

UNIVERSITY of TASMANIA



Tasmanian Institute of Agriculture

Innovation and North West Tasmanian agrifood producers: what sources of knowledge and support are available?

Sue Kilpatrick, Nicoli Barnes & Pattie Weichelt
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Overview

- Agriculture and food processing are increasingly knowledge intensive.
- NW Tasmanian agri-food has been dominated by large processing companies.
- SME producers struggle to find knowledge they need be sustainable in the face of rapid changes, particularly in climate and technology.
- Project is first step toward establishing a regional agri-food knowledge cluster.
- Funded by Department of Agriculture, Fisheries and Forestry Future Drought Fund IDEAS grant 2022-2023



Regional agri-food systems and innovation

- Agri-food systems sit at intersection of natural systems and economies; require decentralised control because reliant on local knowledge and skills (van der Ploeg 2016).
- Knowledge management and sharing **throughout regional value chain** and capacity to learn and adapt are essential (Dung et al. 2020, Stone & Rahimifard 2018).
- Needs collaboration structures such as clusters to bring people together and make the most of cross supply chain synergies and manage risks holistically (Jia 2018).
- Trust and social capital and ability to support agri-food SMEs to acquire and use knowledge are essential (Rotz et al. 2019).



Methods

- Advisory group input into design of knowledge tool.
- Web searches for relevant knowledge holder entities
- Group and individual interviews with:
 - agri-food, NRM and regional development bodies,
 - Drought Hub staff, and
 - knowledge entities, e.g. agronomists, researchers, agri-tech businesses,
 - rural business advisors.
- Qualitative research approach using thematic reflexive analysis
 - Inductive, iterative approach (Braun & Clark 2019).



About the matrix

Agri-food Knowledge Matrix identifies and arranges knowledge holder entities according to:

- agri-food production sectors,
- areas of practice and
- stages of the innovation/change process (awareness, decision making, implementation and monitoring and review)

where knowledge could be used by agri-food producers.

Excel workbook with spreadsheets for individual sectors and multi-sector relevant agri-food SMEs



About the matrix

Agri-food business sectors where knowledge is relevant:

- Multi-sector (knowledge relevant to all sectors)
- Horticulture
- Dairy, livestock and wool
- Seafood and aquaculture
- Environment, forestry and wildlife
- Food processing
- Agritourism.

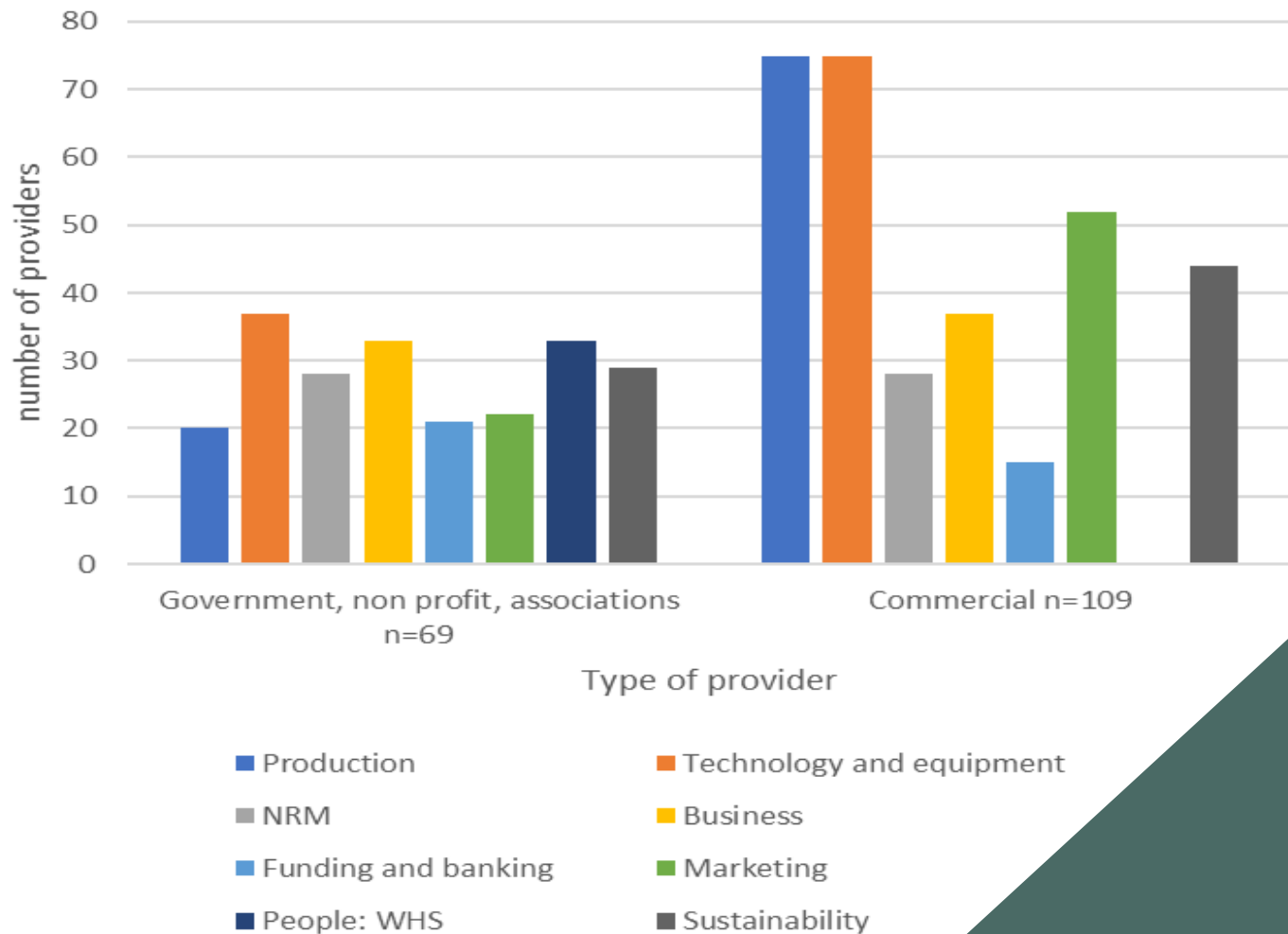
Areas of food production practice where knowledge could be applied:

