



Can contemporary Regional
Development identify a future for
islands?
King Island: a case study.

Lea Coates

Submitted in fulfilment of the requirement for the degree of PhD

June 2014

**The Institute for
Regional Development
CRADLE COAST CAMPUS**

IMAGINE WHAT CAN HAPPEN

Declaration of Originality

This thesis contains no material which has been accepted for a degree of diploma by the University or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of my knowledge and belief no material previously published or written by another person except where due acknowledgement is made in the text of the thesis, nor does the thesis contain any material that infringes copyright.

Authority of Access

This thesis may be made available for loan and limited copying and communication in accordance with the Copyright Act 1968.

Acknowledgements

I would like to acknowledge the tremendous support given to me by my supervisors Professor Janelle Allison and Dr Tony McCall, and Associate Professor Robyn Eversole, Director of the Institute for Regional Development. They have inspired me, guided me, frustrated me, and encouraged me to heights not dreamed of. In other words this is entirely your fault!

My husband Raymond has been steadfast and true, even if he does not understand why I took on this challenge. Although as a born and bred King Islander he must take some of the responsibility. ILY

To the agri-food community of King Island, the King Island Council, old friends who still live there, thank you for your participation in this project and your support. I could not have done it without you.

Abstract

“All forms of understandings are needed for a fuller, deeper appreciation of the island condition.” (Baldacchino 2008, p50) This thesis takes an island case study – King Island, a small island south of the Australian mainland – and examines it through a range of literature based analytical frameworks. These include two streams of contemporary regional development literature and four streams of food systems literature in an attempt to gauge and understand the prospects for King Island’s future as a sustainable agri-food based economy. Such an in-depth approach to the analysis of King Island is necessary so as to understand the island’s metrics and enable the extraction of potential innovation platforms on which to build a sustainable future.

The food systems literature analytical frameworks come from both the United States of America and Europe. The work of American sociologist Constance (2008) and his four questions for the current globalised food system asks about the impact of the control held by large multinational corporations in localised food systems on the agrarian, environmental, socio/cultural and emancipatory features of rural communities. The six fields of endeavour to support sustainable local food systems designed by the Centre for Whole Communities (2009) follows on from Constance as the second lens to be applied to the King Island data in an attempt to discover what it takes to have a truly sustainable local food system. The thesis then looks to Europe and the work of Wiskerke (2002) and Roep and Wiskerke (2010) to further analyse King Island in relation to the ten barriers confronted by local systems in a global market place, and the fourteen lessons learned while working with a number of producers and retailers across Europe in trying to establish sustainable local food systems. All four lenses reveal that King Island is not necessarily well placed to have a structurally sustainable local food system operating in a global market place.

The thesis also finds however that while returns from primary production are declining on King Island, analysis of King Island through the regional development literature analytical frameworks reveals there is scope for a Regional Innovation System (RIS) (Cooke 2007) based on the islands traditional agri-food industries,

beef and dairy. Further, when examined through the lens of the Regional Development Platform Method (RDPM) (Harmaakorpi & Pekkarinen 2003), avenues for development can be identified that may help the island community wrest back the value inherent in its two iconic brands, King Island Dairies and King Island Beef from the transnational companies that own them.

Also revealed is the need for strong local governance of regional innovation systems, particularly those that rely on agri-food production. Governance of food systems has increasingly been vested in national, trans-national or supra-national organisations that rarely disperse value in their supply chains evenly or equitably. The RDPM can be used as a tool to identify gaps in governance, and suppose ways to redress the imbalances. While not a panacea for King Island's economic woes, the exercise of examining an island through a contemporary regional development lens is useful and valuable as it can aid an island community to identify their own assets and strengths and leverage them for themselves, creating a unique platform for sustainable development.

Abbreviations

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
BAE	Bureau of Agricultural Economics
CAFO	Concentrated Animal farming Operation
CFP	Cornwall Food Programme
CMR	Complete Member Researcher
COO	Country of Origin
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DEDTA	Department of Economic Development, Tourism and the Arts
EU	European Union
FDI	Foreign Direct Investments
FRT	Food Regimes Theory
FSANZ	Food Standards Australia and New Zealand
FSC	Food Supply Chain
FSP	Food Standards Programme
GEM	Governance, Embedding and Marketing
GI	Geographical Indicator
GVC	Global Value Chain
IP	Intellectual Property
JBS	JB Swift Pty Ltd
KI	King Island
KIBMG	King Island Brand Management Group
KIDHS	King Island District High School
KIE	King Island Exports
KIRDO	King Island Regional Development Organization
LBCBA	Latvian Beef Cattle Breeders Association
MLA	Meat and Livestock Australia
NFF	National Farmers federation
NHS	National Health Scheme
OECD	Organisation for Economic Co-operation and Development
RDP	Regional Development Platform
RDPM	Regional Development Platform Method
RIS	Regional Innovation System
SME	Small to Medium Enterprises
SNIJ	Sub-National Island Jurisdictions
TDA	Tasmanian Development Authority
TFGA	Tasmanian Farmers and Graziers Association
TIA	Tasmanian Institute of Agriculture
TINA	There Is No Alternative
TNC	Trans-National Corporation
UHT	Ultra High Temperature
USDA	United States Department of Agriculture
UTAS	University of Tasmania
VCA	Value Chain Analysis
WTO	World Trade Organization

Where is King Island?

Figure 1: Where is King Island?

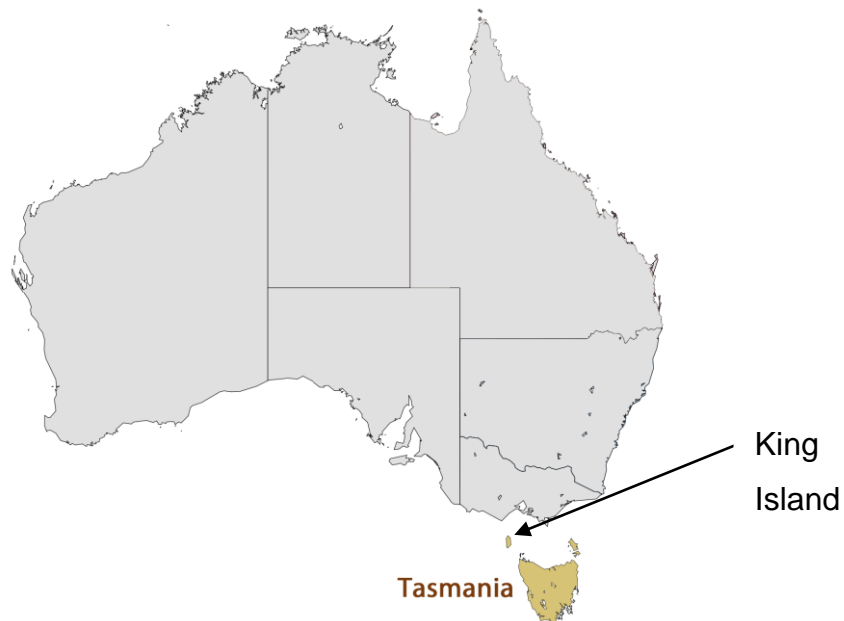


Figure 2: A pictorial representation of King Island



A tiny island marooned,
Held in evolutions grip;
Fought to hold at bay
The sailing ship.

Splintered timbers and tattered sails
She strew along her rugged shores,
Rotting hulks embedded in her beaches,
Like human travel sores.
But still they come,
Relentless in their push.

A million years of virgin forest giants
Reduced to fern and stunted bush.
Travelers now come passing through,
Cannot know the beauty forebears slew.
Eucalypts, eight feet at the girth,
One hundred to the nearest limb,
Have slipped into the pages
Of history growing dim.

Her spirit lives on,
See the salt spray fly,
Born in the wild wind,
Heard in the seabird's cry.

John Reed (1991)

Table of contents

Declaration of Originality	i
Authority of Access	i
Acknowledgements	i
Abstract.....	ii
Abbreviations	iv
Where is King Island?	v
Table of contents	vi
Table of tables	ix
Table of figures	ix
Chapter 1: Introduction.....	1
1.1 The Case Study – King Island.....	2
1.2 The Literature Review	3
1.2.1 Sustainable Food Systems	4
1.2.2 Regional Innovation Systems	6
1.2.3 The Regional Development Platform Method	6
1.3 The Methodology	7
1.4 Examination and Analysis	8
1.5 The Discussion	9
Chapter 2: Regional Development, Islands and the Paradox of Global Food Provision and Sustainability	11
2.1 Regional Development: Theories.....	13
2.2 Regional Innovation Systems (RIS).	17
2.3 Development: dynamics and dilemmas.....	23
2.4 Food for thought – an academic view	27
2.5 Food chains and innovation	29
2.6 In an Island Context.	32
2.7 The Paradox of Global Food Provision and Sustainability	37
2.7.1 Globalisation and the Rising Power of TNCs	38
2.8 A GEM of an idea? Governance, Embedding and Marketing as a tool for sustainable rural development.	55
2.9 Towards a conceptual framework	59
Chapter three: Methodology	62
3.1 The Case Study Approach	63
3.2 Methods in outline	65
3.2.1 Methodological Conceptual Framework.....	65
3.2.2 Desktop Analysis	67
3.2.3 The Survey	67
3.2.4 The Research Sample	74
3.2.5 Context Construction	75
3.3 Taking King Island apart; exploring the data	76
3.3.1 Step one; analysing the King Island agri-food system	77
3.3.2 Step two: Regional Innovation Systems and Constructing Advantage	78
3.3.3 Step three: Regional Development Platform Method.....	79

