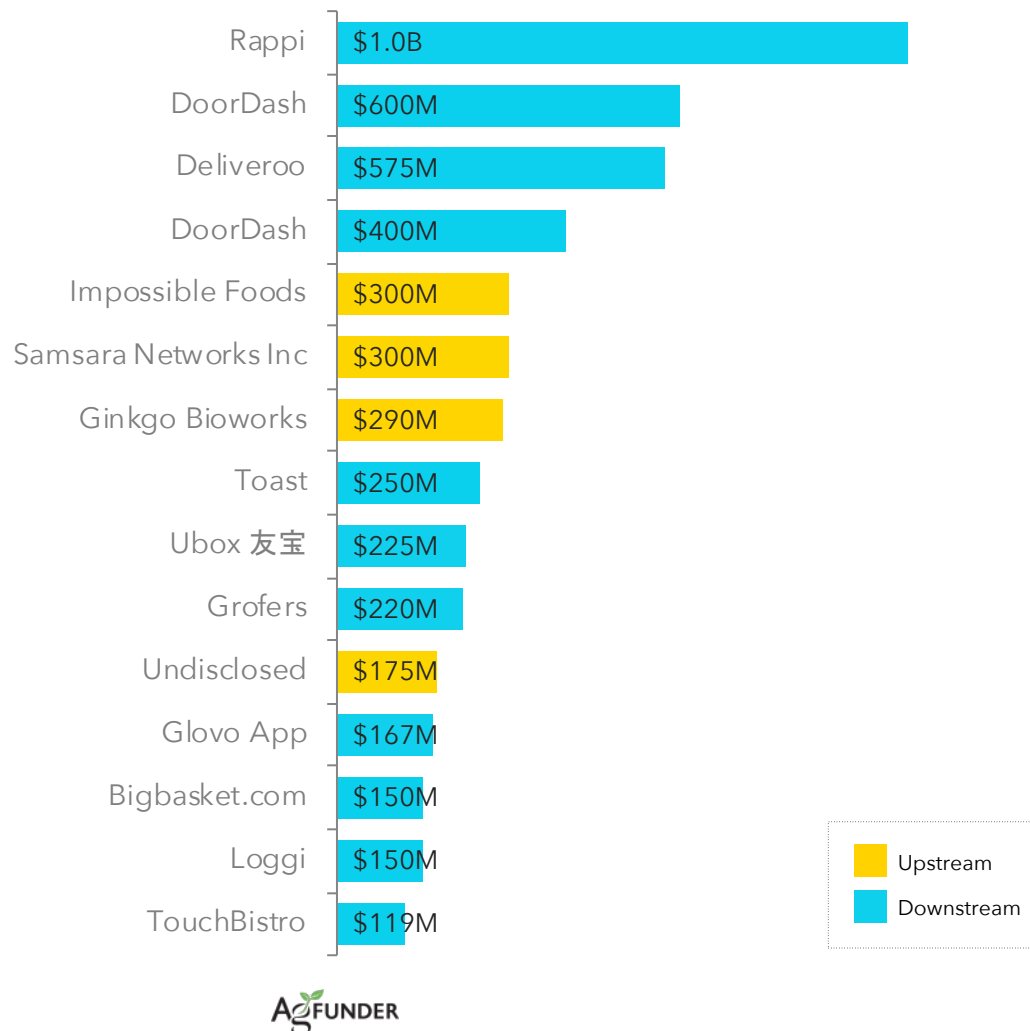




# Top 15 Late Stage Deals

This chart accounts for deals at Series E stage or bigger. It includes private equity and some micro-cap listed companies with a valuation of less than \$350 million, which we consider to be young and still startup in nature. That said, none of the deals that made the top 15 list are in fact private equity or listed microcaps, highlighting how far venture capital can go.

This list can be largely summed in two words: delivery companies. And they are geographically diverse. The top deal, with a 10-figure funding round, is Colombia's Rappi. US-based DoorDash raised two late-stage rounds in the first half of the year: a Series F in February and Series G in May. Two are based in Europe (Deliveroo and Glovo), two in India (Grofers and BigBasket) and one in Brazil (Loggi).





# Deals by Geography

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Image Courtesy of Trace Genomics

# Key insights – by Geography

1. While our reporting of other regions globally has improved thanks to our data partners (see page 8), there's no doubt agri-foodtech is now a globally diverse investment sector. Increasingly US-based investors are investing across borders as opportunities in markets like Asia and Latin America become too hard to ignore. A recent example is Acre VP and Fall Line Capital's first overseas investment in Argentinian ag marketplace Agrofy. At the same time, major investors from other regions, especially Asia with the likes of SoftBank and Temasek, are investing across the globe.
2. US deals now account for 35% of global deal activity while countries like China, India and the UK represent a combined 24% of deal activity. In dollar terms, US startups raised 44% of total funding while those other leading countries contributed a combined 28% to the funding total.
3. While the bulk of the investment in China and India's agri-foodtech space was directed at the food delivery and retail spaces, the UK is more diversified with some leading startups in other areas like Novel Farming Systems, alternative proteins, fintech for ag, and agribusiness marketplaces.
4. Israel continues to punch above its weight contributing the fifth largest number of deals to the global ecosystem over the year with a diversified pool of investments across most categories.
5. 2019 was a breakout year for the Latin American region, as it closed \$1.4 billion in funding across 40% more deals than in 2018. That's more than the LatAm VC industry overall raised in 2017. Investment in the region represented 4.5% of deal activity and 7.3% of dollar funding in 2019, compared to 3.9% and 7% in 2018 respectively. Colombia's \$1 billion for Rappi took a large chunk of the funding total, but the increase in deal activity is notable. Argentina was a particular driver of that growth in deal activity, a fantastic achievement considering the political turmoil of the second half of the year.
6. Deal activity dropped in most countries, confirming the general trend for a pullback in funding to the sector. India, Brazil, Ireland, Australia, Singapore, Indonesia, and Argentina were among the exceptions to that rule.