- Production
- Technical
- Natural resource management (NRM)
- Business
- Funding and banking
- Marketing
- People workplace health and safety
- People wellbeing
- Sustainability
- Advocacy

The Agri-food Knowledge Matrix

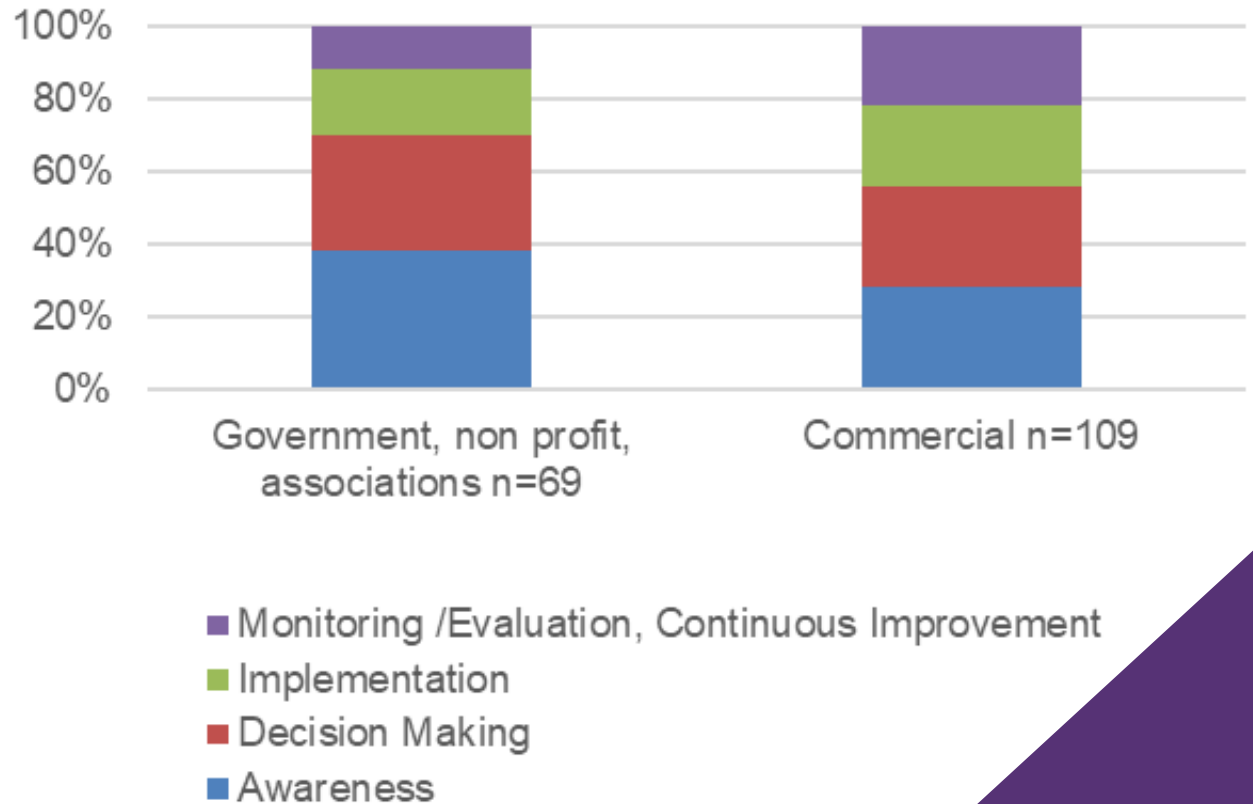
1		Area information and/or support											Innovation stage			
	<i>We provide info/support/resources for innovation:</i>	Production	Technology and equipment	NRM	Business	Funding and banking	Marketing	People Work Health & Safety	People Wellbeing	Sustainability	Advocacy	Awareness	Decision Making	Implementation	Monitoring/ Evaluation/ Continuous Improvement	
2																
3	*Tasmanian Farmers and Graziers															
4	National Farmers Federation															
5	*Food and Agribusiness Growth Centre															
6	Tasmanian Women In Agriculture															
7	Rural Youth															
8	Tasmanian Agricultural Productivity Group															
9	Australian AgriTech Association															
10	BUD Organic Club															
11	AGFEST															
12	Irrigation Australia															
13	*Farmers for Climate Action Tasmania															
14	Soil First Tasmania															
15	ABC Radio															
16	*Bureau of Meteorology (BOM)															
17	CSIRO															
18	Department of Natural Resources &															
19	*Farm Point (NRE)															
20	Cradle Coast Authority															
21	Cradle Coast NRM															
22	Local Government Association Tasmania															
23	Tas Water															
24	Tas Networks															
25	*The List (Land Information System)															
26	Food agility (CRC)															
27	AgTech Finder															
28	Migration Tasmania															
29	Safe Farming Tasmania (NRE)															
30	Indigenous Land and Sea corporation															
31	Rural Business Tasmania															
32	Braddon Business Centre															
33	Rural Financial Counselling															
34	Regional Investment Corporation															
35	Regional Development Australia,...															
36	Department of State Growth															
37	*Business Tasmania															
38	Skills Tasmania															
39	Libraries Tasmania															
40	*Digital Ready (Department of State															
41	Fair Work															
42	Adult Mental Health Service															
43	Legal Aid															
44	Tasmanian Fire Service															
45	Tasmanian Irrigation															
46	Agriutures															
47	TIA															
48	TasTAFE															
49	University of Tasmania															
50	Sprout Tasmania															
51	RESEED															
52	Tasmanian Agricultural Education Network															
53	Agri Tas Trade College															
54	26TEN															
55	Agricultural Advisors and Consultants															
56	Seedlab Tasmania															
57	The Van Diemen Project															
58	Enterprize Tasmania															