3.4 Validity	80
3.5 Research Methodology Limitations	83
Chapter Four: King Island – contexts, politics and change	84
4.1 King Island: a tale of richness and decline	85
4.2 Policy from a distance: a walk through time	87
4.3 The Dairy Industry	91
4.4 The Beef Industry	94
4.5 King Island: Efforts to diversify	97
4.6 King Island: other forms of capital and competencies	99
4.7 Brand King Island	101
4.8 The problem with island-‘ness’	104
Chapter Five: Regional development and food systems analysis of King Island	109
5.1 King Island and the Four Questions raised about the relationship between industrial agriculture and the rural and regional communities that depend on it..	110
5.1.1 King island and the agrarian question	110
5.1.2 King Island and the environment question	112
5.1.3 King Island and the food question	113
5.1.4 King Island and the emancipatory question	115
5.1.5 Implications of the analysis of the four questions and King Island	117
5.2 King Island and the six fields of endeavour designed to underpin a sustainable agri-food system	119
5.2.1 Justice and fairness (field 1)	122
5.2.2 Builds strong and resilient communities (field 2)	125
5.2.3 Vibrant Farms (field 3)	127
5.2.4 Healthy People (field 4)	129
5.2.5 Sustainable Ecosystems (field 5)	130
5.2.6 Thriving Local Economies (field 6)	132
5.3 King Island and the Ten Barriers to creating a sustainable agri-food system	133
5.3.1 Barrier One: The willingness of consumers to pay more for higher quality products is very limited.	134
5.3.2 Barrier Two: Common goals across the whole chain are difficult to achieve given the diverse range of actors and interests.	135
5.3.3 Barrier Three: Problematic competitive environments with high regulatory costs.	136
5.3.4 Barrier Four: Growth of an initiative may lead to a loss of individual actor independence and changes in governance leading to imbalances in power relationships	137
5.3.5 Barrier Five: Growth for growths sake alone can lead to an FSC losing authenticity and credibility	138
5.3.6 Barrier Six: Institutional financial support is weighted to support mainstream production.	138

5.3.7 Barrier Seven: Trade liberalisation continues to contribute to a cost-price squeeze with arguments that some imported foods have an unfair competitive advantage.....	139
5.3.8 Barrier Eight: Alternative FSCs are hindered by the lack of small to medium sized production and processing facilities.....	140
5.3.9 Barrier Nine: Power negotiations between large scale processors or retailers and smaller producers are asymmetrical and often thought of as placing unfair pressure on conditions of supply, such as price, quantity, quality et cetera	141
5.3.10 Barrier Ten: The high market share captured by large retailers undermines ethical and sustainability initiatives due to their reluctance to support place of origin labelling.	141
5.4 King Island and the fourteen lessons learned when trying to develop sustainable agri-food systems in Europe	142
5.4.1 Lesson One: Developing a supportive institutional environment.....	143
5.4.2 Lesson Two: Creating a space for change.....	143
5.4.3 Lesson Three: A strategic alliance with chain partners.....	145
5.4.4 Lesson Four: Willingness to invest in a share enterprise	145
5.4.5 Lesson Five: Mobilising investment capital for scaling up.....	147
5.4.6 Lesson Six: Anticipating implications for scaling up.....	148
5.4.7 Lesson Seven: A visionary and capable leader	148
5.4.8 Lesson Eight: Building a strong brand	149
5.4.9 Lesson Nine: A flexible procurement system for local sourcing	151
5.4.10 Lesson Ten: Regional marketing as basic security.....	151
5.4.11 Lesson Eleven: Regional embedding as a marketing strategy	152
5.4.12 Lesson Twelve: Specificity as a key in aligning regional interests	153
5.4.13 Lesson Thirteen: Promotion of Regional Identity	154
5.4.14 Lesson Fourteen: Public sector food procurement through partnerships	155
5.5 Agri-food and Island futures: analysis in summary.....	156
Chapter Six: Constructing Advantage.....	158
6.1 King Island and RIS	162
6.1.1 The economy of King Island	162
6.1.2 The governance platform on King Island	166
6.1.3 Knowledge infrastructure on King Island	168
6.1.4 King Island and the community and culture platform	169
6.1.5 RIS and King Island analysis in summary.....	170
6.2 King Island and the RDPM: an analysis.....	172
6.2.1 RDPM and Brand King Island	174
6.2.2 GI for KI: a legitimate response?	180
6.2.3 GI for KI and GEM	182
6.3 Agri-food, Regional Development, Innovation and Islands: a question of governance?	185
6.3.1 Governance – at what level?	186

6.3.2 Governance – who decides?	189
Chapter Seven: Conclusion	192
References	199
Appendix 1: The Survey; King Island and a Sustainable Agri-food Future?.....	211
Appendix 2: Survey Results	213

Table of tables

Table 1: an example of Harmaakorpi & Pekkarinen's (2003) matrix of 'Principle of Industries and Areas of Expertise'	21
Table 2: the three 'camps' of globalisation sociological theory and related theorists from Bonnano & Constance 2008, p18	39
Table 3: The origins of and justification for the research question	71
Table 4: selected ABS data for King Island 2006 & 2011	86
Table 5: King Island and the Six Fields of Endeavour. Taken from the Whole Measures Approach used by the Centre for Whole Communities (2009).....	121
Table 6: The Paradox of Sustainability and Governance as a Response	160
Table 7: Cooke's (2007) tenants and potential stakeholders of GI for KI as a RIS.	180
Table 8: the ten barriers to creating a sustainable food system and GI for KI as a response:	183
Table 9: The fourteen lessons learned when trying to develop sustainable food systems and GI for KI as a response.	184
Table 10: Cooke's (2007) Platforms and the Four Worlds of Food (Morgan et al 2006)	188

Table of figures

Figure 1: Where is King Island?	v
Figure 2: A pictorial representation of King Island	v
Figure 3: Theory of related variety RIS from Lazereti et al 2009, p30	20
Figure 4: Flow chart of the literature path.....	36
Figure 5: The questions, goals, barriers and lessons for a sustainable agri-food system.....	61
Figure 6: matrix outlining the four methods	77
Figure 7: Pictorial representation of data collection and analysis methodology	82
Figure 8: Currie Wharf photo courtesy of the author, July 2011	105
Figure 9: Naracoopa Jetty, photo courtesy of the author, July 2011	106
Figure 10: Grassy Harbour, photo courtesy of the author July 2011	106
Figure 11: Hanging kelp on King Island, July 2011. Photo courtesy of the author.	163
Figure 12: King Island Power Station July 2011. Photo courtesy of the author.	164
Figure 13: King Island and Cooke's (2007) platforms that underpin RIS theory	171

Chapter 1: Introduction

There is an allure that surrounds islands which has nothing to do with sandy beaches, turquoise seas or balmy evenings celebrated with tropical delights. The allure for this author is the people, and the relationship they have with their place, their island. As an area for research it is exciting and dynamic, and remarkably tactile. The island is the people, the people are the island, and to touch one is to engage with the other, everything matters. Which is why planning for the future of islands is so complex.

Islands and regions on the periphery face challenges not seen in urban areas however Stratford (2013, p3) argues it is no longer helpful to view islands as remote, often dependent off-shoots of mainland territories either. How then should islands be viewed? Are they “political projects in progress” as Baldacchino (2011) would suggest, or is there a method by which they can take control of their own destiny, and be less reliant on political and/or institutional interventions?

Fletcher (2011 p20) argues (in reference to Baldacchino 2008a) that island studies as a discipline still has “some distance to go” in outlining a methodological or epistemological basis for analysis of islands, given island contexts are, for academic purposes, multi-disciplinary. Islands studies can be historical, cultural, economic, political, scientific, and geographic; in fact almost any stream of analysis can be applied. Indeed Baldacchino (2008a, p50) states that “all forms of understanding are needed for a fuller, deeper appreciation of the island condition.”

Regional development literature calls for much the same thing, a more contextual understanding of regions able to underpin stronger responses to regional disparity; responses that are strategically aligned with a region’s strengths. Similar to ‘islands’, ‘regions’ are multi-disciplinary. They are not just geographic, economic, cultural, social or environmental organisational areas that can be understood when viewed through only one lens (Kinnear, Charters & Vitartas 2013). Can a methodology from the emerging regional development literature be just as useful for islands as it has

been for some regions? Islands are not dissimilar to other regions on the periphery and it seems logical to ask if there is a way identified in the regional development literature able to extract value for island locals and determine a better, more sustainable future for islands based on their unique endogenous assets and resources?

1.1 The Case Study – King Island

To answer this question this thesis works through a range of literature and analyses it through a case study. The case study at the centre of this research is King Island. King Island is part of the Tasmanian archipelago located south of the Australian mainland, and lies at the western entrance to Bass Strait. King Island makes for an interesting regional development case study. It is a small island showing evidence of significant sustainability/viability problems as described by Stratford (2013) and Baldacchino (2008a). It is also an island that can be described as a ‘region’ in a peripheral location with a small population, small local economy and all the attendant problems associated with regions so located. Further, King Island’s economy is based on agri-food production, described by many as being one of the most globalised sectors of the economy today (Bonanno & Constance 2008).

Thus the research question could be – what is King Island’s future? More importantly and perhaps more pertinent to the politics of islands is it possible that a multi-disciplinary approach, one that embraces regional development approaches situated within island studies and theories around local food systems, can provide insights? Can regional development theory tell us much more about the sustainability of King Island’s future and in so doing lead to a better understanding of how to “work with” island communities to ensure a sustainable future? What insights can regional development literatures provide that can support a theoretical and methodological framework for the study of islands?

The complexity of the island’s economy demands a thorough analysis, and understanding King Island requires attention to a range of concepts; King Island as an island, King Island as a food producing region, and King Island as a region whose

islanders are looking to construct economic development for themselves through whatever assets they can identify. This requires an acute level of detail and deep interrogation of King Island's (and indeed looking forward, any island's) position in a global food world.

1.2 The Literature Review

Thus the thesis begins the first of its avenues of investigation with a regional development literature review. It tracks this (regional development) literature stream from its beginnings and through its evolution from early economic thought to constructed regional advantage, a call for deliberate strategic policy interventions to assist regions as they come to grips with a globalised trading environment. The first section draws heavily on the work of Dawkins (2003), before moving on to more current work from Marsden (2003), Cooke (2008) and Harmaakorpi and Pekkarinen (2003) which draw out the importance of identifying regional innovation and development platforms framed around a reconfiguration of endogenous assets.. It discusses the limitations of economic theory to fully account for regional differences, and identifies attempts to redress this.

The discussion then moves on to the provocation of what development means and for whom. What is to be developed and why? Can the development be sustained in a way that it continues to benefit the island and its people into the future? This thesis argues for the development of whole regions, implying a requirement for a level of sustainability beyond the economic offering only short term solutions. This is particularly important when a region is reliant on the growing and selling of food; food production is tied to place (Van der Ploeg & Renting 2000), so for the region growing and selling food to be sustainable, so must be the food production processes. Thus the thesis begins to lay a second foundation for analysis, that of sustainable agri-food systems literature as one facilitator or tool for an in-depth analysis of King Island.