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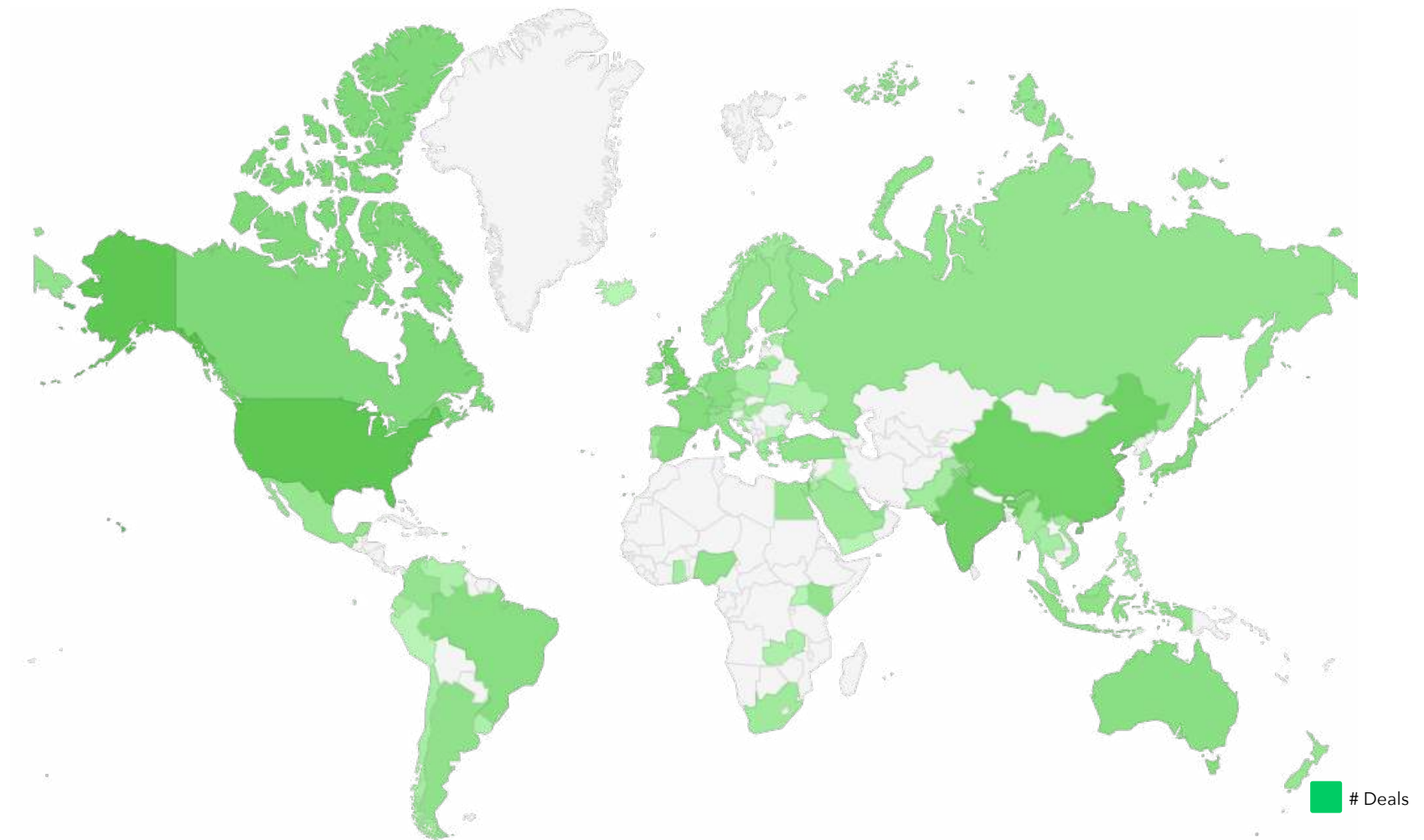


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# Global Investment World Map





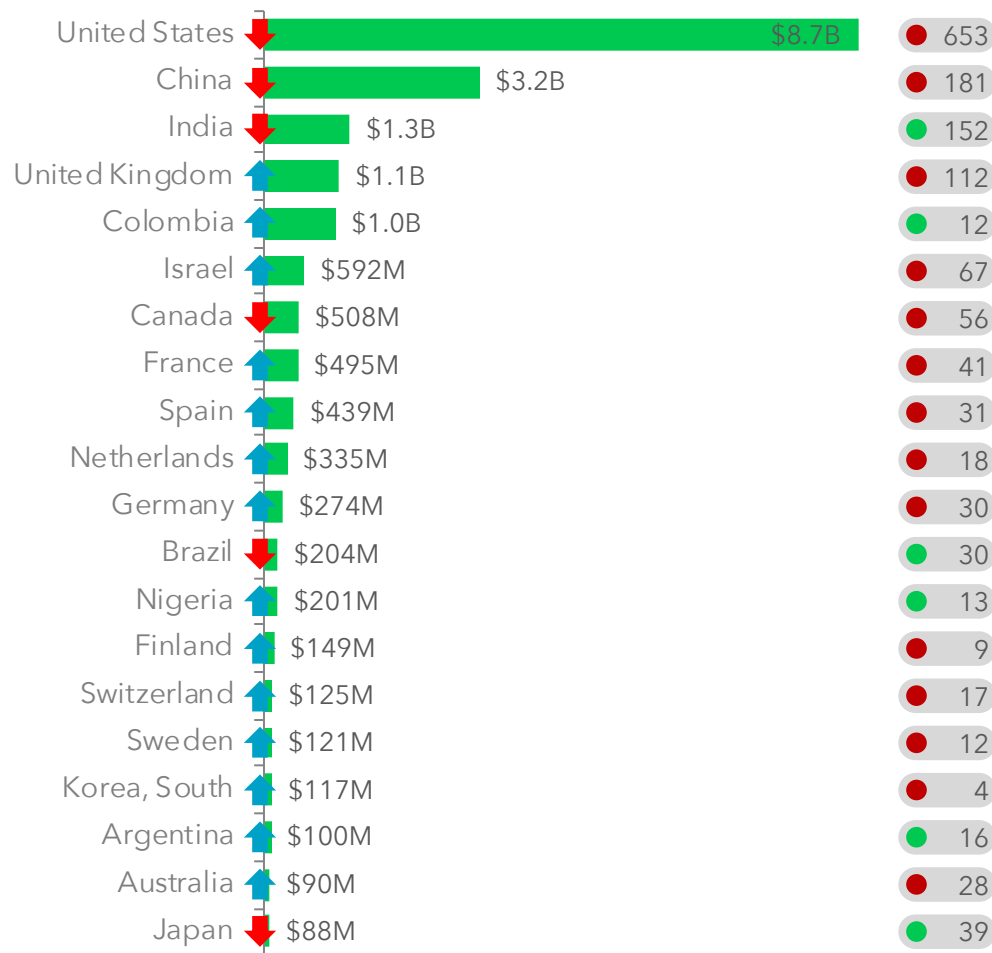
# Top 20 Countries by Investment

While most regions experienced a pullback in deal activity, there was notable growth in funding for several countries. The biggest growth in dollar terms came from Colombia, UK, Israel, The Netherlands, Nigeria, Spain, Germany, France, Argentina, Sweden, and South Korea.

