



Contents



09

Image credits

01	Introduction
02	Key insights
03	Omnivore
04	Investment highlights Featuring startup spotlights - Ecozen, Loopworm, Varaha
05	Investment by category Featuring startup spotlights - Agrizy, S4S Technologies
07	Category definitions
08	Sources & methodology



Our partners

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AgFunder is one of the world's most active foodtech and agtech VCs with nearly. We're rethinking venture capital for the 21st century. Born online in 2013, we use technology, media and network effects to invest in and support transformational founders and technologies. Based in Silicon Valley and Singapore, we've invested in over 60 startups operating from farm-to-fork, globally.

AFN is a news site dedicated to publishing daily, original news about global food+ag+climate systems and technologies. Also known as AgFunderNews, AFN is a division within AgFunder Inc, one of the world's most active foodtech and agtech venture capital firms.

Become an insider and join our 90,000+ subscribers by signing up to our must-read weekly newsletter here. Omnivore is a venture capital firm, based in India, which funds entrepreneurs building the future of agriculture and food systems. Omnivore pioneered agritech investing in India, backing over 40 startups since 2011. Every day, Omnivore portfolio companies drive agricultural prosperity and transform food systems across India, making farming more profitable, resilient, sustainable, and climate-proof.

For exclusive updates on India's agrifood sector, subscribe here.

India agrifoodtech investing in 2022





The agrifoodtech startup ecosystem in India mirrored the global slump in venture capital funding in 2022. Funding dropped 33% to \$2.4 billion in 2022, from \$3.6 billion in 2021. Euphoric startup valuations, alongside easy money, drove investments to a record-breaking high in 2021, followed by a swift correction.

Despite the dip, the sector is a critical emerging space in India for transforming agriculture and ensuring food security. With the responsibility of sustaining 17.7% of the world's population, the country is facing the urgent task of addressing various value chain inefficiencies and mitigating the escalating effects of climate change. More than 80% of Indians live in climate-vulnerable districts. By 2030, over 17 million people in India can potentially go hungry due to climate change-induced hunger.

Upstream agrifoodtech startups were the bright spot in a bleak year, raising \$617 million, up 50% year-on-year. Startups working to integrate India's hyper-fragmented agricultural ecosystem attracted generalist investor attention including DeHaat, Waycool, and Captain Fresh. Upstream investments have also become more diverse, with increasing activity in carbon credits and farm robotics.

Despite attracting heavy funding over the past few years, investment dollars in downstream agrifoodtech startups saw a 37% dip in 2022. Once the pandemic lockdown ended, many downstream ventures struggled to maintain the accelerated pace of growth created by Covid-19 in 2020 and 2021. A highly saturated home delivery market further reduced investor interest. In the coming months, we expect fewer players to enter the downstream market and to see more M&A activity among existing companies.

Across India's agrifoodtech ecosystem, 2023 will stress test startups, while also being an ideal vintage for VCs who can enter promising deals at cheap valuations. Despite the transient headwinds, agrifoodtech in India will continue to surge ahead. We hope this report catalyzes further engagement and collaboration across this exciting space.

Happy reading!

Louisa Burwood-Taylor, Mark Kahn and the AgFunder & Omnivore Teams.





Key insights





Agrifoodtech startups in India raised a total of \$2.4 billion in 2022, down 33% from 2021.

The number of deals also declined to 133 in 2022, compared to 230 deals in 2021.

Startups innovating upstream, closer to the farmer and in the supply chain, bucked the downward trend, raising \$617 million, up 50% from \$409 million in 2021.

Farmtech also remained relatively strong, raising \$1.1 billion in 2022, only a modest 15% drop from \$1.3 billion in 2021.

Rising concerns around the impact of climate change on Indian agriculture have captured the attention of investors, catalysing efforts to deliver efficient and affordable technology solutions to smallholder farmers.

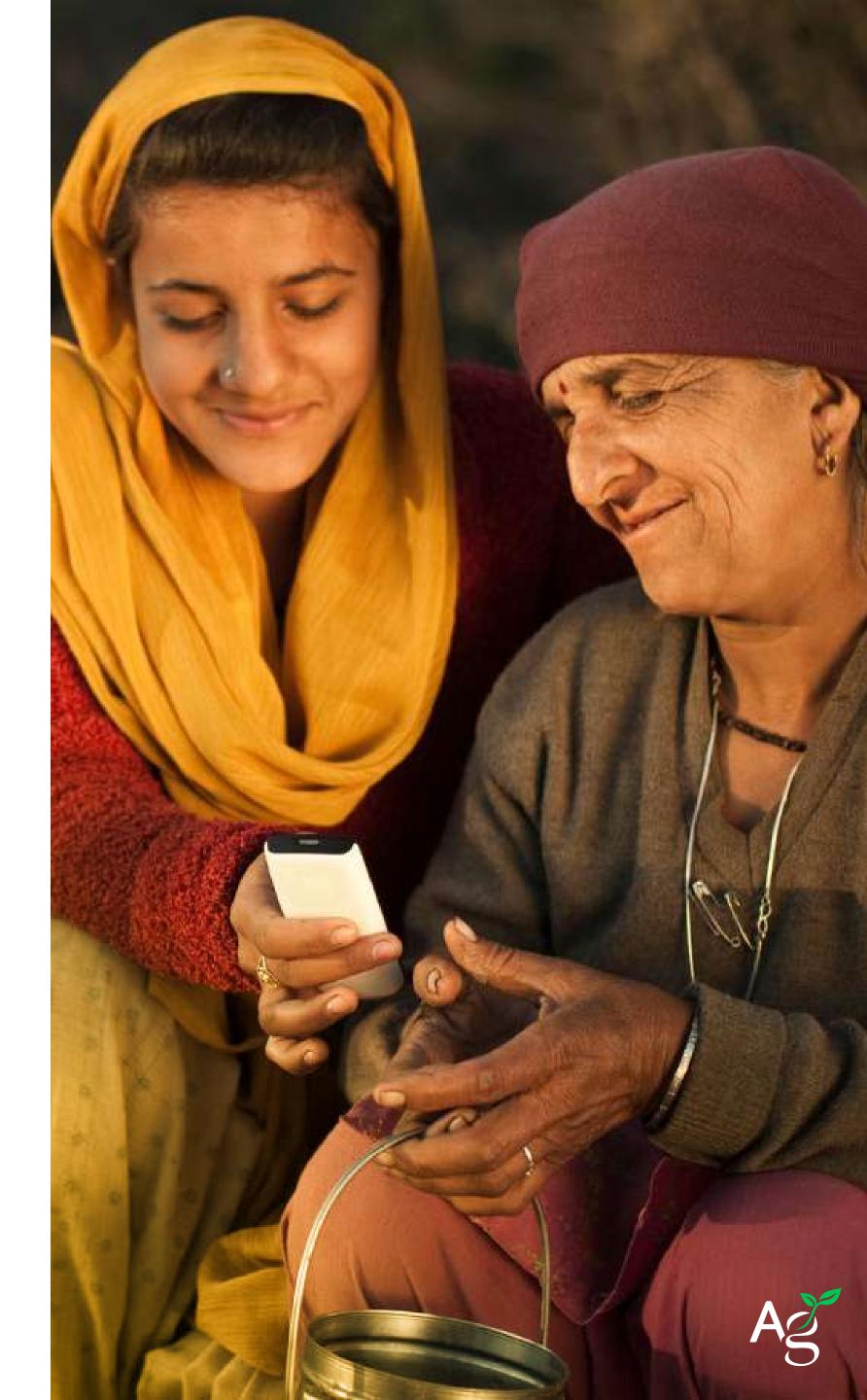
Agribusiness Marketplaces and Fintech category was the most funded upstream category.

Meal Marketplaces and eGrocery were the most funded downstream categories yet again. The capital raised by these two categories accounts for 54% of total funding in Indian agrifoodtech, with eGrocery startups landing the highest number of late-stage deals.

Downstream startups raised \$1.7 billion in 2022, a 37% decrease from \$2.6 billion in 2021. Swiggy's \$700 million late-stage deal accounts for the bulk of investment in this category.

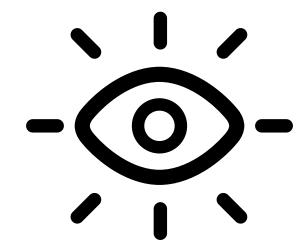
eGrocery startups raised \$776 million across 20 deals, accounting for 32% of overall agrifoodtech funding in India.

Midstream Technologies deal activity decreased. While the category remains active with \$232 million raised across 14 deals, the reduction in deals indicates multiple sub-categories achieving relative maturity.



Key insights

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BIGGEST DOWNSTREAM CATEGORY

CATEGORY

CATEGORY

S776 MILLION
FUNDING

Swiggy \$700 MILLION

FUNDING

TOTAL
AGRIFOODTECH INVESTMENTS
\$2.4 billion

TOTAL FARMTECH INVESTMENTS \$1.1 billion

BIGGEST UPSTREAM CATEGORY

Agribusiness Marketplaces and Fintech

\$428 MILLION FUNDING

Waycool
\$117 MILLION
FUNDING



Partner Omnivore





Omnivore is a venture capital firm, based in India, which funds entrepreneurs building the future of agriculture and food systems. Omnivore portfolio companies drive agricultural prosperity and transform food systems across India, making farming more profitable, resilient, sustainable, and climate-proof.

····· omnivore.vc



Omnivore pioneered agritech investing in India and is the only impact investor in South Asia focused entirely on agriculture and food systems. The firm currently manages \$120 million across two funds and invests in Indian startups developing breakthrough technologies for agriculture, food, climate, and the rural economy. Omnivore's investment thesis focuses on six core agritech themes: Farmer Platforms and Fintech, Precision Agriculture, B2B Agri Marketplaces, Farm to Consumer (F2C) Brands, Agrifood Life Sciences, and Post-Harvest Technologies.

