Growing Agriculture at 41° South

Report prepared by the IFMA22 Congress Local Organising Committee





Foreword

The global challenge to produce more food from less resources is intensifying just as is the need for small state and regional economies largely dependent upon agriculture to remain viable and grow to sustain local living standards and contribute to increasing global food demand.

This challenging issue was addressed through the "Growing Agriculture at 410 South" theme of the IFMA22 congress held in Tasmania where it was discussed in relation to that location but developed a set of nine strategic themes that are relevant to any location addressing agricultural growth and development.

As an example of government agricultural policy the congress also considered implementation of the Tasmanian Government vision to increase the annual farm gave value of agriculture to \$10b by 2050 representing a tenfold increase. The congress was clear in its conclusion that such a vision must be owned by the stakeholders with the role of government being long term bipartisan leadership, empowerment and resourcing. This conclusion has global relevance and demonstrated the clear distinction of industry and government roles.

Achieving this vision will require investments in many areas of agricultural production, marketing and management which also raises generic issues of foreign ownership of agricultural resources quality assurance, climate change response and resource utilisation.

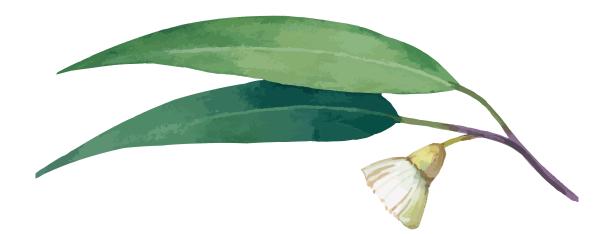
The 22nd IFMA Congress brought together people from many countries, and with diverse interests in farm management to look, listen, learn and discuss the farm management issues that will contribute to growing agricultural output in regions like Tasmania. The outcomes of the inspections, presentations and discussions are summarised in this report.

As President of the International Farm Management Association I am delighted to support the production and publication of this report. It provides a lasting legacy of the Congress and I believe it will be of value to other jurisdictions where there is enthusiasm and planning to increase agricultural output.

I am confident that the 22nd IFMA Congress in Tasmania will contribute to the planning and strategic growth of agriculture in that state and challenge others to critically analyse their visions and strategies to achieve them.

Trevor Atkinson

President, IFMA 6 December, 2019



Summary

The objective of the International Farm Management Association is to further knowledge of farm management theory and practice throughout the world. In part, this objective is accomplished through a bi-annual international Congress. The 22nd Congress was held in Launceston in March 2019, around the theme of "Growing Agriculture @ 41 Degrees South".

Presentations by invited speakers, contributed papers and visits to farming and related agricultural businesses in northern Tasmania provided around 300 delegates from around the world with information about agriculture in Tasmania, and the ideas and opinions on the topic – how to increase the value of agriculture 10 fold by 2050 (Vision 2050 – the State Government's target). The final workshop session allowed delegates to contribute their ideas in a formalised workshop.

This report provides a framework that can be used by the state government to develop and implement a strategy to deliver Vision 2050.

The congress concluded the role of the Tasmanian Government in delivering a Vision 2050 strategy is one of leadership, empowerment and resourcing so as industry stakeholders can own the strategy they develop, implement and evaluate.



The following nine strategy themes were identified that encompass the issues that must be addressed in order for Vision 2050 to be achieved. The role of government in delivering a strategy within each theme has been identified and articulated below.

 Innovation and research, development, extension and adoption: Facilitate the formation and continued operation of an advisory group comprising representatives of the supply chains for the priority sectors/industries, with the group recommending, driving and being accountable for actions that will contribute to V2050 to ensure RD&E investment is driven by industry.

2. Competitiveness:

Collaborate with industry to produce auditable systems that verify points of difference important to consumers.

3. Trade and marketing:

Facilitate creation of connections between Tasmanian supply chains, local, national and global consumers. Continue support for and promotion of the Tasmanian brand.

4. People:

Continue support for School Farms. Allocate funds for training advisers and consultants.

5. Agriculture in society:

Facilitate discussions with stakeholders on the issue of who meets the costs of societal expectations for maintenance of the rural environment.

- 6. **Managing natural resources:** Provide leadership that will empower industry to improve management of the natural resources through self-regulation.
- 7. Transformational issues: Assist stakeholders to keep up-to-date.
- Changing consumer diets: In collaboration with industry provide factual dietary information that dispels myths that consuming agricultural products including red meat and dairy products is not healthy.
- Post farm gate value adding: Coordinate approaches and invitations to interstate and overseas businesses to visit Tasmania, and facilitate such visits. Provide continued support for "Brand Tasmania".

We envisage the construction of a V2050 Board or integration of V2050 into an existing organisation comprising industry stakeholders and Government representatives committed to delivering V2050.

