



Inquiry into food security in Australia

The House Standing Committee on Agriculture

December 2022



About AUSVEG

AUSVEG is the prescribed Peak Industry Body representing the interests of the Australian vegetable and potato industry. AUSVEG is a not-for-profit, member-based organisation that is run by growers, for growers.

AUSVEG represents over 3,600 vegetable producers that account for 3.83 million tonnes of vegetable production worth \$4.91 billion in farmgate value and over \$5.2 billion in retail value annually.

AUSVEG is a nationally federated body with the following members: AUSVEG VIC, AUSVEG SA, Growcom, vegetablesWA, NSW Farmers, NT Farmers, WA Potatoes, and the Tasmanian Farmers and Graziers Association (TFGA).

AUSVEG advocates on behalf of industry at local, state, and federal levels with the core purpose to enhance the economic, social, and commercial environment for growers so that the industry can continue to produce outstanding vegetables and potatoes for local and international consumers.

AUSVEG delivers projects for growers around Australia in the areas of extension, communication, environmental sustainability, biosecurity, export development and market access. We work closely with Australia's growers to ensure their needs are reflected in this work.

AUSVEG also hosts Hort Connections with the International Fresh Produce Association. This annual event is the largest conference in Australian horticulture and brings growers, supply chain and industry members together to increase awareness and uptake of the latest industry innovations and research, facilitate industry networking and recognises the industry's leading contributors through the National Awards for Excellence.

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Industry Insights

3,600+
Vegetable
Businesses
in Australia

Gross value of Australian
vegetable and potato industry is
\$4.8 billion

Horticulture
employs
more than
60,000
people



3.72 million tonnes
fresh vegetables and potatoes
grown in Australia

In 2019-20,
Australian growers
exported over
210k tonnes
of fresh vegetables
valued over
\$275 million.

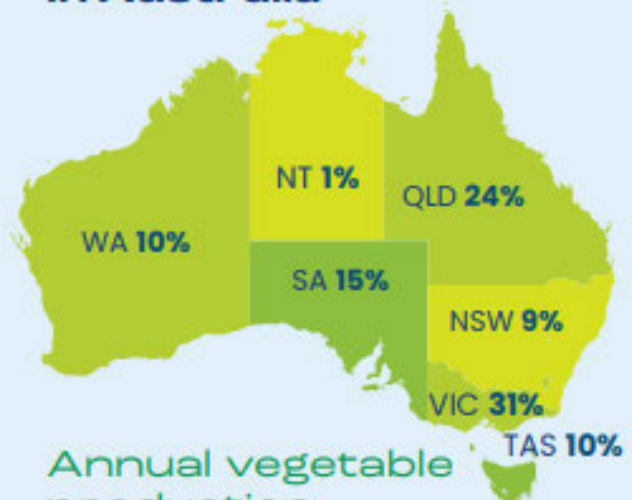
**Top export markets
in 2021 include:**



Average
consumption
of vegetables
and legumes is
**2.4 serves
a day.**

Australian Dietary Guidelines
recommend 5 serves a day.

Vegetable Production in Australia



Annual vegetable
production:
**3,723,506
tonnes (\$4.85b)**

Introduction

At almost every meal, half a plate is dedicated to our industry, and yet it is often rejected when it comes to critical issues that affect growers. Vegetables are the core of our diet, we cannot survive without them, unlike many other foods.

The Australian vegetable industry faces significant challenges, including extreme weather events, to constant threat of biosecurity incursions and shortages to workforce and vital farm inputs such as fertiliser and chemicals. Vegetable growers are the first to experience these challenges and are the most impacted by them.

In this submission, AUSVEG will be focusing on eight areas, including:

1. National Supply Chain resilience
2. Consumption
3. Competition
4. Cost of production
5. Biosecurity
6. Climate Change
7. Food Waste
8. Exports

Each is critical for the horticultural sector to operate sustainably. Australia produces an abundance of food with our farmers providing over 90% of our domestic food supply. It is forecast that agricultural exports could reach over \$70 billion in 2022-2023, providing food across the region to international markets reliant on our produce.

Whilst Australia has little risk of becoming food insecure, there is the risk that our food will become unaffordable and unavailable. AUSVEG acknowledges that food insecurity does exist in parts of Australia. Regional and remote communities as well as lower socio-economic communities do have issues accessing healthy, nutritious food at affordable prices.

