

A Silicon Valley-based venture capital firm run by a Kiwi<sup>1</sup> looks for agri-tech solutions to global problems. If you are feeling overwhelmed<sup>2</sup> by apocalyptic mid-century climate scenarios, avoidable only if we can radically curb<sup>3</sup> greenhouse gas emissions, consider an even more pressing problem.

By 2050, the world will need to feed 10 billion people. That will require a 70 per cent increase in current food production and a leap forward in innovation as significant as Norman Borlaug's green revolution of the 1950s and 1960s, which massively increased crop yield<sup>4</sup> and is credited with saving hundreds of millions of people in the developing world from starvation<sup>5</sup>.

We will literally have to do more with less, a situation that is fueling an investment boom in cutting edge<sup>6</sup> agri-tech companies – estimated at US\$735 million last year alone by analyst group PitchBook. Now a Silicon Valley-based venture capital firm run by a Kiwi is opening an office in Palmerston North to tap our own agri-tech industry for answers to that existential problem.

"I have a passion for what we can do here. There's a lot of great technology and science that is not being commercialised," says Arama Kukutai, the co-founder of Palo Alto-headquartered Finistere Ventures.

The pioneering agri-tech investor has taken stakes in companies from Ireland to Israel, but also has a strong weighting of New Zealand companies in its portfolio, thanks to Kukutai's roots in Ngaruawahia and long association with the New Zealand agricultural sector. Zeakal, BioLumic and Invert Robotics are among Finistere's local investments, with the company often leading a group of investors who bring international networks and industry links, as well as money to the table.

### Beyond meat substitutes

Finistere, says Kukutai, is on the hunt for innovations that can disrupt sectors, not 'me too' ideas. That means less of a focus on plant-based meat alternatives, epitomised by the likes of Beyond Meats, which listed on the Nasdaq stock exchange last month, or New



Zealand's own pea protein-based chicken substitute producer SunFed.

"We are looking at novel technology in 'protectable' areas," he says.

"We are doing some work around molecular proteins and in algal protein production. There are algal<sup>7</sup> compounds that have the effect of sweetening. They could be replacements for sugar or synthetic sweeteners."

Another area of focus for Finistere is on technologies to help reduce food waste. US supermarkets alone lose US\$15 billion annually in unsold fruit and vegetables, according to the US Department of Agriculture.

"From field to farm, as well as inside the supply chain, waste is a massive issue," Kukutai says.

Finistere has invested in Danish company Telesense, which uses sensors to monitor the contents of grain elevators, where a year's inventory of food can be stored at any one time.

"When you think about all the inputs that went into producing it, to waste any of it adds another environmental problem. It's another way of addressing food security," says Kukutai.

✦ Peter Griffin, *How agri-tech innovation in NZ can help solve the world's most pressing problems*, noted.co.nz, 2019

1. citizen of New Zealand
2. submerged
3. reduce
4. agricultural productivity
5. hunger
6. modern
7. related to or caused by algae