Over the past decade, Omnivore has become the preferred investor for agritech startups in India, given its deep sectoral expertise and catalytic value addition. Every member of Omnivore's investment team has prior experience in agribusiness, agricultural development, food processing, rural marketing, and/or agricultural technology. To date, Omnivore has backed over 40 startups and impacted the lives of more than 12 million farmers.

Omnivore portfolio companies have shown great perseverance in solving legacy issues in Indian agriculture and paving the way for a more climate-resilient future. The latter is especially necessary given India's high degree of vulnerability to climate change. With agriculture representing 25% of the Indian economy and impacting the lives of 130 million farmers and their families (approximately 600 million Indians), Omnivore portfolio companies will create massive social and environmental impact in the coming years.



Omnivore has recently begun helping to catalyze the nascent agrifood life sciences ecosystem in India. In 2021, Omnivore launched a special initiative called OmniX Bio to accelerate earlystage agrifood life science startups. OmniX Bio is catalyzing venture capital towards Indian entrepreneurs working in the fields of agricultural biotechnology, novel farming systems, bioenergy and biomaterials, and innovative foods, including alternative protein. OmniX Bio also provides mentorship from global agrifood life sciences leaders, institutional partnerships, and business development support to access domestic and export sales channels.

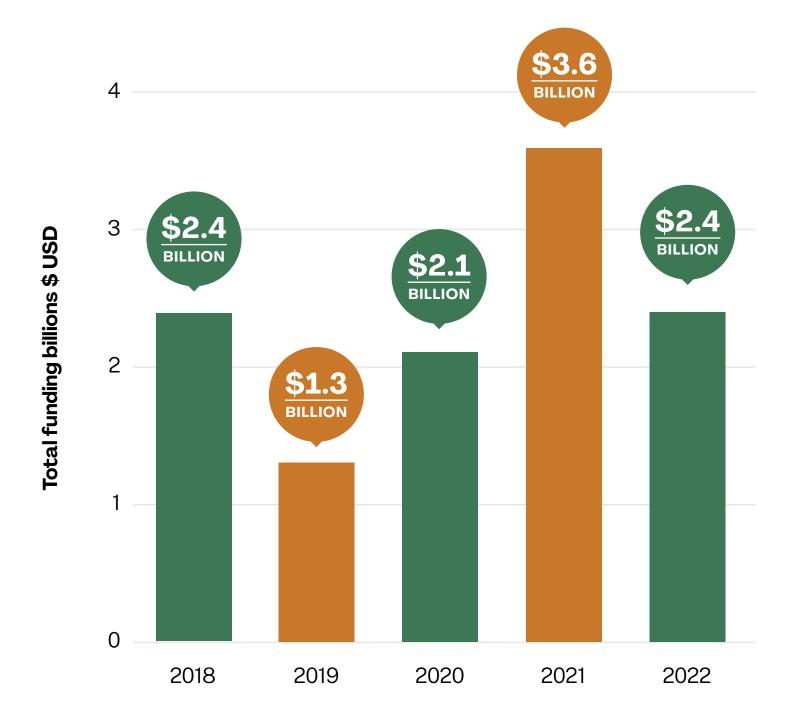


Investment highlights

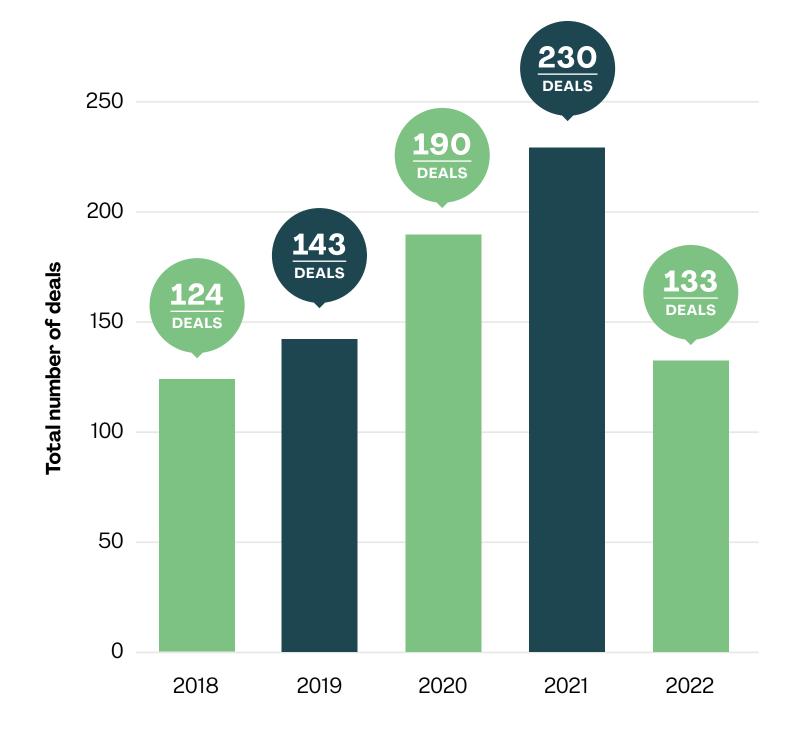
5 years of agrifoodtech in India

The global economic slowdown and relentless onslaught of climate change have had a telling impact on investment trends. While capital flows have become cautious with heightened scrutiny on various performance metrics, the past decade, especially the pandemic years, proved the importance of tech innovation to safeguard food security. India was not immune to the global slowdown and pullback in investment in 2022 but as with the global stage, there were bright spots including an increase in upstream investment. The macroeconomic headwinds had a bigger impact on downstream, consumer-facing categories, where funding declined significantly.

Funding \$USD



Deals

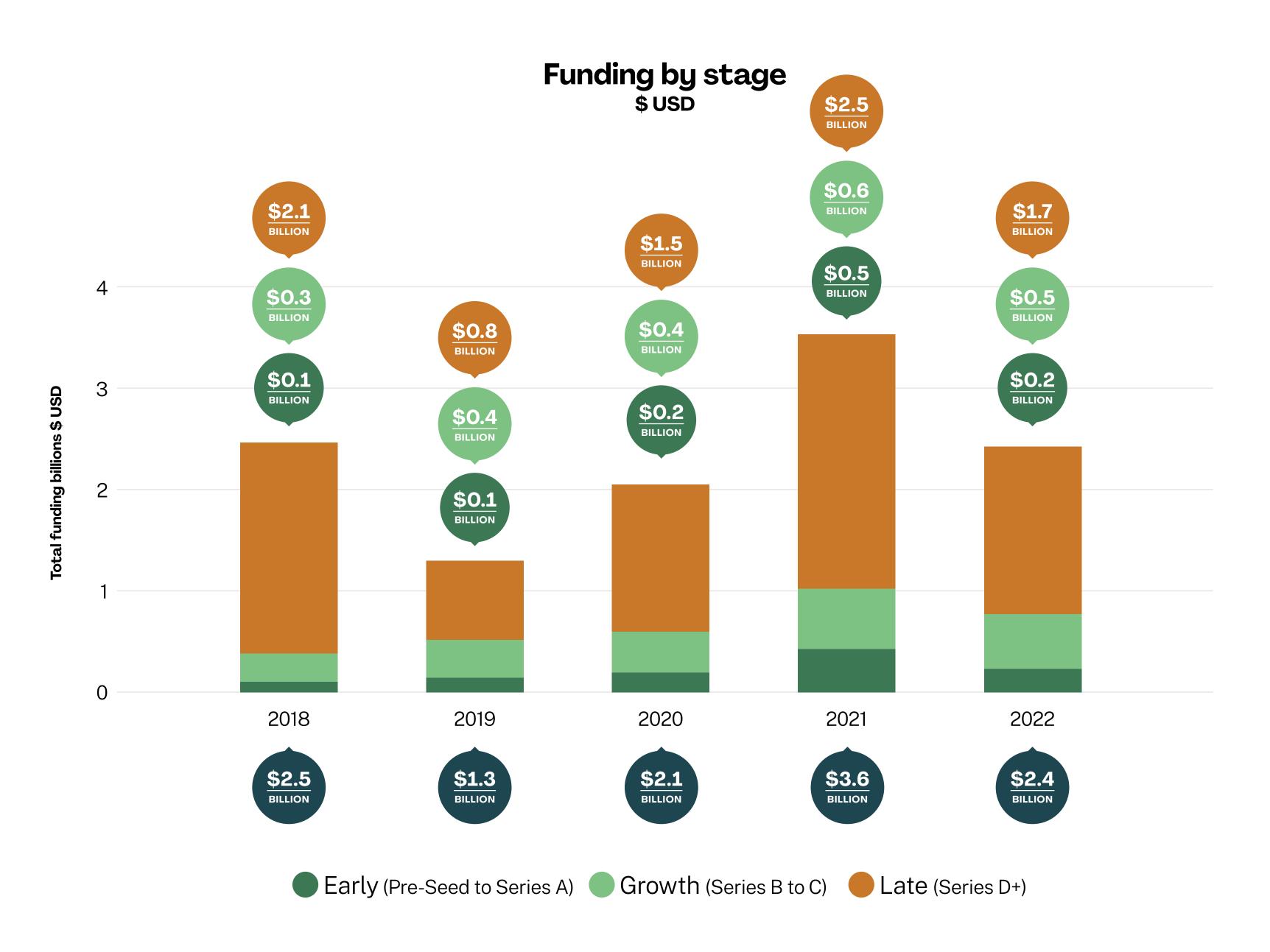




Investments by stage

2018-2022 (\$ USD)

Total investment in 2022 dipped 33% year-over-year. Late-stage investments dropped by 34% and early-stage registered a 46% decrease. Growth-stage deals showed comparative stability with an 8% decrease in capital flow.

