



	Contents			
	Foreword Letter from Minister Furner About Future Fields Finding your way around How we got here From the grassroots Sharpening our focus Leading the work Vision and values Bio Strong Coordinated Compliance Innovate to Access Working Smarter Together	4 5 10 12 14 16 20 24 28	Fundamental fields Monitoring, oversight and review Acknowledgements Appendix Longlist, shortlist and final four fields	32 34 36 37
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3				FUTURE FIELDS

Foreword

Those of us lucky enough to work in the Queensland fresh produce supply chain, when given the chance to step back and reflect, are able to fully appreciate its true value and worth.

We value its diversity and dynamism, the enduring relationships it creates, its complexity, the risks it makes us take, and ultimately the deep satisfaction we feel in providing Australia and the world the highest quality, safe, fresh and nutritious fruits, vegetables and nuts.

We have been incredibly successful and should be proud of our achievements.

The sector not only feeds the nation but through direct on-farm employment puts food on the table for up to 25,000 Queensland workers and their families. We are the lifeblood of many rural communities, creating over \$3 billion in value at the farm gate last year.

While the sector remains buoyant, now is not a time for complacency.

Recently, COVID-19 has raised challenges and caused significant disruption to our sector, as have natural disasters and pest and disease incursions of national significance.

We can expect these types of disruptions to continue, but they will also bring with them new opportunities. In addition, the pace of technological change will only continue to increase and drive new ways of doing things.

For these reasons we must continue to evolve and improve. There is enormous opportunity for those willing and able to anticipate and adapt.

But if we are to reach our true potential, we must also be willing to challenge and change our own mindset about what it takes to be successful, and the culture of our industry. We must be prepared to redefine success itself.

While undoubtedly there remain important gains to be made at the margin, over the course of the Future Fields strategy we will need to start thinking and working in new and different ways to innovate and grow.

Working with the retail sector, we will need to look at ways of maximising value from our domestic market while we actively seek to expand our export market opportunities. Our historic culture of fierce domestic competition with one another has delivered to the Australian consumer the highest quality fruits, vegetables and nuts and at the least cost.

However, we need a collaborative mindset if Queensland is to win globally and supply larger markets. We are a small fish in a big pond. To compete overseas we must cooperate at home.

A reinvigorated culture of cooperation will not only help to deliver the scale needed to compete in international markets. It will also provide the intellectual power we need to respond to emerging pest and diseases and make the most of new tools and technologies that will allow our sector to be responsive and resilient in meeting the expectations of our customers and the regulatory systems that give them confidence.

In this context, our long-term success is tied to the success of those around us, our neighbours, suppliers and buyers, with whom we compete and trade day to day.

It is our shared intention that Future Fields will mark a turning point for the Queensland fresh produce sector and food system, when we became increasingly outward looking and ambitious.

Over the course of this next decade we must seize the unique opportunity from the 2032 Summer Olympic and Paralympic Games being held in Brisbane to share our amazing produce with the world. And we have the chance to lead the Australian agriculture sector to its target of \$100 billion in farm gate value by 2030.

As leaders of the sector, we commit to modelling the behaviours and values, and taking the actions we believe will deliver improved returns along the fresh produce supply chain.

Angus Ferrier Chair, Future Fields Advisory Committee **Belinda Frentz** Chair, Growcom

by Frents.





The Hon Mark Furner MP Minister for Agricultural Industry Development and Fisheries and Minister for Rural Communities

Ms Belinda Frentz Chair, Growcom Mr Angus Ferrier Chair of the Advisory Committee

Dear Ms Frentz and Mr Ferrier

I would like to thank you both for the work you have done as Chair of Growcom and Chair of the Advisory Committee in leading the Future Fields program and delivering this vision for the horticulture industry.

Here in Queensland, we produce around one third of Australia's fruits and vegetables which includes more than 120 types of fresh produce. Queensland is responsible for the majority of Australia's banana, pineapple, mango, mandarin, avocado, beetroot, and macadamia production. The industry is innovative and forward looking and its strength lies in its diversity, quality, and clean green produce.

Horticulture supports many rural and regional communities and is essential to Queensland. Despite challenging climatic events including cyclones, floods and drought, and labour shortages due to Novel Coronavirus (COVID-19), the value of the horticulture sector was around \$3 billion in 2020-21 at the farm gate and has grown by around three per cent each year since 2007-08. There has been substantial expansion in some key commodities such as macadamia nuts, citrus, and avocados and the sector contributed to softening the impacts of the COVID-19 pandemic on the Queensland economy.

This is a testament to the resilience and strength of the industry that needs to be recognised and congratulated. The Queensland Government is proud of the success and desire for continued improvement that drives the Queensland horticultural industry.

Future Fields highlights the areas where further work will position the industry to capture future opportunities, not just locally but also overseas - not just in fresh produce but with a growing emphasis on value adding opportunities and new markets.

