Tasmanian Institute of Agriculture
Strategic Plan
Updated June 2016
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Agriculture is a key strength in Tasmania’s economy and the Tasmanian Government has committed to increasing the value of agricultural production across the state to $10 billion per year by 2050.

With the increasing demand for fresh, safe and high quality food, Tasmania has a remarkable opportunity to leverage off our competitive strengths in agriculture to significantly expand our agricultural industries and food manufacturing capacity. The Tasmanian Government’s AgriVision 2050 plan will strengthen the economy and create jobs in Tasmania.

The partnership between the Tasmanian Government and the University of Tasmania through the Tasmanian Institute of Agriculture (TIA) is playing a key role in achieving this goal. TIA is helping to drive productivity in agriculture with an emphasis on investment, innovation, research, skills development and sustainability.

Innovation in agriculture can only come about by ensuring there are stronger partnerships between all parties.

TIA has a mandate to support industry development through ensuring that research is practical and responsive to industry.

The Institute’s work is not only relevant, but critical to achieving sustainable growth and, importantly, creating more jobs into the future.

If Tasmanian agriculture is to achieve its full potential, if we are to deliver on AgriVision 2050; then we must do it together, in collaboration.

AgriGrowth Tasmania, a specialist division created within my Department, provides leadership in agricultural policy development.

Working together, TIA and AgriGrowth Tasmania are ensuring that the research, development, extension and education services provided are maximising the potential of agriculture.

Our success will ultimately be measured by the employment that this industry provides for Tasmanians.

New irrigation schemes are a key foundation for this growth and the $115 million irrigation investment by the Tasmanian and Australian Governments and the private sector will unlock huge opportunities in new areas like vegetables, poppies, new seeds crops, dairy, wine and fruit.

It was therefore necessary for TIA to review its strategy to ensure that it is investing its resources and delivering on measurable outcomes in priority areas that will support this growth.

As Minister, I am excited by the work being undertaken by TIA and the focus provided by this updated Strategic Plan that will continue to advance the state’s prosperity and sustainability in agriculture.

Jeremy Rockliff MP
Deputy Premier and Minister for Primary Industries and Water
I wish to congratulate TIA staff and the industry stakeholders who have contributed to the review and update of TIA’s Strategic Plan in response to a rapidly changing environment.

A critical part of the Tasmanian Government’s strategy is to grow the farm gate value of the state’s agricultural industries and TIA needs to be responsive and able to support this goal.

The last few years of TIA’s growth, expanding external income and success in delivering to stakeholders, have illustrated the benefits of the partnership between the University of Tasmania and Tasmanian Government to combine scientific research, industry development, extension and agricultural education in one organisation.

The synergies derived from carrying out these complementary roles in collaboration with the agriculture sector have led to this model being adopted in other states. TIA’s success has demonstrated that ‘science for impact’ works: not only have TIA scientists performed extremely well in the Australian Government’s Excellence in Research for Australia (ERA) assessment; they are also highly appreciated and effective at the coal-face, valued by farmers and industry for their practical knowledge, and appreciated by government for their relevant and timely input into the policy-making process.

The University of Tasmania has been recognised for its global excellence in agricultural research by being ranked in the top 150 universities in the world in the 2015 QS Subject Rankings.

There is ample evidence that the Joint Venture Agreement is delivering considerable benefits not only for Tasmanian agriculture, TIA’s interstate and overseas partners, but for the University of Tasmania and the Tasmanian community as well.

TIA is an important part of building Tasmania’s future as an international scientific research and knowledge hub.

TIA is playing a leading role in helping to address one of the 21st Century’s most pressing issues: global food security. Within the agricultural domain, our small island is making significant contributions at the state, national and international levels.

The University of Tasmania has always been very keen to encourage involvement in the community. TIA’s model of regional engagement – responding to requests for targeted research and delivering with new knowledge, translated to meet the immediate needs of industry, illustrates that strong connection.

I have great confidence that this updated Strategic Plan will help guide TIA to bigger and better achievements and help grow Tasmania’s agriculture industry.

Professor Peter Rathjen
Vice-Chancellor
University of Tasmania
TIA’s updated Strategic Plan builds on the vision and direction of the original plan to clearly articulate how its strategic goals will be achieved.

The principles and priority outcomes align with the goals of the Tasmanian Government and the University of Tasmania in relation to RD&E in the agriculture and food sector.