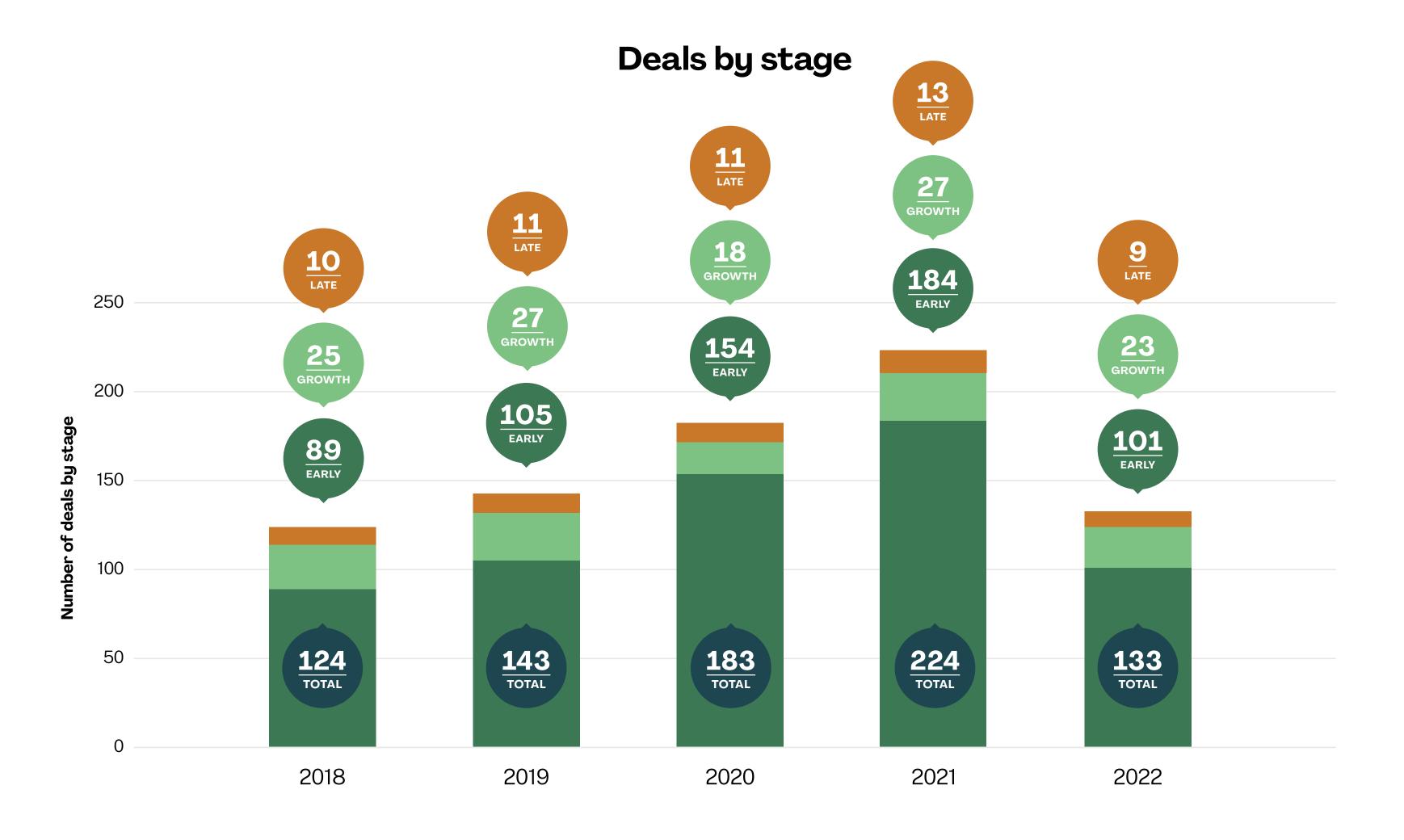




Investments by stage

2018-2022 (\$ USD)

By number of deals, the earlystages adjusted down by 45% signaling a more challenging environment for new entrants in the sector.





Investments by stage

2022 (\$ USD)

\$2.4 billion

raised in India in 2022

133 deals

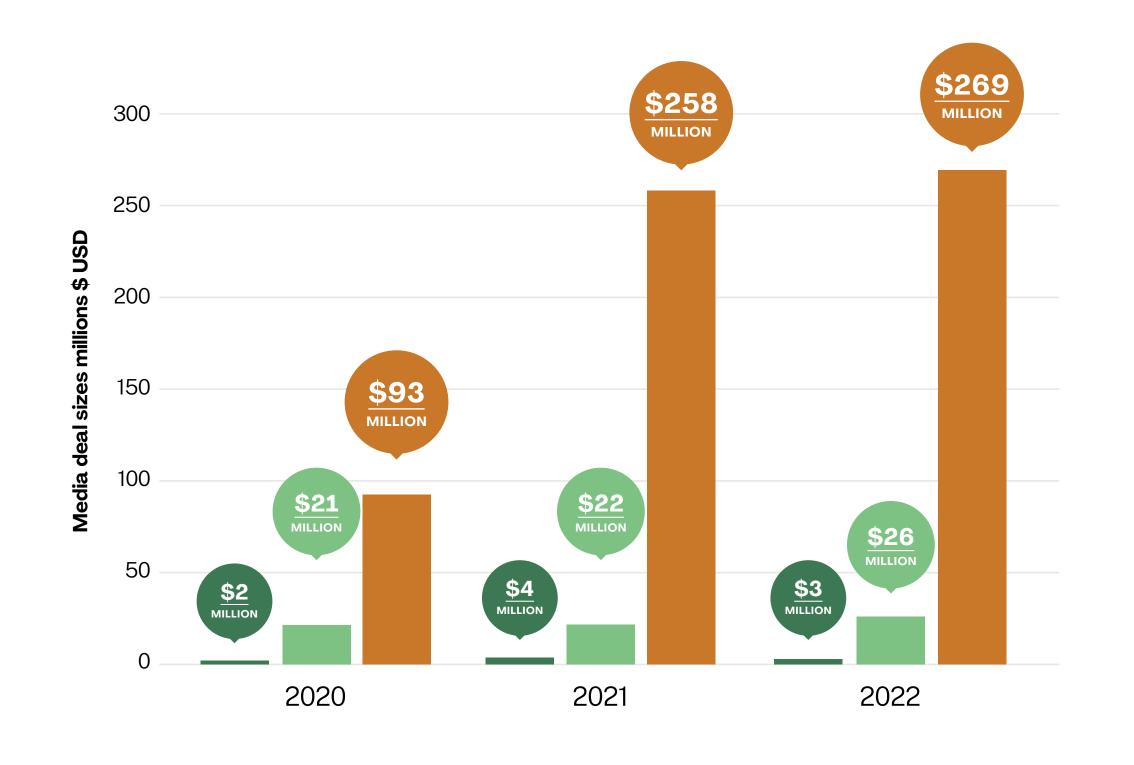
across the region in 2022

\$29.6 billion

raised globally in 2022

Median deal sizes

Largest deal raises



STAGE	COMPANIES FUNDED	RAISES
	Aquaconnect	\$15 m
	Mooofarm	\$13m
	Deep Rooted	\$12.5 m
	Eggoz	\$8.8m
	Absolute	\$100m
	Captain Fresh	\$50m
	Curefoods	\$50m
	Jai Kisan	\$50m
	Farmart	\$32m
	Swiggy	\$700m
	Dunzo	\$240m
	Zepto	\$200m
	Licious	\$150 m