1.2.1 Sustainable Food Systems

Creating and maintaining sustainable food systems, where the economy of a region is dominated by the production of food for global markets, such as King Island, is not easy. The paradox of global food provision and sustainability has become a complex economic, environmental and social challenge, a political battle played out on a global stage (Nestle 2009, Clapp & Murphy 2013, Perrem 2013). Food production is big business, primarily owned by large trans-national corporations (TNCs) that shift production to the most cost effective places as required (Ikerd 2005, Gittens 2010). This is what makes King Island such an interesting case study. It is an isolated and remote food system structurally challenged in the race for efficiencies of production, yet daring to compete in a global market place. And importantly daring to compete in a highly differentiated space where provenance and value add is the “name of the game”.

The social and political challenges of sustainable food provision are very clear in the literature. Globally there is enough food produced to feed the world (Pritchard 2013, Patel cited in Lawrence, Lyons & Wallington 2009) however chronic hunger remains a blight in the landscape of many countries and food ‘security’ has become an important issue worldwide. Solutions to hunger, according to Pritchard (2013), must come from the bottom up because hunger is not a problem of food, but of justice. The goal then is to create a just, sustainable food system that can respond to these challenges.

This is the dilemma. It is widely perceived that TNCs do not concern themselves with sustainability issues (Marsden 2003, Ikerd 2005). In the main they have externalised the environmental costs of production from their own bottom lines and left them to be carried by the farmers and communities where they live (Juska 2010, Shuman 2007). However many regions are now looking for a more holistic approach, a food production system that grows good quality food without negative environmental and social impacts (Marsden 2003, Lyson 2004, Ikerd 2005, Constance 2008) .

In response to the implied need for a robust examination of local food systems this thesis seeks to unpack the complexity of building a sustainable and just global system for food provision. This is done by triangulating research on sustainable food systems and outlines what such a system would entail, and how a sustainable agri-food system could be measured. It begins by using the work of Constance (2008) and the Centre for Whole Communities (2009). Both Constance and the Centre for Whole Communities are examples from the United States of America that question the sustainability of the current global agri-food paradigm. Constance (2008) poses four questions about the relationship between industrial agricultural and sustainability, and the Centre for Whole communities outlines six fields of endeavour that can be used as benchmarks for a successful sustainable agri-food system.

Then, having laid a foundation of sustainable agri-food systems as one facilitator of an in-depth analysis of King Island, we are reminded that while a sustainable food system may well provide food sustainably, it does not necessarily guarantee regional or local sustainability, given the role of place, the market, value chain actors and power relationships in local food systems. How can a region, or an island, use its comparative advantage of being able to supply healthy fresh food locally and turn it into a competitive advantage in order to engage sustainably in a global market? Once again the literature highlights the paradox of King Island as an engaged member of a globalised food world. Given the logistics of importing raw materials and exporting final products over large distances by sea and air, the island is not ideally placed to be home to a sustainable food system. Yet it strives to be so.

To further examine the complexity of King Island's place in a global world, a third analysis stream is applied. The European literature of Wiskerke (2002) and Roep and Wiskerke (2010) details practical, real world issues relevant to King Island. The Governance, Embedding and Marketing (GEM) framework details ten barriers to the creation of sustainable food systems, and fourteen lessons they took from research into agri-food systems across Europe. Given that King Island has an economy dominated by agri-food and is part of a global agri-food system, it makes sense to examine the island through these lenses as well.

1.2.2 Regional Innovation Systems

Much of the work in Europe seeks to leverage the comparative advantage of growing and producing fine food in Europe as competitive regional economic drivers. King Island seeks to do the same. This then makes it necessary to include the emerging regional development literature for a more robust analysis of whether in fact King Island can have a sustainable future, and what that may look like. Is agri-food production for a global market the best or only way forward? The work of Cooke (2007, 2008) suggests that to turn comparative advantage into competitive advantage for regional economies, an institutional framework, which Cooke calls a regional development platform, needs to be constructed. A platform that can provide support for local, place based actors to go about their daily business and successfully engage in a competitive market place by creating strategic relationships and networks that can generate spaces for innovation. This is known in the literature as constructing advantage. These relationships and networks are then actively managed so that the innovations are able to be leveraged for local advantage. These are known in the literature as regional innovation systems (RIS).

RIS are useful in that they are able to also leverage 'related variety' (Asheim, Boschma & Cooke 2009). In King Island's case related variety may mean linking food production to tourism, or culinary schools, or other educative platforms that can also generate income for the island community. The related variety concept demands a thorough examination of regions as individual, yet connected entities that have a unique position that must be understood from a local context. Such regional development literature highlights the imperative to develop a strategic regional plan based on as much information as possible. This could become a laborious task as project proponents grapple with what is useful information and what is perhaps just 'white noise'.

1.2.3 The Regional Development Platform Method

To overcome this, RIS theory is then complemented by the work of Harmaakorpi and Pekkarinen (2003) who have designed a method to test the validity of the regional innovation system as a response to global challenges that are present in a region.

They call it the Regional Development Platform Method (RDPM) and it consists of eight phases that each ask important questions of the region's endemic capacity to respond. The information it seeks is what a particular region has by way of assets, and to leverage those – not to investigate what is missing and perhaps import perceived gap fillers. Constructed advantage is just that, advantage constructed on what a region, or in this case an island, already has. To fully appreciate the capacity of the King Island community to engage in a global world of food production it is necessary to examine its social and cultural capital alongside its economic and environmental ones. The RDPM gives us the opportunity to do that. This approach is very useful here because it is applied and multi-disciplinary in nature, and lends itself well to a case study method outlined in chapter three.

1.3 The Methodology

Food systems are often examined by way of case studies, such as the work conducted by Roep and Wiskerke (2010). The case study approach used here to analyse King Island, and outlined in chapter three, is informed by a social constructionist paradigm and uses desktop analysis and a survey instrument to gather the data to be examined. A description of the survey and its relationship to the literature is also included here. The chapter then moves on to describe the evaluation method, a triangulation type approach where the desk-top data and survey data are examined in context to the sustainable agri-food systems literature, and regional development literature, most notably the RIS work of Cooke (2007) and the RDPM (Harmaakorpi & Pekkarinen 2003) framework. The decision to use this form of evaluation was made, as indicated earlier, in order to support a broader and deeper understanding of King Island and its place in a global world.

To add to the broadened perspective, and following from chapter three, a narrative is constructed in chapter four from the desktop analysis to place King Island in context to the literature. The results from the research conducted on King Island are also included in chapter four, and form part of the narrative. This then provides the socio-political context within which to view the main economic activities.

1.4 Examination and Analysis

Chapter five then probes more deeply into the question of the sustainability of an agri-food system on King Island. This necessarily includes the analysis of the survey responses in line with the sustainable agri-food systems literature. It starts with Constance (2008) and his four questions/provocations concerning the relationship between globalisation and a rise in the power of TNCs in the global agri-food system, and the contests that are revealed when a system seeks to supply more and more food, cheaply, from finite and sometimes diminishing resources. Question one Constance (2008) calls the agrarian question and it examines the relationship between the current structure of agricultural production and the quality of life for the farmers and communities engaged in this system.

The second question asked by Constance (2008) he calls the environment question. This question asks about the structure of agriculture and its relationship to its environment; does it impact negatively or have a sympathetic relationship with this pivotal input, and what that may mean for the environmental custodian, i.e., the farmer. The third question Constance (2008) calls the food question. Here Constance seeks to understand the relationship between industrial, globalised agricultural systems and food. More specifically the type, quality, nutritional value and safety of food made available by these systems. Constance (2008) points to so called 'alternative' systems such as organics, slow food, fair trade, and ideas of provenance, branding and appellations to differentiate food and how these play out on the ground within an industrialised culture.

The fourth question/provocation posed by Constance (2008) is the emancipatory question. This seeks to understand the relationship between the industrialised food systems and the quality of civil rights within the system. It raises similar concerns to those of Pritchard (2013) outlined earlier as to the ability of the food system to be fully inclusive and to support a community that can afford food, is capable of earning enough money to procure food and other necessities, and that has enshrined an entitlement to living conditions that include the right to adequate food among other things.

Chapter five continues with the evaluation technique to explore or deconstruct the King Island agri-food system in a multidisciplinary way with the analysis of the King Island data against the fields of endeavour and benchmarks put forward by the Center (sic) for Whole Communities (2009). Each of the six fields of endeavour – 1) Justice and fairness; 2) Strong communities; 3) Vibrant farms; 4) Healthy people; 5) Sustainable ecosystems; and 6) Thriving local economies – encapsulates four ‘practices’ or benchmarks that can be used to measure a local food system.

Continuing the analysis of the King Island data in relation to the sustainable food systems literature the chapter takes yet another perspective, and delves considerably deeper, because while it is useful to understand what a sustainable agri-food system may look like, for that to be a primary goal it is also necessary to understand what it takes to create and maintain one. This is done by considering King Island in context of GEM and the ten barriers to a sustainable food system outlined by Wiskereke (2002), and fourteen lessons for the creation of sustainable food systems learned in research conducted by Roep and Wiskerke (2010) in Europe. What became evident in the European case studies is that they all contained fragments of the networking and innovation capacity required by Cooke’s regional innovation system, and it would seem pertinent to examine them further here.

1.5 The Discussion

Chapter six then looks for evidence of RIS on King Island. Are there networks in place that can be reconfigured, or assets that are underutilised at present that can be better leveraged? This chapter looks at whether a RIS can be designed on King Island and what that might look like using the RDPM. Should a King Island RIS be constructed on agri-food?

Both RIS and RDPM call for strong local actors with local governance, while economically successful industrial food systems are governed on a global scale. This does not seem to be compatible or sustainable and governance of food systems is

further examined by cross-referencing Cooke's four development tenants and Morgan, Marsden and Murdoch's (2006) four worlds of food paradigm. Unfortunately global governance of agri-food chains has not led to a food secure world for everybody, and questions are being raised (Clapp and Murphy 2013) about what level is the appropriate level of governance to ensure safe, secure and equitable food supply systems? Pritchard (2013) argues that the solutions to hunger will need to come from the bottom up, so too it can be argued that the solutions for a sustainable agri-food system will need to come from the bottom up. There may well be a case for more nationalistic and/or local regional policy approaches to address the paradox of global food provision, however as Amin (1999, p375) cautions, "No amount of imaginative region-building will be able to sustain a spiral of endogenous economic growth in the absence of a conducive macro-economic framework."