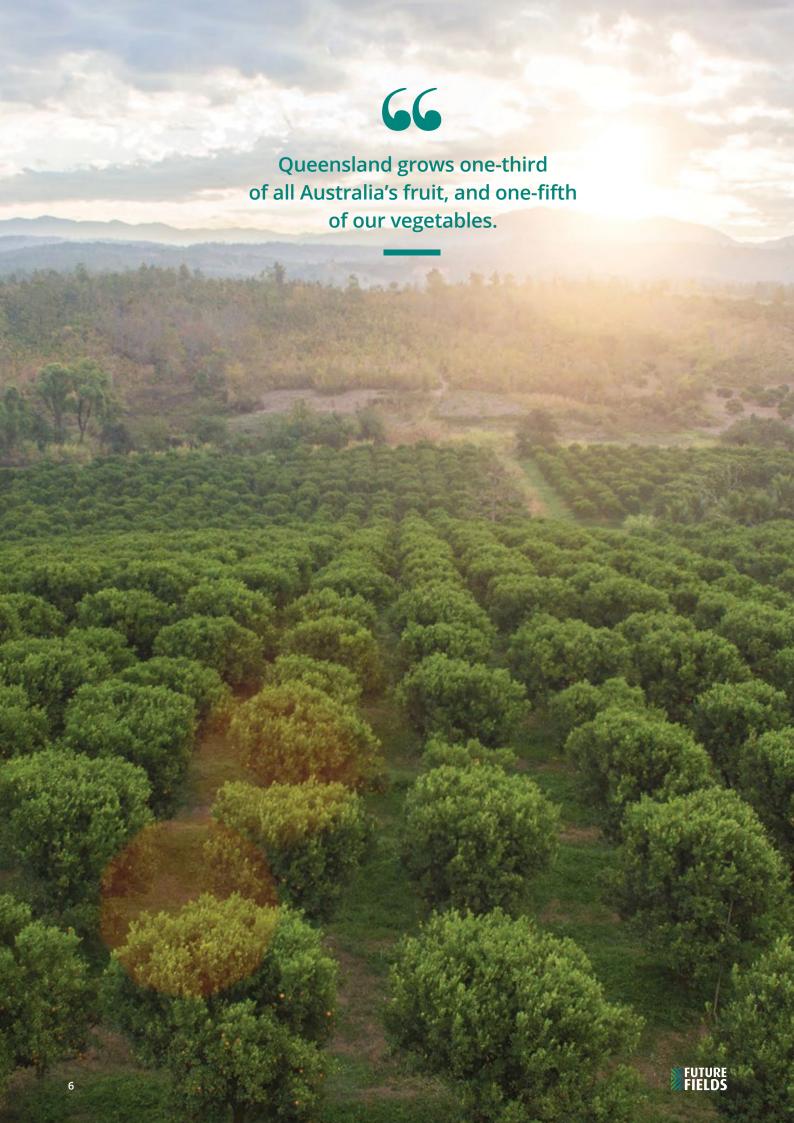
Critical to achieve this will be collaboration. I would like to join with you, as well as others with interest in the sector, to work together in realising the value and opportunities ahead of us.

I am delighted to commend the vision of Future Fields to position Queensland horticulture as prosperous, profitable and innovative. I extend my recognition for the work and effort of the advisory committee, industry leaders and all those along the supply chain who contributed to its development. I look forward to continued collaboration with you and all those who share this vision and want to work together for the future of the sector.

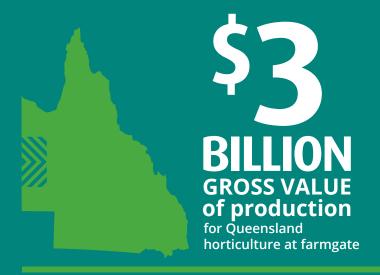
Yours sincerely

MARK FURNER MP

Minister for Agricultural Industry Development and Fisheries and Minister for Rural Communities



Queensland Fresh Produce Sector



\$1.79 billion

Fruit and nut gross value of production

\$1.19 billion

Vegetable gross value of production

\$250 million

First stage processing gross value of production

Horticulture is Queensland's second biggest agricultural sector. It is second only to the beef industry in size, and larger than either of the sugar and grain industries.

\$879 million fresh produce exports from Queensland

Approximately

3,500

engaged in the Queensland fresh produce sector Up to

25,000 WORKERS

directly engaged in some capacity within the sector annually

Queensland growers produce more than 100 types of fruit, vegetables and nuts, from Stanthorpe in the south to Cooktown in the far north.

Queensland supplies one-third of Australia's fruit, and one-fifth of our vegetables.



99%

250

98%

Ginger

94%

6

70%

66%

0

5/%

PROPORTION OF THE NATIONAL CROP GROWN IN QUEENSLAND

The Queensland fresh produce sector is a high value and efficient user of water, energy and land resources.

3%

Queensland cropping land used for horticulture

10%



Queensland irrigation water used for horticulture

40%



Value of Queensland irrigation production created by horticulture

Future Fields: Plan on a page

VISION

We will be a thriving, prosperous, and collaborative sector, famous for our safe, nutritious and high quality fresh and processed fruits, vegetables and nuts.

VALUES

Underpinning this vision is a set of values that will inform the priorities we set and actions we take over the next decade.



Profitability



Collaboration



Wellbeing



Optimism



Sustainability



Program of work: An inaugural two-year program of work details the actions we need to take and responsibilities across four key fields, or areas of strategic significance.



BIO STRONG

Strengthening pest and disease management practices through technology adoption, data sharing and a more collaborative culture.



COORDINATED COMPLIANCE

Making it easier for growers to meet market driven requirements and comply with government regulations through digitalisation and eliminating duplication.



INNOVATE TO ACCESS

Accessing new market segments both domestically and overseas through significant transformation of fresh produce and product innovation.



WORKING SMARTER TOGETHER

Coming together to identify and adopt labour-saving technologies that will help phase out repetitive, labour-intensive tasks.

OBJECTIVES

PARTNERS

ACTIONS

REVIEW

Fundamental Fields: Developing capacity in the sector to support the delivery of the program of work and to secure our long term success.

LEADERSHIP

CONNECTIVITY

DATA ACCESS

STORY TELLING

Monitoring and oversight: We will report back to an oversight committee annually on progress against programs of work for each field, and report biennially to all stakeholders our progress against each of the Future Fields values.





About Future Fields

Future Fields sets out an ambitious vision for where the Queensland fresh produce sector and supply chain wants to be in ten years, to the end of the 2032-33 financial year.

To ensure we make demonstrable progress toward this ten-year vision, an inaugural two-year program of work has been developed that details the actions we need to take and responsibilities across four key fields, or areas of strategic significance.