Note. Video recordings and PowerPoint presentations provided by the invited speakers, and copies of the Contributed Papers are on the IFMA web site: IFMAONLINE.org

The International Farm Management Association



The International Farm Management Association (IFMA) is a society for people involved directly or indirectly in all aspects of agriculture. This includes the whole spectrum of individual and corporate producers, managers, advisors, researchers, teachers, policy-makers, suppliers, farming and marketing organisations and agribusiness companies associated with agriculture, horticulture and rural enterprise.

Currently the Association has members in over 50 countries. The objective of the Association is to further the knowledge and understanding of farm business management and to exchange ideas and information about farm management theory and practice throughout the world.

To achieve this objective, IFMA publishes the International Journal of Agricultural Management and oversees the organisation of an international Congress, held every two years, with participants from all over the world. The most recent international Congresses have allowed participants to refine their knowledge and exchange ideas on themes related to the most recent agricultural trends and issues.



IFMA22 Congress

The 22nd Congress was held in Launceston, Tasmania in March 2019.

The theme for the Congress was: "Growing Agriculture @ 41 Degrees South".

This aligns with the Tasmanian State Government's objective of increasing the annual farm gate value of agriculture to \$A10b by 2050.

A key objective of the Congress sessions was to examine the impediments to growing the value of agriculture in Tasmanian and elsewhere around the world, and how these impediments could be overcome using Tasmania and it's growth objective as a test case.

Invited presentations and "round-table" discussions focused on the issues and actions that a region like Tasmania could take to facilitate such an increase.

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Introduction

The theme of the 22nd International Farm Management Association (IFMA) Congress in Launceston in March 2019 was "Growing agriculture at 41° south". This theme was chosen because of its' alianment with the State Government's Vision 2050 (V2050), which was (and remains) a succinct and unambiguous objective to grow the annual farm-gate value of agriculture in Tasmania 10-fold to \$10b by 2050. The Congress organising committee believed that discussions around the issues and actions that would be necessary for such momentous growth to be achieved would be of interest and relevance to other regions around the world, where increased production is necessary to feed the growing population as well as sustaining the economies of rural communities.

The structure of the Congress was designed to provide expert views on the supply chain actions needed to grow the farm gate value of agriculture, using Tasmania as an example of a smaller regional economy producing differentiated produce and commodities for export.

This report aims to summarise the ideas, issues and recommended actions presented at the Congress. We hope that it will encourage development and implementation of detailed long term strategies for growing the value of agriculture in Tasmania, as well as in other regions around the world.

IFMA22 Congress structure

The congress was structured for delegates to gain an appreciation of Tasmanian agriculture from commercial, technical production, environmental, marketing and management perspectives by visiting farms, processors and the Tasmanian landscape. They were able to combine this local context with the thoughts delivered by national and international experts on issues of global significance including ones which will impact on achieving V2050. Discussions between delegates continued throughout the congress culminating in a round table workshop to specifically focus on strategies that will drive Tasmanian agriculture to achieve V2050.

Driving Vision 2050

Prior to 2014 Tasmanian agriculture was viewed and considered by Governments according to production sectors with each focused on short term strategies to address immediate issues or problems. There are many issues including research, development and extension, biosecurity, infrastructure development and transport that are common across sectors and umbrella-like to the whole of agriculture. Many of the agriculture sectors have a strategic plan but many plans are short term and not delivering to potential due to lack of ownership, leadership and resources. However we do acknowledge that some industries such as dairy and wine are driving industry development using well prepared strategic plans although short term relative to Vision 2050. It is also acknowledged that nationally focused industry development corporations have well developed strategic and operational plans but none of these align with the Vision 2050 time-scale or are specifically focused on Tasmania.

The Tasmanian Government during 2014-18 attempted to provide unifying leadership through its concept of V2050. Growth of this magnitude represents a compound growth at the rate of around 6% per year which is substantially higher than the growth rate achieved in recent years. A growth rate of 6% will require momentous changes to the entire agriculture supply chain.

Whilst the achievability of such a Vision is open to debate it does provide a focus for all components of the agricultural industry to develop strategic directions that align with this Vision. Since announcing this Vision some agriculture sectors have acknowledged it by referring to it in publications and to support applications for individual initiatives but no sector or overarching group has claimed ownership or is attempting to drive it from the perspective of the whole Tasmanian agriculture industry.

To date the Government has not articulated any long-term whole of agriculture strategies (other than supporting irrigation development) which are deliberately focused on driving progress towards achieving this Vision. Tasmania's Sustainable Agri-Food Plan 2016 – 18 focuses on a three-year time horizon with discrete relatively small scale strategies rather than 30 years over which the 2050 Vision was envisaged.