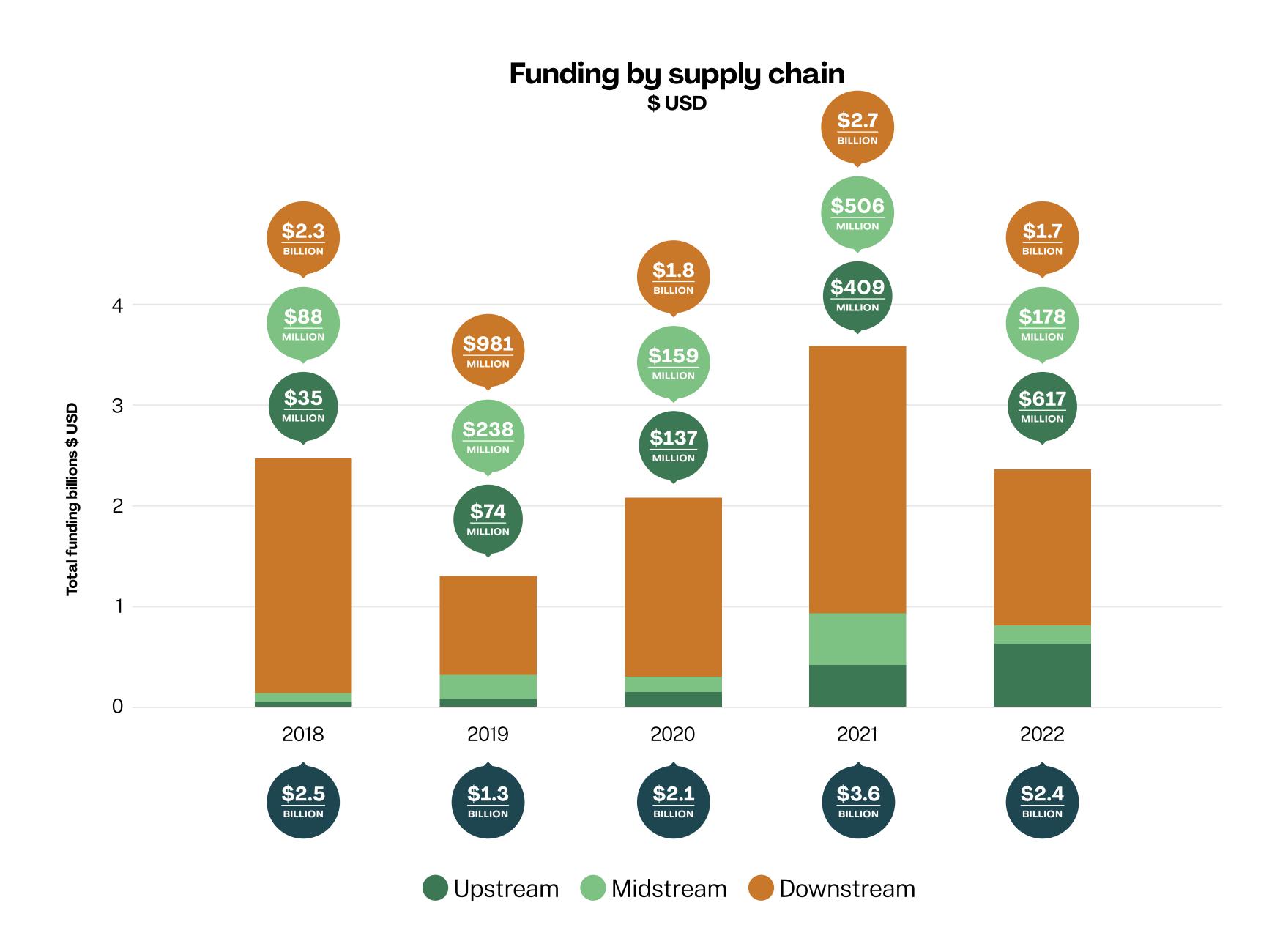




Investments by supply chain

2018 - 2022 (\$ USD)

Investment trends did not replicate across the supply chain. While funding to startups in downstream and midstream categories decreased — 37% and 65% respectively — upstream investments are on the rise, with a 50% year-over-year increase in 2022.

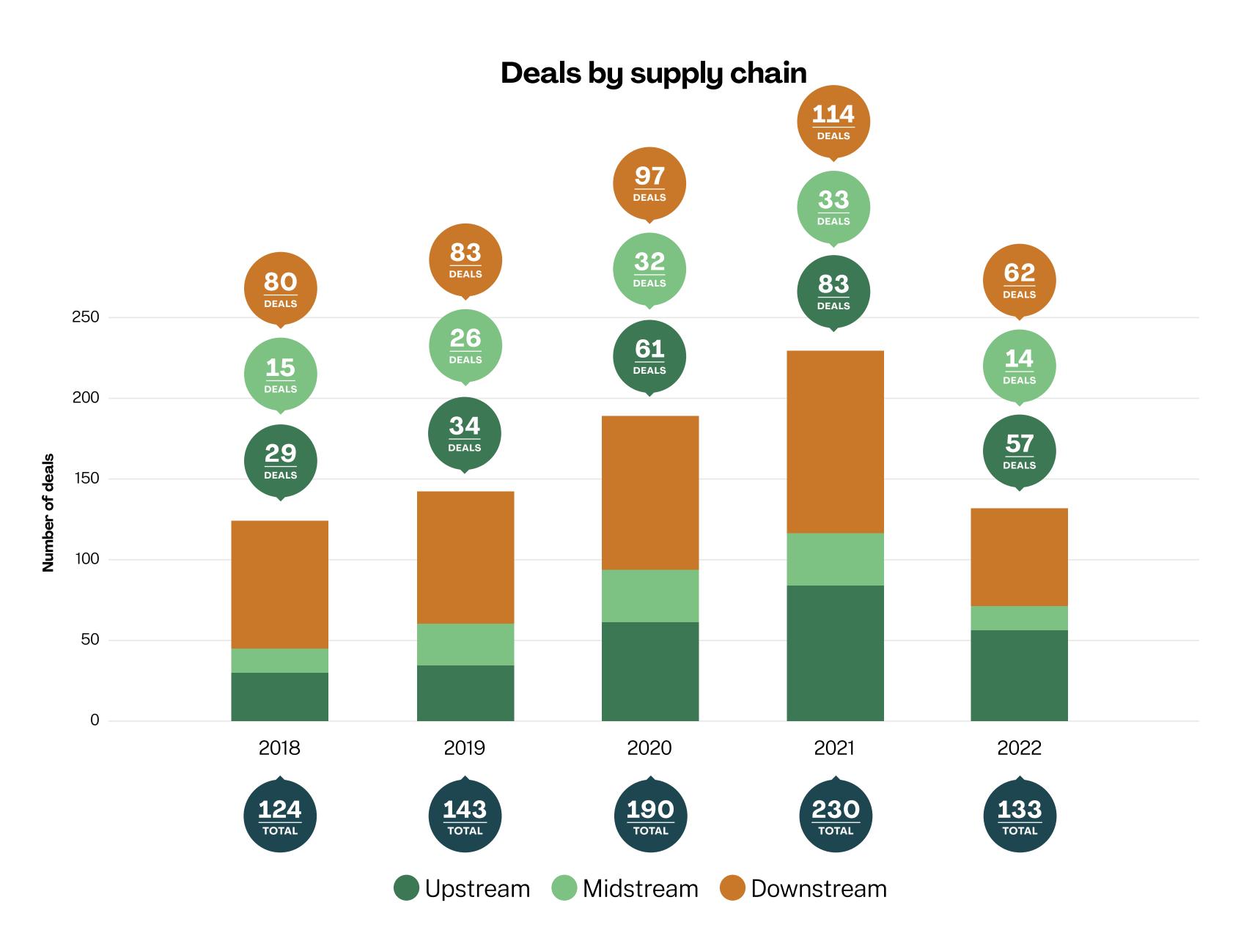




Investments by supply chain

2018 - 2022

Rising concerns about the impact of climate change on agriculture have catalysed investments in deep science tech startups that offer deep moats, deliver efficient and affordable tech solutions to smallholder farmers, and ultimately create long-term value for investors.





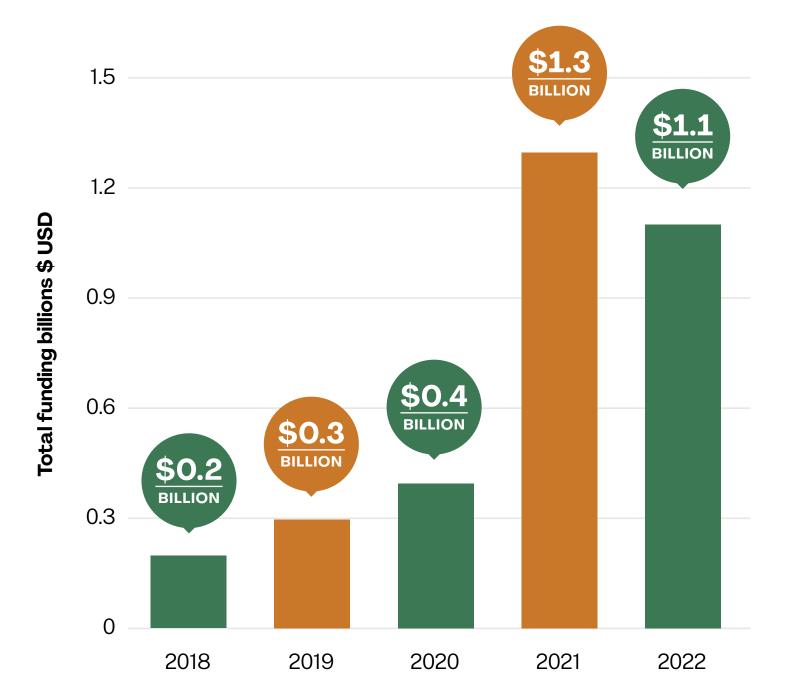
Farmtech investments

2018 - 2022 (\$ USD)

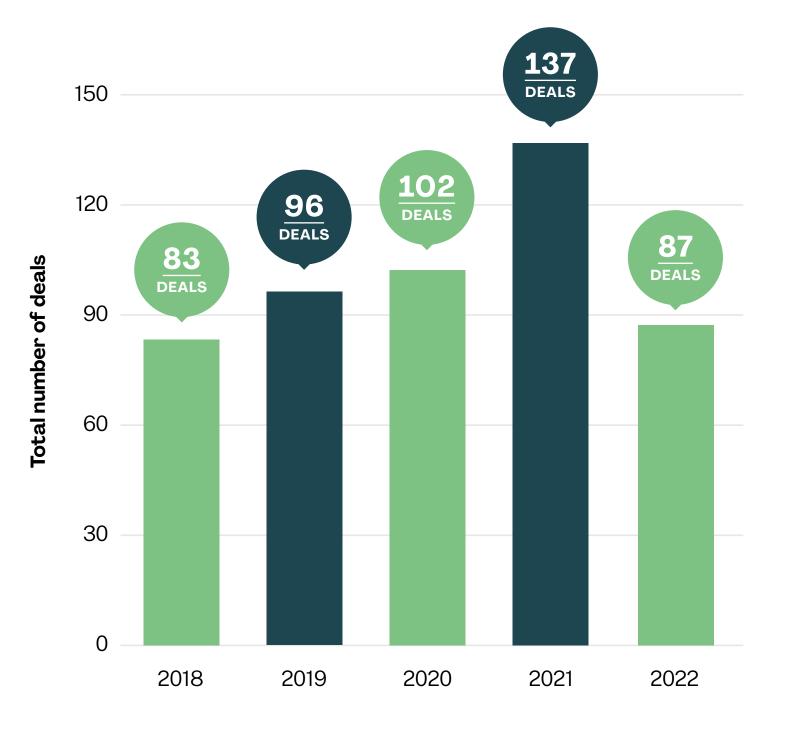
Farmtech refers to technologies that are deployed on the farm and that largely aim to improve farming outcomes from better agricultural practices to forging reliable farm to customer connections.