In essence this thesis uses a range of tools to thoroughly examine the complex circumstance of a small island (King Island), offshore from another island (Tasmania), in turn offshore from another island (Australia), and its place in a global market paradigm for food provision. Can small food systems, such as the one in place on King Island, be sustainable into the future? Using contemporary regional development literature, this thesis seeks answers not just for King Island, but for other islands as well. "Can contemporary regional development literature identify a future for Islands?" The search for an answer now begins with the literature review.

Chapter 2: Regional Development, Islands and the Paradox of Global Food Provision and Sustainability

This chapter will follow a number of steps, based on the assertion that regional development literature can inform planning, and point to an endogenous approach to development using local assets. The region under examination here is King Island, the economy of which is based on agri-food. Food however positions the island in a complex setting because food is both global and local in nature, commodity based, and locally based food production reside simultaneously in a variety of forms. Because food is so complex this study will interrogate a number of ways in which it can be investigated. At least four avenues have been identified to elicit a better understanding of food and the opportunities around food as a regional development tool. Brought to bear on this will be some of the latest thinking emerging from the regional development literature which takes endogenous assets and begins to work out what to do with them. Specifically Harmaakorpi and Pekkarinen (2003) looks at identifying the range of assets in situ and works on ways to reconfigure them. Cooke (2008) and others argue that when this is done, and approaches like related variety are applied regions are then in a position to identify where the innovation might reside. The work of Cooke (2006, 2008) and Harmaakorpi and Pekkarinen (2003) suggest regions try to build the platforms for development first, based on the assets and opportunities identified within the region. This is broadly the approach taken with this literature review to identify the conceptual framework in which to position this thesis.

This chapter begins by introducing the theoretical underpinnings of regional development theory. It does not seek to canvas all of the regional development literature, instead outlines some key regional development trends that have informed policy over the years. This is done to highlight the point that regional development theory is based on economic theory whilst recognising that space, and place, are an integral part of how regions develop. Theories have developed from their economic base to encompass not only human capital and physical and economic assets as variables, but to also include social, political and environmental capital among their important concepts.

Regional development theories also allow us to ask ‘Development for whom?’ If there is to be government intervention in response to the ‘free’ market’s failure to redistribute wealth evenly, who, what, where and why should be the beneficiaries? If we are to argue, as this thesis does, that the most strategic intervention should come at the regional level, what might that look like? For example, we tend to rely on our rural regions to produce food, and if market forces cannot support a region to grow food sustainably, what should the policy response(s) be?

Phillip Cooke (2008), a regional development practitioner and scholar, has conceptualised the Regional Innovation System (RIS) as one framework that can assist policy makers in the decision making processes. RIS is a response to Cooke’s (2007) question about how to identify the best way to construct sustainable advantage for individual regions, based on their endemic strengths. It is done by bringing together and actively managing a network of local actors who can together work on projects for mutual benefit. This benefit includes not only clusters of like industries, but also the benefit of being able to leverage the value of different, and related, businesses to add to the breadth of the development. Food tourism is one example where those who grow food, and those who provide hospitality, work together for regional benefit.

The question then moves to whether RIS can be applied to an island. As food growing regions, islands are different to those regions bordered by land, not least for the consideration of transport strategies. Literature from Island Studies scholar Godfrey Baldacchino is included here. This thesis looks to identify similarities and synergies from Regional Development literature and Island Studies literature that can perhaps be applied to the case study, King Island.

Given that King Island’s main economic strength is food production, it is necessary to also include literature that pertains to food systems and their appropriateness as regional economic drivers. This chapter continues by outlining the paradox of global food provision and sustainability, and looks for answers and examples from the United States of America and Europe. This extensive literature review across a range of themes forms the basis of the conceptual framework of this thesis

2.1 Regional Development: Theories

Many definitions of what 'region' means, or what it means to be a region, are frustratingly opaque. Not all regions are as geographically bound as King Island, Tasmania, or Australia, yet they are still recognized as 'regions'; Tuscany in Italy, or the Basque Country in Spain, for example. Dawkins, in his annotated bibliography, published in the *Journal of Planning Literature* in 2003 (p133) cites a 1987 definition of a 'region' by Markusen as a "historically evolved, contiguous territorial society that possesses a physical environment, a socioeconomic, political and cultural milieu, and a spatial structure distinct from the other territorial units, city or nation". Scott and Storper (2003, p579) describe regional economies as "synergy-laden systems of physical and relational assets". Gulumser, Baycna-Levent and Nijkamp (2010, p546) cite the Cork Declaration on 1996 when they state regional (rural) areas can be characterised by "a unique cultural, economic and social fabric, an extraordinary patchwork of activities and a great variety of landscapes". The place, the people, the culture, the politics, and the history all matter to a region and all have influence over the economic, environmental and social futures of that space.

This may be one reason why regional development has become a focus for research, because, as Dawkins (2003, p132) asserts, "space matters". Geography, topography, infrastructure, physical, social and environmental amenity, and demography are all part of what makes a region. No two are the same, and each has different economic, environmental, social and political 'platform' around which they are organised. Consequently, regional development has not a rigid prescription, but has evolved to a point where researchers are able to select, from the works of previous authors and an "increasing proliferation of competing and partially overlapping conceptual approaches" (Grabher & Hassink 2003, p 699), the ideas relevant to 'their' region, and discard others, leading to the hybrid forms of unique and more responsive methodological strategies that are required by communities today.

Dawkins (2003) describes early regional development literature as focused on economics and the comparative advantage of one region trading with another. He explains the 'Interregional Convergence Hypothesis' (2003, p135) as a theory that

assumes resource or 'factor' abundant regions will be at a comparative advantage in the production of goods that require predominantly that particular resource. This leads to specialization and exporting, while the region imports goods and resources they have less of. It also assumes perfectly competitive markets, and suggests that different regional economies will stabilize and become more similar, or equal, over time (Dawkins 2003, p135).

It was not until the middle of the 20th century when 'Space' became integral to the theories of today and *Location Theory* was expanded in response to the critiques of neo-classical economics. In a nutshell, transport costs began to be included in these earlier theories by the likes of Isard and Greenhut (Dawkins 2003). Mobility of factors of production, including labour, agricultural inputs, water and more is not without cost (Higgins & Savoie 1995), and so must also be considered when researching development opportunities. No region is exactly the same as another, some are not as environmentally endowed, culturally equipped, or investment ready as others. Thus the cost of doing business in different regions needs to be included as a variable in any analysis.

According to Dawkins (2003), Location Theory proponents were dedicated to working out the mathematical equation for the best positing of a business vis-à-vis roads, other transport infrastructure, large towns, and available work force. It is Isard, says Dawkins (2003) who can be credited as the father of regional science, and whose 1960 book, *Methods of Regional Analysis: an introduction to regional science*, introduced methodological approaches to the examination of regional economies.

Almost thirty years later Isard was still trying to use mathematical economic equations to theorise, and overcome, location/place issues, having described uncertainty and imperfect information as key characteristics in locational problems (Asami & Isard 1989). Examples used include:

$$n^* = \arg \max \{E[\pi](n = [n\#]), E[\pi](n = [n\#] + 1)\}$$

(to work out an optimal sample size for predicting profit)

$$\frac{dE[II(z)]}{dz} = -\frac{\mu t(1-a)}{a} + B$$

(to find a market site in response to demand)

$$E[II(x, m, n)] = \text{Max} \{II_m(x, m, n), II_c(x, m, n)\}$$

(to help a farmer consider if his land is best used for milk or cream)

Higgins and Savoie (1995, p5) however believe that the complex interactions of people, resources, transport costs, communication, innovation and information have led to location theory becoming “one of the most abstract, one of the most abstruse, and one of the least satisfactory branches of neoclassical economics”.

Critiques of Location theory have informed other theories. Myrdal's 1957 Cumulative Causation theory is one example. He argued that increasing economic returns to scale produces a 'clustering' of economic activity, which then tends to feed the growth of other enterprises nearby (Dawkins 2003, p139). The more businesses you have in one place, the more economic growth will occur within and of that place. Another example is Growth Pole theory that describes forward and backward linkages between firms of one place, with larger “propulsive firms” (Dawkins 2003, p140) generating growth for smaller firms in their vicinity.

Similarly, theories around the structural adjustment of economies grew out of critiques of growth and distribution theories, instead nominating path dependency as the reason of economic change (Dawkins 2003). Stage/Sector Cycles cited the evolution of agricultural based economies into industrial ones, and rural regions transforming into urban areas and then large cities as consequences of maturing economies (Dawkins 2003). Profit/Product Cycles posit that a niche or specialised product will develop to become more standardized, or perhaps be of less demand, and that profit within firms will cycle from zero through super profit and then through negative profit (Dawkins 2003). Necessarily, as change abounds, theories of

industrial restructuring have emerged to explain how “changes in the organization of industries have affected regional capital and labour markets” (Dawkins 2003, p142). Concurrently, theories of flexible specialization and networks have emerged. Such theories focus on the interrelationship of firms within new industrial district, and examine if any patterns can be detected. Flexible specialisation is a mode of industrial restructuring designed to respond quickly to consumer demand, and is based on the use of flexible capital, and a flexible labour force that is purported to exist in highly localized networks (Dawkins 2003).

After reading Dawkins, it became apparent that theories such as Myrdal's 1957 Cumulative Causation, Perroux's 1950's Growth Pole ideas, Profit/Product Cycle theories, Industrial Restructuring theories, Flexible Specialization and Network theories and more can all be seen as snapshots of the economic situations of the times. They are essays into what has happened, with theories as to why. As economic conditions ebb and flow, so do regional development theories in an effort to inform policy for optimal regional outcomes. This process is particularly reminiscent of Marxist theory, which premises the occurrence of specific crises force 'capitalists' to review their modes of production (Dawkins 2003). Growth Machine Theory is based on the Marxist 'elites', who form coalitions to 'benefit' from the opportunities of regional and local development, and so have an impact on the distribution of economic activities throughout the region (Dawkins 2003, p 146). New Institutional Economics is an attempt to add institutions and institutional change to such theories of economic development through reducing transaction costs. Dawkins (2003, p146) cites North (1990) when suggesting that both economic and political institutions evolved primarily to resolve transaction cost issues. These institutions decide what rules will apply to economic exchanges, who or what is eligible to participate in regional economic exchange and at what level, and deem 'appropriate' returns for investors in regional economies.

