

# Protected cropping heralded as the ideal system to help supercharge Australian agriculture.

'Sustainable growth' is the key phrase underpinning the Australian Government's plans to make the nation's agricultural industry a \$100 billion industry by 2030. Yet with widespread and continued drought conditions challenging these ambitious plans, growers are looking to new solutions to ensure more consistent crops and higher yields – and protected cropping is one increasingly attractive proposition. There's no doubt that indoor and controlled environments, speed breeding and hydroponic systems are currently driving food production like never before. The Protected Cropping Industry is the fastest growing food producing sector in Australia, valued at around \$1.8 billion per annum. As Vertical Farming Systems Executive Director John Leslie explains, that's no surprise. "Australian agriculture currently has a return on investment of about 3-5%, and that's not sufficient to attract investment into the sector," he says. "Vertical farming removes much of the labour cost, which is the most expensive component of farming, so the ROI can be increased to 20% and upwards – and then agriculture does become an attractive investment proposition." With a \$3.9 billion fund recently set up to support water infrastructure and drought-related projects, protected cropping has never been more relevant. Controlled environment farming protects the industry from unfavourable weather conditions like drought, contributing to more consistent crops and higher yields. John sees vertical farming as the ideal solution for some parts of the industry, because the process is impervious to climate, and the dehumidification process generates a massive amount of water. "We're actually producing water out of the air, and that makes vertical farming highly viable, even in places as arid as the Sahara desert. While vertical farming isn't a fix-all for every drought situation, it's another tool we can use to combat the effects – and it will certainly support some parts of the food supply chain and help address things like drought." Current advancements in the technology mean that protected cropping will soon be applicable on a broader scale. John explains how his company is developing systems that will soon be able to produce animal feed and proteins. "It's based on the same technology we're right now using for vegetables, and over time that will begin to address the problem on a wider scale," he says. Hydroponics is another production sector currently experiencing rapid growth – and as hydroponic grower and consultant Brian Ellis explains, it's highly efficient in its use of inputs including water, fertilisers, labour, land and energy. "It's possible to produce 5-10 times as much per hectare using hydroponic systems compared to growing in soil. There's no doubt that adverse weather is impacting everyone as the climate continues to change – but with hydroponics you have much more control over your environment. Essentially there's much more predictability, and less effect from extreme weather." Brian explains how hydroponic systems use only minimal water, which contributes further to their viability. "We often only use as little as 5% of the water for re-circulated hydroponic crops, compared to growing the same crop out in the field. That gap may have closed a little with the introduction of new technologies, but it's still nowhere close to that figure. As drought continues to affect growers, there's no doubt that hydroponics will become even more important, and more relevant to the success of the industry." In the face of food security and global climatic variability concerns, safe, sustainable protected cropping in the form of vertical farming, hydroponics and speed breeding could well be the way of the future. With protected-crop growers at the forefront of highly sustainable, efficient and innovative food production processes, protected cropping will increasingly help to secure a profitable and more sustainable future for Australian agriculture. The Global Forum for Innovations in Agriculture (GFIA) will present the latest innovations and technologies for the controlled environment and protected cropping sector at Australia's largest agricultural innovation event, GFIA in Focus, in Brisbane on November 27-28. John and Brian will join a host of guest speakers discussing everything from vertical farms and greenhouses to hydroponic and aquaponic systems and much more. To register for a free entry badge or to find out more, visit [www.gfiaaustralia.com](http://www.gfiaaustralia.com) Ends Media Enquiries: Kate Munsie - C7EVEN COMMUNICATIONS (02) 6766 4513 [kate.munsie@c7even.com.au](mailto:kate.munsie@c7even.com.au) Photo captions: Previous GFIA Protected Cropping Exhibition Protected Cropping

## Contacts

Kate Munsie  
02 6766 4513  
mailto:  
Adam Arndell  
0267664513  
mailto: