David Armstrong, Agricultural Consultant. 23 January 2017

My submission aims to justify my confidence that agriculture can make an important and growing contribution to Tasmania economy, and to suggest ways the Government can support growth in the sector.

Background. I worked in the South Australian and Tasmanian Departments of Agriculture for 15 years in research and advisory positions, and as a private Agricultural Consultant in Launceston since 1984. I am currently in transition to retirement

The Tasmanian Agri-Food Scorecard Snapshot 2014-15 (published by AgriGrowth Tasmania, DPIPWE) provides the following data:

Gross Farm Gate Values for food products:

Dairy \$442m
Beef \$221m
Potatoes \$161m
Sheep meat \$96m
Apples & pears \$36m
Cherries \$31
Wine grapes \$21m

TOTAL food \$1,193m

The farm gate value of non-food products adds wool (\$91m), pasture and vegetable seeds (value unknown), poppies (perhaps \$50m), fodders etc. ABARES Farm Survey data for farm gate values shows the total farm gate value of agriculture in 2014-15 at \$1,437m

Farm gate values do not include value adding after the farm gate; including food processing, manufacture of dairy products, pharmaceuticals etc. Value adding in 2014-15 yielded food worth an estimated \$2,819m (excluding seafood).

The State government has an aim of increasing the value of agriculture 10 fold by 2050; this is an objective that I support. Tasmanian agriculture is a sector of the economy where our natural resources and skilled farmers, researchers and advisers make us internationally competitive. We are very good at producing high quality and safe food, fibre and other agricultural products, with potential for significant growth.

So, assuming we support the objective of increasing the value of agricultural output, what are the things that need to happen for this to occur?

Increase productivity. We currently produce primarily commodities for export. There is limited opportunity to add value or to influence the market price, and prices for commodities fall over the long term. So to be competitive we need to produce to specification and constantly improve productivity. Marketing alone is not the answer.

A recent presentation by Mick Keogh (Executive Director, Australian Farm Institute, and ACCC Agricultural Commissioner) indicated that world food production needs to increase by 70% to meet the demand predicted demand by 2050. This requires a compound annual increase of 1.7%. Global food production has been increasing by 2.5% (according to Keogh and others, although some reports

indicate this has fallen recently to 0.8%). So we cannot be confident that demand will outstrip supply – leading to higher profitability for food producers. Lowering the cost of production must be the aim.

Markets. Tasmanian domestic consumption in terms of volume could only increase slightly, due to population increase. The value per unit of produce might increase slightly by providing new sources and differentiated produce (e.g. organic or A2 milk). We might replace some imports? But my belief is that the increased value from these sources will be relatively small. Significant increase can only come from exports.

Export markets must be focussed particularly on Asia, e.g. China, India etc. To have produce marketed there, Tasmanian suppliers must have sufficient volume to be reliable suppliers of sufficient volumes of produce. And the quality must be high to compete with other counties with similar objectives.

We need market intelligence – what do the Asian consumers want. We need market access – export protocols, quality assurance, quarantine/bio-security protocols. Government agencies can help with these things.

And the producers either need to be large enough in their own right to get into these markets, or we need "marketers" who can take produce from the farm gate to the overseas markets. We need to attract marketers to the State; show them what we can do, and add the Tasmanian story as background.

We also need skilled a and trained farmers, at all levels; technical skills to produce the goods and farm management skills to ensure financial viability. TAFE training is essential, provided the training is directed at developing skills required by employers.

As well as developing technical skills, we need to develop managerial skills and consider new models for the structure of farming businesses. The recently publicised courses by UTAS in horticultural business management are a step in the right direction. Most Tasmanian farms are small - a recent report by ABARES (of farms with an EVAO greater than \$5,000) indicated that 48% of farms had EVAO less than \$50,000, and 67% less than \$150,000. These farms combined produced 9% of the Operational Value of Tasmanian agriculture. In comparison, 15 per cent of farms in the state had an EVAO of more than \$500,000 and accounted for an estimated 73 per cent of the total value of agricultural operations in 2014–15. The smaller farms are unable to achieve economies of scale (so are high cost producers) and are constrained in their capacity to supply processing and marketing companies. In my opinion these farms are not sustainable. Alternative models could provide ways for business ventures to be of sufficient scale to be involved in marketing produce to other countries; for example cooperatives and joint ventures. I'm aware that the Tasmanian Institute of Agriculture has conducted some research on alternative business models that would improve the viability of these businesses.