By deal count, Japan, India, Mexico, Kenya, Nigeria, Argentina, Singapore, Kuwait, and the Czech Republic grew the most.

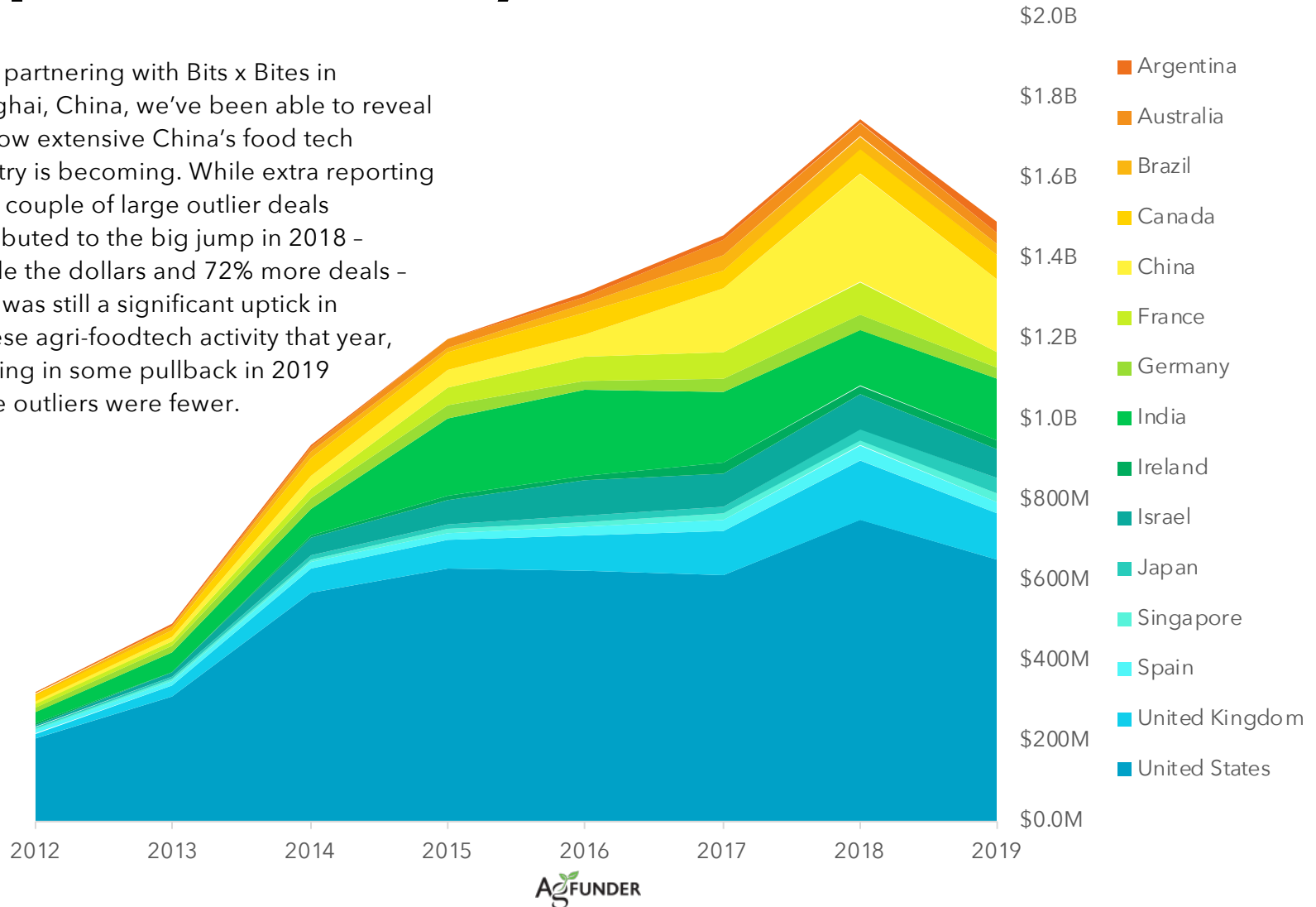
Regionally, deal activity increased the most in Latin America (36% to 83 deals) and increased 31% in Africa to 46 deals. But in all other regions, startups closed fewer deals than in 2018.

In dollar terms it was a different story due to large deals pushing totals up. African startups raised more than double what they did in 2018 to \$282m; European startup investment increased 94% to \$3.3bn; and Latin America startups raised \$1.4bn, up 32% year-over-year.



# Top 20 Countries by Investment

Since partnering with Bits x Bites in Shanghai, China, we've been able to reveal just how extensive China's food tech industry is becoming. While extra reporting and a couple of large outlier deals contributed to the big jump in 2018 – double the dollars and 72% more deals – there was still a significant uptick in Chinese agri-foodtech activity that year, resulting in some pullback in 2019 where outliers were fewer.



# Top 15 Non-US Deals

This list is much more diverse globally than in 2018 when it was dominated by Chinese deals with a strong showing from India.