Information and support relevant to multiple sectors of agri-food businesses by area of support





Innovation stage activity by type of knowledge holder organisation





Connecting and co-creating knowledge across the value chain

Clues from analysis of local knowledge holder websites of aims to foster regional collaboration. Not all actively involve agri-food SMEs, eg:

The benefits of broad industry collaboration, both between sectors and between pre and post farm gate interests, is more evident today than ever and critical to providing the optimum policy and priority settings for growth of the Tasmanian economy. (Tasmanian Agricultural Productivity Group n.d.).

TSIG encompasses all aspects of the Tasmanian seed production industry, from farmers to agronomists, seed companies, seed testing, government and researchers. (Tasmanian Seed Industry Group 2023)



Connecting and co-creating knowledge across the value chain

National RDCs aim to collaborate across the value chain. Extension programs, typically delivered by regional organisations, have potential to connect NW Tasmanian SMEs into the regional value chain., eg:

- MLA carbon neutral and pasture programs
- Hort Innovation funded VegNET
- Dairy Australia programs

Other national bodies aspire to promote cross value chain collaboration, eg:

We're connecting the community of agritech innovators, farmers, investor groups, government regulators, researchers, industry bodies and interested public to catalyse profitable innovation, expand sustainability and environmental awareness.... (Australian Agritech Association n.d.)

BUT no mention of any doing cross-value chain collaboration on the ground in the region.



Connecting and co-creating knowledge across the value chain

Except for programs funded and/or developed by RDC neither was there evidence of commercial extension providers connecting and facilitating learning and innovation across the value chain.

DairyTas is the only extension provider working across the value chain. Provides programs for farmers and processors that facilitate innovation and connect with government and other parts of the value chain:

...deliver[ing] both Tasmanian-specific and Australia-wide dairy research, development, extension and education activities that support and develop dairy farmers to build robust and sustainable businesses... cooperates with a range of industry and government stakeholders... (Dairy Australia 2023)

Just one other extension provider for food processing SMEs in the region, the Food and Agribusiness Growth Centre, which uses clusters to connect to other parts of the value chain.



Next steps

- Making the matrix more user friendly and accessible to agri-food producers with input from SME agri-food producers.
- Matrix should then be embedded in an organisation/structure that can keep it updated.
- Further work to confirm the nature of a cluster that would be most effective to make the most of cross value chain synergies and manage risks holistically for a resilient value chain in North West Tasmania,
 - need to identify an intermediary to assist SMEs engage with cluster.
 - A role for extension?



References

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