Other economic models that have influenced and informed regional development theory include New Economic Geography (NEG) and Endogenous Growth Theory (EGT). Fingleton and Fischer (2010, p468) believe that recently, NEG has begun to rival the more classical versions of growth theory “as a way of explaining spatial variation in economic development”. Dawkins (2003, p148) states that while NEG is

not strictly a model for regional development, it is useful in that it can provide “static predictions about the forces that lead to the emergence of industry clusters”. It still embodies equilibrium modelling, and Fujita (2010, p25) describes Krugman’s 1991 core-periphery theory as “a general equilibrium framework that illustrates how the interactions among increasing returns at the level of the firm, transport costs and factor mobility can cause spatial economic structure to emerge and change”.

The theory of endogenous growth posits long-run economic growth as being determined from within a region, and influenced by domestic savings, investment, and higher levels of research and development (Stimson, Robson & Shyy 2009, p380). According to Stimson et al (2009, p383) not everyone can agree on a universal variable that measures endogenous growth, or decline, nor is there a standard definition. To overcome this, Dawkins (2003, p148) links NEG with the endogenous growth model by stating that while NEG is true to the tradition of equilibrium modelling, the two foundation pillars; savings rates, and technological change and innovation, come from *within* the region and are seen to be endogenous. He cites Rosser (1998) who he (Dawkins) believes demonstrated that investments in local infrastructure, particularly in logistic networks, communication and transport, enabled private sector firms and industries to coordinate their activities across a region or space.

Economics then is the accepted benchmark for ‘measuring’ regional development, and there is a growing recognition and focus on internal assets and resources as drivers for regional economic development. Yet the question remains development for whom? Which assets are more suited to development, and what might that development look like? Regional development approaches have begun to examine platforms for development, and systematic, coordinated policies, known in the literature as Regional Innovation Systems (RIS) as drivers for economic growth.

2.2 Regional Innovation Systems (RIS).

Cooke (2008) believes the concept of RIS is straightforward enough; actors (individuals, institutions such as universities, networks) involved primarily in

“knowledge exploration” on the one hand, and actors specialising in “knowledge exploitation” (entrepreneurs, small-to-medium enterprises (SMEs), large firms, multi-national corporations) on the other (Cooke & Schwartz 2007, p8). Together, they systematically ‘examine’ the knowledge, and test it for feasibility, durability, and sustainability (Cooke 2008, p401) and try to create a commercial innovation particular to their region. RIS seek to leverage innovation as a point of difference that sets one region apart from another. The RIS phenomenon has gained much favour with practitioners and there is evidence of RIS as an economic strategy at a national and sub-national level throughout Europe, Latin America and Asia (Cooke 2008).

RIS theory is strategically aligned with Cooke’s (2007) call for constructed regional advantage as it is able to leverage endemic comparative and competitive advantage already in place. However RISs are rarely organic. Cooke (2007) argues that to construct regional advantage through RIS, policy platforms actively supporting regional development must first be in place. The four key areas that should be specifically targeted for policy levers are the economy, governance, knowledge infrastructure and community and culture:

- Economy; for Cooke (2007, p186) this means “regionalization of economic development; ‘open systems’ of inter-firm interactions; integration of knowledge generation and commercialisation; smart infrastructures; strong local and global networks”;
- Governance; “multi-level governance of associational and stakeholder interests; strong policy support for innovators; enhanced budgets for research; vision-led policy leadership; global positioning of local assets” (Cooke 2007, P187);
- Knowledge Infrastructure for Cooke (2007) means that universities, along with public sector research, intermediary agencies, professional consultancies and the like all need to be involved for their problem solving abilities in a structured way;
- Community and culture embodies “cosmopolitanism; sustainability; talented human capital; creative cultural environments; social tolerance” (Cooke 2007, p188).

These policies must be cross-sectoral, and as the term ‘platform’ suggests, provide base-load support with the capacity to nurture innovative and/or entrepreneurial opportunities that may present in a region. Harmaakorpi and Pekkarinen (2003) advocate however that not all perceived opportunities are robust enough to be acted upon, and suggest a thorough investigation of both the pitfalls and potential of each project, as this thesis intends to do. This leads to a deeper examination around the question of who gets to decide the strategic investment trajectory to be followed (Uyerra 2010), and may discourage attempts to ‘pick winners’ (McCall 2010), by leveraging regional assets instead of importing them. Proponents are similarly reminded by Uyerra (2010) and Baldacchino and Bertram (2009) that it is the *breadth* of industries, skills and infrastructure within a region which allow for flexibility and greater capacity to respond to opportunities, although create headaches for policy makers who prefer to pick winners or support the one-size-fits-all model for regional development.

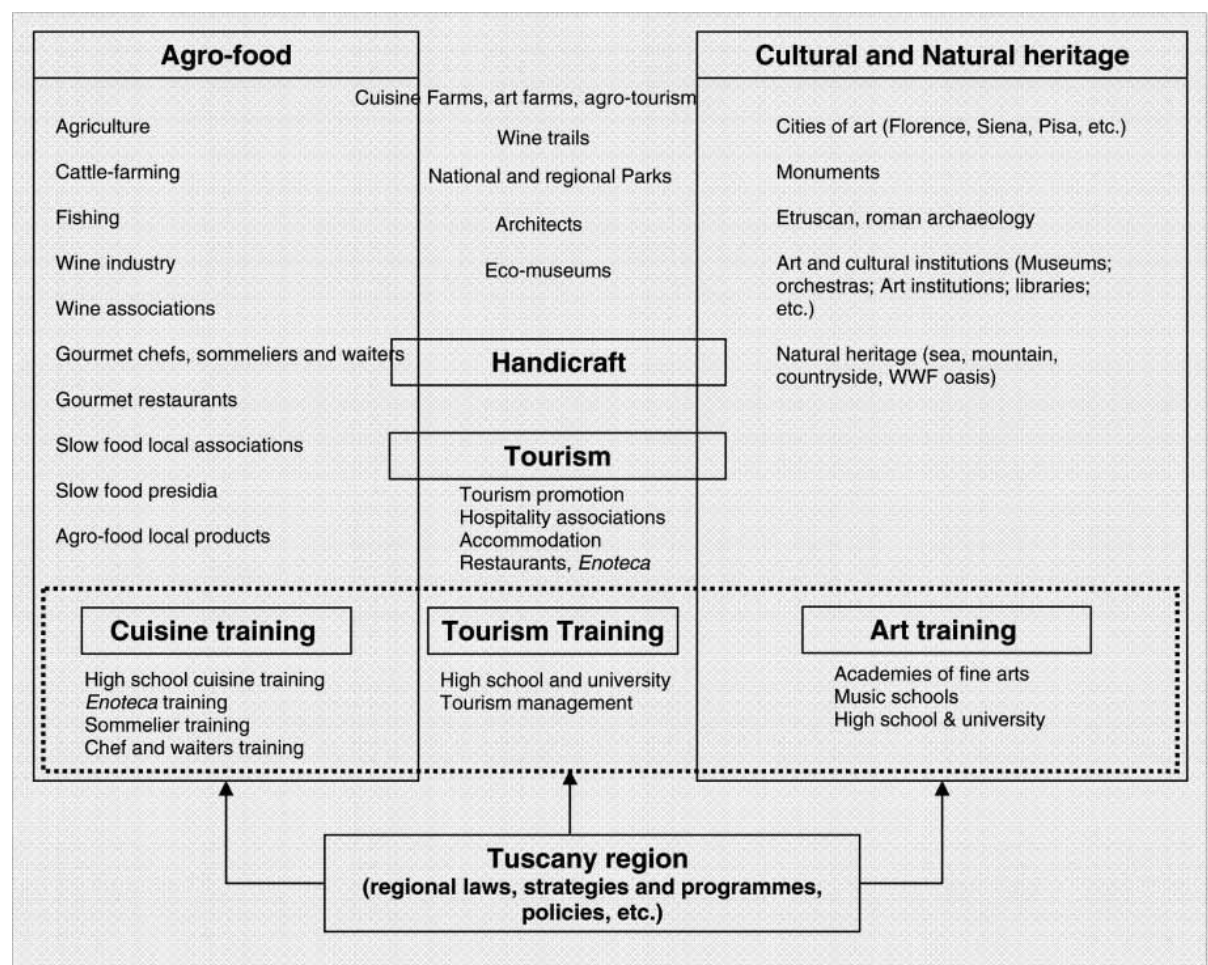
While one-size-fits-all or generic regional development strategies may look appealing, “The idea that it is possible to design one-size-fits-all regional policies is no longer valid” (Boschma, Asheim and Cooke 2011, p900) given that individual regional contexts require individual responses. However, as Uyerra (2010) points out, there are methodological and analytical issues. For example, what geographic level is the appropriate ‘regional’ level? What constitutes an appropriate component of a RIS? How can the performance of a RIS be measured? Such questions are problematic for policy-makers so Uyerra (2010, p130) tasks them to look inwards, not outwards for answers;

Rather than starting from scratch or copying from best practise, policy makers need to take existing region competences and specialisation as building blocks while broadening the economic base of the region through encouraging linkages between related activities.

Lazeretti, Capone and Cinti (2009, p30) believe that many of the RIS they looked at underlined the importance of related activities when looking to build the competitive advantage of a region. The relatedness between economic activities in the context of knowledge transfer, shared competences, and potential innovation is known to

them as ‘related variety’. They cite examples of art and food as a ‘related variety’ RIS strategy used in Tuscany and agri-food and culinary excellence as a related variety platform of RIS in Norway (Lazereti et al 2009 see **Error! Reference source not found.**). These strategies are cross-sectoral, not based on one regional competency, but many, deliberately and strategically linked to create advantage for the enterprises involved and the region as a whole.

