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## 2018 Early-stage Agtech Report

#### Credits & Contact

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Special thanks to:

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## Introduction

The last 10 years have seen remarkable growth in agtech investment. As agtech financings have grown, so have the number of innovative new companies announcing their presence in this ecosystem. As our sector continues to mature, there is increasing need for quality information on financing activity. After all, in both farming and investment, good decisions must be based on quality data. This is why in 2017, Finistere Ventures partnered with PitchBook to curate a first-of-its-kind dataset that enabled clear insights into financing activity and metrics in the agtech sector. The results of this effort culminated in the release of our AgTech Investment Review.

While feedback on the report was largely positive, our team noted a noticeable gap—a lack of insight into seed-stage investment and a bias toward US financing data. At Finistere, a key feature of our firm is our global network of partners. We intentionally seek investments from global centers of agtech excellence. And through our Farm2050 initiative with Innovation Endeavors, Finistere has been bringing together leaders in agtech innovation from across the globa. As the global population rises, innovations that will help feed us will come from all over the world. After all, agriculture is a global industry, and agtech innovation happens all over the world.

Over the first half of 2018, the teams at Finistere and PitchBook worked hard to close the gaps in seed and geographic data. Readers may note that the angel & seed totals included in this report are lower than what they may anticipate. Datapoints at the earliest stages of the venture cycle are notoriously difficult to collect. Our intention with this report series is to build the strongest agtech dataset possible, especially at the angel & seed stages. To do so, we ask for your help in contributing any angel- or seed stage data you would feel comfortable sharing. Ultimately, this series is meant to help our community get the clearest picture possible of our sector. We are excited to share the results of our work in this mid-year report, focused on providing insight into early-stage financing activity in leading innovation geographies. This issue is the first of a two-part series looking at specific regions. Israel, Canada and Australia & New Zealand are spotlighted here, and the next report will focus on South America and the European Union. We hope both will provide valuable insight into global agtech financing and innovation.

Special thanks to the Finistere global network partners at Radicle Growth, Angel Association New Zealand, Sprout, AgThentic, and Start-Up Nation Central. Without their generous contributions of time, insights, and data, this publication would not have been possible. As we continue to grow this dataset, we invite you to read this report, and thank you for continuing to grow this dataset. We hope that these efforts will benefit our sector as a whole in the years and months to come.

Arama Kukutai, Managing Partner, Finistere Ventures

If you are interested in sharing your data to the PitchBook platform, please do not hesitate to reach out to survey@pitchbook.



# Taxonomy & methodology

#### 1. PitchBook venture data

PitchBook includes equity investments into startup companies from an outside source. Investment does not necessarily have to be taken from an institutional investor. This can include investment from individual angel investors, angel groups, seed funds, venture capital firms, corporate venture firms and corporate investors. Investments received as part of an accelerator program are not included. However, if the accelerator continues to invest in follow-on rounds, those further financings are included.

**Angel & seed**: PitchBook defines financings as angel rounds if there are no PE or VC firms involved in the company to date and we cannot determine if any PE or VC firms are participating. In addition, if there is a press release that states the round is an angel round, it is classified as such. Finally, if a news story or press release only mentions individuals making investments in a financing, it is also classified as angel. As for seed, when the investors and/or press release state that a round is a seed financing, or it is for less than \$500,000 and is the first round as reported by a government filing, it is classified as such. If angels are the only investors, then a round is only marked as seed if it is explicitly stated. It should be noted that in order to better reflect the agtech seed-stage market, this report increased that round size limit to \$2 million or less. However, some seed-stage rounds in agtech may still not have been captured as of yet as a consequence.

#### 2. Finistere Ventures survey data

The survey for this report was conducted by Finistere Ventures throughout spring 2018, utilizing Qualtrics for survey building. Finistere reached out to select professionals within its network in order to ensure the audience was appropriate. The sample size was accordingly small, n = 17, with individual questions at times receiving only a handful

of responses. Consequently, only select questions were included within the survey data summary section.

Please note this report is intended as the first in a two-part series that Finistere and PitchBook are producing in collaboration with other agtech players in order to create a robust, useful dataset for the agtech industry on the whole. This first report focuses explicitly on early-stage venture financing trends in agtech, and includes a regional spotlight on Canada, Israel, Australia and New Zealand; the next report shall focus on the European Union and Latin America in particular.