The horticultural sector is vulnerable to climatic and political changes as demonstrated during the pandemic with imports such as fertiliser, chemicals, machinery, and packaging affected by disruptions to global supply chains. The pandemic also saw a mass exodus of foreign workers, many of whom were working in agriculture. Again, with the Russian invasion of Ukraine, horticulture was severely affected by fuel and electricity hikes. And lastly, the severe flooding caused by climate change has wiped out whole horticultural businesses.

Each of these events affect the availability and affordability our Australian vegetables, as we saw from the \$12 lettuce in supermarkets. It is important that we highlight these issues and prepare for the future.

Whilst our current trajectory sets us to reach \$8 billion by 2030 we also have aging farmers, few people entering the industry and looming global threats. AUSVEG outlines in this submission how to address the industries core issues and create changes that will have flow on effects to other industries and communities domestically and abroad.

Like most industries through the food supply chain, the Australian vegetable industry faces significant challenges in securing a sufficient, competent, reliable workforce. ABARES estimates the total number of workers used by Australian horticulture farms decreased by around 20 per cent (29,300 workers) over the last three years, mainly due to a decrease in overseas working holiday makers.

The economic cost for vegetable growers of the ongoing labour shortage is not just the lost profits for the lost production that couldn't be planted and harvested, but also the longer-term impact for vegetable

growers who must reduce investment in areas that would increase their production efficiency and profitability for future seasons.

AUSVEGs submission to the Inquiry into Food Security in Australia is supported by our state members including: AUSVEG VIC, AUSVEG SA, Growcom, vegetablesWA, NSW Farmers, NT Farmers, WA Potatoes, and TFGA.

Recommendations

1. Develop a National Food Supply Chain Resilience Plan.
2. Government better support Australian households to access healthy, nutritious foods including \$100m to develop and execute a national strategy and behaviour change program to increase fresh vegetable consumption.
3. Investing in a marketplace transparency tool for the vegetable and potato industry.
4. Make the Food and Grocery Code mandatory.
5. Develop Unfair Practices Provision in the Competition and Consumer Act.
6. Increase sovereign capability by investing in local manufacturing facilities to develop key inputs such as fertiliser.
7. Improve seasonal worker movement flexibility within the PALM scheme.
8. Re-connect under participating countries back into the PALM scheme.
9. Develop a dedicated Agriculture Visa or Harvest Work Visa.
10. Support unemployed Australians to reintegrate back into the workforce.
11. Support on-farm initiatives to increase farm sustainability, i.e. renewables fundings and waste recycling.
12. Develop a National Labour Hire Licensing Scheme to improve working conditions and attract more workers into the sector.
13. Incorporate Agriculture into Australian primary and secondary curriculum.
14. Restart consultation on the Biosecurity Imports Levy with stakeholders, with a view to implementation.
15. Government reform to increase capacity and capability of critical government services in biosecurity through increased and sustained funding.
16. Immediate increase in resources to support plant pest incursions like the Varroa mite response and other on-going threats.
17. Develop a measurable implementation plan to measure progress against the National Biosecurity Strategy.
18. Provide industry with opportunity to engage at the national level in area of priority setting, decision making and planning.
19. Develop on-farm workshops to educate growers about mitigating climate risks and regenerative practices to ensure ecosystems are protected for the long term.
20. In development of a future food security plan, the utilisation of food waste needs to be given integral consideration.

Contents

About AUSVEG.....	2
Industry Insights	3
Introduction.....	4
Recommendations.....	6
National Food Supply Chain Resilience Plan	8
Consumption	8
Competition.....	9
Market price transparency	10
Cost of Production	10
Inputs.....	10
Workforce.....	11
National Labour Hire Licensing.....	14
Future Workforce	15
Biosecurity	15
Climate Change.....	17
Food Waste.....	17
Export	18

National Food Supply Chain Resilience Plan

Despite countless reports and research in recent decades, Australia has so far failed to produce a nationally coordinated, cross-portfolio assessment of risks to its food supply chain, along with measures to mitigate those risks.

The need for such an assessment continues to grow as the rate and severity of disruptive events has increased in recent years, with that trend set to continue.

There are many existing and emerging threats that could hamper Australia's ability to meet its own food security needs, as well as its ability to contribute to global food security. Many of these are already inhibiting Australia's food production. Many more still, including future risks and vulnerabilities, could be identified through comprehensive supply chain risk mapping.

All these potential disruptors have never been brought together under 'one' co-ordinated national strategy. In order to prepare and plan for disruptions, government and industry must work together to fully understand the complexities of our food system and how specific events might impact the various links in the food supply chain.