TIA’s updated Strategic Plan provides more clarity and a stronger proposition for its investors, the Tasmanian Government, the University of Tasmania and industry.

The Tasmanian Government has set the ambitious goal to grow the farm gate value of the state’s agricultural production by tenfold.

TIA will play a crucial role in meeting this goal and this updated Strategic Plan will help direct TIA’s research, development and extension activities and provide a clear ‘line-of-sight’ from individual projects to measurable outcomes.

TIA is regarded as a national role model for institutional partnerships and integrated research, development, extension and education. With the recent fusion of the School of Land and Food and its research arm, a new model of research, development, extension and education has been pioneered.

Fully integrated into the Faculty of Science, Engineering and Technology, TIA provides research and brokers’ knowledge beyond anything that any other Australian university provides.

With around 130 staff and over 200 students, of whom more than 100 are postgraduates, TIA is Tasmania’s premier research, development, extension and education provider to the agricultural sector.

This makes TIA a catalyst for productivity increases and sustainability gains in Tasmania, with considerable national and international implications.

This Plan provides a vision and direction for TIA and shows how this vision will be achieved and complements those of the Tasmanian Government and the University of Tasmania in relation to agriculture and education respectively.

This Plan owes a significant debt to the Director of TIA, Professor Holger Meinke, and the staff of TIA.

I am confident that TIA’s position as a key provider of first class agricultural research, development, extension and education in Australia and globally will be strengthened.

John Whittington
Secretary
Department of Primary Industries, Parks, Water and Environment
TIA’s updated Strategic Plan describes the translational research, development and extension (RD&E) goals that will support the development of prosperous, innovative and sustainable agriculture and food industries and communities.

The Plan incorporates a ‘Strategic Direction,’ which provides a roadmap to help the Institute achieve its goals with adequate resources. This is underpinned by five core principles detailed in the ‘Statement of Principles’.

The updated Plan will improve decision-making, communication and strategic direction planning for the Institute by:

• Assisting TIA in setting its strategic direction;

• Articulating how TIA will implement its vision;

• Providing a mechanism by which the Strategic Plan can be updated continuously without disrupting business continuity;

• Providing a roadmap for TIA staff that helps to achieve the Institute’s goals;

• Improving communication of successes and impact.

In this context, the Principles and Strategic Direction set a framework when evaluating the appropriateness, effectiveness and efficiency of all activities that TIA undertakes.

Our external environment is characterised by multiple challenges, but also many opportunities for agriculture.

TIA is now responsible for delivering all agricultural RD&E and education on behalf of the Tasmanian Government and the University of Tasmania. In recognition of this we have developed a Monitoring, Evaluation and Reporting (MER) project that will guide staff in the design of activities needed to ensure that information reaches end users. MER will enable TIA to report against indicators used in strategic and operating plans.

This will be rolled out through the life of this Plan. Externally we are creating even stronger links with stakeholders in the agribusiness community – from leading farmers, through key service providers to industry groups.

TIA has a state, national and international mandate. At the state level, we work closely with our partners in government and industry to improve the performance of Tasmania’s agricultural sector, across all industries and value chains. In line with the expectation of our joint venture partners – the Tasmanian Government and the University of Tasmania – we place equal emphasis on impact and delivering outcomes for Tasmania’s agricultural sector as well as research and teaching excellence.

This updated Plan launches a new period of growth for TIA, along with further streamlining of our internal management systems and aligning our operations more closely with the goals of the University of Tasmania, the Tasmanian Government and the needs of our stakeholders.

This Strategic Plan is designed as a ‘living document’. It will be reviewed annually based on our own insights and external feedback.

This updated Plan was developed in close consultation with staff and stakeholders.

I would like to take this opportunity to thank everyone who contributed to the development of it. I particularly thank the TIA Chair and Advisory Board members for their support and all our staff who have risen to the challenge and actively engaged in the development of this Plan.

Professor Holger Meinke
Director, TIA
and Head of School, Land and Food
Key settings

Our operating environment
A number of key policy documents influence the work of TIA.

- The University of Tasmania’s Open to Talent 2012-2016 Strategic Plan provides for greater strength and innovation in the university.
- Tasmanian Government’s AgriVision 2050.
- Australian Government’s Agricultural Competitiveness Green Paper.
- The National Strategic Rural R&D Investment Plan.
- Rural R&D Corporations Strategic Plans.
- Tasmanian Farmers and Graziers Association’s Tasmanian Agriculture 2015 Blueprint.
- Industry strategic documents (DairyTas, Fruit Growers Tasmania, Sheep Connect Tasmania, Wine Tasmania and others).
- The operations of TIA are also informed by the Joint Venture Agreement (JVA) between the Tasmanian Government and the University of Tasmania. The JVA requires TIA to provide the Tasmanian Government with specialised services and information to support its planning, policies and operations.
- As other influences to the work of TIA become apparent, these factors will be recognised in our planning and operations.