This deficiency was recognised by Tasmanian proponents as the incentive for hosting the 2019 IFMA Congress in Tasmania. The proponents viewed the Congress as an opportunity to define long term strategies and actions essential for achieving V2050. The strength of this approach was that the congress was an opportunity to focus the thoughts and experiences of 300 national and international delegates on this issue without the shackles of self-interest or needing to adhere to the policies of a particular production sector or political party.

Principles – established by the Congress Organising Committee and reinforced by Congress delegates

Growing agricultural output and its value is universally accepted as both desirable and necessary. Although Tasmania is recognised as a region with a high level of food security it is a net exporter (internationally and nationally) of food products. Governments, farmers and processors agree that there is potential for substantial increase in production and that envisaged in V2050 will be beneficial for the broader community.

Vision 2050 will only occur substantially through actions "inside the farm gates". What happens on farms will be determined by the physical, social and economic environment both inside and outside the farm gate, so actions to grow output and its value will be influenced by members of the supply chain from producers to consumers and the impact of others such as government agencies at all levels on all members of the supply chain.

Congress delegates noted that V2050 was proposed by the State Government (probably largely in isolation from industry), but it is apparent that it has not been universally adopted (other than when expedient) by stakeholders including members of the supply chain from farmers to retailers. While the State Government must have a major role in providing leadership and facilitating the interaction between stakeholders, establishing policies that facilitate growth and monitoring progress, the on-ground actions will be the responsibility of commercially motivated stakeholders.

Achievement of Vision 2050 is dependent upon it remaining relevant and supported by Government policies that will prevail over the next 30 years during which time around eight governments may lead Tasmania. These governments must be consistent in their support for V2050 as the long-term driver of agriculture and the state economy. Short term horizons and changes in direction are a recipe for failure. This does not prevent these eight governments developing, supporting and branding their unique actions provided they focus on achieving V2050.

In fostering industry development governments have defined functions which take account of public good, market failures and leadership which is why the role of government in each of the strategic themes is articulated in this report.

The business of agriculture in Tasmania is driven by the private sector in its many dimensions hence custodianship of driving Vision 2050 should rest with this sector not the government or a government agency. A supply-chain based management approach to driving V2050 must therefore be adopted to ensure ownership and relevance. Whilst the importance of differentiating Tasmanian agriculture and food production from that of the rest of the nation is recognised it is also critical that strategic linkages are established and strengthened with national plans so as national resources flow to enhance those available locally.

Tasmanian agriculture is not entirely unique so many of the issues and the likely actions will be common to other regions around the world. We expect the following discussion will therefore include ideas applicable in other areas.

Participants in a strategy for growth

Who will be the contributors to a strategy, and the beneficiaries?

The beneficiaries will be:

- Farmers/producers
- Marketers & processors and others in the marketing chain
- Suppliers of good and services
- The general community

In 2009 Professor Jonathan West who was the Director of the Australian Innovation Research Centre in Hobart prepared a lengthy report (An Innovation Strategy for Tasmania, A New Vision for Economic Development, Conceptual Overview and Options Outline) on the future prospects for Tasmania, and specifically described the potential for agriculture, concluding that if growth occurred to the extent he considered possible, then Tasmania would be the most wealthy state in Australia.

The contributors:

- Farmers & farmer organisations
- Consultants
- Educational institutions, schools, further education providers, university, agricultural institutes/colleges
- Rural merchants
- Processors and marketers
- State and Federal Governments



Strategic themes



The following nine strategic themes were identified as a basis for the Congress discussion session. Within each theme strategies and actions are grouped and prioritised based on the current situation analysis relative to that theme. These themes are consistent with those developed for "The Blueprint for Australian Agriculture, 2013-2020" published in February 2013 by the National Farmers Federation of Australia which strengthens their validity, importance and relevance from local, national and international perspectives.

Over the coming 30 years these strategies and actions will evolve and change but the strategic themes are expected to remain.

These themes were used to structure and catalyse general discussion by delegates during the Round Table discussion period on the last day of the Congress. At this stage of the congress delegates having experienced Tasmanian agriculture and the congress papers were assumed to be well prepared for applying their learnings and thoughts to the themes.

- Innovation and research, development, extension and adoption – growth in agriculture is underpinned by continuing innovation and research & development, and putting what is known into practice.
- 2. **Competitiveness** all in the value chain must be competitive in the areas of production costs, quality and customer expectations.
- 3. **Trade and marketing** barriers and distorting policies, and meeting customer needs.
- 4. **People in agriculture** training and attracting people to agriculture.
- 5. Agriculture in society community support and trust, sustaining rural communities.
- 6. **Managing natural resources** growth while protecting the environment.
- 7. **Transformational issues** radical changes representing threats and opportunities.
- 8. **Changing consumer diets** malnutrition, obesity and the desire to live long healthy lives based on healthy food.
- 9. **Post farm gate value adding** transforming farm produce higher value products.