This plan is a starting point. The fields we're focusing on in this inaugural plan will be reviewed, refreshed and replaced over the course of the next decade as the sector evolves.

We acknowledge that in many instances work has already begun or been completed in each of the four fields and so our objective will be to make connections to either move this work further forward or ensure its outputs have been applied.

Future Fields offers an ongoing, open invitation to all stakeholders across Queensland and the country to come together, take action and seize on the enormous opportunities available to us that can only be realised by working collaboratively.

The development of Future Fields has been guided by three key overarching and interrelated principles: shared ownership, sharp focus and leading through action.

Our aim with Future Fields is to build an approach that explicitly includes all key players and stakeholders to ensure shared ownership. This is essential to reflect the broad interests and remit of stakeholders along the supply chain, and ensure that the strategy does not reflect only the interests of any one part of the sector.

While the scope of Future Fields is wide, taking in the whole fresh produce supply chain, the fields in which actions will be taken will be kept in sharp focus. Time, attention and resources will be directed toward those distinct opportunities or challenges where we can have most impact and greatest benefit for the sector by working collaboratively.

Future Fields is about the horticulture industry and supply chain partners coming together, taking their futures into their own hands, and leading through action. This principle is underpinned by the understanding that people who take responsibility in a situation have the best chance of taking actions that will make a difference.

Finding your way around

The Future Fields strategy contains four core parts: introduction, action, implementation, and acknowledgement.

The introduction includes what you're now reading, together with an overview of our consultation and development process, the overarching vision and values that will inform our priorities and actions, and those fundamental elements we need to secure to ensure a thriving fresh produce sector.

The next part on actions includes unpacking each of the four fields the sector has agreed to focus on over the next two years, the major opportunities in each field and the actions we need to take together to address these opportunities.

The third part details a plan for implementation, including monitoring and evaluating our overall success as a sector and progress in taking action in each field. It recommends a model of governance that involves all stakeholders along the supply chain.

The fourth and final part acknowledges and celebrates the many significant contributions that have been made in the development of Future Fields.





How we got here

As part of its platform ahead of the last state election the Queensland Horticulture Council called on the incoming government to support the development of a strategic plan for the fresh produce sector, starting with a summit of key industry stakeholders.

Re-elected and reappointed to the portfolio, Minister for Agricultural Industry Development and Fisheries and Minister for Rural Communities Mark Furner has supported Growcom to develop a strategic plan on behalf of sector stakeholders.

From the grassroots

In late October 2021 over 120 stakeholders across the fresh produce supply chain, from government, research and other institutions, came together virtually and at the Brisbane Markets for the Future Fields Summit.

From November 2021 to March 2022 over 200 people attended seven workshops held in the major horticultural growing regions of Queensland, around the towns of Bundaberg, Mundubbera, Bowen, South Johnstone, Mareeba, Stanthorpe and Nambour.

These grassroots events sought to elicit an understanding not just of key challenges and opportunities, but also their root causes, drivers and exactly how solving or addressing them would benefit the fresh produce supply chain.

At the same time just over 100 stakeholders responded to a short online survey, providing their views on what we should work on first and how we should measure our success as a sector.

Sharpening our focus

A rigorous, evidence-based methodology, driven by grassroots input, was applied in arriving at just four fields where the time, attention and resources of the fresh produce sector would be focussed through the first two years of action under Future Fields.

In whittling down from 17 potential issues, we arrived at the final four fields by asking industry experts and leadership to rank them by two factors: the amount of benefit or 'impact' potentially derived by industry, and the level of 'collaboration' required to bring this impact about.

The reason we prioritized impact needs no further explanation.

The logic of assessing options in terms of the level of collaboration required to achieve an outcome, stems from the guiding principle of Future Fields of shared ownership. A challenge or opportunity that is wholly within the power of one business, one organisation, or even one part of the supply chain, to address is their concern and not the focus of a strategic plan following fresh food from farm to checkout.

This logic is informed by the insight that many of the big opportunities and intractable challenges we face as an industry remain big and intractable because they are both complex and require collaboration. If they were easy, someone would have fixed them already.

Appendix A provides the longlist of fields identified from grassroots consultation. Take a read of the *Future Fields Interim Report* for more detail on our methodology for prioritising these fields.

Leading the work

In developing the detail of Future Fields, we are also developing the capability of a network of key people, willing to work together for the long-term success of the fresh produce sector and supply chain.

The Future Fields Leaders are a group of a dozen current and emerging leaders drawn from across the fresh produce supply chain. They include those managing or governing businesses or industry bodies and those with the potential or aspiration to do so. Find more detail about our Leaders in the Acknowledgement section.

Future Fields Leaders worked in small teams of three, with training from the Sustainable Innovation Company, and support from Growcom, the Department of Agriculture and Fisheries, and the Future Fields Advisory Committee, to develop a 'program of work' or action plan for each field. Throughout this task they have drawn on a process of deep and targeted engagement with a number of key stakeholders and leading experts in each field.





... we are also developing the capability of a network of key people, willing to work together for the long-term success of the fresh produce sector and supply chain.



Vision and values

We will be a thriving, prosperous, and collaborative sector, famous for our safe, nutritious and high quality fresh and processed fruits, vegetables and nuts.

We will also be known as a sector of willing partners and the place of choice for those within Australia, from interstate and overseas, wanting to collaborate and invest in fresh produce production and processing.

Underpinning this vision is a set of values that will inform the priorities we set and actions we take over the next decade.

We value:

- Profitability and fair trading, so that we can reinvest in our businesses, our people, the community and environment.
- Collaboration, the pursuit of common goals, and the willingness to reach out for help and to respond with generosity.
- Wellbeing of all those in the sector and their feeling that they belong to an industry that has value, purpose and meaning.
- **Optimism**, a sense of ambition and adventure that will propel the sector and supply chain forward and over obstacles and barriers.
- Sustainability, operating in concert with the natural environment and preserving its value and our industry for future generations.