Key challenges and opportunities
As we move forward to deliver on our Strategic Plan, we are focused on a number of key challenges and opportunities requiring attention in the wider community. Through addressing the challenges and articulating the opportunities, TIA will deliver significant industry and community benefit. These include the following.

- Sustainable landscapes, profitable farms and vibrant rural communities – the importance of linking the elements of the ‘triple bottom line’ at a practical level is apparent as Tasmania promotes its ‘boutique’ characteristics. Communities can only flourish within an economically vibrant economy. For agriculture to contribute appropriately to the economy, it is dependent on well-managed natural resources to support the industry and for industry to ensure the sustainability of the resource base. Such management in turn supports other sectors such as tourism and trade.

With increased community concern about securing access to resources for long-term food production, amenity and lifestyle values, Tasmania is well positioned to meet such multiple objectives. To do so, its resource management programs must live up to community and farmer expectations. Therefore, a broad, triple bottom line focus is essential for the growth of the agricultural sector. Reconciling contested values about Tasmania’s resource use and improving our resource-use efficiencies will remain our key challenges.

- Food security and food safety – Tasmania already contributes significantly to Australian food production.

A key research question is: ‘How much more can we contribute, for how long and in what way?’ TIA will provide much-needed facts to underpin this discussion. We will also develop and assist to implement the transformational technologies needed to lift our contribution to the global food bowl in terms of quantity and quality. In addition to such technologies, TIA will make significant methodological contributions by explicitly addressing
issues such as variability and uncertainty in decision-making.

- **Agriculture beyond food** – particularly in Tasmania, non-food products such as essential oils, fibre, medicinal plant-based products (e.g. as derived from the poppy industry) and other plant-based chemicals (e.g. pyrethrum) play an increasingly important role in our move towards a bio-based economy.

  TIA aims to be at the forefront of this emerging trend towards plant-based products, so that our industry partners can become early adopters and therefore gain maximum benefit.

- **Integration through the value chain** – no longer is the ‘production’ side of food the key element of food products. Today all components of the value chain are interlinked and quality elements are crucial as we transport high quality food products around the state, to mainland Australia and globally.

  Supply chain improvements and market requirements need to be identified and addressed. Hence, TIA will have an explicit focus on value chain related RD&E.

- **Biosecurity** – as Tasmania’s contribution to international agricultural production increases, so too must our vigilance regarding the introduction of pests, diseases and invasive species.

  TIA will facilitate well-informed and evidence-based discussions about biosecurity through research, scenario analyses, forward planning, monitoring and evaluation in order to maintain the advantages that our island status offers.

- **Skills shortage** – a shortage of skilled labour is already leading to decreasing resource-use efficiency.

  TIA is uniquely positioned to assist in addressing the skills shortage with our university and industry connections. We are focused on increasing our industry engagement; we understand their wants and needs and will ensure that our students are ‘employment ready’.

- **Global change, including climate change** – change is a constant; with change come risks and opportunities.

  TIA seeks to help people in their abilities to better manage risks and capitalise on opportunities. TIA will assist stakeholders in foreseeing, identifying and managing risks and opportunities via scenario planning and forward thinking. This is at the core of this Strategic Plan.

- **Internal** – TIA is comprised of a large group of professionals with very diverse backgrounds and experiences.

  We recognise and celebrate this diversity. In fact, we believe that it is this diversity that has brought TIA to where we are now: at the cusp of being recognised as Australia’s premier provider of agricultural research, development, extension and education. What unites us is our passion for sustainable and profitable agriculture and its place in our society, but we also need to nurture our common goals. This will require resources and time in order to deliver our vision.
The key role for TIA is delivery of quality RD&E and world-class agricultural education to meet the identified challenges and opportunities.

TIA is a strategic partnership between the Tasmanian Government and the University of Tasmania and, as a result, its mission must align with the goals of both stakeholders.