The following discussion section of this report is a summary of the ideas and views provided to delegates by the invited presenters and the ideas and views of the delegates in the Round Table discussion session.

1. Innovation and Research, Development and Extension



Strategic analysis

Australia (and globally) is under-investing in Agricultural Research, Development and Extension (RD&E). Public support for RD&E has been declining since the 1970's, despite it underpinning large long-term productivity growth and the associated benefits which have enabled agriculture to remain viable despite declining terms of trade.

There are a number of research and development corporations in Australia (e.g. Grains Research and Development Corporation and Dairy Australia). Their modus operandi is a unique approach to providing base-level government and industry co-investment in agricultural RD&E. This should be maintained and strengthened.

Extension services are now primarily provided by the private sector. Government investment in extension has declined hugely in all Tasmanian farming sectors (albeit there remains an active extension program in the Tasmanian dairy sector operated by the Tasmanian Institute of Agriculture (TIA), DairyTas and Dairy Australia).

Extension as a concept has been developed and evaluated in the United States but is likely to complement rather than replace more personalised models.

Knowledge is abundant, but only useful when it is converted to information that is relevant to a production system and is adopted into that system.

Knowledge is not being effectively passed through generations of farmers and researchers resulting in reinvention of known technologies and slowed adoption progress. There is a mistaken belief that "old" knowledge loses its value.

Tasmania has limited research capability – physical and financial resources.

Innovation through data management and robotics will be necessary for high-cost producers (as in Australia) to be profitable.

R&D in genomics will offer opportunities to increase the rate of genetic improvement.

Tasmanian strategies

- ✓ Identify/confirm the farming sectors with the greatest potential to contribute to V2050 (e.g. red meat production, aquaculture, cherries, processed vegetables and wine grapes) and prioritise RD&E investments to achieving outcomes for these sectors. Outcomes to be assessed against the criteria of productivity gains, cost of production savings, environmental and social benefits, and the opportunities for value adding within Tasmania.
- Empower industry to drive, direct and coinvest with Government investment in RD&E rather than just provide advice which does not engender ownership.
- Identify global technologies and business models that can have positive impacts on the priority sectors of Tasmanian agriculture and foster their accelerated adoption.



- Develop integrated systems approaches to RD&E throughout the supply chain rather than a constrained discipline approach in which R&D are disconnected from E.
- ✓ Value and promote agricultural extension and consultants as professionals of equal standing with researchers and equally rewarded.

Tasmanian actions

- Focus RD&E on the priority sectors, and within each sector focus on priority issues. Ensure the RD&E projects are integrated with interstate and overseas RD&E professionals working on similar issues.
- Projects to be prioritised against the expected outcomes and benefits to Tasmanian agriculture rather than the narrow interests of the project proponents.
- Extension has to be reinvented to narrow the gap between the "middle 50%" and the "top 20%" farm businesses and to shorten the tail which is critical to achieving V2050.
- Develop industry specific supply chain focused extension programs with credible and experienced staff aimed at reducing adoption variance.
- Increase use of benchmarking and leading farmers (top 5%) as leaders of change and as industry mentors.

- Facilitate the formation and continued operation of an advisory group comprising representatives of the supply chains for the priority sectors/industries, with the group recommending, driving and being accountable for actions that will contribute to V2050 to ensure RD&E investment is driven by industry.
- Strategic investment and fostering global collaboration in RD&E.
- Develop or facilitate development of contemporary and integrated face to face and digital extension support services which complement commercial consultancy businesses.
- Ensure the RD&E investment made in TIA¹ is strategic and Tasmanian industry focused with investment decisions being made by industry.
- Through the TIA funding agreement increase delivery of generalist extension services that support and work collaboratively with private sector consultants through the creation of a vibrant "discussion" group of extension professionals (members to meet for training and the exchange of ideas and information).
- Recognise extension specialists in TIA on the same scale as researchers.

¹ TIA is a partnership between the Tasmanian Government and the University of Tasmania.

2. Competitiveness



Strategic analysis

Australia's international competitiveness is declining despite world food demand expected to increase by 70% by 2050.

World food production has been growing by around 2.2% per year, due to productivity increases, while land and water availability for agriculture have declined.

Producers in developed nations should anticipate continuation of long-term reduction in commodity prices interrupted occasionally by climate and other disruptions, with periods of higher prices.

Australian producers are fully exposed to global influences without government subsidies in order to comply with negotiated free trade agreement conditions.

Growth in the value of Tasmanian produce will require it to be differentiated and directed towards higher value markets where premiums can be identified.