Figure 3: Theory of related variety RIS from Lazereti et al 2009, p30



Asheim, Boschma and Cooke (2009, p7) state that because ‘related variety’ has “systemic and intangible features” embedded within a region, it is harder for other regions to imitate, so creating a competitive edge. Regional development policies based on related variety are also able to counter criticisms levelled at ‘picking-the-winner’ strategies, because the focus is not the promotion of particular sectors or regions, but on bringing together different, yet related, activities that can create for

themselves a future path (Asheim et al, 2009). The case studies highlighted in Lazereti et al (2009) support the argument of Harmaakorpi and Pekkarinen (2003) that for effective RIS, it is important to first build a platform, based on a regions' shared competences and a thorough assessment of the potential opportunities that may arise.

Known in the literature as Regional Development Platforms (RDP), the platforms are, usually, policy based instruments that focus on the five key elements of sustainable economic growth mentioned earlier (knowledge, innovation, creativity, entrepreneurship and networks) and attempt to identify the best way(s) to configure, or re-configure, the associated assets for optimal regional performance (Harmaakorpi & Pekkarinen 2003). Again, regional context, including environmental sustainability, historical events and social and cultural norms, is highly influential in the formation of any development platform. RDP has even been described as "regional resource configurations based on past development trajectories but presenting the future potential to produce a competitive advantage existing in the defined resource configurations" (Harmaakorpi & Pekkarinen 2003, p8).

One example used by Harmaakorpi and Pekkarinen (2003, p10) of how to assess business potential linkages and opportunities is to cross-reference areas of expertise and industries identified in a region. This they call their Principle of Industries and Areas of Expertise and the following table is an example adapted from their illustration:

AREAS OF EXPERTISE	INDUSTRIES	DAIRY	BEEF	VEGETABLES
SUPPLY CHAIN				
MARKETING				
SUSTAINABILITY				

Table 1: an example of Harmaakorpi & Pekkarinen's (2003) matrix of 'Principle of Industries and Areas of Expertise'.

As is shown in this simple table, it is much easier to identify current strengths and weaknesses of a region, and potential opportunities, if innovation is approached in a systematic way. If a regional dairy company for example has marketing expertise, it may be encouraged, through RDP networks, to share the knowledge and in turn build expertise in the beef or vegetable industries in the same region. Additionally, analyses of infrastructure may identify opportunities for resource sharing. These are *local* innovations that can be leveraged for *local* economic development.

There is a word of caution however in relation to RIS and RDP. McCall (2010) for example, discussed the need for trust and a shared vision among stakeholders when reviewing Tasmania's state innovation policy, and Christopherson and Clark (2007) warn of the assumption that multinational companies and SMEs work cooperatively in regional economies all the time. They do not. There is a power imbalance which Christopherson and Clark (2007, p1224) assert can affect the innovative capacity of a region in three ways. The trans-national companies (TNCs) as they call them can:

- i. Use political power to influence regulatory policy, affecting which innovations are commercialised and how knowledge is diffused, to whom and under what conditions;
- ii. Drive the innovation agenda within publicly supported research centres, including universities;
- iii. Dominate the regional labour market, using management resources to cater skill development to their particular skill requirements, and competing with SMEs for members of the regional skilled workforce.

There is an inherent conflict for policy makers when trying to incorporate both SMEs and multinational corporations in RIS and RDP. Christopherson and Clarke (2007, p1233) state that

The goal of regional innovation is a dynamic set of firms producing more jobs and opportunities. The goal of TNCs, by contrast, is to control any innovation not compatible with the firm's interest in sustainable competitive advantage. Certainly TNCs have no incentive to promote the growth of small firms into regional competitors and producers who will challenge them for skilled labour and drive up the cost of other inputs.

This section has identified that a systemic approach to regional development, based on regions strengths, and the four necessary 'policy platforms' (economic,

governance, knowledge infrastructure and community/culture, Cooke 2008) as the optimal way forward, insofar as it demands that support for local innovation be part of the policy milieu. How then might this work in a small regional or island economy? There is already a general understanding that not all regions are the same and that strategies aimed at developing regions must be contextualised. As stated before, place matters, and each region has its own dynamics and dilemmas that must be assessed as part of any regional development initiative

2.3 Development: dynamics and dilemmas

Regions develop at different rates and for different reasons as discussed. This makes it difficult to identify causes or allocate blame for regional 'failure' (Higgins and Savoie 1995). It also makes it difficult to 'cut and paste' regional development strategies in response. Acknowledging differences across space and place, Terry Marsden (2003) in the preface of his book, *The Condition of Rural Sustainability*, (2003, pi) called for rural social scientists "to develop more robust models of not only 'what is' but also 'what might be' and 'what may work'". Marsden's (2003) call for more robust models came from his admission that it is a struggle to identify ways in which rural and regional spaces can be made more economically sustainable without discounting the importance of social and environmental sustainability in the process. The example from the case study region, King Island, is the use of agriculture as a development vehicle.

For many years, and for many regions, including King Island, agriculture has been the deliberate focus for rural and regional development; however agriculture, particularly commoditised agriculture, is a square peg in a global world of economic round holes. It stubbornly refuses to conform to one mainstream economic rationality- that of substitution (where products of similar nature can be substituted with cheaper alternatives from low wage countries for example), not because it does not want to, but because it was not designed to. Morgan et al (2006) call such design flaws 'fixities' – food is fixed in place through nature and fixed in culture through food production and consumption. We cannot separate place from food; the rural from agriculture (Lyson 2004, Van Der Ploeg & Renting 2000), at least not yet, so it is

difficult to seamlessly substitute one high cost place of production for a cheaper one. This design flaw leads to tensions. Because food production is fixed in and of place, many researchers call into question the sustainability (environmentally and socially) of the current, economically rational, industrialized global food system (Morgan et al 2006, Hinrichs & Lyson 2007, Lawrence et al 2009).

This then leads to the impression that food production and consumption, in terms of health, welfare and employment concerns, is underpinned by an inherently unsustainable model of economic growth (Marsden 2003, p2). Morgan, Marsden and Murdoch (2006, p145) refer to it as “The Commodity Ghetto”. Marsden (2003, p3) calls it the “race to the bottom paradigm”. In 2008, the Australian Farm Institute (AFI) (AFI 2008, p55) stated that the production of only low-value agricultural products will not deliver long-term, sustainable growth for the Australian agricultural industry. It was suggested that commodity production should act as a buffer while higher value options are identified and explored, but is it a truly sustainable path? King Island has taken the low-volume, high-value production route; however, as described later, it has not proven to be ultimately sustainable. This in turn leads to the questions; What might ‘sustainable’ look like? How could it be recognised?

Like the term region, ‘sustainable’ is also a frustratingly opaque term. It is an oft used, contested construct that frequently dominates development discourse. Patricia Allen, (2004, p82) suggests there are many, varied, and broad definitions that surround sustainability, yet most include the three E’s; Economics; Environment; and Equity. Her favoured one comes from the Founders Agricultural Working Group in California and describes a sustainable food and agricultural system as one that:

- *Protects the environment, human health and the welfare of farm animals;*
- *Supports all parts of an economically viable agricultural sector, and provides just conditions and fair compensations for farmers and workers;*
- *Provides all people with locally produced, affordable and healthy food;*
- *Contributes to the vitality of rural and urban communities and the links between them.*

(Allen 2004, p82)

As a consequence, in answer to the question of development for whom, how, what and when, and to ensure that benefits of regional development are spread as wide as possible, research into sustainable agricultural and food systems needs to be

multidisciplinary, and to reach beyond the narrow confines of an academic or scientific setting into one that includes farmers, communities, consumers and policy makers. For Peck (2003, p730), “There is no ‘one best way’.” According to Allen (2004, p98) it also needs to consider western science as only part of the “cognitive map” required to address all the interrelated issues. Allen cites the 1987 research of Altieri, who found that, when “developing agro-ecosystems, it is ‘impossible to separate the biological problems of practising ecological agriculture from the socioeconomic problems of inadequate credit, technology, education, political support and access to public service” (2004, p100). Allen (2004, p39) goes on to argue that:

Farmers, consumers, development planners, university researchers and educators, policy makers and environmentalists are all engaged in the sustainable agriculture movement.

It is a striking omission, but where do ‘economists’, so venerated in western society, fit in this agricultural movement? Should they be ignored because of a general misunderstanding about the inelasticity of food demand (Allen 2004, p55)? Should they be berated for worshipping the voracious beast that is now an end unto itself, instead, as purely intended, a means to an end? Is it possible to reconcile sustainability and capitalism in such a context?

John Ikerd’s 2009 essay on sustainable capitalism takes up a point made by former French President Nicholas Sarkozy that the ‘spirit of capitalism’ has been betrayed. Ikerd (2009, p2) states, “in our relentless pursuit of economic wealth, we are destroying the foundation of our economy”. If we can begin to understand the economy is actually an abstract that produces nothing of value, and instead acts only as a facilitator of human relationships with the earth and each other, we can begin to understand why acting ‘for the good of the economy’ is not always in our best interests.

Tony Kevin (2009, p7), an honorary visiting fellow at the Australian National University: Research School of Pacific and Asian Studies lamented recently:

Why...can't Australian governments and decision making elites – clever people, mostly – deal adequately with a major environmental crisis and a major economic crisis in the same policy framework? Why does it have to be the economy or the environment....?

Kevin (2009) in his book *Crunch Time: Using and Abusing Keynes to Fight the Twin Crises of our Era*, reminds us that our current economic model of endless global growth is still subject to Newton's third law of motion; for every action there is an equal and opposite reaction. The exploitation of environmental and human capital that supports the economy is actually destroying the planet and any resemblance of social/family/community ties. We are consuming our future, and our present is falling apart with massive environmental degradation and social malcontent. McMichael and Friedmann (2007, p310) phrase it better;

If consumers commodify their future – in the form of debt – they also commodify, indeed consume, their future, in a world with increasingly evident social and environmental limits. Climate change, declining fish stocks, energy shortages, displacement of food by feed, agri-exports and now bio-fuels and so on, are direct consequences of the 'age of high mass consumption' (Rostow 1960). Poverty is increasingly an outcome, rather than an original condition, in a corporate economy producing food for that minority of the worlds' population with purchasing power in the market. While governments are not providing a social wage to sustain a more widely distributed consumption of necessities and staple foods, 'the market' re-allocates resources to service that quarter of humanity that live on institutionalised credit.