#### 3. Contributing partner data

- Start-Up Nation Central: The datasets on Israeli agtech venture activity cover the seed and early stages, with overall methodologies similar to PitchBook's.
- AgThentic: The data provided by AgThentic covers venture investment overall in agtech in Australia, similar in methodology to PitchBook's venture classifications.
- Angel Association New Zealand, Sprout:
   The scope of the data provided by Young Company Finance was formal early-stage investment in New Zealand, analogous to PitchBook's early-stage methodology.

#### 4. Agtech taxonomy\*

- Plant science: The modification of existing plants and organisms to improve plant health and yield, including plant breeding, development of novel traits, genetic modification/editing, and more.
- Crop protection & input management:
  The development of products and technologies that when applied improve plant yield, including the development of synthetic and natural active ingredients, biologicals, formulations, seed treatments, and nutrient technologies to improve plant or soil health and reduce other inputs.

- Precision agriculture: The building of software suites, data management and analytics tools for improved farm management, including the measurement of crop inputs, soil, moisture, weather, inventory, etc., typically within the realm of enterprise suites with user-friendly mobile capabilities.
- Agriculture marketplace & fintech: Online marketplaces for the trading, buying and selling of agricultural goods, as well as platforms for the management of related financial transactions and administration of business relationships.
- Indoor agriculture: The production of turnkey software and hardware systems designed for the cultivation of crops within buildings, often focused on either residential or commercial real estate markets, as well as related services and building of infrastructure.
- Sensors & farm equipment: Hardware and software systems specifically designed to monitor a range of conditions, most frequently within close proximity, plus equipment for farming, with integrative capabilities for whole platforms.
- Imagery: Equipment, software and hardware systems plus actual manufacturing of drones and satellites for aerial monitoring.
- Animal technologies: Hardware and software systems specifically designed to enable management of livestock and other farm animals in general, with use cases ranging from monitoring of health to more efficient harvesting of related resources. In addition, technologies aimed at improving formulation of animal feed and medicines are also included, ranging from veterinary drug applications to the entire nutritional spectrum.

\*Note: This taxonomy was developed by Finistere in order to better categorize and analyze the differing segments of this sector.



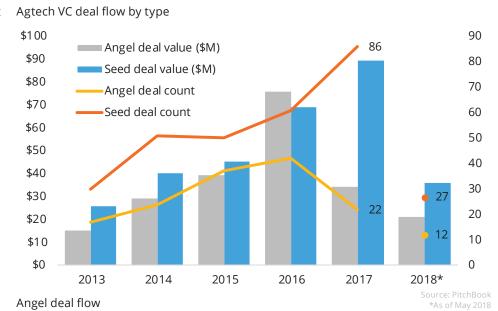
## Market overview

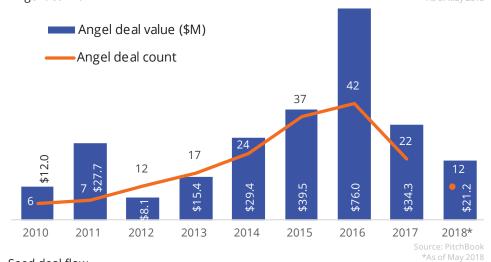
Agtech as a whole is maturing in a short amount of time, as more expertise and resources are drawn to the category. Underlying technologies are improving and milestones are being hit more often and quicker than ever before. As more solutions are introduced into the agtech ecosystem, new technologies are building on those advancements. At the same time, investors, both specialists and generalists, are gaining more understanding of what works in this nascent market.

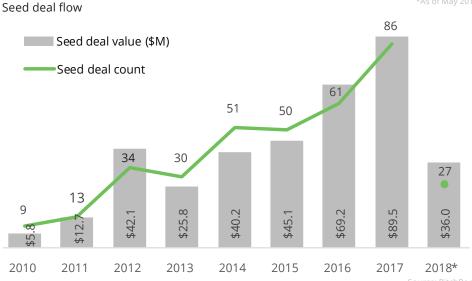
Compared to other sectors, however, the agtech market is influenced heavily by what happens at the angel & seed stages, as opposed to the headline-grabbing numbers more prevalent at the Series A and B stages. This is because agtech innovation occurs globally, and startups often rely on early-stage funding from local communities. Angel & seedstage agtech funding continues apace across the globe. 2017 marked another significant year for the sector, logging \$123.8 million worth of financing across 108 angel & seed-stage rounds. Angel deal value was down from its record year in 2016 (\$76.0 million in all), though seedstage investment, which will be emphasized throughout this report, hit a record high last year with \$89.5 million. Moreover, the median round size at the angel & seed stage is (so far) above \$1 million in 2018. Yearly median round sizes have flirted with the million-dollar mark before, but typical years settle somewhere in the \$600,000 to \$900,000 range.