Global over supply of some commodities (pork, sugar, dairy) is reducing price below cost of production thereby threating sustainability of such industries.

Australian labour costs are the highest in the OECD, yet there are shortages of labour for unskilled activities (e.g. fruit picking).

Declining availability and increasing cost of using infrastructure such as transport.

Consumers demanding high quality, safe food at the lowest price. Consumers are spending a smaller proportion of their disposable income on food as their incomes rise and are more prepared to pay for the information package that comes with the product. The level of trust in the package influences the premium that consumers will pay.

The expected changes will mean larger farms, fewer farm businesses and bigger equipment. Land values are driven by demand rather than by the expected financial returns from its' productive use. Financial rewards from production are commonly low (~1-2%) while returns from capital appreciation of the land asset are higher.

Tasmanian farm businesses are commonly small with very limited opportunities for efficiencies from scale. Around 31 per cent of farms in Tasmania had an EVAO1 between \$50,000 and \$150,000. These farms accounted for only 4 per cent of the total value of agricultural operations in 2016–17. In comparison, 17 per cent of farms in the state had an EVAO of more than 1 million and accounted for an estimated 61 per cent of the total value of agricultural operations in Tasmania in 2016–17. There are opportunities (e.g. leasing and joint ventures) for business models that will help the smaller-scale farm businesses to increase returns.

1 EVAO – Estimated Value of Agricultural Output, at the farm gate.



Tasmanian strategies

- ✓ Support investments in RD&E that foster adoption of technologies that reduce cost of production and enhance Tasmania's competitive advantages.
- Increase financial literacy of producers and support new approaches to business operations and structures.
- Target higher value markets with differentiated products, noting the differentiation may be the result of perceptions of quality or other attributes.
- Develop consumer trust in the production systems based on information provided with food that depicts production system and processing standards.
- Increase production scale as a means of reducing production cost.
- Translate marketing and product differentiation learnings from other successful industries to agriculture.

Tasmanian actions

- Develop market specific consumer information packs that highlight the points of difference important to consumers regarding Tasmanian produced food and other produce (e.g. wool).
- Develop generic quality assurance systems that can be easily adapted across agriculture sectors.
- Catalyse establishment of business relationships between farmers and entrepreneurs to help transition from commodity to niche or higher value products.
- Maintain an overarching Brand Tasmania concept that supports generic Tasmanian branding.

- Collaborate with industry to produce auditable systems that verify points of difference important to consumers seeking to purchase food and agriculture outputs that meet or exceed their values.
- Invest in projects that identify opportunities to increase scale and reduce input costs then encourage industry uptake.

3. Trade and marketing



Strategic analysis

Increasing world-wide consumer demand for clean, safe, high quality, provenance guaranteed and production system integrity guaranteed food. Consumers' expectations are increasing and driving purchase decisions.

Access to some markets is constrained by trade barriers associated with biosecurity and protectionism.

Opportunities for international freight direct from Tasmania are increasing and should be supported (e.g. direct air freight from Tasmania to Asia is now likely).

The cost of international freight relative to the value of differentiated and branded produce is falling.

There is strong demand for Australian and Tasmanian produce in the Asian market which is relatively close compared to Europe and North and South America.

Increasingly, food production does not occur close to population centres and urban dwellers have no connection to food production. Transport is therefore a considerable cost to food production.

Selling products in the market in which they were produced removes the impact of exchange rate and international transport thus an opportunity to substitute imported products with those locally grown.

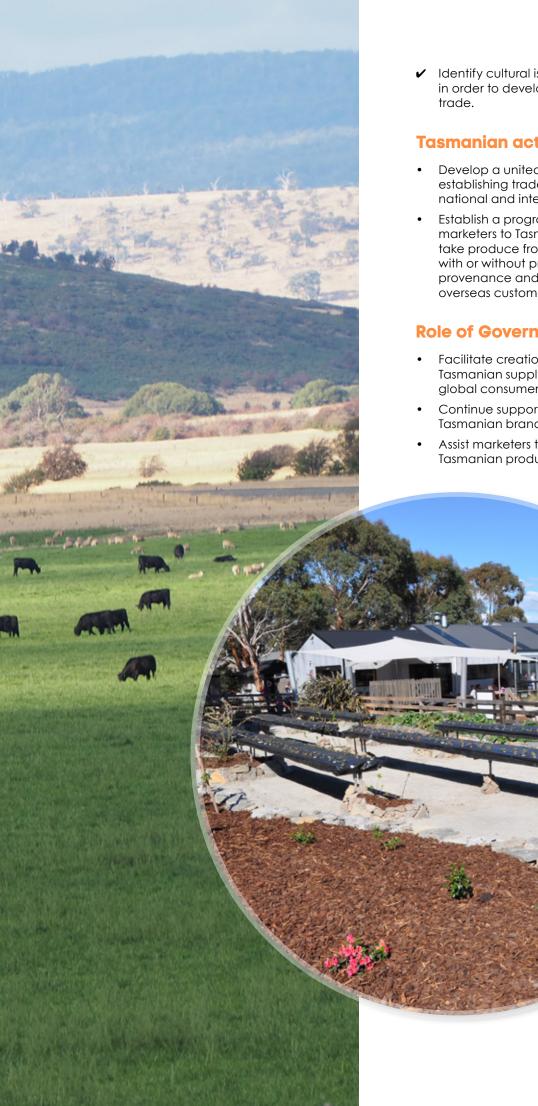
Tasmania is Australia's most successful example of place of origin branding because of the identifiable geographic boundary.