In contrast to many other university-based groups, TIA functions as a ‘boundary organisation’, expected to move from scientific frontiers to delivering targeted solutions to addressing technical or policy problems. TIA’s aim is to partner in developing prosperous and sustainable rural industries; to have impact and facilitate practice change. TIA also plays an integral role in agriculture education as part of the School of Land and Food. Postdoctoral fellows and postgraduate students are a central part of the research team. The School of Land and Food educates students who will support Australia’s future growth and development.

The relationships between TIA’s partners are illustrated in Figure 1.

TIA brings together more than 130 scientists, educators and technical experts, many of whom are internationally renowned, with access to world-class facilities and equipment.

TIA has strong links to other research, development, extension and educational institutions in Australia and around the world.

As an organisation on the boundary between science and society, TIA is positioned to create a constructive science–community dialogue which is increasingly sought in the current environment. We provide straight-forward, technical solutions, but we also address the difficult issues, characterised by contested values and often conflicting objectives. Through the practical knowledge of our staff we support the development of robust, innovative agricultural policy that facilitates Tasmania’s growth and that firmly establishes TIA as a world-class, science-based organisation.

TIA’s role is to provide a solution-oriented approach to research, development, extension and education. TIA functions as an integrated unit within the Faculty of Science, Engineering and Technology of the University of Tasmania.
TIA’s four RD&E Centres are the core organisational units of TIA where translational (applied) research is undertaken.

The work of the Centres is funded through the Tasmanian Government and University of Tasmania Joint Venture Agreement and from external sources, such as industry and Federal Government grants.

As part of TIA’s new Strategic Direction, the Institute has realigned its centres to position TIA to implement its Strategic Plan, create the conditions necessary for TIA to become a high achieving organisation (HPO) and meet key stakeholder expectations. The realignment brings staff expertise together to benefit the commodities through collaborative centres of Horticulture, and Dairy and Grazing.

TIA has also created two ‘programmatic’ centres, Food Systems and Agricultural Systems, that will provide much-needed systems thinking and input for the two commodity-based centres (Figure 2).

TIA Corporate provides the much-needed corporate support for TIA staff who are distributed throughout the state. Its purpose is to facilitate a smooth and efficient functioning of TIA by providing the interface between the University administration and the Tasmanian Government without duplication and minimal bureaucracy. This allows all TIA staff to concentrate on their core responsibilities supported by a highly efficient, professional and low-cost corporate service unit.

The role of Director of TIA is combined with the role of Head of School (HoS) of Land and Food in order to guarantee a seamless, synergetic work environment that maximises the research and education potential of TIA. Foundational research (blue sky research) and agriculture education (undergraduate and postgraduate) are undertaken within the School of Land and Food. The Director/Head of School reports to the Dean of the Faculty of Science, Engineering and Technology. The TIA Advisory Board was established by the Minister and Vice-Chancellor to oversee the affairs of TIA. It is chaired by the Secretary of the Department of Primary Industries, Parks, Water and Environment, supports the Minister and Vice-Chancellor and comprises the Director, senior government and University staff as well as four industry members.
TIA has a premier research, development, extension and education role, with strong links to key stakeholders in industry (from farmers, service providers and those involved in the agricultural value chains), policy, education and the wider community, particularly our young people. We will continue to build our networks nationally and internationally.

Our Vision

- TIA will contribute to the development of prosperous, innovative and sustainable rural industries and communities through impact-focused education, research, development and extension.
- TIA will create and sustain knowledge through partnerships.

Our Mission

TIA conducts and delivers targeted, innovative and responsive agricultural education, research, development and extension.

People

TIA will inspire committed and innovative staff teams to develop and deliver their professional services with high impact, backed by consistent and efficient management systems.

We are passionate about our work. We aim to generate and share knowledge that improves agricultural practice, grows agricultural enterprises and fosters the development and uptake of new understanding, products and processes, for businesses and industries. We aim to inspire the next generation to take up the challenge of sustainably feeding the world. We care about and support viable rural communities and a healthy environment. We support development of a strong, vibrant research, teaching and agribusiness workforce. We are a goal-oriented team that values diversity, respect and compassion. We will create a supportive working environment that fosters creativity and cooperation, bringing out the best in our staff and students.