A corresponding 37% decrease in the number of deals is indicative of higher deal values and more mature startups tackling chronic inefficiencies in the value chain.

Funding \$USD



Deals







Investments by category

2022 (\$ USD)

In 2022, Indian agrifoodtech raised \$2.4 billion across 133 deals.
The most active categories by number of deals were Agribusiness Marketplace & Fintech and eGrocery.

Aside from Swiggy's late stage \$700 million late-stage funding round, Online Restaurants & Meal Marketplaces did not see much

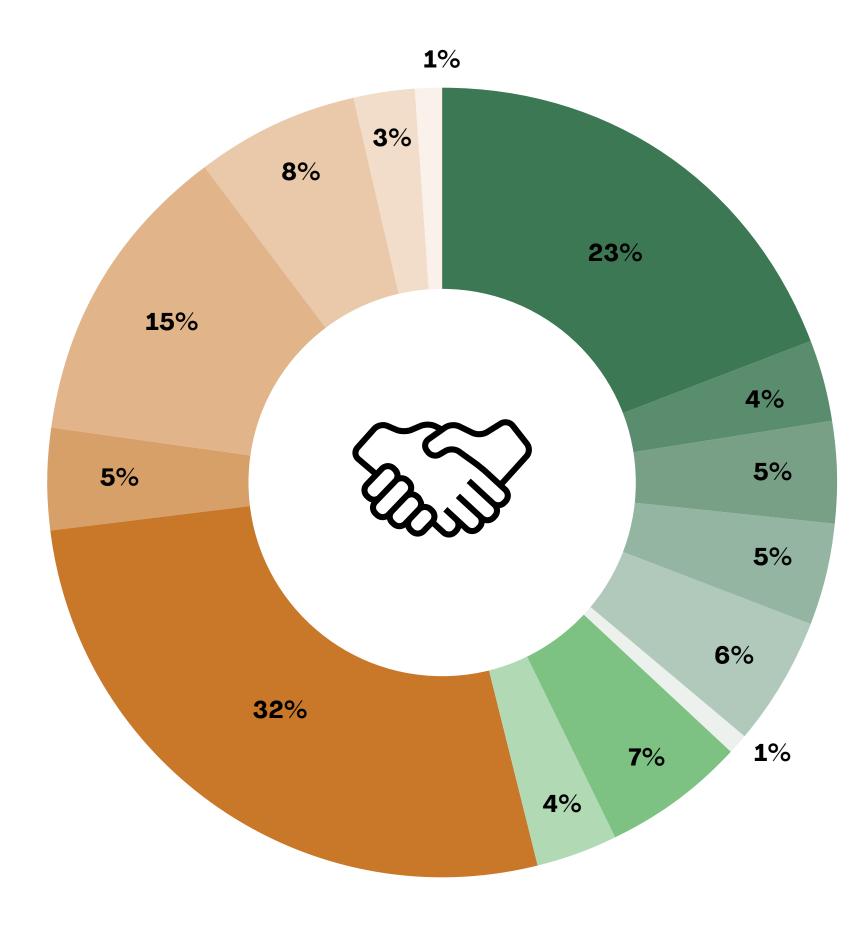
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- Upstream
- Midstream
- Downstream

Categories by funding \$ USD)

Category	\$	USD
Agribusiness Marketplaces & Fintech	\$	428m
Ag Biotechnology	\$	123 m
Novel Farming Systems	\$	30m
Farm Management Software & Sensing	\$	19 m
Farm Robotics, Mechanization + Equipment	\$	16 m
Innovative Food	\$	5m
Bioenergy/Biomaterials	\$	0.5m
Midstream Technologies		178m
Miscellaneous	\$	10 m
eGrocery	\$	776m
Online Restaurants & Meal Marketplaces	\$	775m
Premium Branded Foods & Restaurants	\$	52m
In-Store Retail Tech	\$	38m
Home and Cooking	\$	9m
Cloud Retail Infrastructure	\$	0.8m

Investment by deal count





Startup spotlight Ecozen

MIDSTREAM TECHNOLOGIES





Ecozen develops climate-smart deeptech solutions and core technology stacks to deliver a sustainable future, including motor controls, IoT, and energy storage. Applying these technology stacks to the agricultural sector, Ecozen has revolutionized cold chains (Ecofrost) and the irrigation industry (Ecotron), substantially improving the income of 100,000+ farmers and enabling the generation of over 1Bn units of clean energy(kWh).



ecozensolutions.com



What stood out to you the most about 2022?

The highlight of 2022 was Ecozen's tremendous growth triggered by the growing acceptance of our smart-farming technology led solutions among farmers.

What are the biggest challenges facing the world's food and agriculture industry today?

With the global population breaching the 8 billion mark and dwindling natural resources, food security challenges that need to be addressed urgently.

How would you describe the agrifoodtech sector to an outsider?

Despite the relative unattractiveness of this rather difficult space lies great

opportunities. Capital access has significantly increased and we now have over 1000 players in the agritech space.

What keeps you up at night?

The sustainable amelioration of society and our environment. Climate change is an impending threat in our future. The early signs are plenty-from changing climate patterns to heat waves in Europe.

How is your technology making a positive impact on the world?

Our innovations have helped farmers improve farm productivity and have irrigated over 6 lac acres of arable land, increased harvest shelf-life by up to eight times, reduced food loss by 30% and increased their revenue by 40%.

What are your predictions for 2023 in our industry?

Like all other sectors, climate conscious innovations will emerge as a key theme in Indian agriculture in 2023.

What has your experience fundraising been like?

It has been a rewarding experience, especially due to the current focus on sustainable business models over growth-focused, loss-making ones. We are proud to have both generalist and specialist investors on our board who support Ecozen's vision of sustainable food systems and better farmer livelihoods.



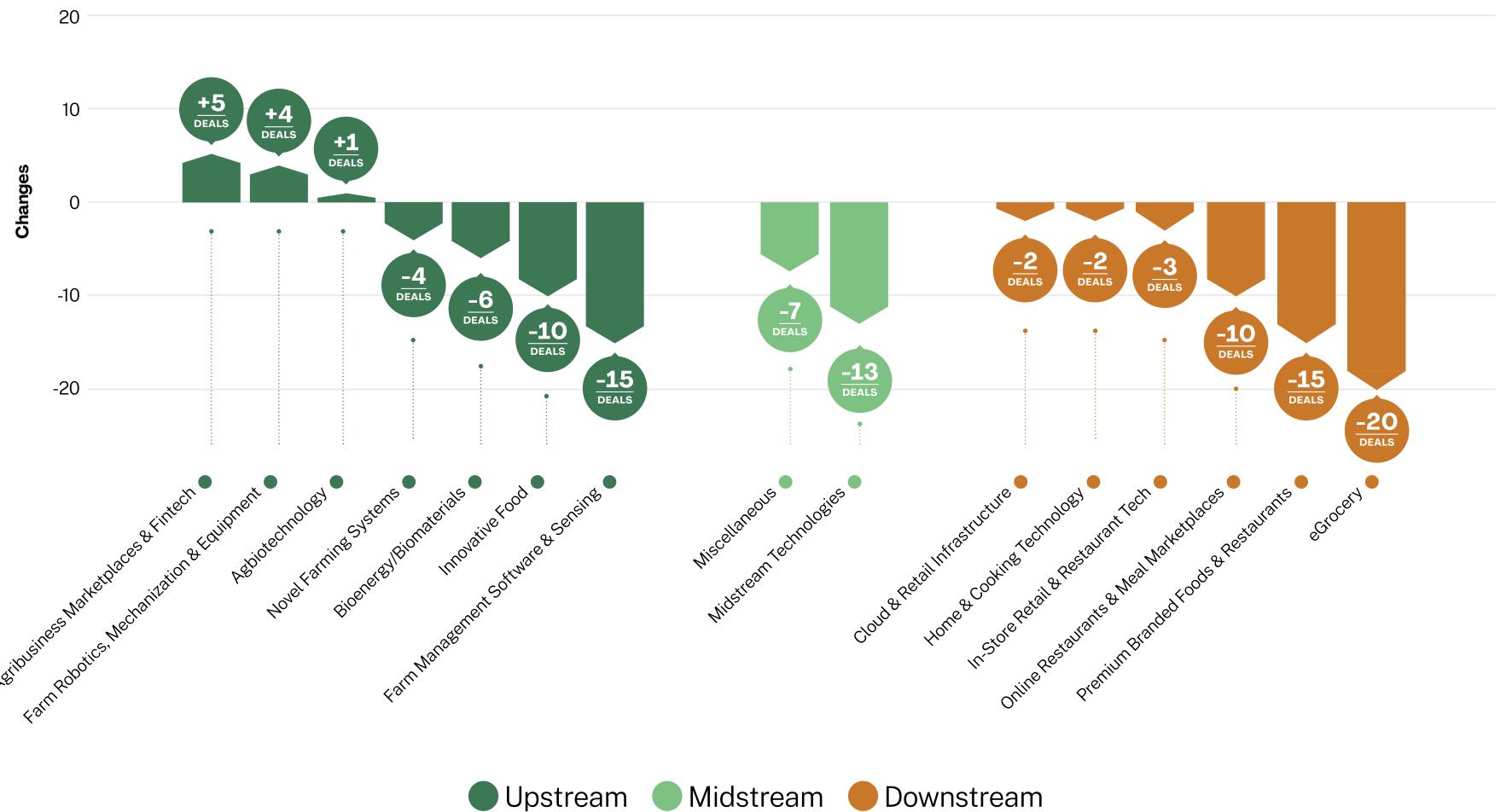
Investments by category

YoY change in deal count

Almost all categories closed fewer deals in 2022 than in 2021. Investors focused on funding growth-stage startups over early or late-stage companies. Only in Agribusiness Marketplaces and Farm Robotics did the number of deals increase.