Kevin (2009, p57) does his best to 'channel' renowned political economist John Maynard Keynes citing Keynes' 1932 argument "We have to invent new wisdom for a new age" - a new paradigm. Byerlee, de Janvry and Sadoulet (2009) today argue "a new paradigm is needed that recognizes agriculture's multiple functions for development" in this present context of globalisation, integrated value chains, environmental constraints, and technological and institutional innovations. John Ikerd (2009) argues for a paradigm "that respects the fact that the world is actually a natural living ecosystem". Kevin (2009, p 158) argues that in the height of the recession of the 1930's, Keynes was "trying to persuade his conservative society to do sensible and necessary things". This does not look to be an easy task and prompts a deeper investigation into the literature around food and food security and sustainability. Food is an expansive and popular lens through which to view

development, and this thesis now uses a selection of literature to demonstrate the complexity of food production as a platform for regional development, including Campbell's (2009) Food Regime Theory (FRT), and Morgan et al (2006) Worlds of Food paradigm.

2.4 Food for thought – an academic view

Food production is both old world and new age. Farmers still tend livestock and manage crop rotations, but that is now just part of a massive institutional system of food delivery. Morgan et al (2006) describe a range of engagement levels in today's food system as a 'worlds of food paradigm'. This they base on Storper's 1997 'worlds of production' theory, which describes four different levels of engagement with a market place. The *industrial world* of production is the mass market, high volume, low margin approach to production. Morgan et al (2006) equate this with an industrial world of food and cite the fast food monolith McDonalds as the most obvious example. Another world of production is the *intellectual resource world* with high innovation, and competitive advantage based on being 'first' to deliver a new product to market. According to Morgan et al (2006) there is also a science-based intellectual resource world of food that began with the green revolution and now involves large agricultural multi-national companies using gene technology to advance productivity. Perhaps the most obvious example here is Monsanto.

The *market world* of production looks to turn niche products into a trend that delivers them a mass market and high returns for as long as the product is popular. This Morgan et al (2006) equate to a market world of food that is also constantly looking for market share in the 'mass market'. Evidence of this trend can be found in the standardisation of food and production processes in a diverse range of market 'niches' - the commoditisation of organic agriculture for example (Lyons in Lawrence et al 2009). Storper's (1997) last world of production is the *interpersonal world*, where crafts persons as artisans are able to interact and negotiate with their market in highly personalised ways. This Morgan et al then relate to the interpersonal world of food production, based in local and cultural spaces of production where

relationships matter; relations to place, to food, the environment and each other matters. People and place matter.

Another academic deliberation on global food provisioning is Campbell's (2009) Food Regime Theory (FRT). Campbell's (2009, p309) plan was to use FRT to "interrogate whether there are any grounds for hope that we might one day achieve a more sustainable set of ecological relations that can operate in a stable form and at a global scale". FRT identifies a number of food specific phases or eras through history. These include food systems in colonial times, the Dust Bowl, then the Great Depression and the initiatives through World War II. Campbell (2009, p 310) cites Harriet Friedmann when suggesting our current regime is the corporate environmental food regime; where global-scale governance mechanisms have emerged for environmental food auditing, and are particularly promoted by large retailers and supermarkets.

Two key dynamics to emerge from this regime are notions of 'Food from Nowhere', and, 'Food from Somewhere' (McMichael, cited in Campbell 2009, p 309). While 'food from somewhere' is impossible without the 'food from nowhere' idea, the potential of the rise of *place-based*, local foods lies in the space says Campbell (2009, p318), "where cultural politics, ecological processes and reflexive consumption have given new social movements more power of the design of food chains than they have ever experienced before". Once again, the literature has returned to the concept that people and place matter for sustainable food production.

As suggested above, the 'food from somewhere' notion has implications for regions other than productivity growth, and as a result, we also need to understand local food systems in the context of their resource use especially, say Duram and Oberholtzer (2010, p99), in relation to climate change. The environmental factors most commonly associated with local food production include water use, energy use, biodiversity and agro-ecological variables such as drought or flood, and "while climate change is impacted by agricultural practices, climate change will also shape agriculture in most communities around the world" (Duram & Oberholtzer 2010, p101). Along with agricultural adaptations in response to climate change, Duram and Oberholtzer (2010, 9104) believe that local agricultural and food systems must be

“fully integrated” into other institutional spheres; political, social and economic.

McMichael & Friedmann (2009, p315) argue:

To politicise (and de-naturalise) food relations is to open up the question of the production regime and its social and ecological consequences, and possibly reverse the paradigm that supermarkets are deepening

Supermarkets and TNCs are merely doing what they are supposed to do such as make money for their investors. To ask questions about the sustainability of their practices it is necessary to understand the food system, or supply chain, in which they are powerful actors, better. The research into food supply chains is extensive and includes commodity chain analysis and value chain analysis as methods to examine food systems.

2.5 Food chains and innovation

Commodity chain analysis, as a method for regional development, arose initially in response to the critiques of neo-classical regional development theories. Collins (2005, p5) argues that researchers were drawn to commodity chain analysis because, as an alternative theory, it offered “relatively durable macro-structural arrangements” while still leaving “room for contingency and agency as well as for discourse and culture.” To support his argument Collins cites the 1994 argument of Gereffi and Korzeniewicz that commodity chains are “embedded” spatially, demanding that any analysis of them requires that their organizational context be included. Collins (2005, p15) herself declares commodity chain analysis a “richly promiscuous approach” enabling the researcher to tap into “a broad range of theoretical perspective and that doing so makes them sceptical of determinisms, more sensitive to culture, and more aware that the processes we label ‘development’ are experienced, understood and valued differently from locations along the commodity chain.”

Collins (2005, p5) states that researchers have used commodity chain analysis to “empirically document the structures, actors and power relationships associated with the productions, processing and retailing of commodities.” Further, academics such

as Kaplinsky (2000) and others suggest each segment of the commodity chain can be broken down and analysed for the value, or 'economic rent', it can return to which stakeholders. Known as a 'value chain', Kaplinsky (2000, p121) defines the value chain as a description of

“the full range of activities which are required to bring a product or service from conception, through the intermediary phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and the disposal after use.”

Others describe a global value chain (GVC) approach (Bolwig, Ponte, du Toit, Riigaard & Halberg 2010, p174) that seeks to understand the linkages and dynamics of chain actors and activities.

Today, trans-national corporations that include major supermarkets seek and exploit value in food supply chains very well. Oosterveer and Sonnenfeld (2012, p7) argue that

Supermarkets have a profound impact on all stages of the food supply chain, including farming, processing, transport, trade and consumption, and thus they have acquired a central coordination position in food supply chains.

Trans-national agri-food corporations have the capacity, according to Friedmann (2005, p253), “to organize supply chains that cross many national borders as private trans-national supply chains, and to create, enforce and audit....producers, shippers and handlers along the chain”. Kaplinsky (2000, p127) argues that it is through the governance of such 'quality' chains that economic rent is captured by the large corporations.

Further, Friedmann (2005) believes that inter-governmental food standards, such as those put forward by the World Trade Organization (WTO), are the platform on which the 'quality' chains, requiring additional standards, are constructed. The combination of the two she suggests “differentiates citizens – all of whom benefit equally from public regulation – into consumers – only some of whom can afford expensive quality standards” (2005, p255).

In Australia, supermarkets do their best to cater for both, ordinary citizens and discerning consumers, ensuring they capture as much value as possible by importing from countries with lower standards of living that can supply 'cheap' food, as well as selling local produce. Unfortunately local farmers who operate within the private 'quality' chains are unable to leverage quality (economic) rent (Richards, Bjorkhaug, Lawrence & Hickman 2012), as there is little regulation to enable consumers to differentiate products in the absence of country of origin labelling, and so no imperative for supermarkets to pay the local producers more. As such the supermarkets retain the 'value' created by the farmer's high quality standards.

This has led to research into value chains in an effort to identify where value can be leveraged for the benefit of more participants (including the food producing region) along the chain, not just the most powerful actor. It is broadly understood that value chains are systems. Their function is to deliver value to consumers as well as to deliver sustainable profit to the firms along the chain (Fearne et al 2008). Consumer values and subsequent choices are fluid and varied, demanding that frequent research be carried out in an attempt to identify the next 'trend'. The chain that best responds to the most recent 'trend' is most likely to be the 'winner'. Value Chain Analysis (VCA) is a methodology to map a value chain (who, what, why and where) and then assess its innovation (how) capacity "in order to improve the efficiency and effectiveness of existing processes and to introduce new products and services that consumers value" (Fearne et al 2008, p3). Innovation then becomes an important input to creating and leveraging value. According to the OECD, the innovation tree will take at least five years to bear fruit (OECD 2009, p6), longer than most electoral cycles, however the OECD (2009) also believes that innovation is a key element for any effective regional policy. They state (OECD 2009, p6) that innovation is a highly localised element of regional development, which leads to the conclusion that any policy designed to encourage and foster innovation must be cemented in the local context, be it a geographical place, or link in a chain.

The regional development literature and food system literature have evolved to the point that to engender regional development, it is imperative to create an innovative environment locally that can encourage, support and exploit inventors and entrepreneurs as needed. According to Gulumser et al (2010, p 546), academic

researchers such as Richard Florida believe that “*Knowledge, innovation, creativity, entrepreneurship and networks* are seen as the real engine of economic and sustainable growth, particularly over long-term period.” Gulumser et al (2010, p546) also argue that “The well-managed development of these five concepts (*italics above*) and their cyclic interrelations can lead to sustainable competitive advantage for a region by exploitation of its uniqueness.” What then might this look like in an island context?

2.6 In an Island Context.

There is a branch of geographic literature that concerns itself with island studies, with researchers from across the globe looking to explore islands as both apart and within the countries they are linked geographically or politically to. Godfrey Baldacchino, recent Chair of Island Studies at Prince Edward Island University, Canada, focuses primarily on sub-national island jurisdictions (SNIJs) that are not countries in their own right but have some form of political independence, such as Tasmania (Australia’s island state). While King Island is not a SNIJ by this definition the literature of Baldacchino and others in this sphere is another useful tool in analysing King Island’s particular context as an island region, with particular opportunities and constraints different to other landlocked food producing regions.

Baldacchino (2008b, p190) believes that on face value at least, small island economies are amongst the least equipped economies to deal with the challenges of the new ‘knowledge age’. Structurally, he believes, they are cheated; of markets, of economies of scale, and of institutional critical mass. How then can entrepreneurship and innovation exist on a small peripheral island, let alone be promoted and supported? Regional development theory, particularly RIS and RDP become relevant here.