This will allow TIA to attract and retain highly-skilled and motivated staff. Research and decision outcomes are intrinsically uncertain. By definition, not every project will lead to the desired outcomes. We will create monitoring and evaluation processes that turn such perceived ‘failures’ into important learning outcomes. This will support TIA in its goal of becoming a ‘learning’ institution that encourages staff to take well-considered risks, and that is prepared to support staff and stakeholders in the long term. Our staff must be bold to succeed; thus TIA must provide the leadership and management that supports staff in their quest. Effective communication, both internally and with stakeholders, will ensure that our research, development, extension and education remain targeted, effective, efficient, salient, credible and legitimate. Our administrative processes will be simple and efficient and use appropriate technology in order to avoid duplication, reduce the administrative burden on our staff and demonstrate cost-effectiveness.
Framework to deliver goals

The TIA Strategic Plan (updated June 2016) provides a vision and direction for TIA over five years. It shows how this vision will be achieved and aligns with the goals of the Tasmanian Government and the University of Tasmania in relation to RD&E and education in the agriculture and food sector. The Plan guides the direction and activities of TIA by the priorities and policies of the Institute’s partners – the Tasmanian Government, the University of Tasmania, the University’s School of Land and Food, and the agriculture and food sector (Figure 1 page 2).

TIA’s Strategic Plan, Strategic Direction and Annual Operating Plan all cascade to explain how the Institute invests resources and delivers outcomes in RD&E (Figure 3). TIA’s Statement of Principles guides the activities and direction of the Institute.

TIA’s Strategic Direction will provide clarity for the Institute’s investors and will provide a ‘line of sight’ from individual projects to high level outcomes. It will also be used for the Institute to develop an annual Operating Plan.
Statement of Principles

TIA’s Statement of Principles has been developed to guide the RD&E decision-making and activities of individuals who are part of the Institute and the Institute as a whole. The five core principles define TIA’s focus and articulate the foundation that all RD&E activities are built on. In this context, the principles set a framework when evaluating the appropriateness, effectiveness and efficiency of all activities that TIA undertakes. While not every activity will necessarily meet all five principles, activities must not conflict with any of the five principles. Individuals, stakeholders and the Institute as a whole use these principles in planning and undertaking all RD&E activities.

- **Innovation – The path from knowledge to success**
  TIA will lead and support the translating of knowledge into economic, social and environmental wellbeing for the agriculture and food sector - creating, sharing, and putting knowledge into productive use.

  As a progressive, science-based organisation we want to champion innovation in every aspect of our work. In the education we offer, in the research we conduct, in the industry development and extension we deliver, and in our management processes and communication, we seek creativity, expansive thinking and a high degree of rigour. By collaborating across traditional boundaries between disciplines, organisations and sectors, we foster linkages that transform sound science into innovative outcomes.

- **Collaboration – Building on each other’s strength through co-creation**
  TIA expects collaboration within its own Institute, and with the University of Tasmania, the Tasmanian Government, industry and other RD&E institutions on whole-of-sector issues.

  We work closely with our stakeholders, ensuring good communication throughout extension and education programs. This is essential as it ensures that our research remains well-targeted and results in adoptable technologies and practices. We are committed to rigorously measuring, reporting on, and learning from the results of our integrated RD&E work.
• Empowerment – Knowledge exchange, co-learning and stakeholder engagement

TIA supports building knowledge together through participatory research where all participants (primary producers, industry, extension consultants and researchers) contribute and learn together (underpinned by empowerment, equity and trust).

We seek to operate collaboratively as knowledge broker by actively building partnerships across agricultural sectors, government agencies, research funders and research partners. We generate knowledge and make it available for action. We seek to establish and nurture ongoing collaborations that add value to our research, industry development, extension and education. We leverage our resources to maximise benefits, resources and impacts.

• Agricultural sustainability – Proud and confident about our agriculture and food

TIA encourages RD&E activities that sustain or increase economic, social and environmental prospects (triple bottom line) and help build social capacity and confidence in Australia’s agriculture and food sector, local communities and the Tasmanian community as a whole.

In close collaboration with our stakeholders, we will develop integrated production system options that optimise the efficiency of resource use, minimise the environmental footprint of production and maximise long-term productivity throughout the supply chain. Our aim is the facilitation of production methods that result in profitable products that meet or exceed stringent sustainability requirements.

• Informing policy development – Helping policy makers to know what matters

TIA will provide expert advice on policy development for sustainable, profitable and productive agriculture and food production systems.

Through the practical knowledge of our staff we support the development of robust, innovative agricultural policy that establishes TIA as a key authority on agriculture issues, with particular reference to Tasmania.
The TIA Strategic Direction provides a roadmap to help the Institute achieve its goals with adequate resources. It is underpinned by five core principles detailed in the TIA Statement of Principles (page 14-15).