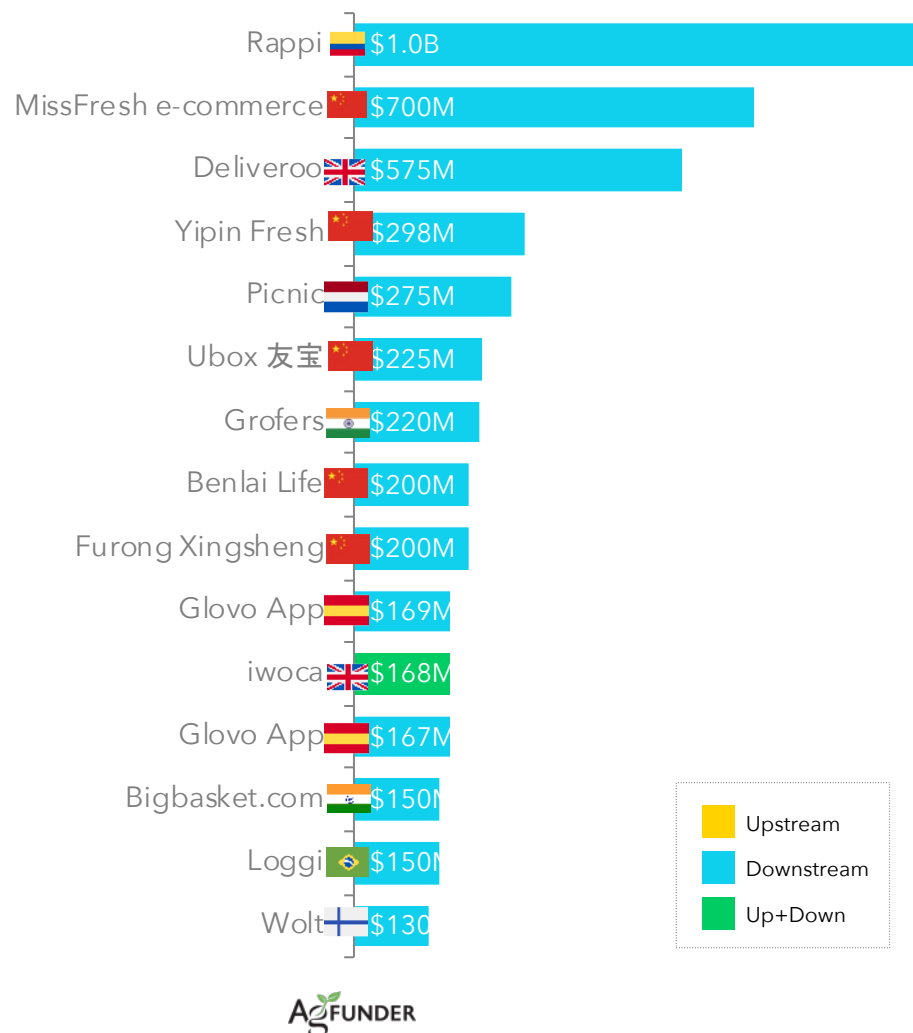
This added geographical diversity highlights how the industry is maturing across the globe and the wealth of funding available for high-growth downstream startups.

Large, international and corporate investors were involved in many of these deals including SoftBank, T. Rowe Price, KKR, Microsoft, Amazon, and Sequoia.

Spain's delivery anything app Glovo did a Series D in April and a Series E in December, weirdly of similar size.

Iwoca is a fintech play offering credit to small businesses across Europe, including many in the food sector.

In a rare showing from Finland, Wolt raised the funding to expand its AI-driven restaurant marketplace across Europe.



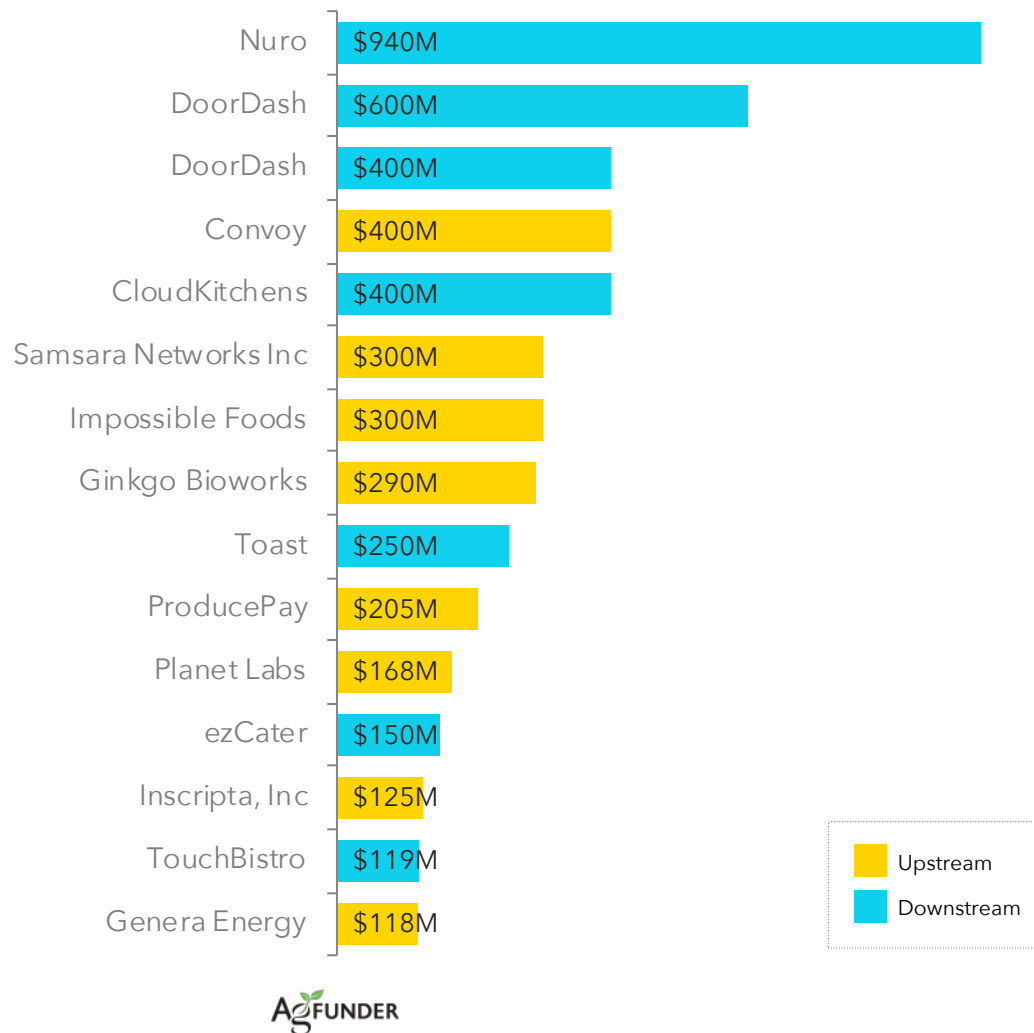
# Top 15 US Deals

It's interesting to see the weighting towards upstream deals in the US leaderboard despite the dominance of downstream deals overall. This highlights the diversification of the US agri-foodtech market.