The two charts to the right show an exponential pattern of deal activity; reported angel deal flow increased more than sixfold between 2010 and 2016, while seed activity increased more than fivefold between 2013 and 2017. To some degree, deal flow at the angel stage eventually spills into the seed stage, which has become more institutionalized over the years.

That said, angel & seed activity differs considerably when broken down by sector. The crop protection & input management space is set for a big year, and is well on pace to set new highs in both count and value. The same is potentially true for precision agriculture, as well. The following page breaks down trends in several subsectors, many of which saw record activity levels in either 2016 or 2017.









#### Animal technology

Animal tech activity is rising. 18 angel & seed rounds were completed last year, raising a combined \$21.3 million. Each of the past four years has seen at least 10 such investments, and the two raised this year were worth \$9.1 million altogether.



#### Plant science

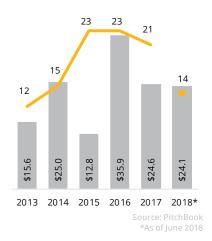


representing the agtech segment with some of the most well-known and profitable exits and technologies, it receives less angel funding than its counterparts. This is likely due to the complexity of technology development, regulatory barriers, and long development timelines in this sector.

Despite plant sciences

#### Crop protection & input management

Crop management and input management startups have taken in nearly as much angel & seed capital as the sector received all of last year. The push to improve plant yields has drawn significant interest since 2012, which recorded an unusually high \$21.7 million worth of financing.



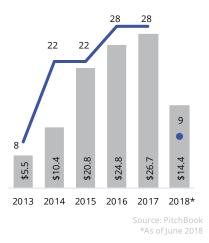
#### Indoor agriculture



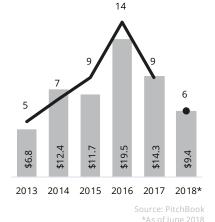
Both volume and value in the indoor ag sector took dives in 2016, sandwiched between much stronger years in 2015 and 2017. Indoor ag is a nascent sector within agtech, and activity is expected to trend higher as consumer interest in controlled environment production and local food systems continue to rise.

#### Precision agriculture

The precision ag space continues to be a popular haven for angel & seed investments. Like imagery, precision ag is a natural outpost for angel investors with backgrounds in software, data management and analytic platforms in other industries.



#### **Imagery**



can take several forms, from drones and vehicles to body-worn camera systems. Because of its simple solutions, imagery startups attract broader interest from angels with backgrounds in hardware and tech

generally.

Imagery startups

have received much

attention at the angel

& seed stage. Imagery

Note: All the underlying data are classified as angel & seed venture activity, combined. All above charts indicate deal value as bars and volume with lines.



## Agtech is a global ecosystem

## A Q&A with seed investors Kirk Haney and Dean Tilyard



#### Kirk Haney

Kirk Haney is Managing Partner of Radicle Growth, an Ag and Food Tech acceleration fund focused on transforming the speed of innovation in agriculture. Under Kirk's leadership, Radicle secured top tier financial and corporate investors including Finistere Ventures, \$150M agtech fund, OurCrowd, \$300M funding platform, Bayer Crop Science and DuPont Pioneer.



#### Dean Tilyard

Dean Tilyard is Chief Executive of Sprout, a New Zealand based start-up advisory and accelerator specializing in early stage agritech investment. Dean has experience with multiple start-ups and technologies and is a founding member of the New Zealand Angel Association. He has founded an angel investment network and two seed stage funds. He is a director of Levno, a leading provider of remote monitoring in the dairy industry and chairman of Speirs Nutritionals, a developer of omega-3 food ingredients.

As part of our 2018 Early-stage Agtech Report, we invited two prominent seed investors, Kirk Haney and Dean Tilyard, to share their thoughts on the agtech market globally and what they look for in prospective investments. Kirk invests globally out of his San Diego office, and Dean's focus is on agtech opportunities headquartered in New Zealand.

From a results perspective, what do you expect to hear from founders when they pitch to you? Have those goalposts changed over the past few years as the industry itself has matured?