The TIA Strategic Direction replaces the original six-part program structure, as detailed in the original Strategic Plan 2012-16, to provide clarity on how TIA strategically allocates resources to key strategic objectives and priority outcomes identified through extensive consultation with and in alignment with the goals of the Tasmanian Government, the University of Tasmania, and the Tasmanian and Australian agriculture and food sector.

TIA’s Strategic Direction has been designed to be responsive to changing priorities and can be updated without disrupting business continuity. The Strategic Direction will also provide a foundation for developing TIA’s annual Operating Plan.

The Strategic Direction provides a clear link from individual project to high-level outcomes that will benefit Tasmania, Australia and the world’s agriculture and food sector.

It has been developed using a new Monitoring, Evaluation and Reporting (MER) framework that shows how the immediate results of our work connect and contribute to longer-term and higher-order outcomes. This approach will enable TIA to better and more consistently communicate its outcomes and impacts to stakeholders.

This line of sight between individual project results and institutional outcomes will also enable investors to appreciate TIA’s value proposition.
Figure 4.
TIA has determined that it works in eight key priority areas, which have been represented as the Institute’s Scope of Activities, as outlined in the below diagram. Each of TIA’s Centres will determine the commodity priorities that need to be addressed.

The detail within the Scope of Activities is continuously updated to enable TIA to be responsive to changing needs and new developments in the agriculture and food sector.

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<tr>
<th>Scope of activities</th>
<th>Details</th>
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<tr>
<td>Cropping Systems</td>
<td>Profitable farms and loyal consumers through better whole farm management, understanding genotype, environment and management interactions, industry intelligence &amp; knowledge transfer.</td>
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<tr>
<td>Grazing &amp; Livestock Systems</td>
<td>Improved feedbase and animal performance and forage use through whole farm analyses and RD&amp;E on alternative feeds, intake and feed use efficiency for sustainable and profitable farm management.</td>
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<tr>
<td>Horticultural Systems</td>
<td>Horticultural systems thrive through R&amp;D into physiology (pollination, fruit, seed set), nutrient &amp; water relations, cultivar evaluation, postharvest mgt, protected cultivation, value adding &amp; consumer science.</td>
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<tr>
<td>Food Safety, Security &amp; Sovereignty</td>
<td>Improved agrifood security locally and for our trading partners through innovation platforms; excellence in food and supply chain safety and quality through modelling of microbial hazards, predictive tools, scenarios and foresighting.</td>
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<tr>
<td>New Products, Processes &amp; Value Chains</td>
<td>Functional value chains through new products and process development with emphasis on premium products and innovation.</td>
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<tr>
<td>Irrigation</td>
<td>World-leading productive and sustainable irrigated systems through R&amp;D including soils and drainage, agronomy, varieties, precision agriculture, new value chains, processing and knowledge creation.</td>
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<tr>
<td>Agricultural Technology &amp; Innovation</td>
<td>Through partnerships and training capture value, turn information into knowledge and develop new approaches that equip industries to be competitive.</td>
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<tr>
<td>Industry Intelligence &amp; Knowledge</td>
<td>Industry benefits from a focus on risk management, skills and capacity building, farm business and knowledge management, practice change and benchmarking.</td>
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Priority outcomes within each objective have been determined in collaboration with our key stakeholders and will be reviewed annually by the Director and the TIA Advisory Board.

The priority outcomes also provide a decision-making framework for strategically seeking new projects in areas of high priority.

**Productivity & Competitiveness**
- Increase agricultural productivity and competitiveness by producing and supplying more market driven, quality products.
- Increase on-farm efficiencies and innovation.

**New Markets, Processes & Products**
- Develop new markets and fit-for-purpose products through value chains that make the most of the production base.
- Strengthen Tasmania’s and Australia’s reputation for safe, high-quality products and processes.
- Ensure management of perceived and real risks and opportunities are based on sound social, financial and environmental knowledge and are informed by foreseeing future trends.

**Enabling, Transformational Technologies and Practices**
- Develop enabling, transformational technologies and practices through participatory approaches that increase productivity and support sustainable land use transformation.
- Integrate technologies, expertise and resources that realise new opportunities.
TIA’s strategic objective is to contribute to the future economic and environmental sustainability of agriculture and food by growing Tasmania’s and Australia’s agriculture and food sector and enabling sustainable industries.

The strategic objectives provide the logical delivery platform for TIA’s priority outcomes.