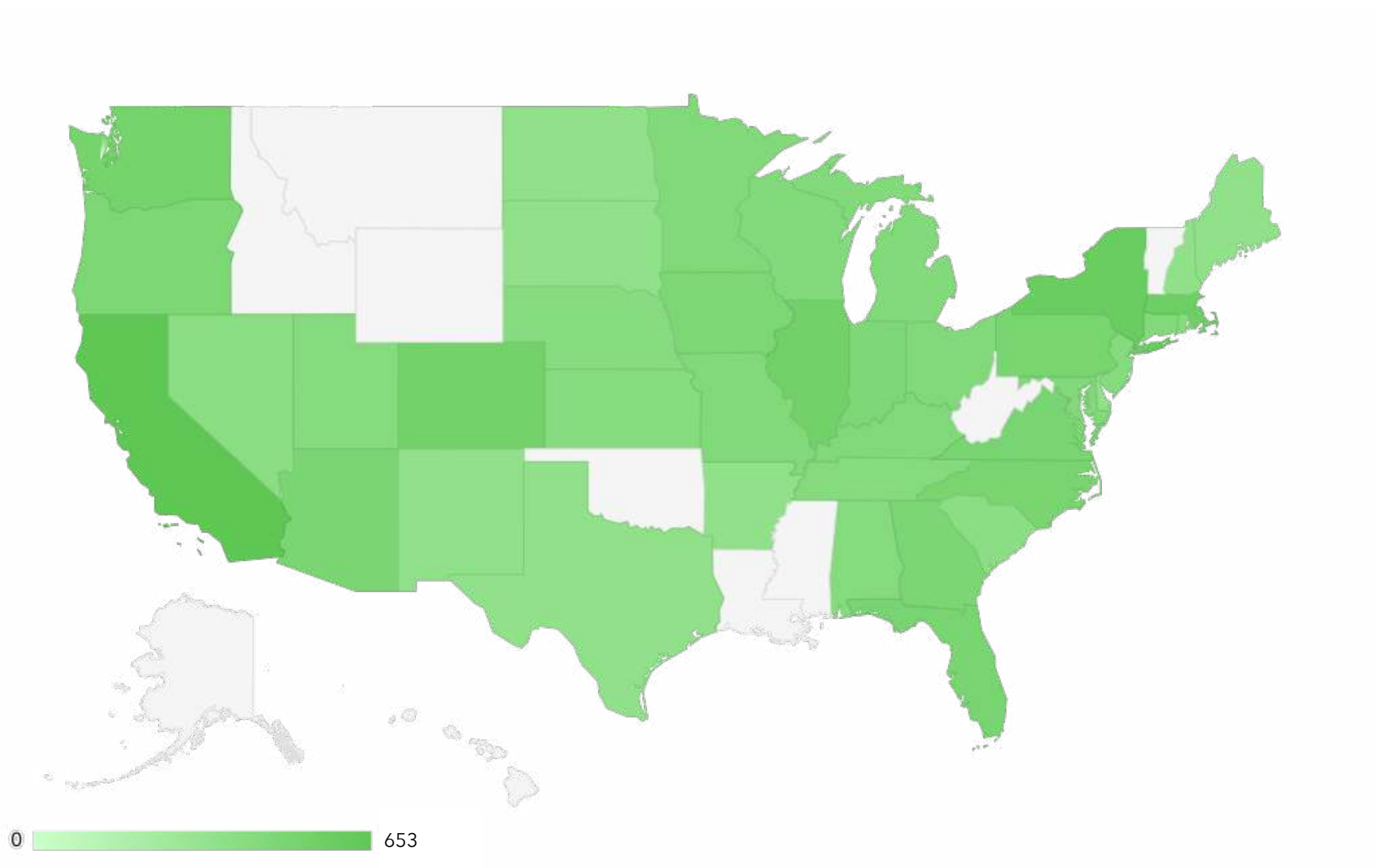
Nuro's SoftBank-backed round valued the company at \$2.7 billion and went towards expanding the company's fleet of self-driving delivery robots, including its partnership with supermarket chain Krogers. It also planned to expand beyond California.

Both Samsara Networks and Convoy are Midstream Tech transport and logistics technologies, while Toast is an In-store retail technology.

ProducePay, Farmers Business Network and Planet Labs are all farm technologies but in different segments covering online product sales and lending, and satellite data.