**Kirk**: We always want to see a big vision that's grounded in how it will be executed. Saying your technology will increase crop yields on a particular crop is too vague. We prefer to hear, "We're going to change the way you farm by integrating a new biological system into your leafy greens acreage. This technology will apply to every broadacre row crop and every horticultural crop, and this is how our platform is going to generate these higher yields. We're going to start with leafy greens and scale it up before moving on to corn." Those are entrepreneurial visions out

to change the world, but still very grounded and methodical in the approach. We like to see some domain experience and some example of the entrepreneur's success. If you grew up on a corn farm, you'll likely have some insight into how corn is grown and you'll come across as credible. Or, conversely, if you worked for a software company and built it up and sold it, then you understand the process of entrepreneurship at an early stage and you've already had that experience of being successful.

The last thing, and arguably the most important, is being coachable. We pass on entrepreneurs all the time if they aren't. VCs are not all-knowing, but when they give feedback, how the entrepreneur processes that feedback tells us whether they're coachable or not.

What early investors like to see when posing a question is not only what the answer is but how they approach answering the question. That tells us a lot. Mike Maples at Floodgate Capital did an analysis of his successful investments, and 92% of them had a change in business plan after he invested. Successful entrepreneurs are taking cues from the market, which is very important to reshaping their business models.

Take Granular, which was recently acquired by Corteva for \$300 million, as an example. It started out as a soil-testing company and turned into a farm management system prior to acquisition. Climate Corp. was trying to do weather forecasting for sporting events before turning to agriculture. These aren't all dramatic shifts, but the initial business plans shifted in significantly.

**Dean**: We're looking for a clear understanding of the problem, and if the individuals involved have spent time trying to understand the problem. A lot of New Zealand founders have been close to the problems for a long time, having grown up on farms or through their business careers. Living in New Zealand, your degree of separation from agriculture is probably one degree. Understanding a problem is the first step, but the next step is internationalizing the solution, which requires lots of support, not only from angels but also from international sources of capital to facilitate introductions to offshore markets. New Zealand's focus at the moment is on wins—a few years ago it was getting deals done, but that's no longer a metric of success for us. We're now focusing on customer traction and pushing through to exit, so we're really looking for companies that are aligned to that. One of the key maturity points has been around capital and being honest about how much an agtech company is going to need to meet its goals. A lot goes into making a product and getting it into a customer's hands before getting paid for it. There's a real understanding now of how long trials and demonstrations take—you need to do that multiple times and there are ways you can speed things up, but it's still longer than other sectors.

After the Climate Corp. acquisition several years ago, you probably saw lots of angels come in. Can you speak to the level of sophistication you're seeing among angels who stuck around and are investing in today's market?

**Kirk**: Like anything, it depends on the group. There are some great professional angel investing networks like Tech Coast Angels and Silicon Valley Angels and many throughout the country. There's also interest from generalist investors who are paying attention to global population growth, and the fact that people want to know where their food is coming from and that it is produced sustainably. The typical angel network or incubator approach is to create an 'ag and food' track, which is helpful because the industry needs syndicate partners. However, when these groups underwrite agtech deals, they often don't have familiarity with how farmers integrate new technologies and the ecosystem and therefore do not truly understand how to build a rational revenue growth plan. Farmers don't buy products in a digital way yet, so understanding the importance of the dealer network is critical to helping entrepreneurs build the right revenue forecast. Most of the time, these angel-backed deals are priced inappropriately and the companies end up undercapitalized. 100% of the deals we've done involved companies with insufficient budgets to reach their milestones, and 100% of the time we've had to double their budgets. Entrepreneurs are notoriously ambitious and positive and assume things will go well. We always add a little cushion to their budgets. Once you have proof of concept in-hand for your technology, it takes three to six months to raise your next round of financing, and you need that runway in the bank.

Dean: There's a couple things to that in our region, as well. One is that the New Zealand investment community underestimates how much capital will be required. We're more calibrated to the capital we think we'll be able to raise than the amount that's actually required. Another point is that New Zealand companies are pretty capital efficient—cost structures for personnel and equipment is lower in New Zealand than it is elsewhere. That said, the average angel round in New Zealand trends higher than other regions—around \$800k here. But because there isn't an abundance of followon funding immediately available, that's still not enough for many companies to make it to the next milestone.