Tasmania is a place of inspiring natural beauty with a growing tourism industry closely linked to food experiences.

Cultural understanding of potential markets is essential particularly in Asian countries such as China where trust and relationships need to be established before a trading relationship.

Tasmanian strategies

- Further developing the Tasmanian brand to encompass clean, safe and provenance in a manner that complements individual product and company branding.
- Develop Australian markets as the key markets for Tasmanian agricultural produce to remove risks of exchange rate and transport costs.
- Growth in volume of Tasmanian products will require transport interstate and overseas; therefore develop efficient freighting infrastructure.
- ✓ Support the links between tourism and agriculture, and the relationships between products and their place of origin.
- ✓ Where local brands are developed, they must be protected.



✓ Identify cultural issues that must be understood in order to develop international agricultural

Tasmanian actions

- Develop a united Tasmanian approach to establishing trade and market access in national and international markets.
- Establish a program to attract processors and marketers to Tasmania with the capability to take produce from the farm gate and deliver it with or without processing but with Tasmanian provenance and back-stories to interstate and overseas customers.

- Facilitate creation of connections between Tasmanian supply chains, local, national and global consumers.
- Continue support for and promotion of the Tasmanian brand.
- Assist marketers to protect the provenance of Tasmanian produce.

4. People

Strategic analysis

Fewer Australian workers are content with undertaking dull, dirty, repetitive and dangerous tasks which characterise many jobs within agriculture.

Jobs in agriculture are generally seen as a lowskilled and poorly paid and thus agricultural careers are not promoted to the best and brightest.

Contemporary agriculture offers a wide diversity of career opportunities. A partnership between learners, teachers and industry is necessary to attract young people to careers in agriculture.

Access to finance and effective succession planning are huge impediments to young people establishing their own agriculture production and value adding business.

Farmers are becoming time-poor and information over-loaded so as technology advances farm managers need skills in a wide range of areas or at least access to those with such skills.

The current emphasis on tertiary training in Tasmania is on training scientists and research professionals rather than extension, communication and practical production specialists.

Tasmanian strategies

- Use robotics to undertake tasks that are unattractive to people.
- Ensure employment opportunities in agriculture are presented throughout the whole education experience of kinder to university.
- Foster and facilitate a culture of lifelong learning within the agriculture supply chain including the strategic use of consultants as valued members of the farm business management team.
- Maintain an appropriate balance between family and corporate agriculture to support the competitive advantage and Tasmanian image of food production being from the family farm.
- Develop a cohort of generalist agricultural consultants (such as available from University of New England graduates in Rural Science (Agricultural Consulting)) fluent in technical agriculture, financial and business management and encourage their integration into farm business management teams.
- ✓ Explore development of a farm finance system that is specifically tailored to agriculture and young entrepreneurs starting in the industry.



Tasmanian actions

- Ensure agricultural education is delivered by professional agriculturalists with the appropriate mix of contemporary theoretical and applied knowledge and experience.
- Develop and promote succession planning education.
- Support the tertiary level training of more generalist agriculture professionals, with technical/production skills as well as the skills to assess the farm management and financial consequences of decisions on technical and production matters.

- School farms in Tasmania are currently small and best suited as a tool to introduce students to the basics of agriculture. Resource schools so they have better scale to demonstrate the wider range of careers and appoint agriculture teachers who are experienced agriculturalists so the latest technologies are demonstrated by leading practitioners.
- Allocate funds for training "rounded" advisors and consultants.

5. Agriculture in society



Strategic analysis

Rural communities are consolidating so there are fewer people and employment opportunities where agriculture happens. Smaller rural communities are struggling to retain essential services (e.g. in education and health).

Negative consumer perceptions about agriculture and its impact on the planet.

The urban community is losing its connection with agriculture hence its knowledge of agriculture is second or third hand often delivered by groups with their own agenda.

Urban dwellers are demanding that the rural landscape and natural resources are managed in a manner that meets their expectations and values.