**Strategic Objectives**

- **Growing the Agriculture and Food Sector**
  - Advances in economic opportunity, productivity, competiveness and sustainability of Tasmania’s and Australia’s agriculture and food sector are facilitated by robust and innovative RD&E.

- **Agriculture & Food for the future**
  - The nation’s agriculture and food sector is effectively addressing the challenge of sustainable production systems.

- **Enabling Sustainable Industries**
  - Rural industries and communities within Tasmania and Australia are prosperous, innovative and sustainable.
TIA is leading the nation through the establishment of an integrated system that will quantify the efficiency, effectiveness and appropriateness of its activities and assess the impact and sustainability of its outcomes to inform continuous improvement. Reporting credible evidence of TIA’s progress to stakeholders will support their decision-making.

Role of MER at TIA

There are three vital steps required to make sure that TIA’s work benefits the agriculture and food sector – monitoring, evaluation and reporting (MER).

Effective MER allows TIA to capture and communicate TIA’s contributions to the strategic goals of its joint venture partners, the University of Tasmanian and the Tasmanian Government, as stipulated in TIA’s ‘Strategic Objectives’ and ‘Priority Outcomes’ as outlined in the Institute’s Strategic Direction (pages 16-21).

MER helps TIA to:
- Align its activities and outputs so that they contribute to meeting TIA’s Strategic Objectives and Priority Outcomes under the TIA Strategic Direction.
- Deliver high quality outcomes-orientated RD&E.
- Report on its outcomes in RD&E to communicate results to stakeholders and funders.

MER provides a line of sight from individual projects and collectives of projects to high level outcomes that address industry needs.

MER enables projects to be continuously evaluated during their life and adjustments to be made to the project activities so that the final outputs and outcomes deliver on the goals of the project.

START

Project proposal: Decide what needs to be done differently to contribute to meeting TIA's Strategic Objectives. Eg. what issue does industry need solved?

Plan M&E

Do work and do M&E

Gather results & evaluation data

Report the results of our work

Communicate results to stakeholders and funders
Reporting outcomes to external stakeholders

MER also provides an effective and transparent process to communicate RD&E project outcomes to TIA’s agriculture and food sector stakeholders and investors such as research and development corporations, cooperative research centres and peak industry bodies.

TIA’s diverse stakeholders will be provided with fit-for-purpose, credible evidence to support their decisions about future investment, collaboration, partnerships, adoption of services, or any other interaction with TIA.

This will provide more clarity and a better value proposition for TIA’s investors.
MER framework and reporting

TIA has prepared a framework to guide how to monitor, evaluate and report on the effectiveness of its projects in contributing to TIA’s ‘Strategic Objectives’ and ‘Priority Outcomes’ as outlined in the Institute’s Strategic Direction.

The MER is being implemented in stages during 2015-16, with all relevant TIA staff expected to have access to all the resources and training required to implement project MER by the end of 2016.

MER will be applied at all levels, starting from the project level and progressing to how TIA is contributing to its Strategic Objectives under its Scope of Activities.

For example, one project that is developing more efficient fertiliser application systems for dairy pastures, will contribute to increasing the ‘productivity and competitiveness’ (Priority Outcome) of “grazing and livestock systems” (Scope of Activities). Evaluation shows how this was achieved; for example, farmer observations and experience were gathered during interviews or specific measurements showing the change in the cost to produce a litre of milk.

Individual projects will produce MER reports at milestone points during the project’s life-span and these reports will feed into a TIA-wide evaluation for incorporation in the annual TIA report. Collation and synthesis of evaluation data in this way will enable the impact of TIA’s activities to be measured over the long term, five and 10 years and longer.

Qualitative and/or quantitative evaluation data will be collected once and used for multiple reporting purposes, to reduce workload associated with reporting.
Continuous long-term improvement

While reporting of monitoring and evaluation will be used to better communicate successes and lessons learnt, its power lies in how it can be used to enhance decision making for continuous improvement.

MER will provide a roadmap for staff to develop a shared sense of purpose and use TIA’s priority areas for forward planning. For example, MER will provide vital information to help improve the way activities are conducted or how relationships are built in current and future projects.

MER is not something that is done only at the end of a project. It is used to:

- Develop a project proposal that includes an evaluation plan to show how the project will meet its objectives and fits with TIA’s Strategic Direction.
- Monitor and guide continuous improvement during the life of the project.
- Report and evaluate the activities, outputs and outcomes at the project’s conclusion.
- Revisit the project stakeholders or sector in the future to measure its long-term impact and whether it is contributing to TIA’s Priority Outcomes and Strategic Objectives.