You don't really see the natural progression here that you do elsewhere—a startup gets its seed round followed by A, B and C rounds. More often you see those companies going back to their existing shareholders to ask for early-growth capital. The challenge for those New Zealand investors is having capacity to

keep writing those checks. Because you don't always have that next-stage investor who might be better connected to the market, you're not necessarily getting validation going back to those prior investors. That means that round sizes aren't growing, which compounds the problem of companies not getting enough money.

## Have expectations risen hand-in-hand with valuations?

Kirk: Silicon Valley ag deals are priced like any other Silicon Valley deal. They're priced very aggressively out of the gate similar to enterprise software deals, and bids go up because Silicon Valley thinks the time-tomarket is the same as other industries. Eyeballs are OK for certain segments, but that approach doesn't work very well in ag if you can't show acreage. Trials are signed in the off-season and then you trial your technology during the growing season. Once you have the data in-hand, now you can go to market and raise more capital and acquire more customers. This is a two-year process. We try to help bridge that gap through counter-season trials by taking products to places like Brazil or New Zealand. That costs more, but time is money.

Once you get outside the Valley, the strategy and approach to commercialization are more rational and this leads to rational valuations, rational timelines and clear paths to capital raising. The entrepreneurs are typically better-versed in agriculture. You have larger agricultural hubs, like the mid-west, Salinas, Latin America, Australia, New Zealand and Canada. You find entrepreneurs who have grown up on farms and have domain expertise, and they understand how long it takes to get these technologies to market.

**Dean:** I think it's fair to say that New Zealand valuations are lower. Companies that are able to raise money from US investors are seeing higher valuations than they would have gotten otherwise, which is encouraging.

#### What are some conversations worth having that aren't discussed enough, or haven't been mentioned yet here?

**Kirk**: Here's one of the things that gets missed across the board in the sector. 40% of our deal flow is international, and I like to parallel Silicon Valley's view around technology relative to agtech. Silicon Valley is 50 years old, and it has

academics, entrepreneurs, VCs and acquirers all within a 50-mile radius. It's fantastic, and there's no other place like it in the world.

Agriculture is 10,000 years old. Agtech is global.

Acquirers and VCs are on different continents.

There is no Silicon Valley for agtech. Many of the most prominent VCs in agtech aren't in Silicon Valley. They're in San Diego, Israel, Chicago, Boston, Los Angeles and New Zealand and new ecosystems are popping up all over the world.

The other piece is the importance of the agtech ecosystem, and really understanding the size and scope of the problem and what it's going to take to get that technology into the hands of end-users. Agtech adoption within farms is accelerating—not as fast as other industries because of biological constraints, but that's starting to change. Retiring farmers are handing the reins to younger generations, or to corporate growers who are starting to embrace technology more quickly. But if you're unable to get your technology on to a farm somewhere in the world quickly—to demonstrate that your technology works during a growing season it's going to be hard to get that next round of financing. Identifying that gap is very important. You can't just design a product in four months and get a Series A—it just isn't going to happen in this sector. Series A investors want to see these products work on a farm, even if it's on one acre. It's a global market and therefore a global opportunity, and investors need to have an ecosystem in place to get these technologies adopted more quickly.

Dean: I agree that adoption rights around technology aren't discussed enough. At the moment, we would classify adoption rates in New Zealand as being low. Adoption rates of IoT and precision ag would probably be closer to 10% rather than 50%. While we have companies have a good understanding of the problem, they're not necessarily putting as much emphasis on the user interface and the customer experience. That's contributing to the slow uptake. When you see companies coming through with forecasts and business plans that have quick levels of adoption, there's a natural question of what other companies are doing differently. There needs to be discussion in New Zealand around why the situation is the way it is and where we can move faster. The solutions need to make life easier, not necessarily just adding yield through a convoluted system.



# Seed-stage survey data

#### Qualitative assessment of the agtech market solicited from industry players

Note: This survey was conducted with the intent to garner a qualitative assessment of the market from our strong network of industry participants, as we are still in the process of improving industry datasets in collaboration with PitchBook.

· All seed-focused agtech funds surveyed were either affiliated with an accelerator or incubator, or were dedicated explicitly to seed-stage investing. The majority were focused on investing within the US, yet overall geographies were varied, spanning Europe, South America, Central America and Southeast Asia.

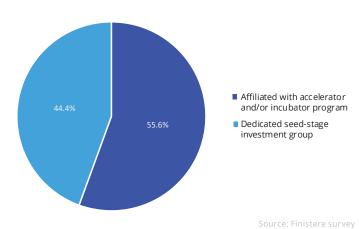
· Cleantech was a clear majority focus, with a couple responses indicating social impact was an additional goal.