What to find in a field

The following part of the Future Fields strategic plan deals with our program of work over the next two years.

This involves unpacking each of the four fields the sector has agreed to focus on, the major opportunities in each, and the actions we need to take together to address opportunities.

Each action includes a short description, timeframes and an objective. Also, wherever possible we have identified organisations willing to lead and partner in delivering each action.

And so it is our hope that in each field you will find opportunities for collaboration, to lead an action or partner in its delivery.

This is where the rubber of our core principles guiding Future Fields, of shared ownership and leading through action, hits the road.

To those already taking action in each of these fields, we especially want to hear from you. Future Fields is an opportunity for you to amplify your work and make valuable connections, possibly outside your usual networks.

If the strategy is going to be successful we need many people and organisations to put up their hand to address opportunities and challenges that are not just in their own interest to solve, but are of common interest across the sector and supply chain.

Field 1

BIO STRONG

Strengthening pest and disease management practices through technology adoption, data sharing and a more collaborative culture.

Currently, the Queensland fresh produce sector incurs greater damages than it should from endemic pests and diseases due to reactive management arising from a lack of timely or predictive information on prevalence and spread.

Growers report being apprehensive about alerting authorities or their fellow growers about suspected or reportable pests and diseases due to perceived negative impacts on their business.

Improved economic modelling and benchmarking would allow public and private investment in pest and disease management to better align with risks and likely costs.

In the future, the fresh produce sector will have access to better, more timely and accurate information on endemic pests and diseases, enabling them to act pre-emptively to minimise damages and impacts on their business. Growers will have confidence in reporting incidences of pest and disease outbreaks or incursions and will manage these incidences more efficiently through collaboration with their neighbours.

Our measures of success in the Bio Strong field will be greater grower awareness of biosecurity responsibilities, and increased industry investment and coordination in the surveillance and management of endemic pest and disease.

Important work already underway in this field includes the Farm Biosecurity Program and AUSPest Check.



The opportunity

As with every other part of the industry and across the economy, new technology is enabling tasks to be completed with an accuracy and at a scale that could never before have been imagined. This is a trend that will only increase.

While pest and disease surveillance data collected remotely on farm using new technology is valuable for individual growers, its true worth is only realised when fed into a model that enables decisions and actions at the regional or wider level.

In managing endemic pests and diseases, humans are the one species that is perhaps hardest to control. Adopting new technologies provides an opportunity to reset expectations within growing communities about the collaboration required to best meet shared biosecurity responsibilities.



Program of work



Action 1: Empowering reporting

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Develop and package information for a grower audience about biosecurity responsibilities, how to report, and what to expect should a priority pest or disease be confirmed.	Industry	Government regulatory agencies, industry bodies, growers.	By mid-2024.	Raised grower awareness. Timely reporting of pest and disease risks.	Farm Biosecurity Program and website. National Environmental Biosecurity Response Agreement.

Action 2: Enabling local collaboration

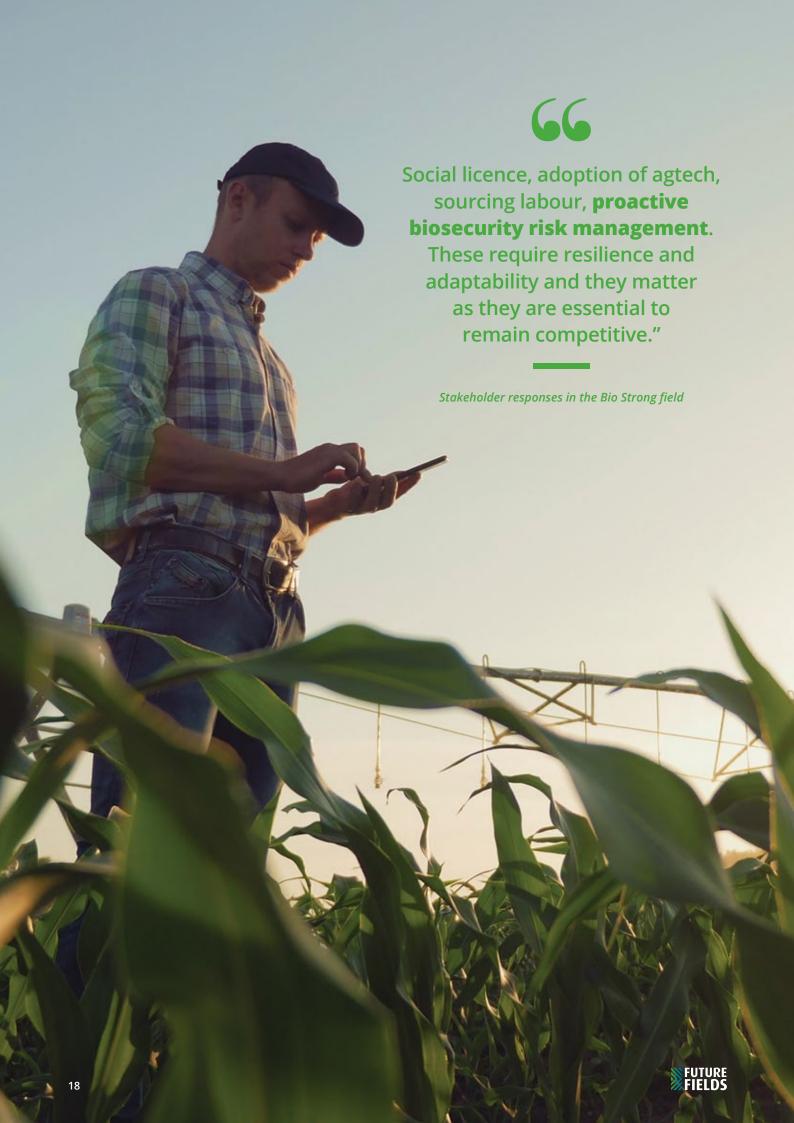
DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Investigate models to better foster and facilitate trusted local or regional co-management of endemic pests and diseases.	Industry	Government regulatory agencies, industry bodies, growers.	By mid-2024.	Models of co- management developed for local or regional adoption.	Area wide management programs. Enhancing Local Government Biosecurity Capacity in Far North Queensland grants program.