For example, MER sets in place a system to monitor and evaluate whether a recommended change in apple pruning techniques is adopted by industry at the conclusion of the project and whether it continues to be taken up by industry and is making a positive contribution to the industry five or 10 years down the track.
Agriculture and food sector: The term ‘sector’ has been used to capture the broader economy of agriculture and food incorporating its value chains and associated industries.

Boundary organisations: Occupy a space between different groups in society to which they are directly accountable, and among which they help to mediate relationships and especially processes that involve the creation or application of knowledge.

Capacity building: Increasing the capacity of Tasmania’s and Australia’s agriculture and food sector to self-manage their changing circumstances, with the objective of improving the stock of human, social, financial, physical and natural capital.

Engage, Collaborate, Work with, Conduct, Partner, Provide: (these and similar terms) incorporate an expectation of joint; financial, resource, staffing, credit sharing and intellectual activities. Thus any stated intent to be active in a particular area implies that it will happen as a joint activity with shared stakeholder input commensurate with level of benefits and outcomes.

Food security and sovereignty: TIA will contribute to improving local and international food security and helping develop policies to guide food production and distribution.

Foundational Research: Also known as ‘blue sky research’. Scientific research in domains where “real-world” applications are not immediately apparent. It has been defined as “fundamental research” and “curiosity-driven science” that may lead to new fields of study and provide foundations for applied research.

Industry intelligence: Industry intelligence involves maintaining and expanding industry knowledge and market intelligence to prioritise and develop RD&E, marketing or biosecurity strategies, and to inform government policy.

Innovation: The process of application of new or existing knowledge in new ways and contexts to do something better.

Land use transformation: Denotes the man-made process of changing the land use from one type to another, e.g. transformation from dryland pasture land to irrigated cropping land.

Monitoring, Evaluation and Reporting (MER): The process of monitoring what is being undertaken, evaluating the effectiveness of what has been undertaken against Goals and Strategies including defined program or project objectives and reporting accordingly in terminology that relates to the achievement of outcomes as opposed to outputs and against impact-focused criteria.

Novel, New, Innovative (these and similar terms): include all the variations in which they may apply such as processes, systems, products, crops, inputs, outputs etc. including but not limited to a region, to science, to an ecosystem or business system, to a social system, to a season etc.

Policy: Decision-making broadly, but especially at the level of organisational decision-making within businesses, industry bodies and government.

Participatory approaches: Participants are involved in the co-production of knowledge, co-learning and/or a shared commitment to achieve the desired results.

Research, development and extension (RD&E): Systematic experimentation and analysis in agricultural and food sciences, technology or economics carried out with the object of acquiring and applying knowledge that may be of use in obtaining or furthering an objective of the agriculture and food sector.

Rural sector or rural communities/industries: Communities associated with agriculture and food production along the value chain.

Science: The systematic development of knowledge and understanding that encompasses TIA’s core Research, Development, Extension and Education (RDE&E) activities.
Society: All of TIA’s stakeholders from government, industry, academia, rural communities and the broader civil society.

Stakeholders: Includes a person, persons, group, or organisation that has a direct or an indirect stake in an organisation because it can affect or be affected by the organisation’s actions, strategies, and policies that arise from such interaction.

Sustainable industries: Sustainable industries meet the needs of the present without compromising the ability of future generations to meet their own needs.

Transformational technologies: New technologies that have the potential to radically change an existing process or practice in the agriculture and food sector leading to a new management practice.

Translational (applied) research: Research that links or translates basic science (biological, genetic, social, economic and environmental) discoveries to practical, applicable strategies and effective policies to improve outcomes in the agriculture and food sector.

Triple bottom line: TIA uses economic, social and environmental prospects for the agriculture and food sector as a criterion for measuring success over time.

Value chains: TIA’s value chain RD&E relates to the production, processing and sale of agricultural and food products, chemicals, machinery and equipment.

Value proposition: TIA’s value proposition is to deliver world-leading RD&E to create an innovative, profitable and sustainable agriculture and food sector in Tasmania and Australia. TIA’s Strategic Direction and new Monitoring, Evaluation and Reporting (MER) framework will help illustrate the combined economic value and impact that the Institute’s RD&E contributes to industry and the economy.