- Overall, investment size and activity indicates respondents are staying within typical early-stage confines, with a preponderance of convertible debt usage and check sizes ranging within \$250,000 and below.
- Associated seed-stage valuations on average were declared to be \$2 million to \$5 million by a majority, with sparse commentary indicating valuations have been at least flat or trending upward, in line with feedback that

the amount of capital flowing into agtech has also increased.

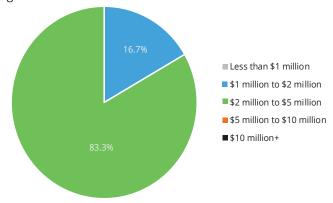
· Interestingly, although precision agriculture and sensor plus farm equipment were the top sectors in terms of self-reported investment focus plus observed deal flow, livestock technology and aquaculture were noted as other areas of potential interest, along with supply chain analytics and infrastructure.

How would you classify your seed fund?

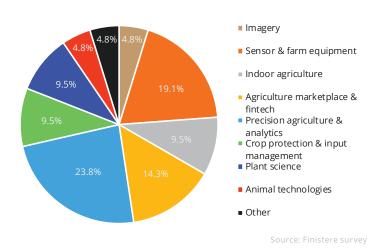


agtech was:

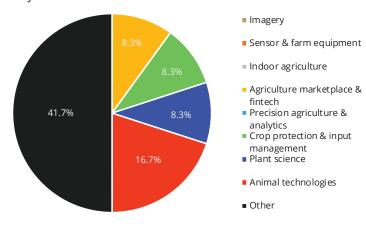
Over the last 12 months, the average seed-stage valuation in



In which agtech segments do you see the most deal flow?

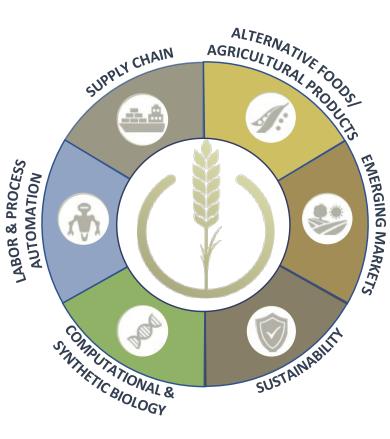


In which segments are you most interested in investing and why?





BRINGING TOGETHER
LEADERS IN THE AGTECH
ECOSYSTEM TO
ACCELERATE WORLD
FOOD PRODUCTION
THROUGH
TECHNOLOGICAL



#### **FARM 2050 SUPPORT**

INNOVATION

An ecosystem of partners resources...







Customer



Land & Trial support



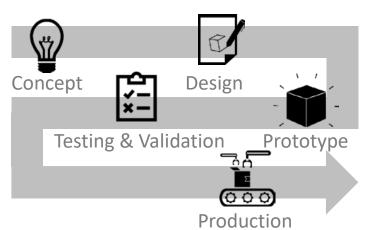
Data



Mentorship

#### **INNOVATION PROCESS**

...to help AgTech startups develop, iterate and validate their vision











## Regional spotlight: Israel

By Shmuel Rausnitz, Start-Up Nation Central



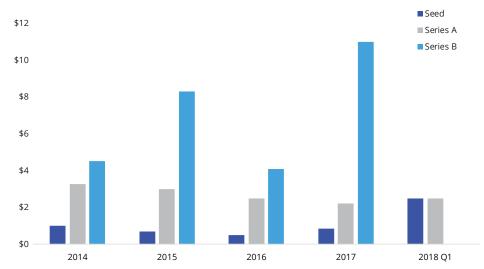
Seed and follow-on of increasingly higher value have flowed to Israel's agtech sector over the past several years. The \$9 million worth of seed investment raised by four companies last quarter is the latest manifestation of growing average values, at a compound quarterly growth rate of 7% since the beginning of 2014. Whether seed investment activity in full-year 2018 will end up resembling the year-end polarization of 2015 and 2016 or the middle-quarters-heavy distribution of 2017, the trend portrays growing investor confidence. As for the 18 B rounds—eight of which were in the tens of millions—their average value is increasing at a compound quarterly growth rate of 34.7%. The trends indicate that young agtech startups in Israel are growing more compelling to investors, and a consistent showing of startups that are further along and have already received follow-on investment are proving viable for ongoing and greater financial bolstering.