Rural landscape custodians in Tasmania clearly understand societal expectations regarding aesthetic and management expectations of the landscape and can quantify the cost of meeting such expectations.

Tasmanian strategies

- Communicate positive factual stories about Tasmanian agriculture to the general community noting these may be contradicted by national or international scenarios.
- Integrate tourism and agriculture with the aim of promoting the contribution that agriculture makes to society and the environment, as well as promoting the qualities of Tasmanian produce through the "back stories" associated with its' production.
- Small scale "niche" tourist farms agriculture are attractive to tourists, but they have limited potential to significantly contribute to V2050. Assist these small scale farming businesses (including "hobby/lifestyle farmers) to meet expected community standards of biosecurity, animal welfare and environmental management.

Tasmanian actions

- Clearly articulate societal expectations regarding rural landscape management and the cost of meeting them.
- Foster the interaction of producers and tourism operators.
- Ensure small scale lifestyle farms are managed in a manner consistent with that considered best practice by larger scale commercial businesses.
- Ensure the popularised practices of small life style farms do not define the image and practices expected of large commercial farms.



- Facilitate discussion regarding who meets the cost of maintaining and managing natural resources in manners that may not be the most cost effective, practical or profitable but demanded by general society.
- Provide forums that ensure the interaction of the farming community and tourism providers.
- Educate farmers including smaller life-style establishments as to their obligations so as their activities do not threaten sustainability of Tasmanian agriculture.
- Ensure farmers have legal protection to enable them to undertake the business of farming without interference from protest or ideologically driven individuals and groups.

6. Natural resources



Strategic analysis

Declining supply of and continuing pressure on basic agricultural inputs – land, water, nutrients and energy; some of which are amplified by climate change.

Tasmanian and Australian Governments have invested in water infrastructure that has allowed a substantial increase in the productivity of land in many areas of the State. It is recognised that the development of irrigation infrastructure is a critical requirement for increasing the quantity and quality of produce, and reliability of its production.

Farmers appreciate the necessity of maintaining natural resources despite the economic pressure to use the resources more intensively.

Consumers are increasingly concerned about the impacts of agriculture on the environment.

Consumers in developed countries waste considerable quantities of food and thus the resources used to produce it.

A growing cohort of consumers have ethical and "romantic beliefs" regarding the use of traditional technologies claiming that food can be produced with minimal inputs.

Tasmanian strategies

- Recycle agricultural inputs such as plastics and community wastes from sewage and water treatment plants.
- ✓ Ensure packaging for Tasmanian agricultural produce is made from biodegradable and or recyclable materials.
- Increase efficiency of production by using less input resources to produce more food and other outputs.
- Educate consumers as to the inputs required to produce food and the importance of recycling and reducing food waste.

Tasmanian actions

• Integrate resource management with V2050 to become a food and resource plan.

- Provide leadership that will empower industry to self-regulate regarding natural resource usage and access.
- Providing leadership with industry to demonstrate that Tasmanian agriculture is a responsible user of natural resources in a manner that leads world best practice.
- Protect access to natural resources for food and fibre production.

7. Transformational issues



Strategic analysis

Agriculture needs to at least double productivity from major inputs including land, water, nutrients and energy.

Agriculture becoming a net carbon sink and energy producer.

Removing, managing and predicting the risks associated with agricultural production.

Genetic improvement using genetic diversity and traditional methods has been a tool successfully used to increase production but the annual rate of progress (food crops 2%, pasture 0.5%, horticultural crops 0%) is too slow to meet future demands.

World-wide demand for food is creating novel production systems in some larger cities, for example a shift to urban production in "artificial" environments or using alternative organisms such as insects and algae. Such systems are attractive to consumers who consider agriculture is damaging the environment.

Tasmanian strategies

- Develop systems that can accurately predict production risks such as floods, disease, pests and temperature on a micro scale and assist with identification of management strategies that can be applied on a similar small targeted scale.
- Develop hubs that actively work to identify and take new ideas including innovative farming systems and organisms from concept to reality.

Tasmanian actions

- Adopt and or develop technologies and or superior genetic material not available in Australia that enable faster rates of genetic improvement of plant and animal species important to agriculture.
- Increase local knowledge and understanding of GMO opportunities coupled with a robust economic analysis.
- Ensure Tasmanian RD&E training and delivery professionals keep up-to date on national and international developments.
- Research alternative agricultural systems using organisms currently not exploited for food production.

- Assist stakeholders to keep up-to-date.
- Co-investment in infrastructure that enables increased efficiency of inputs to be realised.
- Ensure genetic diversity is maintained by investing in genebanks.