Action 3: Surveillance sandbox

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Identify one Queensland growing region as a pest and disease surveillance sandbox, to test and demonstrate networked AgTech solutions.	Industry	Government regulatory agencies, industry bodies, growers and technology providers.	By mid-2023.	All relevant parties participating in sandbox.	Industry networks and AgTech hubs. The new biosecurity virtual laboratory project (in development). Australian AgriFood Data Exchange (in development).

Action 4: Automated reporting

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Automated reporting on spread and incidence of key endemic pests and diseases regionally, state-wide and nationally.	Industry	Government agencies, industry bodies, growers and technology providers.	By mid-2024.	Raised grower awareness. Timely reporting of pest and disease risks.	Plant Health Australia report on exotic spread and incidence.



Do you have a stake in keeping the pressures of endemic pests and diseases down?

Do you have a piece of technology that will help make Queensland Bio Strong?

Is there an action within the program of work you can help deliver?

We want to hear from potential partners and collaborators in the Bio Strong field. Complete a short form to express your interest in getting involved.

CLICK HERE >



CASE STUDY

Working together to control brassica and cucurbit disease

Area wide management (AWM) refers to the management of pests and diseases through coordinated application of control tactics at an area wide scale, rather than on an individual property basis. While the preventative actions of one grower may benefit other producers nearby, the collective actions will provide greater benefit to growers across the whole region.

Using an AWM strategy, insect vector populations are suppressed within the district, and subsequently, the potential spread of the insect-vectored viruses and bacteria is also supressed. Area wide control of alternative weed hosts also prevents the introduction of the pathogens into crops each season.

The Queensland Department of Agriculture and Fisheries led a Hort Innovation project to develop an AWM strategy to address high-priority viral and bacterial diseases affecting brassicas and cucurbits, including those transmitted by thrips, aphid and whitefly pests, and phytoplasmas transmitted by leafhoppers. Two guides on understanding and managing bacterial and virus diseases of vegetables have been developed. A key part of the project was industry engagement through regular workshops, grower meetings, field days, industry journals, newsletters and fact sheets.

COORDINATED COMPLIANCE

Making it easier for growers to meet market driven requirements and comply with government regulations through digitalisation and eliminating duplication.

Currently, the Queensland fresh produce sector and supply chain is under strain from rising input costs, insecure labour supply and unstable returns. On top of this are growing regulatory, compliance and market access requirements that are costly, sometimes duplicative, and always soak up precious time better spent thinking strategically.

Additionally, for some growers, the cumulative demands of multiple requirements can lead to them avoiding certification processes entirely. When their produce inevitably finds its way into markets, it undermines the investment of growers who are certified and compliant, and the reputation of the entire sector for safe and quality produce.

In the future, the fresh produce sector will have the digital tools and support to innovate and reinvigorate their reporting requirements, removing duplication.

Industry will engage with Government regulators and owners of compliance schemes to ensure existing duplication is removed through digitalisation and that future redundancies are anticipated and avoided.

We will value compliance schemes and their important role in providing the assurances our customers and the public want and deserve.

Our measure of success in the Coordinated Compliance field will be a reduction in total time taken up meeting market driven requirements and government regulation.

Important work already underway in this field includes the AgTech Finder, the Australian AgriFood Data Exchange and the Business Launchpad.



The opportunity

COVID-19 has put pressure on the fresh produce sector and supply chain in many ways, but has also accelerated the adoption of new technology, including the increased acceptance of virtual meetings, QR Codes and remote audits. There is a clear and immediate opportunity for reform and adoption.

For many growers, compliance costs and regulatory requirements have become overwhelming. Some have left the industry as a direct result. Our collective compliance cup is empty.

Among quality assurance scheme owners and regulators there is a growing awareness that efficiencies must be found, especially if they propose adding further requirements, and a recognition that the onus for bringing these efficiencies about rests with those setting the conditions.



Program of work



Action 1: Duplication identification

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Review of all market driven compliance and government regulatory requirements. Identify all instances of duplication.	Future Fields Coordinated Compliance team	Government regulatory agencies, compliance scheme owners, auditing bodies, growers, retailers.	Completed by the end of 2022.	Publication of review outputs.	

Action 2: Duplication commitment

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Convene meeting of key stakeholders in the Coordinated Compliance field to secure commitment to jointly pursue removal of duplication, and agreement to priority actions. Undertaken in two streams: market driven and regulatory.	Growcom	Government regulatory agencies, compliance scheme owners, auditing bodies, growers, retailers.	Convened by mid-2023.	All stakeholders publicly committed to duplication removal.	State and territory monitoring of FSANZ production and processing standards for horticulture.

Action 3: Solution promotion

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
A network and community of growers willing to test, review and report on solutions that streamline compliance processes and remove duplication. Includes case studies and testimonials related to solutions through a web based portal.	Australian AgriTech Association	Growcom, AgTech Finder, Regional AgTech Hubs, Grower Support, solution providers, growers.	Launched by mid-2024.	High levels of engagement with the portal by all partners.	AgTech Finder.

Action 4: Beginners' guide

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Basic guidance for new entrants to the fresh produce sector on their compliance and regulatory requirements and obligations.	Grower Support	Growcom, government regulatory agencies, compliance scheme owners.	Launched by mid-2023.	Accessed by all new entrants.	Business Queensland's Business Launchpad.



From a grower perspective the key issues impacting cost of production are increased compliance requirements just for market entry, limited supply of adequately skilled workers and low farm gate prices."