Seed and follow-on funding in Israeli agtech derives from a diversity of foreign and Israeli investors. The 32 rounds in 2017 (18 seed and 14 A/B) included six foreign VCs with offices in Israel, 32 foreign investors operating only from abroad, and 10 Israeli investment sources. As for the seven investments in 1Q 2018 (four seed and three A/B), 17 foreign investors and five Israeli sources participated—some more than once. These figures portray a considerable amount of international partnerships; foreign investors are having no trouble identifying deal flow in Israeli agtech and coordinating partnerships with local VCs or independently with the companies.

The technology foci of all equity-based investment rounds in Israeli agtech over the past two years have been precision agriculture, imagery, and sensors. The total value of investments in such technologies in 2017 increased 88% from the preceding year, when precision ag was already leading the other subsectors in investment value and number of rounds. Specifically, smart irrigation and pest management solutions

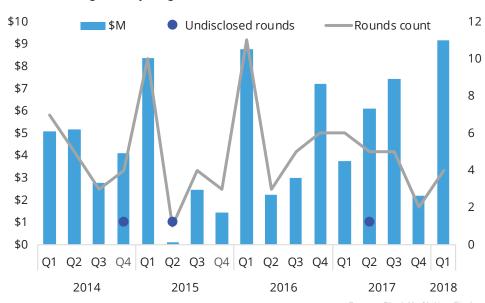
### Late-stage values up, Series A stagnating

Median values by round types in Israeli agtech (\$M)



#### More seed capital heading to Israel

Israeli seed-stage activity in agtech



have proven most alluring for investors, including in 1Q 2018. We also note rising investor interest in Israeli plant science and alternative protein—particularly in cultured meats and novel greens. The total investment value of Israel's alternative

protein companies increased fifteenfold in 2017 and already saw new investments at the beginning of this year. These subsectors stand out among 14 that constitute the diverse and competitive Israeli constituent of global agtech innovation.







# Regional spotlight: Australia & New Zealand

By Sarah Nolet, AgThentic; Dean Tilyard, Sprout; and Suse Reynolds, Angel Association New Zealand

#### Australia

Though Australia has always had strong agriculture (innovative farmers amidst tough soil and climatic conditions, strong export-oriented economy, etc.), what has changed in the last few years is the growth of the agtech ecosystem, across sectors and all levels. Government programs, entrepreneurs, farmers, agribusinesses, investors, and research organizations are all increasingly aware of and participating in this new industry. Access to capital remains a challenge in some cases. That said, good deals are getting funded, and the growing accelerator/incubator space is helping to fill this gap and de-risk deals for investors. Finding effective ways to leverage the know-how in the research community also remains a challenge, but one that is actively being faced.

There's increasing recognition that agtech, while related to agriculture, is a separate industry that has significant potential, without constraints of production. Further, Australia has existing strengths in research that, when effectively combined with a renewed focus on commercialization and inclusion of farmers, has created a real "boots on the ground" approach to agtech. Solutions developed here are grounded in the realities of farming and are often even led by producers or industry veterans (rather than tech entrepreneurs).

#### New Zealand

New Zealand's agtech ecosystem is rapidly mobilizing, with notable increases in startup activity, investment and corporate engagement. Contributing factors include a robust educational network, as well as interested corporations. Accelerators' continued activity also helps boost the vitality of the ecosystem. Entrepreneurs and startups are leveraging New Zealand's expertise in water management, pastoral farming, animal health and food processing with new opportunities developing,

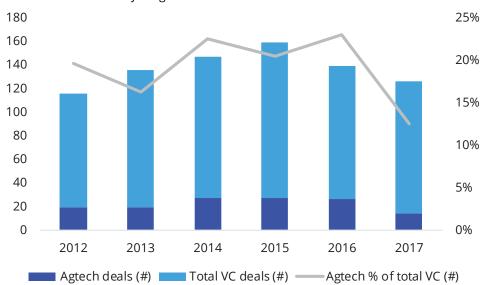
#### **Bouncing back**

Australia seed and accelerator/incubator activity in agtech \$25 45 Seed-stage deal value (\$M) 40 Accelerator/incubator \$20 35 deal value (\$M) Seed-stage # of investments 30 \$15 Accelerator/incubator 25 # of investments 20 18 \$10 15 10 \$5 6 5 \$0 0 2010 2011 2012 2013 2014 2015 2016 2017 2018\*

Source: AgThentic, PitchBook

#### Agtech a significant sector in New Zealand

New Zealand VC activity in agtech



Source: Angel Association New Zealand \*As of May 2018

including in high-value horticulture production. Investor confidence, interest and commitments are increasing, as viable technologies continue to be produced. The next stage is focusing on scaling, transitioning startups to international markets and accessing connected capital.