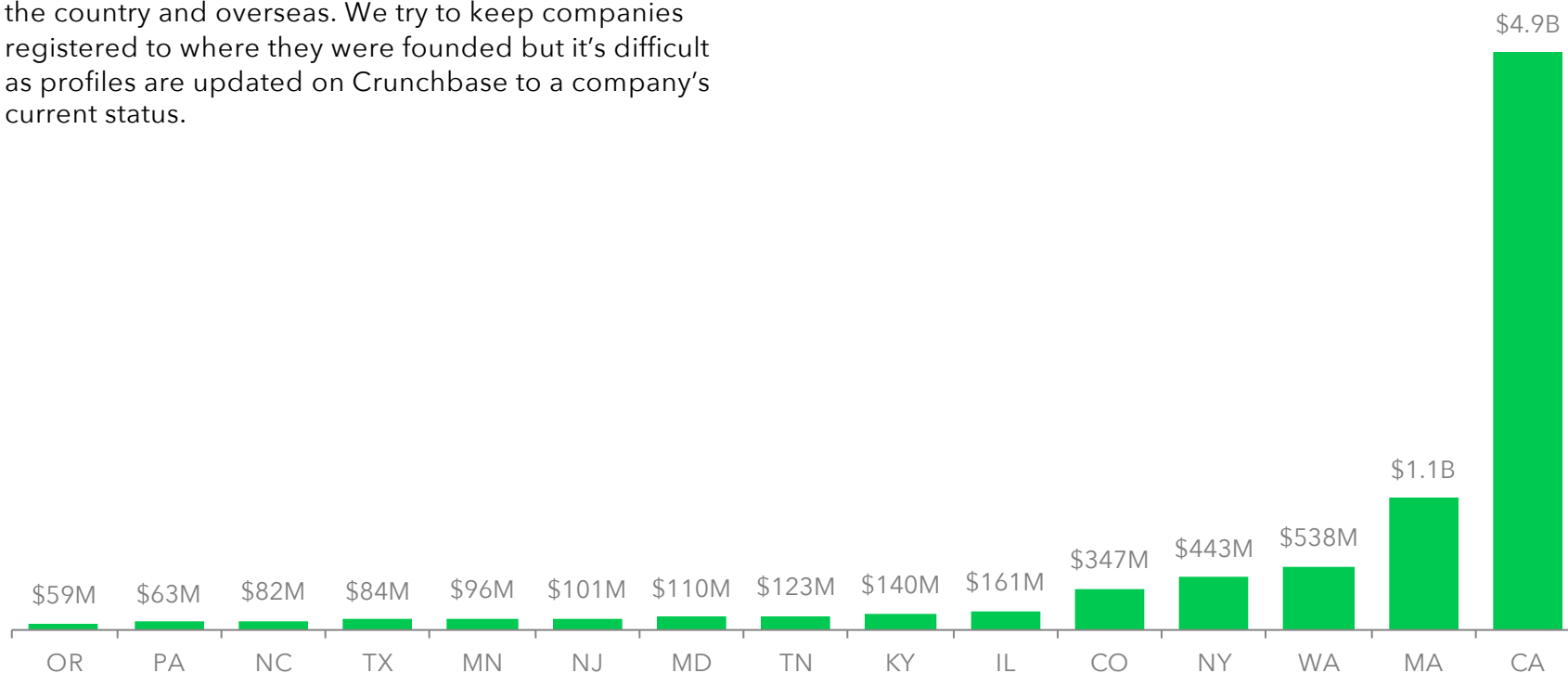
# U.S. Investments: Number of Deals By State Map



# U.S. Investments : Value of Investments by State

Unsurprisingly, California remains the most active state for tech startups, taking in over \$1bn more than all other states combined.

The results are slightly skewed by startups that move their headquarters to Silicon Valley from other parts of the country and overseas. We try to keep companies registered to where they were founded but it's difficult as profiles are updated on Crunchbase to a company's current status.







# Investor Activity


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Image Courtesy of Aerobotics

# Key insights – Investor Activity


1. Investors are diversifying more than ever, clearly highlighted in the venture capital leader board this year, which includes many more generalist investors, and fewer agri-foodtech specialists than last year. Many of these generalist investors are joining food delivery and retail tech deals that will feel more similar to other sectors, and the same could be said for the alternative protein space, which will look and feel a lot like CPG for some investors.
2. Notable additions to the leaderboard are SoftBank and Temasek, two Asia-based groups that have made headlines with their growing global portfolios. Both of them participated in US restaurant marketplace DoorDash's \$1 billion round and they both made bets in our new category "Cloud Retail Infrastructure" for technologies enabling the on-demand food space in Israel (Fabric - Temasek), Latin America (Rappi and Loggi - both SoftBank), and the US (Nuro - SoftBank). Other investments from the SoftBank Group were mostly in the food delivery category, while Temasek invested in alternative protein, ag biotech, and vertical farming.
3. S2G Ventures continues to lead the specialist agri-foodtech investor group, investing in a diverse range of deals across the supply chain and soon to be adding to its group of funds with an aquaculture-focused vehicle.
4. We at AgFunder have continued to expand our portfolio, investing in deals as diverse as an AI-powered point-of-sale technology for quick-serve restaurants (Tray) to smallholder farmer networks and ag marketplaces in Africa (Wefarm) and India (DeHaat).
5. Anterra Capital returned to the leader board this year with a number of unreported investments, including some companies they have created internally in a quasi-incubator model. Most of them are Ag Biotech and none of them are downstream.
6. While the number of accelerators dedicated to the space continues to climb – including our own new entrant GROW out of Singapore, Asia – agri-foodtech generalist accelerators continue to play an important role in supporting startups at the early stages globally.

# Most Active Accelerator Funds

RANK	INVESTOR	LOCATION	# INVESTMENTS
1	SOSV	Princeton, NJ	44*
2	YCombinator	Mountain View, CA	38*
3	500 Startups	San Francisco, CA	31*
4	TechStars	Global	14
5	The Yield Lab	St Louis, MO, Rosario, Argentina	13
6	Hatch	Bergen, Norway, Singapore	12
7	Big Idea Ventures	Singapore, New York, US	10
8	Brinc	Global	11
 10	GROW Accelerator	Singapore	9
11	Plug & Play Ventures	Global	8
12	Radicle Sparklabs Cultiv8	San Diego, US Sydney, Australia	7

\*includes investments made by multiple accelerators and/or follow-on

# Most Active Venture Capital Fund Managers\*

RANK	INVESTOR	LOCATION	# INVESTMENTS
1	S2G Ventures	Chicago, IL	22
 2	AgFunder	San Francisco, CA	15
3	Anterra Capital	Amsterdam, HO	12
4	Tiger Global Management Temasek	New York, NY Singapore, Global	10
5	Blume Ventures Omnivore SoftBank DCVC	Mumbai, IN Mumbai IN Global San Francisco, CA	8
6	Canary Global Founders Capital IM Calcutta Innovation Park Sofinnova Partners InnovaMemphis	Sao Paolo, BR Europe Calcutta, IN Menlo Park, CA Memphis, Tennessee	7
7	InnoVen Capital Tencent Holdings GGV Capital CPT Capital Bpifrance	Mumbai, India Shenzhen, China Menlo Park, CA London, UK France	6

\*by number of companies invested in, including follow-ons



**M & A**



**VERDANT**  
P A R T N E R S <sup>TM</sup>



# Farm Tech M&A Insights

from **VERDANT**  
PARTNERS™

Following a very strong year for digital and precision ag M&A in 2018, there was a slight decrease in activity in 2019. We observed nearly 20 acquisition announcements during the year across digital farm management, advanced breeding and microbiology, precision equipment and mechanization, and other agriculture technologies. Precision and equipment companies, notably Raven and CNH, were the most active acquirers in 2019, purchasing both precision hardware and digital software platforms. Meanwhile, Syngenta continued its global emphasis on agtech through the purchase of Cropio. Over half of 2019's M&A deals included a US-based seller and nearly 40% were companies involved in digital farm management.