From both governments and industry's perspective, research has shown many social and economic benefits from a more efficient, sustainable, and self-sufficient national supply chain. It will provide more stability to food related businesses, boost innovation and technology, enhance the nation's food processing capacity, create jobs and, most importantly, protect Australia's most vulnerable community members who feel the effects of food insecurity most acutely.

The development of the Plan should be undertaken between the Australian Government and the Food Industry, with input from state and territory governments and relevant NGOs. This must be a truly 'whole of government' initiative – working across all relevant portfolios. All relevant industry stakeholders should be consulted to ensure current and emerging risks to Australia's food system are considered.

Recommendations:

- **Develop a National Food Supply Chain Resilience Plan.**

Consumption

The issue of alarmingly low and declining domestic consumer demand is now a multi-billion-dollar problem that is impacting the economic, health, social and environmental wellbeing of all Australians.

This problem starts at the paddock, threatening operating viability and the confidence of Australian growers, and flows right across the fresh food supply chain. It directly impacts the livelihood of our regional communities, with low economic growth, low investment, and the loss of jobs. This flows into Australian homes with poor dietary choices directly impacting our physical and mental health, and on to our health care system with overweight and obesity now the leading cause of chronic disease. This in turn drives our escalating health cost burden and it flows directly back to Government and Australian taxpayers.

Australians are currently consuming 2.4 serves a day, well under the recommended 5 serves a day. Since 2001, we are consuming $\frac{1}{2}$ a serve fewer vegetables per day, equating to 13kg per person per year. This equates to staggering \$1.2 billion of GVP per year that is lost from the farmgate, and this is felt right through the fresh produce supply chain and directly contributing to our escalating health burden, social isolation, and environmental footprint.

Investing to grow vegetable consumption offers a compelling case for investment:

- If Australians consumed just one additional serve of vegetables per day, this would deliver:
 - \$200 million reduction in health expenditure per annum.
 - \$1.3 billion increase in returns to Aussie growers and food supply chain operators.
- Driving an increase of just a serve per day will lead to improved health and wellbeing – reducing mental and physical health issues, obesity, and other illnesses – generating more than \$1 billion economic value after 11 years to Australian taxpayers and Governments at all levels.
- Every \$1 invested in a behaviour change program to increase vegetable consumption results in a \$10 return on investment.
- Every new job created in the Australian food industry supports an additional job in the regional economy.

Research undertaken in 2022 by the Fruit and Vegetable Consortium highlighted that the key barriers for increased vegetable consumption were:

- Cost of vegetables
- Short shelf life
- Lack of skills in planning and preparing vegetables.

The cost of vegetables is a barrier for many Australians meeting the dietary guidelines as people do not have the financial means to purchase fresh fruit and vegetables. The Foodbank Hunger Report 2022 states that over 2 million households in Australia (21%) have experienced severe food insecurity in the last 12 months. Case studies demonstrated that people were forced out of healthy food choices to cheaper more filling food options.

People in rural and remote Australia cited more expensive food due to freight and logistic costs and lack of good quality, fresh food due to reduced shelf life because of transit times as reasons for food insecurity or poor diets.

Recommendations:

- Government better support Australian households to access healthy, nutritious foods including \$100m to develop and execute a national strategy and behaviour change program over 5 years to increase fresh vegetable consumption.

Competition

Australia is unique in our retailer system, which is dominated by two key players (Woolworth and Coles) accounting for 65 per cent of the food retailer industry revenue. Aldi accounts for 9.8 per cent followed by Metcash at 6.9 per cent of the market share. Thus only 17.8 per cent of the market share to other retailers such as Amazon, Costco, and independent retailers.

Unlike other countries such as the United States of America, France, and England, which have at least six or more core supermarkets chains, Australia's market is highly concentrated. The highly concentrated market share in the Australian system gives the duopoly a high degree of bargaining power in commercial negotiations with suppliers.

The concentrated retail sector limits supplier options and significantly reduces their bargaining power. Growers struggle to receive a fair price that allows them to cover their costs. To safeguard food security, Government needs to ensure effective policy is in place to encourage fair competition and equal power for all stakeholders.

Market price transparency

The power imbalance is further exacerbated by the lack of market transparency in the vegetable industry. Growers are unable to see what price their product is being sold for around Australia making it difficult to know what a competitive price is. Most other agriculture industries have visibility over pricing Australia wide, for example the Eastern Young Cattle Indicator (EYCI), the ADPF Milk Value Portal and the AWB grain prices index.

The concentrated marketplace and lack of transparency has made it increasingly difficult for growers to receive a competitive and sustainable price for their goods.

There needs to be more control and visibility over the retailer and supplier relationships and dealings to ensure a fair negotiation system. A system that can allow suppliers to negotiate fair prices and terms without fear of retribution. The Food and Grocery Code is the code that regulates this relationship, this code has no teeth as it is a voluntary code.

A system that ensures suppliers receive a fair price will help growers remain in the industry, producing goods to feed Australian communities.

For example, an approved retail supplier of celery grows a number of plants that has been undefined by the retailer. That retailer will then on a weekly basis bargain with that supplier on the price and amount of celery they will purchase for that week. There is nothing stopping that retailer from turning around and purchasing that product from someone else or stopping that retailer to use their market power and the perishability of that product to their advantage when driving that grower down on price. The grower is not locked into a contract, so the retailer has no reason to buy from them.

To address the unfair behaviours that are demonstrated by the retailers in the above example, Australia needs to develop an Unfair Practices Provision within the Competition and Consumer Act. Both the United States of America and Great Britain have these provisions, which would protect grower suppliers to retailers from unfair dealings.

Recommendations:

- Investing in a marketplace transparency tool for the vegetable and potato industry.
- Make the Food and Grocery Code mandatory.
- Develop Unfair Practices Provision in the Competition and Consumer Act.

Cost of Production

Inputs

The cost of production includes all inputs required to grow produce, including but not limited to labour, fertiliser, water, land, chemicals, fuel, energy, AdBlue, packaging, and seed.

Since the start of 2020, these prices have seen extraordinary increases due to disruptions to the global supply chains. Most of our inputs come from overseas, including fertilisers, chemicals, packaging and labour. When the pandemic hit, Australia's vegetable production was left in a vulnerable position, as the imports of essential inputs slowed or ceased, and products could not be sourced locally.

The reduced production and exporting of inputs to Australia resulted in high prices with key inputs such as Urea fertiliser, which increased 300 per cent in price.

The increases in costs-of-production were for the most part shouldered by the growers themselves as retailers failed to reflect the increases in higher prices to growers. Over the last few years, more growers have been exiting the industry unable to cover their costs.

To safeguard the Australian economy, government needs to think smarter not harder to protect local businesses. For example, the vegetable industry needs secure access to green fertiliser. By using industry by-products and waste such as household food waste, livestock manure, and gypsum waste from the mining industry, Australia can develop high quality fertilisers.

This will safeguard Australia's food security. During the next global supply chain interruption, Australia will be able to produce its own fertiliser and continue to produce as normal. Investing in local manufacturing will have flow on effects to the economy as well as regional and rural communities.

As global energy prices also increase and the industry emissions come under the spotlight, it will be up to growers to make changes to reduce their emissions. Producing renewable energy on farm will both decrease emissions and save growers money in the long term as energy prices increase.

Another input less known about that is becoming increasingly more expensive is land prices and rates. A grower's farmland is becoming worth more than the product they can produce from it. In 2021, land prices increased 20 per cent to an average of \$7,087 per hectare. This was the largest year-on-year increase in dollar terms in the last 27 years and the largest rise in percentage terms since 2005. The national median price has now increased for eight consecutive years, in which time it has risen by 123 per cent. As a result, growers are increasingly selling their land to developers, which is contributing to urbanisation and leaving less agricultural land for farming.

Recommendations:

- Invest in local manufacturing facilities to develop key inputs such as fertiliser.
- Support on-farm initiatives to increase farm sustainability i.e. renewables fundings and waste recycling.

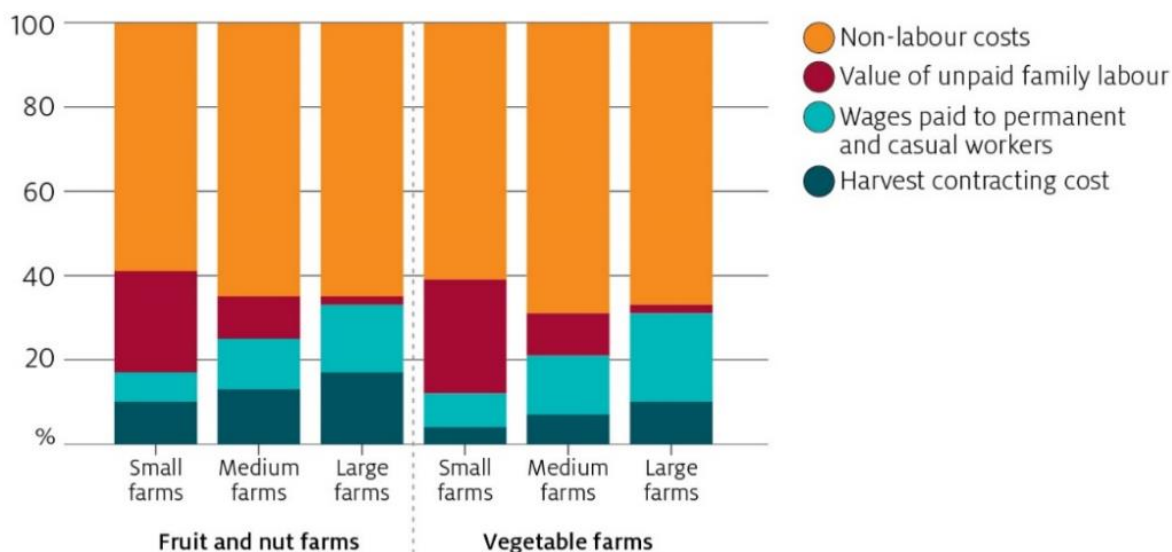
Workforce

Another core input that is often overlooked is labour, yet there is a direct link between labour shortages on farms and the increased prices for fresh produce.

With produce going unpicked, there is less supply going to market, which increases demand for fresh produce in the market, making it more expensive given the economic relationship between supply and demand.

Growers are desperate for workers at all skill levels and stages of production, from irrigation specialists to picker/packers to mechanics. Labour costs make up a significant proportion of the overall cost of production on horticulture farms. For small, medium, and large farms it is over a third of all costs (see Figure 1).

Figure 1: Labour cost share by farm size, horticulture farms by industry, Australia, 5-year average to 2018-19

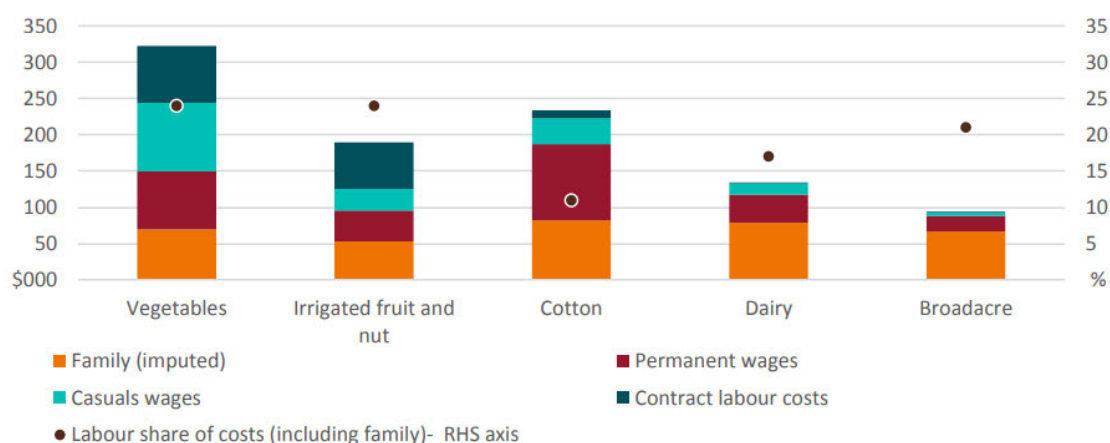


Note: Farm size determined by business turnover – small farms (less than \$500,000), medium farms (\$500,000 to \$2 million) and large farms (more than \$2 million). Data for fruit and nut farms only include farms in the southern Murray–Darling Basin with area planted to fruit or nut crops.

Source: ABARES

The vegetable industry is a labour-intensive industry that requires a great number of workers along the supply chain. In comparison to other agricultural industries, the vegetable industry spends the most on labour, has the highest number of employees and employs the most contract/casual labour. The high number of workers are needed because many vegetables are delicate and need to be hand harvested in order to meet retailers' quality specifications.

Figure 2. Average annual labour expenditure and as a proportion of total costs, by industry, 2017-18



Note: Vegetable farm results reported for 2016–17. Irrigated fruit and nut farm results are based on farms surveyed in the southern Murray–Darling Basin for 2016–17. Labour costs include hired labour and the cost of family labour, but exclude contract service workers who provide machinery and equipment as part of the contract.

The workforce needs of our industry fluctuate greatly throughout the year. During harvest periods, a workforce can swell from 20 to 200-300 workers on a large property.

During December 2020-21, the horticultural industry required approximately 42,000 workers. Over half, 22,500 of those workers were contract/casual, coming onto a farm for a very short period, sometimes from as little as 6-12 weeks during the peak harvest period.

This on-farm workforce was made up of the following:

- Family: 21%
- Permanent Australians: 24%
- Permanent Working Holiday Makers (WHM)/ other overseas: 1%
- Permanent PALM: >1%
- Contract Australians: 25%
- Contract WHM/ other overseas: 23%
- Contract PALM: 6%

A significant portion of the contract/casual labour was WHMs, Australians, and family members of the business owners.

PALM workers have been important in filling the harvest workforce gaps, however because of the nine-month minimum employment period required for PALM workers, they are difficult to place and hence only make up 6 per cent of harvest workers. A harvest period for a vegetable business often only extends for a few intense months. They therefore cannot provide work for all PALM workers outside of the harvest period.

Many growers will use labour hire to recruit a workforce for the needed period, some of these workers are from the PALM scheme.

To secure a long term and reliable workforce, the PALM scheme needs to evolve to fill the need of growers' short harvest work periods. The PALM Scheme also needs to expand to better utilise Pacific nations that are less involved in the scheme, to ensure we create a long-term sustainable program.

Historically WHMs made up 23 per cent of the vegetable industry workforce. In 2021, the legislation requiring WHMs to do their 88-days on farms changed to also allow them to work in hospitality. Due to the labour-intensive nature of farm work and the negative publicity through some media outlets, we will see many backpackers choosing hospitality over horticulture.

A targeted Harvest Work Visa or Agriculture Visa would assist in filling the gap in workers and ensure the visa parameters are more flexible to better meet the unique needs of our industry. Please see the *agriculture specific visa* section below.

The PALM Scheme, Horticulture Industry Labour Agreement and the WHM program are unable to provide a workforce that meets the specific needs of the horticulture industry. We need competent, efficient, reliable workers that can do harvest work on farms for 6 to 12 weeks at a time and follow the harvest trail where needed.

AUSVEG is still supportive of the Agriculture Visa that will fill the gap in the visa system. Alternatively, a Harvest Work Visa (HWV) needs to be designed to help fill the harvest worker shortage.

Similar to the Agriculture Visa and the PALM scheme, the HWV will have high worker protections, enable workers to move between work assignments with different employers and return year on year.

Australians first

The unemployment rate in Australia is at a 48 year low, meaning that most people who want a job, have a job. This creates a challenging and competitive labour environment.

Harvest work is physical, short-term, regionally based, and outdoors, creating a range of barriers for Australians to take up this work. Whilst 80 per cent of the vegetable industry workforce are harvest roles, the other 20 per cent are technical, management and administrative roles. These semi-skilled and skilled roles are in high demand.

AUSVEG recommends supporting unemployed Australians to reintegrate back into the workforce. Unskilled workers could be trained to fill harvest roles whilst workers with pre-existing skills could be retrained to take on semi-skilled and skilled roles.

Programs to reintegrate long-term unemployed have been utilised in some regional areas, with training providers organising transport to not only training them on work skills, but also life skills.

Enabling a flexible and reliable workforce will create a productivity boost for Australian producers and allow the Australian vegetable industry to fill its labour needs during peak harvest periods, enabling businesses to continue to expand and supply high quality fresh produce to Australian and international communities, and ensuring food security through a reliable supply of affordable fresh produce

Recommendations:

- Improve seasonal worker movement flexibility within the PALM scheme.
- Re-connect under participating countries back into the PALM scheme.
- Develop a dedicated Agriculture Visa or Harvest Work Visa.
- Support unemployed Australians to reintegrate back into the workforce.

National Labour Hire Licensing

Labour hire firms and workforce contracting firms play a pivotal role in the horticulture sector in supplying growers with an available workforce to harvest and pack crops. Around 52 per cent of the horticultural workforce is employed through labour hire firms. In 2019-20 this accounted for 52,000 workers during the peak harvest period.

It is critical that growers are able to use labour hire services with confidence knowing that their workers are treated fairly and are paid their award wages

A National Labour Hire Licensing Scheme for the horticulture sector will assist growers to check if a labour hire company is meeting government requirements around regulatory compliance. It will also give workers confidence that they will be treated fairly and paid appropriately without the fear of mistreatment.

The horticulture sector needs a scheme, such as a National Labour Hire Licensing Scheme, that is built with integrity and is well-resourced to ensure that action is taken against unlicensed operators.

The National Labour Hire Licensing Scheme must be well-resourced and funded to ensure enforcement activities are undertaken against rogue operators.

Many horticulture businesses in Australia rely on labour hire operators to access a flexible workforce that can meet the seasonal demands for increased labour. Confusion in the community about the operation of labour hire may allow operators to avoid legal obligations and take advantage of vulnerable workers in the process more easily. Evidence suggests that the horticulture, cleaning, meat processing and security industries are particularly high risk for unscrupulous labour hire practice.

AUSVEG supports better resourcing for the FWO to continue to audit farms so that we can remove/ fine these employers or labour hire companies.

Recommendations:

- Develop a National Labour Hire Licensing Scheme to improve working conditions and attract more workers into the sector.

Future Workforce

Australians lack awareness of the agriculture industry and have become increasingly removed from the food system. The future agriculture workforce is currently at school. We need to do more to educate and entice students about opportunities to work in horticulture. This will achieve multiple outcomes:

1. Educate students about where food comes from and the food system.
2. Increase consumption of vegetables.
3. Improve connection between the regional and urban communities.
4. Show students the career opportunities available in horticulture.
5. Improve the perception of the Australian horticulture industry.

To achieve the above, we need to:

- Develop agricultural education modules for primary, secondary, vocational, and tertiary education (as part of specific agriculture study, electives, or short courses).
- Require a national curriculum unit of Australian Agriculture.
- Engage heavily with industry to ensure curriculum is co-designed and relevant.
- Improve the perception of the horticulture sector.
- Through focused educational units, build students awareness of the career pathways in horticulture.
- Improve exposure to agriculture through programs like 'city experience', which takes students from urban and rural schools into cities. For students who live in cities or urban regions it would be more beneficial for them to do the opposite and do country experience', helping to build their knowledge and understanding of agriculture.
- Continue to support programs such as 'Kids to Farms' to increase children's exposure to farming.

The average age of a farmer is 56. In 2016 only 24 per cent of agriculture workers were under 35 years old. This shows we have an aging workforce and fewer people are entering into post-secondary studies in agriculture. For the long-term sustainability of our industry, we need to ensure we are forward thinking and actively engaging with schools to secure our future workforce

The changing needs of our industry require more innovative, technical, and creative solutions to solve impacts of climate change and input shortages. With the help of industry stakeholders, we need to ensure the required skill sets are built during schooling to produce workers that are job ready and able to meet the food production requirements of a growing population both in Australia and overseas.

Recommendations:

- Incorporate agriculture into Australian primary and secondary curriculum.

Biosecurity

Growers and industry are currently bearing the cost of increasing biosecurity incursions, whether through partaking in an eradication response or increased management costs. However, there are entities along the risk pathways of cargo, sea vessels and aircraft, international travellers, post, and mail that, while contributing to the risk of new pest incursions, do not share the responsibility of the incursion.

The Australian vegetable industry is vulnerable to plant pests and diseases, which are becoming increasingly frequent. To protect our food system we need to ensure we have a robust and well-resourced biosecurity system.

Biosecurity container and passenger levy

Biosecurity is a 'shared responsibility' through the biosecurity continuum. AUSVEG strongly believes that the burden of cost should therefore be shared through stakeholders along the risk pathway.

AUSVEG is of the view that an import levy, along with a passenger levy, is critical to ensure biosecurity is a shared responsibility. Cost sharing of biosecurity risks should be equitable for all parties along the risk pathway. This will provide a pathway for sustained funding for biosecurity preparedness and response.

Industry involvement in all key decision-making levels

Vegetables, potatoes, and plant industries are at the coalface of pest and disease incursions, in response, as well as in preparedness. Peak Industry Bodies (PIBs) like AUSVEG, which represent multiple crops across multiple jurisdictions, offer a unique insight and grassroot level connectivity. PIBs closely understand the challenges faced by stakeholders and can provide critical input for a fit for purpose biosecurity system focused on business continuity and ensure robust businesses.

Plant biosecurity lacks capacity

Over the last five years, the vegetable and potato industries have faced five major incursions – tomato potato psyllid, fall armyworm, serpentine leafminer, American serpentine leafminer and varroa.

Given the volume and frequency of incursions faced by our industry, as well as the plant industries in general, there is a clear and obvious need for increasing capacity and capability across all plant biosecurity agencies. Unfortunately, the opposite is transpiring, and the plant biosecurity agencies are stretched beyond capacity, exacerbated by weather events that the agencies are responding to. This is reflection of a systemic lack of biosecurity support for plant industries by Government.

The varroa mite incursion puts further burden on an already strained plant biosecurity system. State biosecurity staff were being taken away from business-as-usual surveillance, further weakening the system and Australia's biosecurity vigilance.

AUSVEG calls on the Government to urgently increase support towards plant biosecurity. This includes funding to build capacity with the government agencies, as well as PIBs, many of which are single person operations due to lack of resourcing. Government commitment will also garner media support, enabling greater biosecurity awareness, community engagement and a true commitment across the biosecurity continuum.

However, industry is not at the table at key strategic decision-making discussions in Government.

Recommendations:

- Restart consultation on the Biosecurity Imports Levy with stakeholders with a view to implementation.
- Government reform to increase capacity and capability of critical government services in biosecurity through increased and sustained funding.
- Immediate increase in resources, to support plant pest incursions like the Varroa mite response and on-going threats.
- Develop a measurable implementation plan to measure progress against the National Biosecurity Strategy.
- Provide Industry with opportunity to engage at the national level in area of priority setting, decision making and planning.

Climate Change

Australian vegetable growers experience firsthand the impacts of climate change. They are some of the first and most impacted by changing in weather patterns and severe weather events. As we have seen with the flooding events on the East Coast, food availability nationwide was affected, and therefore food prices.

Whilst providing support to help growers recover from these disasters is important, AUSVEG also encourages a more proactive approach to assist growers to prepare for the impacts of climate change. Government incentives could assist growers to relocate or adopt alternative farming practices which would mitigate these risks.

Climate change is also affecting the types of crops that can be grown in certain regions. In future decades whole regions may no longer be able to sustain agricultural cropping systems, and growers will either have to relocate or modify the type and way they grow crops.

The longevity of our industry relies on how we take care of our environment now. Australian vegetable growers are already making leaps and bounds in this area, but it is important that all growers have the knowledge and the ability to take the next step. Protecting our native biodiversity and building back the soil creates a healthy ecosystem which will continue to be productive and fruitful.

Recommendations:

- Develop on-farm workshops to educate growers about,
 - Mitigating climate risks through practice changes.
 - Using regenerative practices to ensure ecosystems are protected for the long term.

Food Waste

Food waste is a significant environmental and economic issue in Australia and research shows that food waste equates to over 7 million tonnes per annum or an estimated cost to the economy of \$36 billion.¹

Food waste includes waste products across the whole supply chain, such as on-farm waste, processing waste, household waste, spoiled food due to poor cold/supply chain management, and waste from other sectors such as hospitality.

The economic and environmental consequences of food waste include:

- Waste of natural resources such as water, land and inputs such as fuel and fertiliser.
- Effect on climate change through the production of methane in decomposition.
- Increased costs to consumer in factoring waste into production cost recovery.

In the horticultural sector, methods to reduce food waste include:

- Prevention of waste including planning of crops and supply chain demand, management inputs, varietal selection, increasing quality and packouts, improving post-harvest techniques, and changing consumer/retail quality specifications.
- Repurposing waste through finding alternative markets (2nd and 3rd grade), donating to charities and foodbanks, alternative products such as juice, and value adding.
- Diverting waste into alternative uses such as animal feed or biofuels.

¹ National Food Waste Feasibility Study - FIAL

Recommendations:

- In development of a future food security plan, the utilisation of food waste needs to be given integral consideration.

Export

The Australian vegetable industry is highly focussed on supplying the Australian local market and Australian communities. Currently, only 6 per cent of total fresh vegetable production is exported annually, which is a very small proportion compared to other horticulture and agriculture sectors - agriculture on average exports 70 per cent of goods produced.

The vegetable industry currently exports to over 50 markets, 90 per cent of them are non-protocol markets. Key export markets for Australian vegetable exports are Singapore, UAE, Malaysia, Hong Kong, Thailand, Indonesia, Saudi Arabia, and the Philippines.

There are rising food security concerns in Singapore and Hong Kong because they are heavily reliant on fresh produce imports due to limited local production. It is important Australia maintains exports to these markets both to supply fresh produce to regionally important countries, and to keep international market opportunities available to Australian growers to have multiple supply options. Export was increasingly difficult for growers during the pandemic due to elevated cost and limited shipping container availability.

Australian vegetables are typically sold in high value retail market segments in international markets, as we rarely compete on price with other lower cost nations. Operating in a low product value category, means that any increase in input cost or disruption to production, can make Australian products unviable in export markets. While Australian growers only export a small amount of overall production, maintaining export markets is important so growers have market opportunities other than solely Australian retail and processing channels.

It is important to note that maintaining export markets is important for Australian vegetable growers to ensure growers can continue to increase production and achieve scale efficiencies, but that the primary focus for the majority of Australian growers is to supply Australian consumers.