- In collaboration with the private sector coinvestors provide support to investigate and commercialise high risk new and emerging technologies and ideas through clusters and
- Support independent whole system economic and opportunity analysis of GMO technologies and the procedures for practical co-existence with other new and traditional systems.
- Support collaboration and training programs for agricultural professionals pursuing new and novel technologies associated with agriculture and food production.

8. Changing consumer diets



Strategic analysis

Less than one third of the global population is eating a healthy diet so obesity and malnutrition predominate.

Consumers want to know more about the food they eat, how it is grown and the impact it's production is having on the planet.

Consumers in Australia and other developed countries are very complacent about food. In these countries almost any food is available cheaply when it is desired.

Increasing concern about meat consumption and the associated environmental impacts, leading to vegetarian dietary preferences.

Tasmanian strategies

- ✓ Demonstrate the true value of food and the concept that food must be affordable rather than cheap.
- Demonstrate that traditional food sources have positive health benefits without leading to obesity.

Tasmanian actions

• Through media releases (printed and social media) provide information about dietary matters and the health benefits of consuming Tasmanian produced food products.

Role of Government

• In collaboration with industry provide factual dietary information that dispels myths that consuming agricultural products including red meat and dairy products is not healthy.

9. Post farm gate value adding



Strategic analysis

Post farm gate processing facilities are highly capital intensive hence their profitability is positively related to scale and throughput.

The processors and marketers outside the farm gate are generally larger corporate businesses with appropriate expertise.

Growth in agriculture will only occur in parallel with growth in the capacity of this sector of the supply chain.

Some niche producers offer a paddock to plate food experience but scale and thus economies of such systems are difficult to achieve.

Tasmanian strategies

- Ensure individuals and organisations in the supply chain outside the farm gate are partners in V2050; for example Tasmanian Agriculture Productivity Group members.
- Attract processors and marketers to visit and explore opportunities for investing in Tasmania.
- Encourage value-adding and product differentiation opportunities at a scale which can provide significant benefits.
- Investigate opportunities to value-add products currently produced in Tasmania and sold as commodities.

- Coordinate approaches and invitations to interstate and overseas businesses to visit Tasmania, and facilitate such visits.
- Support continued development of "Brand Tasmania".
- Foster new and novel value adding opportunities for Tasmanian agricultural produce.

Conclusions

Growing Tasmanian agriculture towards V2050 will have a major positive impact on the entire Tasmanian economy.

The magnitude of growth is huge; it is ambitious and possibly aspirational, but this should not be considered a distraction from the vision of very significant growth.

A vision to 2050 extends a long time into the future, and there will be seasonal and other influences that will cause the momentum and progress to vary from year to year. Interim targets and monitoring will be necessary.

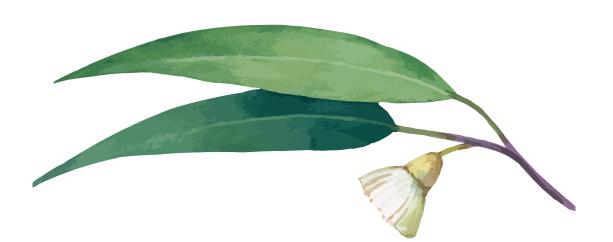
This report contains many specific and targeted suggestions to facilitate progress, but progress will only be achieved with leadership and drivers. Individual participants will change over time, so leadership and coordination must be attached to an organisation, such as AgriGrowth within the Tasmanian Department of Primary Industry. But together with that, long term commitment from stakeholders including farmers, processors, RD&E providers, businesses and organisations focused on agriculture will be necessary.

Recommendations

The Congress presentations and round-table discussions have defined many actions that are either essential for V2050 to be achieved, or will facilitate growth and thus support and contribute to V2050. Given the effort already invested in V2050 doing nothing is not an option.

The Vision created by the Tasmanian Government will be good for the state. The Government has in effect sown the seed, but in order to produce a strong enduring V2050 plant it must be supported and nurtured. This nurturing requires:

- Leadership along with appropriate and enabling investment from Government with the philosophy that Government is committed to supporting V2050 driven by the Tasmanian agriculture supply chain.
- Bi-partisan and long-term support with the flexibility of pursuing short term political initiatives which do not detract from the main V2050 game. The commitment to growing agriculture must be apolitical.
- Government to catalyse and resource a V2050 Board or integrate V2050 into an existing organisation comprising industry stakeholders and Government representatives committed to delivering V2050.
- The V2050 Board must define and prioritise strategies with appropriate quantitative key performance indicators and milestones against which an annual report is provided to Government, the whole agriculture supply chain and Tasmanian community.
- Evaluate and manage risks to increase the chance of success without impeding action for fear of failure.
- A critical requirement will be consultation with industry stakeholders to define the priority areas of production with the greatest potential to contribute to V2050.



IFMA22 Congress