Stakeholder responses in the Coordinated Compliance field



Can you see an opportunity to streamline compliance?

Are you in a position to lead work that will make meeting our market access requirements easier?

Can you make a commitment to removing duplication in a system or scheme?

We want to hear from potential partners and collaborators in the Coordinated Compliance field. Complete a short form to express your interest in getting involved.

CLICK HERE >





As a grower, I don't have the time to explore and unpack all the available technology. I need a trusted source of curation of technology."

Stakeholder responses in the Coordinated Compliance field



Compliance is becoming more and more complex and technology is needed to inform growers on what they need to do to implement and demonstrate Best Practice."

Stakeholder responses in the Coordinated Compliance field

INNOVATE TO ACCESS

Accessing new market segments both domestically and overseas through significant transformation of fresh produce and product innovation.

Currently, the Queensland fresh produce sector and supply chain enjoys a well-earned reputation for delivering high-quality fresh produce, but there is enormous potential to unlock greater returns by engaging in consumer-led innovation, leading to new products, markets and value chains.

There is an opportunity in developing new, shelf-stable products that will help us overcome some of the perennial constraints that limit growth in our fresh product categories, including long supply chains, excess protective packaging, high risk cold chain logistics, and seasonality.

Not only will consumers benefit from their tastes being better met, but the more markets and value chains there are for fresh produce, the better grower returns will be overall.

In the future, the fresh produce sector will better understand new and emerging consumer preferences and changes in eating occasions, and will have the tools, skills and capacity to adopt innovation and adapt practices and processing to meet these preferences and create new markets.

Our measure of success in the Innovate to Access field will be the validation of new market segments for new shelf-stable or long-life products.

Important work already complete or underway in this field includes the Capturing the Prize report by FIAL and programs led by the Fight Food Waste Cooperative Research Centre.



The opportunity

Turning fresh produce, that might have otherwise gone to waste, into high value food or nutraceutical products through new technologies and substantial transformation has been identified as a huge opportunity for horticulture.

As a sector we can better engage with existing and future research efforts, particularly overseas, to identify technologies and processes to derive additional revenue for growers and the supply chain.

We need to see ourselves less narrowly as a fresh produce supply chain, and more as an integral part of the broader food industry. With this view, we can build relationships and partnerships with food technologists, dietitians, and marketers who can help us deliver consumer-led produce solutions and create enhanced and exciting eating occasions.

An emerging opportunity is making greater use of the whole crop to unlock value from the many parts of plants that are not edible. Seizing this opportunity likewise requires a shift in thinking for growers and supply chain partners, and an increased focus on these opportunities in our research and development priorities.



Program of work



Action 1: Innovate to Access convention

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Convene meeting of key stakeholders in the Innovate to Access field to discuss and explore priority products, markets, and technologies.	Growcom	Industry bodies, technology providers, government, investors, R&D institutions.	Convened by the end of 2022.	All important and relevant partners in attendance.	Capturing the Prize report by FIA. Queensland Innovation Places Strategy (to be released).

Action 2: Product exploration

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Desktop research to identify existing shelf-stable products and markets overseas, and associated technologies.	Co-owned by research institutions and industry	Industry bodies, technology providers and government.	Completion of research by mid-2023.	Identification of four new market segments.	Fight Food Waste CRC. Agricultural Trade and Market Access Cooperation Program. KPMG report 'Queensland Food & agribusiness exporters e-commerce opportunities and barriers'.

Action 3: Product validation

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Validate the food industry and consumer demand for shelf-stable products through desktop research.	Co-owned by research institutions and government	Industry bodies, and technology providers.	Completion of research by end of 2023.	Validation of two new market segments.	Queensland Food & Beverage Export Catalogue.

Action 4: Food accelerator

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Automated Accelerator program for new shelf-stable foods derived from fresh produce, connecting producers and processors with the right skills and investors.	Industry	Food industry, investors, technology providers, investors.	Business case completed by end of 2022.	Commence- ment of accelerator program.	Regional food manufacturing hubs. The Food Pilot Plant at the Health and Food Sciences Precinct.

Action 5: Expert panel

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Appoint an expert panel to provide advice, mentorship and support to proponents putting forward concepts and plans for regional food manufacturing projects.	Industry	Food industry, investors, technology providers, investors.	Appointed by mid-2023.	Number of successful projects. Government funds and private investment attracted.	Mentoring for Growth program.



Too much good fruit was going to waste. Increasingly demanding retail specifications meant that more apples were now seen as imperfect and being demoted to juicing fruit. We get a really low price for that, it's just not viable. Plus, all the good stuff – the nutrients and fibre – are lost!

We needed to come up with something new."



Are you an expert in taking new foods to market?

Do you have an interest in investing in new shelf-stable food products?

Are you looking to improve your margins by finding new buyers for your fruits, vegetables or nuts?

We want to hear from potential partners and collaborators in the Innovate to Access field. Complete a short form to express your interest in getting involved.

CLICK HERE >





Design-led mindset has early success

The Savio family have been growing apples in Queensland's Granite Belt for over 70 years. They have transformed from apple producer to creator of a unique new product offering, a drinkable whole apple in a bottle.

Savio Healthy Innovations has sustainably converted imperfect whole apples into a value-added, convenient product that is rich in apple nutrients. Upple® contains 99.99% apple and 0.1% vitamin C and stands alone in a new beverage category of drinkable whole fruit, offering a far higher fibre and nutritional level than fruit juice.

Using a design-led mindset and practices, it has enjoyed early success.



WORKING SMARTER TOGETHER

Coming together to identify and adopt labour-saving technologies that will help phase out repetitive, labour-intensive tasks.

Currently, the fresh produce sector is highly reliant on a large seasonal and temporary workforce, particularly for picking and packing, with insufficient systems to minimise these repetitive and laborious tasks.