Over the pandemic years, the former proved its efficiency and profitability to all stakeholders. Farm robotics is a fast emerging category with rapid advancements in frugal farmercentric innovations. The deepening impact of climate change has made farm automation a crucial step towards scaling sustainable agricultural practices.

Changes in deal count YoY





Startup spotlight Loopworm

NOVEL FARMING SYSTEMS





Loopworm is an agri-biotechnology company that takes inspiration from nature to convert organic wastes into valuable products promoting health, nourishment & well-being for all forms of life. Loopworm is currently focusing on producing alternative sustainable protein & fats for shrimp feeds, poultry feeds & pet foods.



loopworm.in



What stood out to you the most about 2022?

As a multi-insect species focussed agribiotechnology startup leading a niche space, we were thrilled to secure the support of mainstream investors in 2022.

What are the biggest challenges facing the world's food and agriculture industry today?

Stretching limited resources, such as arable land, potable water, and wild flora & fauna, to sustain a growing world population is the biggest challenge of our times.

How would you describe the agrifoodtech sector to an outsider?

Agrifoodtech enables better & superior nutrition to humans, plants, & animals,

offers technology-based solutions to improve yields, productivity & quality of the produce, reduction in drudgery at farms or factories.

What keeps you up at night?

Developing industrial processes with insects as the bioresource is not well established. The strategy to quickly develop technologies, conduct R&D, and test processes to harness the fullest potential of insects, keeps me up at night.

How is your technology making a positive impact on the world?

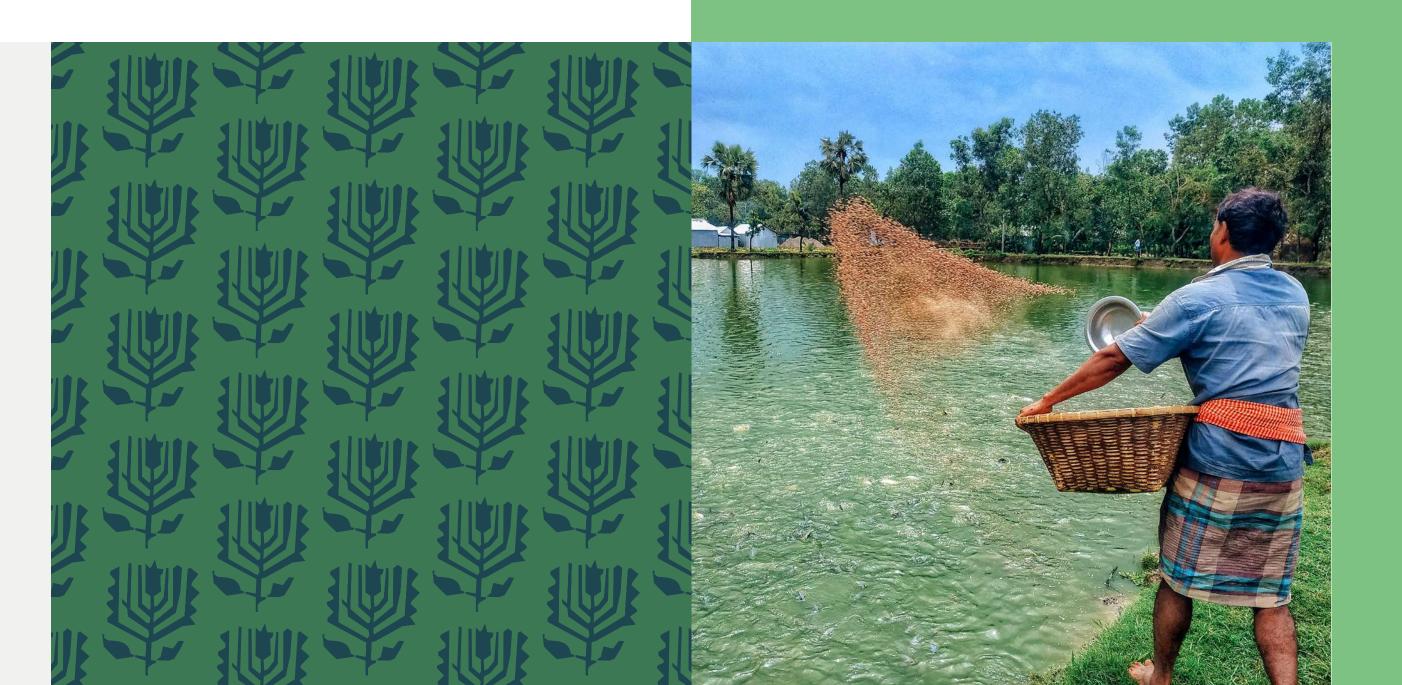
Loopworm is making sustainable insectbased alternative proteins & fats for the aquaculture, poultry & pet food industry. Compared to growing conventional plantbased ingredients, our insect-based products consume 200X less arable land and potable water.

What are your predictions for 2023 in our industry?

In 2023 we should see more investments flowing into life sciences innovations due to the increasing focus on reducing wastage & utilizing by-products.

What has your experience fundraising been like?

It was difficult to explain biotech & life sciences to investors. The demand to establish a working proof of concept before the fundraising leads to a chickenand-egg problem because of the poor availability of pre-seed or R&D capital at the right terms and quick timelines.





Investments by category

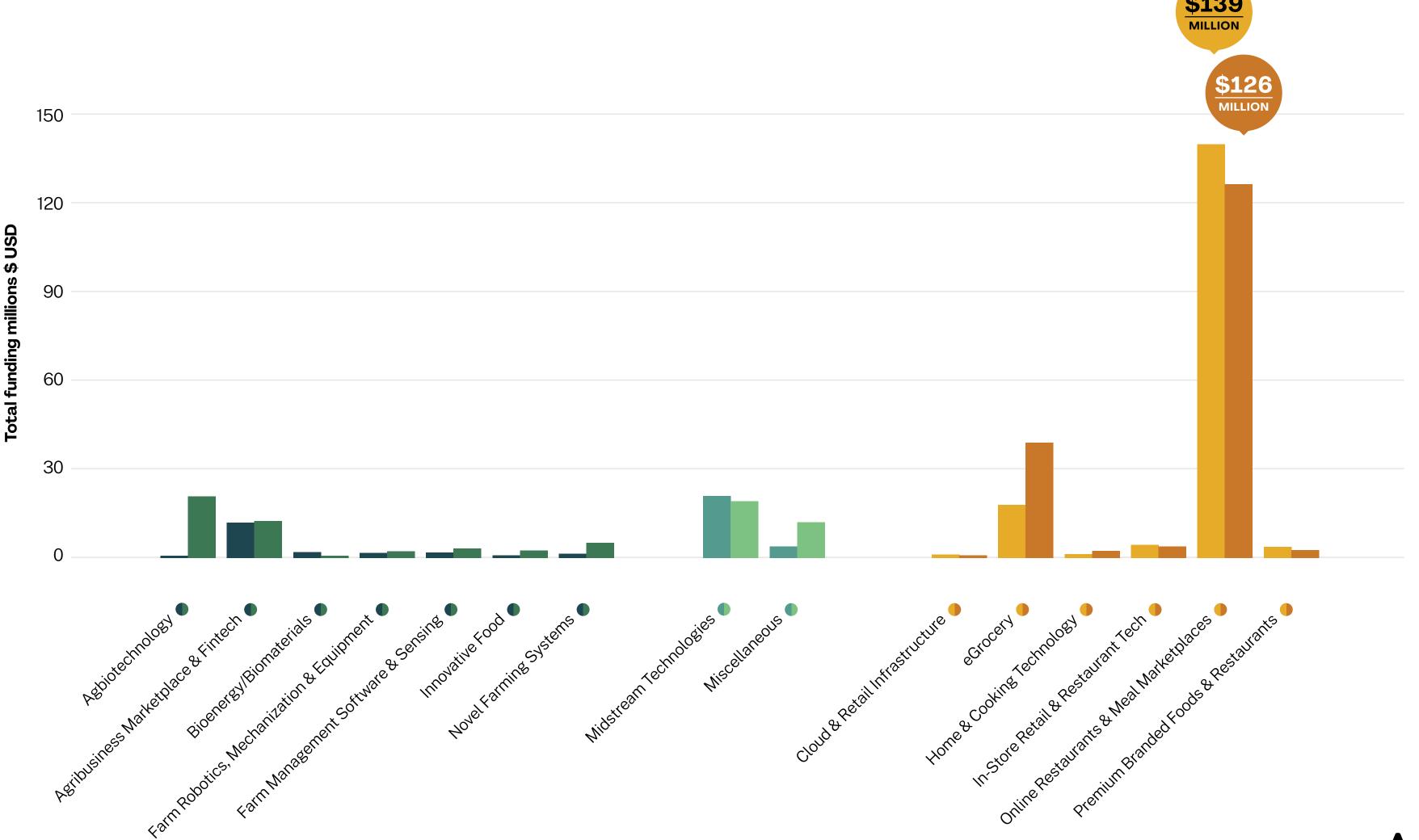
YoY change in deal amount and median deal sizes

With the exception of eGrocery,
Downstream and Midstream
categories saw a decrease in
investments and deal sizes.
Upstream categories had a relatively
better year with increased deal
sizes in Agribusiness Marketplace
and Fintech, Farm Robotics and
miscellaneous spaces including
carbon credits creation and farmercentric social media platform.



- Upstream
- Midstream
- Downstream







Startup spotlight Varaha

MISCELLANEOUS





Varaha's tech-enabled platform generates carbon credits by incentivizing carbon-neutral, nature-based practices. Varaha's projects that generate these credits are meticulously vetted through machine learning algorithms and carbon modeling, ensuring every investment results in carbon removal and creates an additional income source for the smallholders along the way.

What stood out to you the most about 2022?

What surprised me most in 2022 was the enthusiasm of our partners across geographies to work with us and create value for communities and ecosystems. Our initial target in 2022 was to scale up to bring 100,000 acres within our carbon projects, yet we ended the year with over 300.000+ acres.

How would you describe the agrifoodtech sector to an outsider?

Agrifoodtech is a recession-proof industry with immense downstream impact. In India, there is much scope to harness tech-based innovation, advanced market structures and new incentives to advance all aspects of our food systems.

What are the biggest challenges facing the world's food and agriculture industry today?

We must solve for end-to-end decarbonization, from cropping practices to waste processing to transportation, while promoting defensive practices and measures that increase climate resilience.

What keeps you up at night?

I reflect on how to balance our core regenerative agriculture focus with other technology-focused permanent removal solutions, and develop our core technology offerings to other ecosystem participants as an enabler versus a competitor.

How is your technology making a positive impact on the world?

Varaha's technology educates smallholders about suitable and remunerative regenerative agricultural practices and offers a science-backed and platform-led quantification of emission reduction and carbon sequestration at scale.

What are your predictions for 2023 in our industry?

In contrast to organic farming, regenerative agriculture marries science and the practical world well. I foresee more startups coming up in this space.

What has your experience fundraising been like?

Given the infancy of carbon markets, we had to educate investors about the sector and its potential. Eventually, we were oversubscribed in our seed round and found some truly incredible partners



varaha.earth





Investment by category

Agribusiness Marketplaces & Fintech

Top deals (\$ USD)

Agribusiness Marketplaces & Fintech startups raised \$428 million in 2022, a marked increase from 2021. The category also emerged as the most active category by number of deals, closing 32 over the year. Full-stack agricultural platform DeHaat took the lead raising \$106 million across two rounds.

In 2022, as technology adoption spread in the ecosystem, startups began solving legacy challenges, chief among them being access to affordable formal finance. Fintechs and neo-banks such as Ayekart and Jai Kisan are tailoring products for various stakeholders to fortify livelihoods and supply chains.



DeHaat



Vegrow



\$60m

SERIES E



\$25m

SERIES B



Captain Fresh

\$50m



\$13.4m

BigHaat

SERIES A



BigHaat

DeHaat



Mooofarm



\$46m

\$45.1m

\$32.2m

SERIES C

SERIES C

SERIES B

SERIES C



\$13m

SERIES A



ShopKirana





Jai Kisan

Jaî Kîsan

\$50m

SERIES B



FarMart

⊕ FarMart



Ayekart



\$5.5m

SERIES A





Startup spotlight Agrizy

MIDSTREAM TECHNOLOGIES





Agrizy is a tech-first platform to bridge the processed agri supply chain. The platform connects the agri suppliers, agri processors and buyers of agri products across food and non-food categories to optimally discover and fulfil transactions. Agrizy's solutions include a digital B2B platform, a network for value added processing services, and embedded fintech.

What stood out to you the most about 2022?

As a company committed to using the latest technologies to improve our processes and products, we were excited to see increasing technology adoption across the industry.

What are the biggest challenges facing the world's food and agriculture industry today?

Some of the major challenges in the Indian food processing industry include gaps in supply chain infrastructure, inadequate link between production and processing, and inadequate focus on quality and safety standards.

How would you describe the agrifoodtech sector to an outsider?

Agrifoodtech sector is a complex space,

with multiple stakeholders, numerous challenges and boundless potential. The sector is ripe with opportunities for those willing to navigate said complexity and invest in innovation.

What keeps you up at night?

Notwithstanding the boundless opportunities in the agrifood processing sector today, scaling remains a tough undertaking.

How is your technology making a positive impact on the world?

By automating the process of connecting buyers and suppliers, we have been able to increase capacity utilization of SME agrifood processors and standardize quality and operations.

What are your predictions for 2023 in our industry?

In 2023 adoption of agritech innovations will increase, and startups will play a crucial role in driving this trend.

What has your experience fundraising been like?

In agriculture, the pace of business is relatively slower due to seasonal constraints, and the results of investments are not immediate. This makes it difficult for generalist VCs to understand the industry and the potential returns on investment. We have been fortunate to receive support from investors who understand the unique nature of the agriculture industry.



agrizy.in





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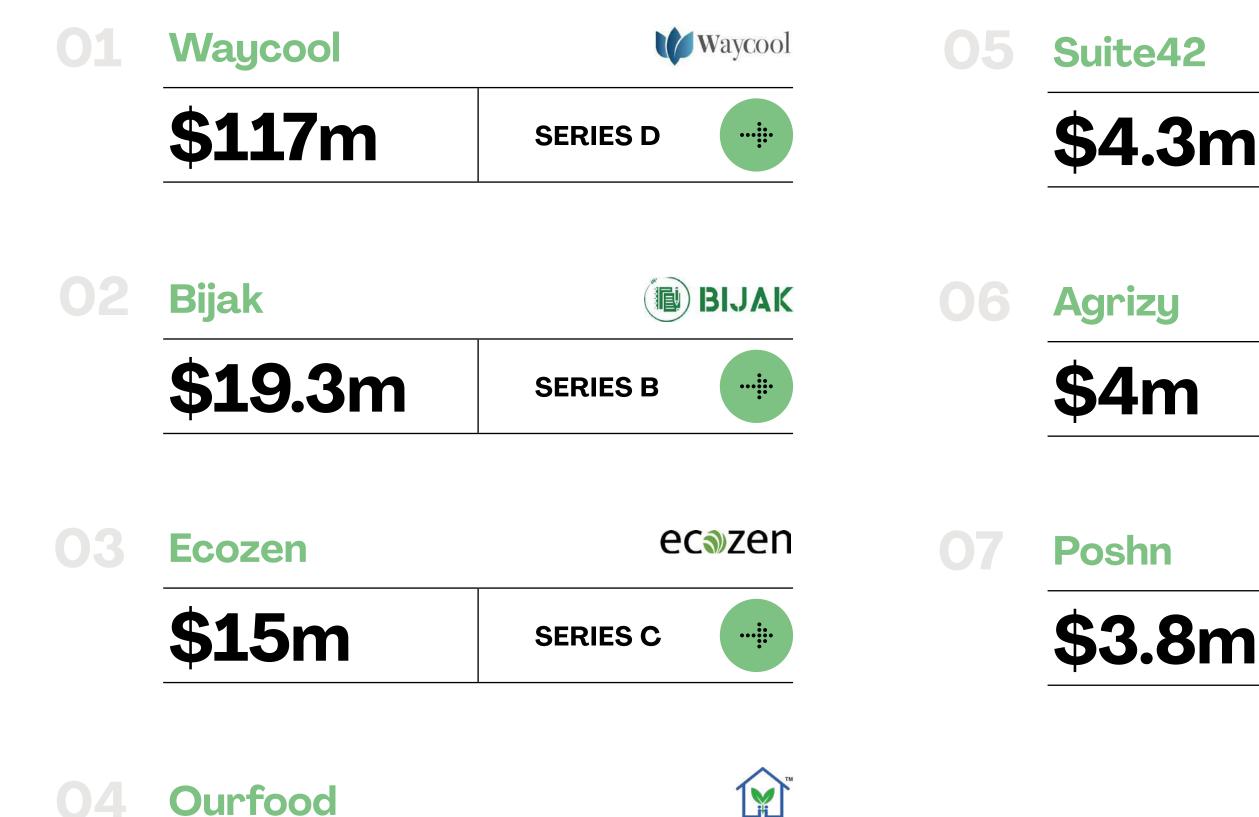
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Midstream Technologies

Top deals (\$ USD)

Despite Waycool closing such a big round, this category raised 61% less than in 2021. For context, the massive increase in aggregate investments from 2020 (a total of \$150 million) to 2021 (a total of \$460 million) was largely driven by Ninjacart and Jumbotail raising a combined \$255 million in 2021. These two startups are B2B platforms focused on servicing small retailers, a theme that growth stage investors have soured on post-pandemic, resulting in a steep drop in funding for the category in 2022.



SERIES A

•••





Startup spotlight S4S Technologies

MIDSTREAM TECHNOLOGIES





S4S Technologies is a full stack food processing platform providing convenience food ingredients to the Food & Beverage industry saving energy, time, and cost for customers. It does so by turning imperfect, lower grade produce that would otherwise be lost into food ingredients with a solar-powered food processing system.



** s4stechnologies.com



How is your technology making a positive impact on the world?

S4S is creating a new food ecosystem that mitigates the increase in agricultural GHG emissions while meeting the world's food needs. S4S's renewable energy solutions and the integrated food-energy system can directly advance energy and food security, while also contributing to job creation, gender equality, and climate resilience and adaptation.

S4S works with small-holder women farmers to process lower grade produce at the farm-gate and earn an assured additional income through processing. S4S provides an end-end ecosystem for these

women farmers to become processors including a combination of technology, access to finance, training & capacity building, and market linkage.

Through S4S intervention, women can be transformed as the breadwinner in the family-doubling her household income and helping her move ouf of poverty. With financial freedom, she also gets greater participation in the decision-making at the household level. Some of the women farmers also take leadership positions in the village and in their community.

What stood out to you the most about 2022?