There was growth in the announcement of partnerships in lieu of acquisitions. We've still noticed inquiries from strategic input providers, equipment manufacturers, and retail distributors aggressively seeking solutions to both improve internal operations and grow markets with a comprehensive technological offering for customers, but the agtech landscape remains competitive and the large field of technology companies makes the identification and selection of acquisition targets challenging for big companies.

Meanwhile, technology companies have benefited by

gaining access to the customer through partnerships without having to organically build expensive distribution channels. A downside to these partnerships has been a loss of independence and technology identity for agtech companies. Further, early stage companies become dependent on their partners' supply chains, which limits future market interest from potential buyers in a competitive business sales process. This is not necessarily true for all partnerships, but some of these limiting factors could be part of the drivers for consolidation in the future.

Verdant anticipates an increase in M&A activity in 2020 driven by strategic companies' continued demand for technological innovation that can only be acquired; continued pressure on startups from investors to make returns; and a reduction in partnership structures that are undervaluing the technology companies and lacking exclusivity and desired control for strategics. We expect an uptick in deal volume for companies with resource efficiency technologies (water, energy, and sustainability), commodity monitoring and handling technology (identify preservation and specialty ingredients), and profitability optimization technology. The current year is off to a strong start with several deal announcements, which we foresee as an indication of greater consolidation in 2020.



# Farm Tech M&A and Exits | 2019

Target	Target Country	Acquirer	Technology	Est. Price	Select Investors
AgSync, Inc.	USA	Raven Industries	Farm Management SW	\$7m	
Multiform Harvest	USA	Ostara	Animal - Manure Tech		
Purfresh	USA	Wheatsheaf Group	Midstream Tech		Foundation Capital, Chrysalix VC, Chilton Investments
First Pass Technologies	Canada	Whipcord	Farm Management SW		
IntelliFarms	USA	Ag Growth International	Farm Management SW		
Midas Nursery Solutions	USA	TreeTown USA	Farm Robotics & Automation		
Precision BioSciences	USA	IPO	Ag Biotech - Gene Editing	\$145.4m	venBio Partners, Arrowmark Partners
Scan Aqua	Norway	Merck Animal Health	Aquaculture Health		
Vertical Farm Mechanics	USA	Summit Harbor Holdings	Novel Farming Systems		
Viewtrak Technologies	Canada	Reco Northern Alberta	Digital Animal Agtech		
Aratana Therapeutics	USA	Elanco Animal Health	Pet Therapeutics	\$245m	MPM Capital, Avalon Ventures, Kansas Bioscience Authority
Once Inc.	USA	Signify	Animal AgTech		
Webstech	Denmark	TeleSense	Sensing & IoT		
iLOX	Germany	Signify	Animal AgTech		
Veterinary Insights	UK	Carus Animal Health	Animal AgTech		
Medi-Productions	United Kingdom	Carus Animal Health	Digital Animal Agtech		
IDT (Animal Health Business)	Germany	Ceva Santé Animale	Animal Pharma		
Atlas Team	USA	Deveron UAS Corp.	Farm Management SW		

# Farm Tech M&A and Exits | 2019

Target	Target Country	Acquirer	Technology	Est. Price	Select Investors
Prevtec Microbia	Canada	Elanco Animal Health	Animal Biotech	\$59.9m	Investissement Quebec, Infu Capital, Desjardins-Innovatech, Telesystem
Osprey Biotechnics	USA	Phibro Animal Health	Animal Biotech		
AgDNA	Australia	CNH Industrial	Farm Management SW		
The Cropio Group	Ukraine	Syngenta	Farm Management SW		
Pro Farm Technologies	Finland	Marrone Bio Innovations	Ag Biotech	\$31.8m	
Animal Consulting Enterprises	Australia	Apiam Animal Health	Animal	\$16m	
DOT Technology Corporation	USA	Raven Industries, Inc.	Robotics		
Plant Response Biotech	USA	Koch Biological Solutions	Advanced Breeding		Monsanto Growth Ventures, Caixa Capital, Middleland Capital, Novozymes
Smart Ag	USA	Raven Industries, Inc.	Automation		Stine Seed Inc.
Decisive Farming	Canada	Telus	Farm Management SW		McRock Capital, Export Development Canada, VA Angels
Geoprospectors	Austria	CNH Industrial (AGXTEND)	Sensing & IoT		CNH Industrial
Vaki (Pentair)	Iceland	Merck Animal Health	Aquaculture sensing		Technology Development Fund
AgSense (49%)	USA	Valmont	Farm Management SW	\$42m	
CropMetrics	USA	CropX	Farm Management SW		Invest Nebraska
Greenbook	USA	AgWorld	Farm Management SW		
Affinity Management	Canada	Ag Growth International	Farm Management SW		