Key hurdles to overcome will be utilizing a diaspora of agtech companies and talent to raise awareness and increase access to sources of capital, as funding of significant scale continues to remain a barrier for startups given the relative size of the ecosystem.

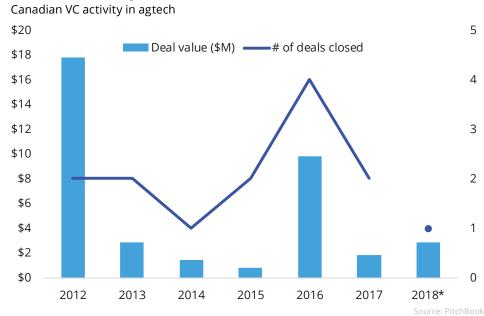


## Regional spotlight: Canada

Agtech seed activity has progressed in fits and spurts over the years. The region lacks the consistency of activity compared to its neighbors in the US, which saw sustained interest following the 2013 Climate Corp. acquisition. Canada, by contrast, had its two best years in 2011 and 2015, with \$17.8 million and \$9.8 million invested, respectively. The intervening years have all recorded less than \$3 million each in total seed activity.

Despite its proximity to the US market and its large swath of farmable land, the agtech ecosystem within Canada is somewhat disconnected from the global market. The talent levels among entrepreneurs and agtech investors is one factor, which is reflected in the data. That said, the Canadian agtech market is poised to improve over time. Canada boasts a strong grant funding ecosystem that should serve as a foundation for stronger early-stage investing going forward, including seedstage investments. Moreover, observers point to promising innovations coming from Canada, particularly in the food category. More technical opportunities are fewer in number, but that may also change as new corporate entrants come to market and spur activity. Talent is available in some respects, though it hasn't translated into investment

#### Canadian activity still subdued



opportunities in categories like precision ag or imagery. Canada does have potential to become a hub of fintech-related activity, however, given the existing talent there in software, communications and IT.

Given its considerable natural resources, the Canadian ecosystem should also see a rise in ancillary sectors like inputs and bioenergy. The Canadian government has committed large amounts of money into the broader agricultural market, mostly through research and development grants. Pivoting from R&D spending to institutionalized investment has been trickier, with much of the Canadian R&D pipeline being underfunded for several years. Capitalizing on that pipeline of innovation remains to be seen, but as the ecosystem is populated with more talent, entrepreneurs and corporate entrants, the data may begin to change, as well.

#### Select seed financings of agtech companies in 1H 2018

Company name	Investors	Deal size	Deal date	HQ
Smart Ag	Stine Seed Farm	\$5.00M	June 14, 2018	Ames, IA, USA
Bear Flag Robotics	Liquid 2 Ventures, Trucks Venture Capital, True Ventures	\$4.59M	May 16, 2018	Sunnyvale, CA, USA
FieldIn	Gal Ventures, Germin8 Ventures, Israel Innovation Authority, Terra Venture Partners	\$4.00M	January 10, 2018	Yokneam Illit, Israel
Aquabyte	Alliance Venture, Costanoa Ventures, New Enterprise Associates, Princeton Alumni Entrepreneurs Fund	\$3.50M	January 30, 2018	San Francisco, CA, USA
Karnott	Leap Ventures, Partech Partners	\$2.96M	May 30, 2018	Lille, France
Motorleaf	500 Startups Canada, BDC Capital, Desjardins Capital de Risque, Fluxunit, Radicle, Real Ventures	\$2.85M	May 15, 2018	Montreal, Canada
Beta Hatch	Cavallo Ventures, E8, Frontier Angel Fund, Keiretsu Capital, Keiretsu Forum, NQV8	\$2.10M	February 1, 2018	Seattle, WA, USA
AVA Technologies	Vanedge Capital	\$1.75M	June 6, 2018	Vancouver, Canada
Gramophone	Info Edge	\$1.00M	March 6, 2018	Indore, India

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