In 2022, S4S Technologies was able to demonstrate processing scale while working with women microentrepreneurs and smallholder farmers. Working in 250 villages in India with 1400 women microentrepreneurs helped us create value for farmers, women microentrepreneurs, and also our customers.

What keeps you up at night?

Excitement and Anxiety-to deliver more for our farmers, more for our women micro-entrepreneurs

What are your predictions for 2023 in our industry?

Accelerated digitization of agriculture for maximizing visibility & transparency of food systems.



eGrocery

Top deals (\$ USD)

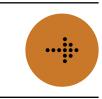
eGrocery startups bucked the overall decline in 2022 by raising 13% more than in 2021, however they did so over half the number of deals hinting at a slow down in new entrants to the market.

The category has become a staple in app-driven urban households. The commitment of on-time, hassle-free delivery of quality produce at competitive pricing has played an important role in customer retention. As the sector matures, we expect fewer players to come to the market, much like Restaurant Marketplaces, and investor interest will also wane.

Zepto

\$200m

SERIES D



Object to the content of the cont



\$12.5m

SERIES A



2 Licious

\$150m

SERIES F



Licious

O7 Fraazo



\$6.8m

SERIES B



Country Delight



SERIES D



08 Pluckk

pluckk

\$5m

SEED



04 Fresh2Home



\$26.7m

SERIES C



Nutrifresh



\$5m

PRE-SERIES A



5 Akshayakalpa



\$15m

SERIES B



10 Rozana



\$2.5m

SEED



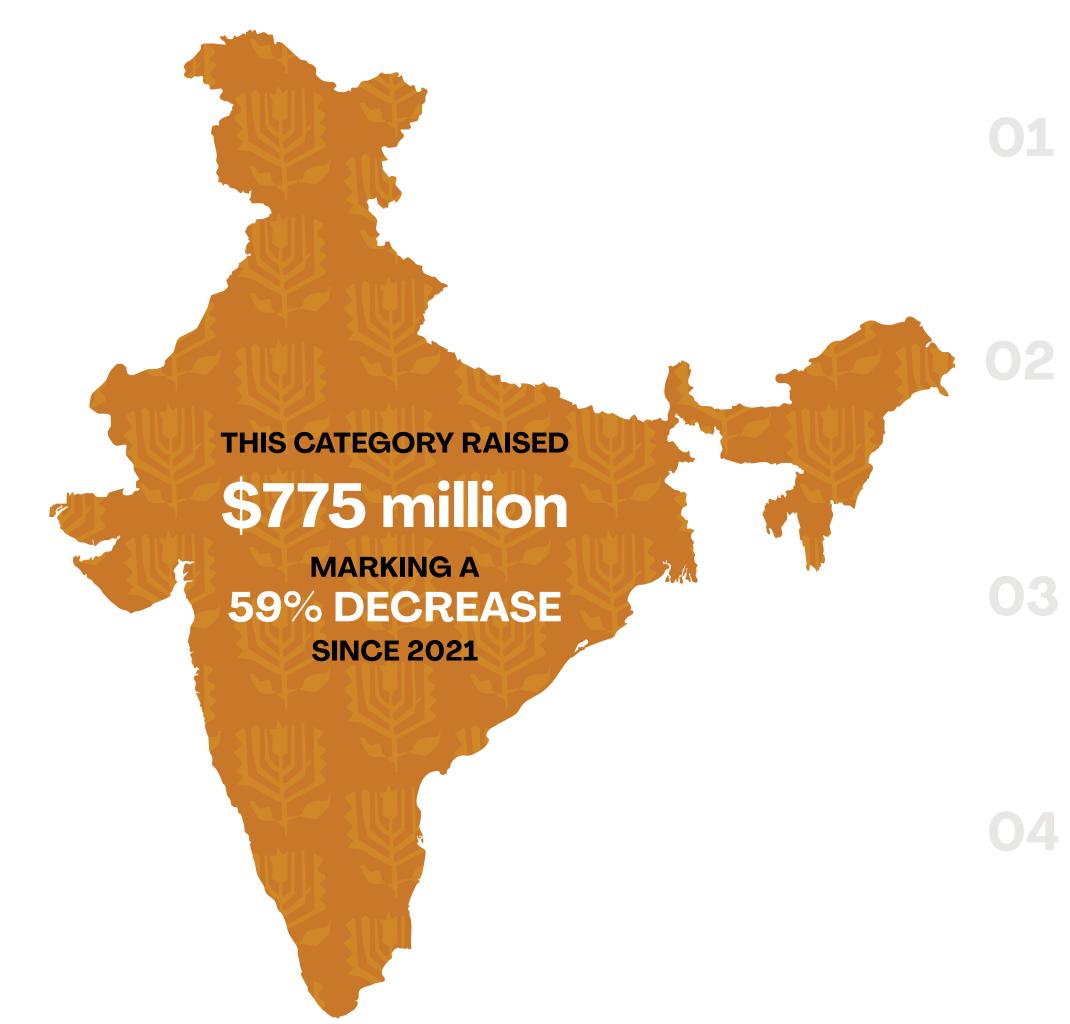




Online Restaurants & Meal Marketplaces

Top deals (\$ USD)

Swiggy's \$700 million late-stage deal boosted overall downstream funding. There was limited activity in this category in 2022. The space is currently saturated as there is little-to-no technological innovation and only a few major players dominating the space.



Swiggy



\$700m

SERIES J1



CureFoods

CUREFOODS

\$50m

SERIES C



Bigspoon



\$12.6m

SERIES A



Freshmenu



SERIES A







Top investors by deal count

RANK	INVESTOR	NO. DEALS	COMPANIES FUNDED
01	Omnivore	11	Agrizy, Loopworm, Suite42, Varaha, TractorJunction
02	Ankur	6	Agrizy, VeGrow, Krishify, Myoworks, Stringbio
03	Matrix	5	CaptainFresh, Country Delight, FarMart, Vegrow, Open Secret
04	Avaana	5	FarMart, Eggoz, eekifoods
05	Tiger	3	Captain Fresh, Absolute, UrbanPiper
06	Accel	3	DeepRooted, Produze, Mooofarm, Curefoods
07	NABVentures	3	Eggoz, TraceX, Vilcart
08	Prosus	2	Vegrow, Captain Fresh
09	Axilor	2	Pepper Farms, Dvara e-Dairy
10	General Catalyst	2	Eekifoods, FarMart
11	Lightrock	2	Waycool, DeHaat
12	Sequoia / Surge	2	Absolute, UrbanPiper
13	Omidyar Network	2	FarMart, Krishify

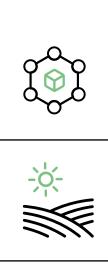




Appendix

Agrifoodtech category defintions

	Ag Biotechnology On-farm inputs for crop & animal ag including genetics, microbiome, breeding, animal health
\$	Agribusiness Marketplaces & Fintech Commodities trading platforms, online input procurement, equipment leasing, farmer fintech
	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
\$ \$ \$ \$ \$\$\$\$	Novel Farming Systems Indoor farms, aquaculture, insect & algae production
	Innovative Food Cultured meat, novel ingredients, plant-based proteins



Midstream Technologies

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

Miscellaneous

All other agrifood-related tech



In-Store Retail & Restaurant Tech

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



eGrocery

Online stores + marketplaces for sale and delivery of processed and unprocessed ag products to consumer



Home & Cooking Tech

Smart kitchen appliances, nutrition technologies, food testing devices & home grow kits



Online Restaurants and Meal Marketplaces

Online tech platforms delivering prepared food and meal kits from a wide range of vendors



Cloud Retail Infrastructure

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



Premium Branded Foods & Restaurants

Premium food experience including better product design, formulation, packaging & thematic restaurants



Midstream/Both







Sources & methodology



Data Sources & Curation

Utilizing new advanced machine-learning algorithms and artificial intelligence to help identify and categorize agrifoodtech startups, our knowledge base has grown to more than 30,000 companies, with new startups and historical data being added each day.

The raw data for our reports comes from Crunchbase, which gathers publicly-available information such as press releases and US Securities and Exchange Commission filings, as well as crowdsourcing directly from the industry. AgFunder contributes data from its own collection methods, including private communications with investors and companies. We also collect data from partners across the globe to ensure we have the most comprehensive, accurate and curated dataset and knowledge base of agrifoodtech companies and investments.

The raw data is painstakingly curated by the AgFunder team, along with their data partners, to ensure they are relevant, accurate, up-to-date, and categorized according to AgFunder's proprietary tagging system.

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.

In 2022, we tightened our definitions of what constitutes an agrifoodtech venture to ensure that the emphasis on food and agriculture is core to the business.

That's had a recalibrating effect on this year's investment figures as well as some past data. Examples include logistics, drones, cloud and any other tech services that may have started in agrifood but have since added other sectors or pivoted away from agrifood. We've maintained historical rounds that were raised on an agrifood focus, where we could.

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 are used.

Undisclosed Financings

Of the 133 financings in this report's curated dataset, 7 were undisclosed and could not be determined through research or direct sources. We exclude undisclosed financings when computing averages and median values. In some cases, we're able to confidentially obtain financing figures directly from investors on the condition they're only included in aggregate.

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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 keep them separate unless they are announced as one single round.

Categorization

AgFunder's categorization system is designed to capture broad themes across the complex agrifoodtech value chain. The agrifood 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.

Starting with our 2023 Global Agrifoodtech Investment Report, we combined Agribusiness Marketplaces and Fintech into one category as there is often overlap between the two. We maintained any fintech tools for retailers or restaurants within the Retail Tech category. Given the reduction in funding to food delivery services, in this report we've combined Online Restaurants & Meal Kits with Restaurant Marketplaces as very similar business models.

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

Special Acknowledgement

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