# Select FoodTech M&A | 2019\*

Target	Target Country	Acquirer	Technology	Est. Price	Select Investors
Caviar	USA	DoorDash (from Square)	Restaurant Marketplace	410.00	
Bite Squad	USA	Waitr	Restaurant Marketplace	321.00	
Proseal	USA	JBT	Midstream Machinery for Packaging	246.15	
Zomato (UAE)	AUE	Talabat.com	Restaurant Marketplace	195.66	
Graze	UK	Unilever	eGrocer	170.45	
Bookatable	UK	Groupe Michelin	Restaurant Tech	161.94	
Foody	Vietnam	Delivery Hero	Restaurant Tech	69.45	
PizzaPortal	Poland	Glovo	Cloud Retail Tech	68.63	Delivery Hero
Resy	USA	American Express	Restaurant Tech	51.07	
SinglePlatform	USA	TripAdvisor	Restaurant Technology	46.19	
Purfresh	USA	Wheatsheaf Group	Midstream Tech (freshness)	41.71	Tessengerlo Kerley
Restaurant Magic	USA	Par Technology	Restaurant Technology	38.00	
iKentoo	USA	Lightspeed POS	Restaurant Tech (POS)	36.66	
Good Uncle	USA	Aramark	Restaurant Marketplace	33.85	
Flyt (Payment App)	UK	Just Eat Holding	Restaurant Tech (fintech)	26.75	
AVA	USA	Koninklijke DSM	Food personalization	10.68	
Drync	USA	Bridge	Beverage Retail Tech	3.52	
City Pantry	UK	Just Eat Holding	Online Catering	17.72	QVentures

\*data from Pitchbook

# What is Agri-FoodTech?

Agrifood tech is the small but growing segment of the startup and venture capital universe that's aiming to improve or disrupt the global food and agriculture industry.

As with all industries, technology plays a key role in the operation of the agrifood sector, a \$7.8 trillion industry, responsible for feeding the planet and employing well over 40% of the global population. The pace of innovation has not kept up with other industries and today agriculture remains the least digitized of all major industries, according to McKinsey.

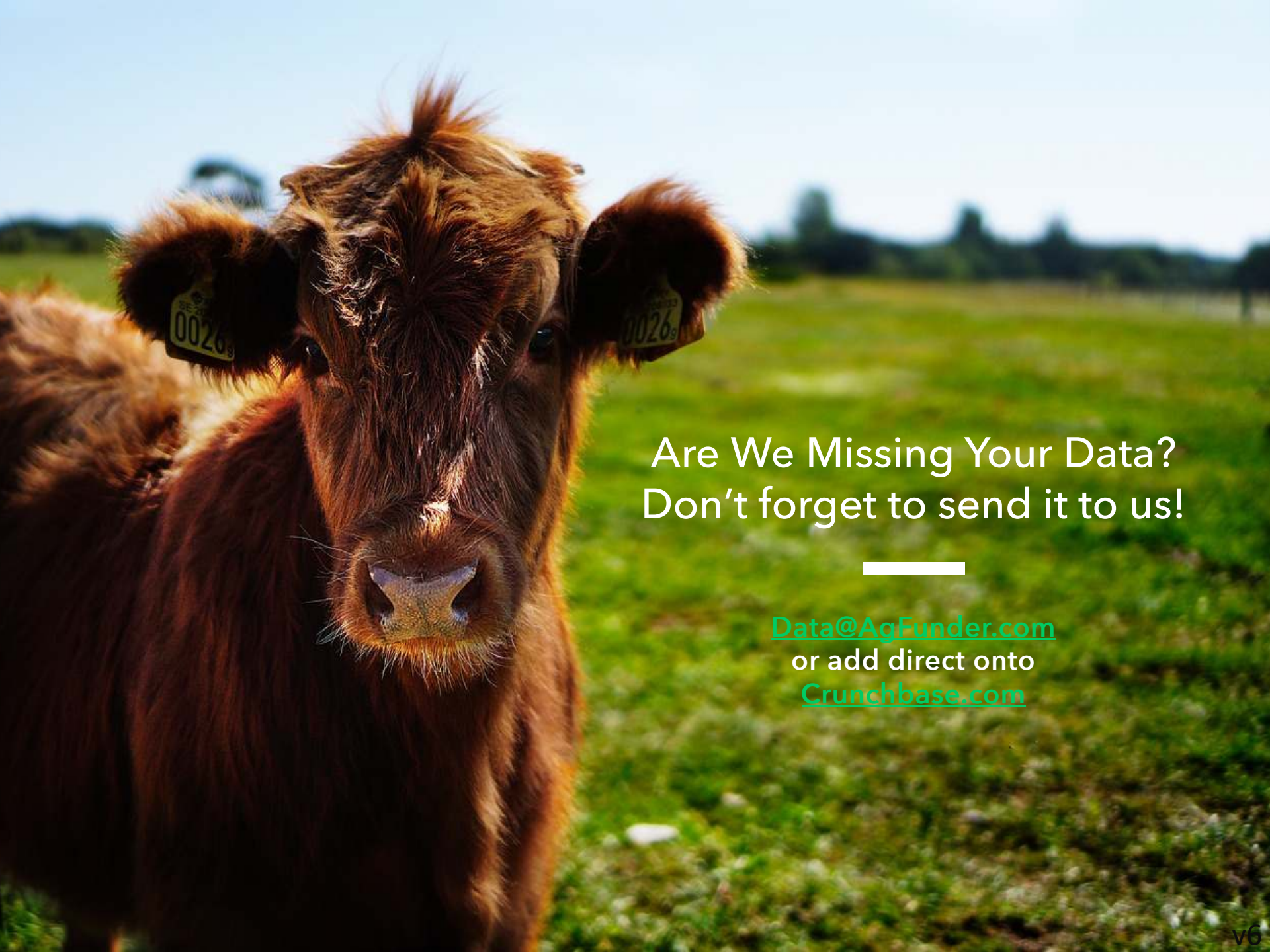
The industrial agrifood sector of today is also largely inefficient compared to other industries, with an increasing number of demands and constraints being placed on it. These pressures include a growing global population set to reach 9 billion by 2050; climate change and global warming; environmental degradation; changing consumer demands; limited natural resources; food waste; consumer health issues and chronic disease.

The need for agrifood tech innovation is greater than ever. This creates many opportunities for entrepreneurs and technologists to disrupt the industry and create new efficiencies at various points in the supply chain. Broadly speaking, agrifood tech startups are primarily aiming to solve the following challenges: food waste, Co2 emissions, chemical residues and run-off, drought, labor shortages,

health and sugar consumption, opaque supply chains and distribution inefficiencies, food safety and traceability, farm efficiency and profitability, and unsustainable meat production.

There are many ways to categorize agrifood tech startups highlighting the complexity of the industry. See page 5 for our categorization system, which we developed in consultation with venture capitalists, entrepreneurs, and other industry experts.





Are We Missing Your Data?  
Don't forget to send it to us!

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