Regional infrastructure will be necessary; for example district irrigation schemes and transport infrastructure (roads, rail, sea, and air). The extension of the runway at the Hobart airport will assist the export of fresh produce.

Growth will require finance. How can new finance be sourced for agriculture when historical returns on investment in traditional forms of agricultural production provide levels of return on assets of 2%? Returns from capital appreciation of land values have been much higher, but realising that return is more difficult – requires the sale of the asset. So I support investment by foreign

investors – though that will only be attractive for significant purchases (many millions of dollars invested).

We need to protect the land and water resources. We are unlikely to bring more land into production so that area needs to be protected from conversion to other uses. But we can improve productivity by adding water, and the effort of Tasmanian Irrigation in expanding the volume and distribution of water for irrigation is very strongly supported.

One of the threats to the land resource is urban development. Subdivision and residential development of rural areas is certainly a threat to agriculture, both from the physical loss of land, and the risk of fettering by the proximity of housing developments.

I am not confident that the recently released draft State Planning Scheme will adequately protect agricultural land from conversion to hobby farms and residential use.

We need research services, both public and private to ensure innovation and improvements in production efficiency.

Summary

Where will growth come from?

- Exports, predominantly food (meat, fruit and vegetables) to meet the increasing demand from wealthy consumers in Asia.
- To export we need reliable supply with sufficient quantities of produce to be relevant to the markets large scale (to offset production and freight costs), and high quality products with the "Tasmanian story" attached.

What can governments do?

- Facilitate access to overseas markets; trade missions, assist with negotiating trading and quarantine barriers and requirements. Support investigation of market opportunities (e.g. fodder exports).
- Invest in infrastructure.
- Support training of producers and managers; skills development.
- Facilitate attracting marketing entrepreneurs with capacity to take produce from the farm gate to overseas markets.
- Minimise the burden of government regulation, particularly for new technologies that are
 easily seen as "risky" (e.g gene transfer, drones); balance the need for safety standards with
 the benefits of new technologies.
- Support definition and promotion of the "Tasmanian story", information attached to the produce that differentiates our produce from competitors.
- Structure legislation to protect the land and water resources, but also encourages growth and productivity improvement.
- Support research and innovation (by public and private providers).
- Support feasibility studies; e.g. the viability of producing organic milk in Tasmania.
- Instead of providing financial support for producers experiencing difficulties (e.g. drought assistance) allocate the funds to research that improves productivity.
- Facilitate opportunities for farm businesses to increase their scale; eg, research to investigate other business models (e.g. joint ventures and leasing land).

In relation to the dairy industry, we are currently efficient (relatively low cost) producers of safe commodities, and there is capacity for increased production within farm boundaries and in the processing arena.

Increased production will result from:

- Infrastructure developments (irrigation schemes and the extension of the Hobart airport runway)
- Innovation (automatic milking machines, SenseT projects-sensors)
- RD&E within the farm gate to increase productivity (TIA Dairy Centre at Burnie)
- Training and education (UTAS/TIA, schools such as Hagley Farm School, colleges Agritas trade college Smithton)

Perhaps there is potential to differentiate Tasmanian dairy products further, and add the Tasmanian story, to increase the demand for our dairy products in Asia? The export of fresh milk from Woolnorth (Moon Lake Investments) is showing the way.

I see merit in a study to investigate the feasibility of producing organic milk products, funded by the State Government, perhaps managed by DairyTas and involving a processor (or processors), dairy farmers, TIA (investigating how to produce pasture and supplementary feed grains organically), and a vet (to investigate animal health issues).

An example of innovation in the dairy industry. Imagine a drone collecting information about the pasture in an area of the farm (quality, quantity, pasture species), directly sending that information to a computer, then calculating the area and location of a paddock of a farm to be grazed next, and setting the virtual fencing so that cows get what feed they need, and identified cows get the supplement they need. This is the Internet of Things – connecting physical devices to collect and exchange data.