# Navigating Productivity Opportunities in Australian Horticulture

Hort Innovation

In the face of rising input costs, labour shortages, and increasing global competition, the Australian horticulture industry is at a crossroads. The recently released *Factors Driving Horticulture Productivity* report, commissioned by Hort Innovation and developed by the Centre for International Economics (CIE), presents a compelling case for embracing innovation to unlock up to $1 billion annually in additional value added, reaching $22 billion in 2040.

This forward-looking economic framework offers growers and industry leaders a practical lens through which to understand the key drivers of productivity and the tangible benefits of adopting new technologies. More than just a theoretical exercise, the report also provides actionable insights and a modelling tool that can help growers start to analyse where they can achieve more with less, today.

## The productivity imperative

Sustained productivity growth is the cornerstone of profitability and competitiveness in horticulture. With domestic and international pressures mounting, growers must find more productive ways to operate.

Productivity is the engine that drives profitability. In other words, increasing profitability cannot be achieved in the long run without improving productivity. By producing more with the same number of resources or producing the same amount with fewer resources - whether through better data, smarter labour practices, or more efficient use of inputs - growers can maintain margins even in challenging market conditions.

The report identifies four key innovation areas that, if adopted strategically, can significantly boost productivity across the sector:

**Production Cost Analysis**

**Automated Farm Data Collection**

**Mechanisation & Automation**

**Machine Learning (ML) & Artificial Intelligence (AI)**

These innovations are not just buzzwords—they represent real opportunities to streamline operations, reduce waste, make better decisions and boost profitability.

## What's at stake?

The modelling framework developed by CIE for the report allows the industry to simulate different innovation adoption scenarios, analysing the potential 'value added' by adopting certain practices.

Value added is a measure representing the value retained by the industry after external costs - such as fuel, fertiliser, etc - are paid. It includes business profits, wages, and returns to capital. By focusing on value added, we gain a clearer picture of the actual value of productivity benefits for growers. It reflects what stays within the industry and directly contributes to its sustainability and growth.

In 2025, the horticulture industry's value added is estimated at $8 billion. Under a **High Adoption** scenario, where growers rapidly embrace the four innovation areas, productivity growth averages 1.3% per year, pushing industry value added to $22 billion by 2040 - a 78% increase compared to a baseline scenario.

In contrast, a **Low Adoption** scenario sees slower uptake, with productivity growth averaging 0.7% per year and industry value added reaching only $17 billion - a 30% increase over baseline.

Even modest improvements - like a 10% increase in adoption rates and a two-year acceleration - could deliver an additional $10 billion in value.

> The message is clear: the pace and scale of innovation adoption matter

The modelling tool that accompanies the report provides a practical resource for growers to explore productivity solutions tailored to their own operations and assess the right adoption scenario for them.

## Productivity in action: An example of how others are achieving productivity boosts

While the numbers are compelling, the real power of this report lies in its practical application. Across Australia, growers are already demonstrating how small, strategic changes can lead to significant productivity gains.

According to Simon Dornauf at Hillwood Berries, "The most crucial path to productivity is to identify improvements and courses forward through the use of on farm data."

"As the industry continues to change, to remain viable, we must be looking for ways to streamline and remove input costs. The capability to do this lies in being able to assess where the money is going and where there are opportunities to reduce or remove costs entirely."

"We've found through building our own app, we've been able to change our practices on farm to get more output for less. We hope to continue to do this more in the coming years and build our database so that every challenge we come up against we can try and find a viable solution."

From capturing harvest picking insights to monitoring the cost of production, Simon believes using data will help create longevity in the business. But he knows that data analysis takes a particular skillset, so to further his productivity he has hired a Productivity Analyst with a background in economic analytics, to help identify opportunities across the business and help build an app and dashboards that display the data recorded in real time allowing his managers to make clearer, data driven decisions.

## Further practical applications

**Understand costs:** As outlined by the report, all growers can work to understand their costs to improve productivity. This starts with understanding where your money goes. By gaining clearer insights into input costs - such as labour, fertiliser, and packaging - growers can identify inefficiencies and avoid overspending. Practical ways to build this knowledge include participating in benchmarking projects, attending field days, and sharing insights within grower networks. A more informed industry is a more productive one.

**Stay engaged with your local industry development officer:** Via the Hort Innovation project *Facilitating the development of the Australian berry industry (MT22010)* - which is funded by the berry R&D levies and contributions from the Australian Government – Berries Australia is working to enhance the adoption of innovation and technology in the Australian berry industry through sharing R&D information with the Australian berry industry across priority areas. By continuing to keep abreast of the information shared by Berries Australia, more information on productivity solutions will continue to become available as R&D project outcomes are reached.

The **Factors Driving Horticulture Productivity** report is more than a roadmap - it's a call to action. With up to $1 billion annually in additional value added on the table, the stakes are high. But the path forward is clear: embrace innovation, invest in capability, and make data-driven decisions.

**Whether you're a strawberry, blueberry, raspberry, or blackberry grower, the tools and strategies outlined in this report are relevant and actionable. By taking small steps today, growers can position themselves - and the industry - for a more productive, profitable, and sustainable future.**

You can find the full report, report summary, model and model user guide at the Berries Australia Resource Library.

Visit bit.ly/BA-RL and search 'HA24004' or 'productivity'

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