There are a number of barriers to labour saving technologies already in the market and being taken up across the sector. Often, individual businesses lack the capital and expertise required to make significant investments in new technology. Also, alternate models of finance or ownership to create economies of scale and make technologies more affordable are not common.

In the future, the fresh produce sector will have the capabilities, skills and resources to effectively assess, invest in, and embrace new labour-saving technologies. This will be brought about through a stronger culture of collaboration and lowering barriers to investment by better sharing insights about the benefits and issues in implementing labour-saving technologies.

Embracing this technology will improve health and safety outcomes for the horticulture workforce, and open new opportunities for workers with new skills in technology and innovation.

Our measure of success in the Working Smarter Together field will be increasingly lower labour factor of production, or put another way, a smaller proportion of total production costs incurred by engaging unskilled labour.

Important work already complete or underway in this field includes the *Digital Foundations for Agriculture Strategy*, the *Queensland Agriculture Industry Workforce Plan 2022-2026*, Queensland Smart Farms, and the Advance Queensland innovation initiative.



The opportunity

Growers need resources, knowledge and trust in new systems of work to overcome the risks associated with implementing and adopting labour-saving technologies.

Knowledge sharing and trust between growers and or other supply chain partners is critical in reducing the risks associated with new technology uptake.

Attracting skilled workers into the fresh produce sector will kick-start our ability to continue to innovate, and further reduce our reliance on insufficient systems that create repetitive work.

By working smarter together, we can build a lasting competitive advantage through adoption of relevant, efficient, and affordable technology that will in turn create better practices and smarter farming, which can also preserve the resources we rely on.



Program of work



Action 1: Labour saving opportunity analysis

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Research to map where greatest savings of unskilled labour exist in industry against mature and commercial labour-saving technologies. Gaps in the map to form research, investment and adoption priorities.	Industry	Growers, technology providers, government, R&D institutions, startup community.	Publication of research by mid-2023.	Identification of four priority opportunities.	Queensland AgTech Roadmap (in development).

Action 2: Duplication commitment

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
A network and community of growers willing to test, review and report on new technology through a web based portal. Global and local users provide feedback or experience ratings. Portal also includes information on events showcasing technologies and hosting opportunities for growers who are adopting new technologies.	Industry	Growers, technology providers, government, R&D institutions, startup community.	Launch of portal by mid-2023.	Number of users and engagement with portal features.	AgTech Finder. AgTech hubs. Queensland Smart Farms.

Action 3: Horticulture hackathon

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Competitive programming and design event where participants form teams and work intensively over a few days to create a solution to a labour saving challenge or problem identified and sponsored by an industry or business.	Industry	Growers, technology providers, government, R&D institutions, startup community, higher education institutions.	During 2023.	Number of challenges and sponsors. Number of participants.	AgTech hubs.



Many farmers are locked into old ways of doing things and are reluctant to try new products and procedures which may be more sustainable, and profitable.

Matters as the more people use new technology and innovations the quicker it becomes cheaper, easier and better to use and make a difference."

Stakeholder responses in the Working Smarter Together field



Are you looking for ways to improve productivity through applying new, labour-saving technologies?

Are you a researcher or entrepreneur working on new solutions for the fresh produce sector and supply chain?

Are you an investor in agtech and looking for new opportunities?

We want to hear from potential partners and collaborators in the Working Smarter Together field. Complete a short form to express your interest in getting involved.

CLICK HERE >





You don't get ahead by working harder. You get ahead by working smarter."

Stakeholder responses in the Working Smarter Together field



Workforce shortages are a catalyst to adopting robotics, automation, digitisation, tech etc... to reduce dependency on labour to reduce cost and increase quality and competitiveness.

Timing is great for transformation!"

Stakeholder responses in the Working Smarter Together field

Fundamental fields

While the four fields in which actions will be taken are in sharp focus, there is still important work to be done in a few fields that don't just enable or underpin the actions we agree to take but are fundamental to the future success of the sector and supply chain.

While high in potential impact, these fields often comprise just a few key actors who can make a significant difference and so do not require the same level of collaboration for progress to be made.

These fundamental fields include:

- · Developing our leadership capacity
- Improving telecommunications, connectivity and digital literacy
- Unlocking the potential of public and private data to enable better decisions
- · Modelling an ethic of sustainability
- Telling a more positive story about our sector and supply chain.



Program of work

Action 1: Leadership capacity

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Building on the success of the Future Fields Leaders program, establish a sustainable model for developing leadership capacity along the fresh produce supply chain, to further the priorities of this strategic plan.	Growcom	Growers, industry bodies, government, education and training providers.	End of 2023.	New leadership capacity building opportunities.	Hort Frontiers Leadership Fund. Diversity in Agriculture Leadership Program. Australian Rural Leadership Foundation. Future Young Leaders Program, Drought Resilience Leaders.

Action 2: Connectivity

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Analysis of likely future connectivity needs and demands of the Queensland fresh produce sector and supply chain. Identify gaps in current and future networks based on this analysis.	Industry	Industry network owners, growers, supply chain partners, and government agencies.	End of 2023.	Report on connectivity needs and future demand.	Regional Connectivity Program. Mobile Black Spot Program. Regional Rural & Remote Communications Coalition. Connecting Australian Agriculture paper.

Action 3: Horticulture heroes

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Promote positive stories about the sector and supply chain that inspire the sector to continue to improve, and attract new entrants to the sector.	Industry	Growers, industry bodies, government.	Ongoing.	Improved perception of the sector.	Australian Farmers "Telling our Story". #eatqld champions. George the Farmer. Thankful4Farmers. Visible Farmer Project.

Action 4: Modelling sustainability

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES	LINKAGES
Build capability to implement sustainable production systems, including through models of leadership and collaboration.	Industry	Growers, industry bodies, government, R&D institutions.	By mid-2024.	Five per cent of growers actively monitoring their performance against sustainability measures.	The Australiangrown Horticulture Sustainability Framework.

Monitoring, oversight and review

Through our engagement process we have been asking fresh produce stakeholders what single measure they would use to gauge the success of the Queensland fresh produce sector and supply chain over the next 10 years.

The range of responses received reflects the diversity of our sector and included measures of domestic consumption, export earnings, sustainability, diversification of markets, and the continuity of family farms.

The most consistent measure recommended however was profitability.

While it is difficult to come up with one measure to reflect the progress of an entire sector, profitability often is an outcome of having the right settings and conditions in place for individual businesses to succeed, and is also predictive of these businesses being able to take advantage of the opportunities before them.

With advice from the agribusiness banking and accounting sector, we will develop measures of profitability for farming enterprises, and then other parts of the fresh produce supply chain that will include earnings and a return on capital.

We will report back to an oversight committee annually on progress against programs of work for each field, and report biennially to all stakeholders our progress against measures of profitability and other Future Fields values, including:

- Collaboration as measured by the number of projects individual businesses are co-invested in with supply chain partners
- Wellbeing as measured by the mental and physical health of all those who play a role along our supply chain
- Optimism as measured by the confidence of business owners along the supply chain in their short to medium term future
- Sustainability as measured by the number of Queensland businesses reporting against the Australian-grown Horticulture Sustainability Framework.

As we head towards the end of the initial two years of action the oversight committee will lead a review of each field, refreshing them where required, identifying new actions, or pivoting entirely to focus on emerging areas of strategic importance and opportunity.



Program of work

Action 1: Profitability measure

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES
Develop measures of profitability for horticultural enterprises, then other parts of the fresh produce supply chain that will include earnings and a return on capital.	Growcom	Agribusiness banks and accountants.	End of 2022.	Measures supported and reported on by agribusiness banks and accountants.

Action 2: Regular reporting

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES
Biennial reporting on the state of the Queensland fresh produce sector, including Future Fields values.	Industry	Growers, industry bodies, government, banks, R&D institutions.	End of 2022.	Agreement between partners to support ongoing reporting.

Action 3: Strategic oversight

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES
Appointment of oversight committee, likely including Future Fields Leaders and members of the Advisory Committee.	Growcom	All stakeholders.	End of 2022.	Acceptance of invitations to join committee.

Action 4: Future Fields review

DESCRIPTION	LEAD	PARTNERS	TIMEFRAME	OBJECTIVES
Review of Future Fields, including the ongoing strategic significance of current and new fields of action.	Oversight Committee	All stakeholders.	By June 2024.	Refreshed fields and program of work until June 2026.

Acknowledgements



The development of Future Fields has been made possible through support and funding from the Queensland Government.



Growcom is especially proud to be developing Future Fields on behalf of the Queensland fresh produce sector and supply chain.

Future Fields Advisory Committee

The Future Fields Advisory Committee comprises a dozen leaders with senior executive management and governance experience and expertise at different points along the fresh produce supply chain. Collectively, members of the committee have championed the strategy and actively involved their networks with the strategy development process.

Future Fields Leaders

The Future Fields Leaders group comprises a dozen current and emerging leaders drawn from across the fresh produce supply chain. They include those managing or governing businesses or industry bodies, or those with the potential or aspiration to do so.

Leaders have formed small groups around each field, identifying, scoping, negotiating and confirming tangible collective actions to be included within the initial two year Future Fields program of work.



Appendix A: Longlist, shortlist and final four fields

Each field on the longlist was given a working title and defined with an aspirational narrative to provide context. Those fields making the shortlist and final four are identified with a bullet point in the respective column.

FIELD	SHORTLIST	FINAL
Zero Waste: Designing new circular models for fresh produce production which involves sharing, reusing, and recycling, aimed at making the best use of resources, tackling waste (organic and non-organic) & pollution.		
Bio Strong: Preparing, preventing and managing pests, diseases and biosecurity risks using data intelligence and collaboration.	•	•
Net Zero: Actively contributing to net zero carbon by restoring biodiversity, improving soil health, transitioning to renewables and reducing emissions.		
Climate Control: Developing production systems that allow greater control of growing conditions, in a world of greater variation in weather and climate.	•	
Market Led: Delivering what markets demand, based on data analysis of consumer preferences, trends and production information.	•	
Innovate 2 Access: Accessing new markets through innovation including on farm, processing, new products & services, packaging & extending shelf life.	•	•
Expanding Exports: Access new and expand existing export markets by gaining a deep consumer understanding and taking a collective approach to supply and marketing.		
Sustainable Chains: Creating new supply chains to augment the existing chain that are shorter, decentralized, resilient, efficient and environmentally friendly.		
Data Driven Decisions: Connecting public and private data to provide new insights that empower businesses to make better, faster decisions.	•	
Coordinated Compliance: Making it easier for growers to comply with government regulations and meet market driven requirements through digitization and eliminating duplication.	•	•
Horticulture Heroes: Telling the positive horticulture story and being respected for doing the right thing by workers, communities and the environment.		
Valuing Diversity: Building diversity across fresh produce supply chains by fostering greater cooperation & collective bargaining by smaller businesses.		
Working Smarter: Building skills to adopt and apply the new technologies that will reduce reliance on low skilled jobs & labour intensive roles.	•	•
Trust Through Traceability: Leveraging existing and new traceability tools to tell consumers more about the provenance of their food and the sustainable practices used in its production.		
Together We Thrive: Supporting multiple leaders who will drive collaboration to make the fresh produce sector more prosperous & sustainable.		
Local 4 Good: Networks of fresh produce suppliers collectively inspiring communities to consume more hyper local-produce.		
Water Wise: Improving water security through greater on-farm efficiency, and utilizing existing water assets better with additional infrastructure.	•	









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