Innovation can exist in small, peripheral (often island) economies, suggest Baldacchino and Bertram (2009) because actors faced with strong contextual features they cannot change instead adapt to them. They state that some longitudinal studies show that there is “an agile and entrepreneurial responsiveness to shifting opportunities” (2009, p144), demonstrated by the utilisation of economies

of scope, and the development of multi-occupational skills within the population. Citing Brock (1988), Baldacchino and Bertram (2009) propose '*flexibility of breadth*' as opposed to depth, as the best option for responding to entrepreneurial opportunities. A solution then could be 'related variety' firms networked through RIS and RDP, being mindful of 'islandness' constraints and opportunities

Baldacchino (2008b, p190) has defined five measurable variables that in studies have been equated with success in small manufacturing firms located in smaller economic jurisdictions. They are:

- 1) *Local ownership, meaning majority or exclusive control of the firm vested in native islanders;*
- 2) *Small size, meaning firm has up to 50 employees or outworkers;*
- 3) *Manufacturing; meaning firm is producing a commodity that has weight, volume or form, which can be separated from its producer in the act of sale or purchase;*
- 4) *Export orientation, meaning the bulk of the firm's manufactures are destined to markets and clients elsewhere, and have been doing so for many years;*
- 5) *Technology adaptation, meaning that any key technological processes used by the firm in the manufacturing has been customised, if not invented by the locals.*

The top examples of entrepreneurship from the businesses that met the above criteria according to Baldacchino (2008b, p197) were 'glocal', in their strategic orientation, borne of both 'home' and 'away', combining the best of what they knew from 'home' with the knowledge gathered from travel and communication overseas. To support this, Baldacchino (2008b, p198) goes on to suggest three ways in which local governments can help, generally by ensuring that:

- 1) *Their territory has an enviable 'quality of life' infrastructure - low crime, strong and safe communities, vibrant culture, efficient bureaucracies, stable economies, affordable housing, welcoming environments, healthy lifestyles, good air and water quality – a package which is likely to lure immigrants;*
- 2) *Its citizens enjoy sufficient opportunities for engaging in overseas activities, including education and employment as well as trade fairs and trade mission participation, and that international travel should be subsidised rather than taxed;*

- 3) *The costs of utilising information technology to remain connected with the rest of the world – such as via broadband – are as inexpensive and accessible as possible.*

Islands can be described as geographically bound regions, often rural and remote in character, with similar challenges to land locked rural and remote regions.

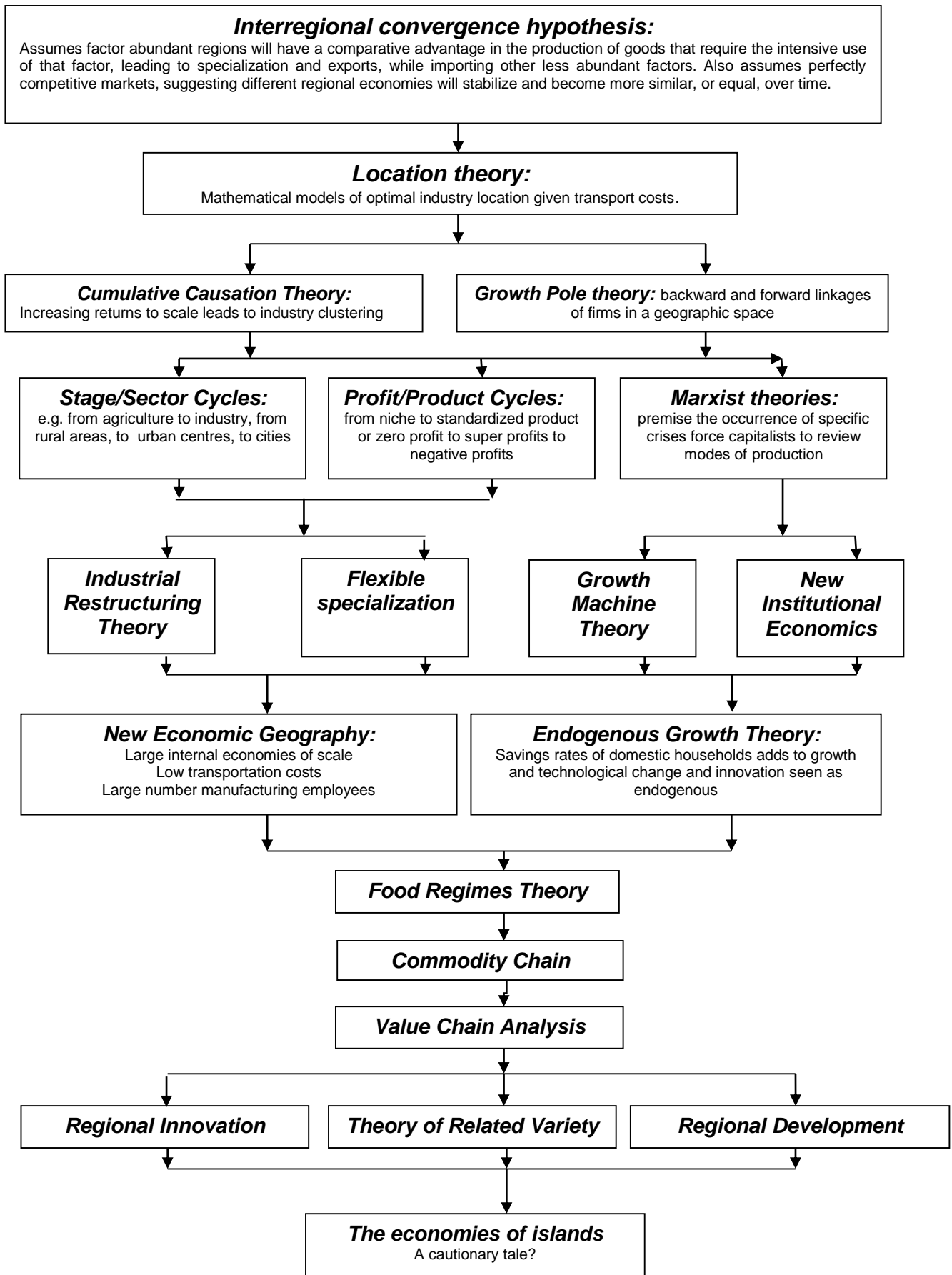
Baldacchino and Bertram's (2009) call that flexibility of breadth is important for island development is reminiscent of the related variety notion found in the regional development literature. It makes sense to view islands through a regional development prism and this thesis has to this point followed the regional development literature path up to RIS to focus on sustainable food systems. The need for more sustainable food systems becomes apparent with the realisation stated earlier that food production cannot be separated from place; thus rural regions, including island regions that rely on agri-food production need to search for alternative models of food systems that hold sustainability as a core principal.

Given this relationship between place and production, and given these are natural assets, it becomes very important to investigate these assets and resources in context, and interrogate them from a number of perspectives. Following on from the discussion of TNC power in food supply chains, the chapter also looks at four questions as posed by Constance (2008): agrarian, environmental, food and social equity questions that can be used to measure agri-food system sustainability. Applying these four lenses to the issue of supermarket dominance in the value chain helps deconstruct some of the complexity that surrounds global food provision and sustainability into more manageable portions of discourse for analysis. This allows for a more contextual and robust examination of regions that engage with food production.

In combination the work of Constance (2008) and the Centre for Whole Communities support the theories of RIS and RDP with two cautionary tales. One: the power of multinational corporations in small economies and two: the size and scale of small island economies with their associated limitations. King Island's economy is based on agri-food production; consequently discussions around food systems, particularly sustainable food systems come to the fore. The following flow chart (Figure 4)

demonstrates the development of the literature review so far and the next section looks at corporate power in the global food chain, ways to perhaps counter corporate power, and how alternative methods of agri-food production and marketing can support sustainable regional development.

Figure 4: Flow chart of the literature path



2.7 The Paradox of Global Food Provision and Sustainability

While this thesis will examine the agri-food system on King Island to find competencies and resource reconfigurations that help identify development platforms and innovations it is timely to pause and consider Christopherson and Clarke's (2007) caution about the power of large firms in value chains, and this is especially important for food. Food is a staple of life. It has also become a staple of political rhetoric and indecision as our governing institutions grapple with economic, social and environmental dilemmas in relation to food provision (Clapp & Murphy 2013, Perrem 2013). Many academics have observed that it is the actions of international regulating bodies and transnational corporations that control food provision globally that lead to imbalances (Clapp & Murphy 2013), with both 'starved' and 'stuffed' (Patel cited in Lawrence et al 2010) populations worldwide. The least politically appealing, least commentated reason is the power of large corporations in the value chain (Coates 2013)¹.

Global value chain management, the process of exploiting value at every opportunity in the agri-food supply chain, is dominated by large trans-national corporations (TNCs). Critics argue that this is a direct result of the World Trade Organisation (WTO), and the Food Standards Programme (FSP) calling for a 'harmonisation' of food regulations, enabling and empowering, if not intending, regulating bodies to reduce or completely evaporate market alternatives for culturally diversified, socially embedded food systems (Bonanno & Constance 2008, Clapp & Fuchs 2009). Compete or die; get big or get out; "it's the market, stupid" (anon); and rationalisation are all key terms in the industrialised food system of today that continually marginalise the small rural and regional food producer, and place pressure on regional sustainability.

¹ Much of this and the next section formed part of a paper presented by the author at Australia and New Zealand Agri-Food Research Network Conference held at the Gippsland Campus of Monash University, Victoria, Australia in December 2010. An abridge form was published in the corresponding book *Food Security In Australia: Challenges and Prospects for the Future*, Farmar-Bowers, Higgins, and Millar, eds 2013 Springer

2.7.1 Globalisation and the Rising Power of TNCs

In their book, *Stories of Globalization: Transnational Corporations, Resistance and the State*, Bonnano and Constance (2008) bring together more than a dozen theorists who have published works on globalisation and the rise in power of TNCs globally, with some describing it as the globalisation project (McMichael cited in Bonnano & Constance 2008, p35). The 'project' was, Bonnano and Constance (2008, p266) say, devised as a way of addressing a capital accumulation crisis brought about by the success of civil rights, labour rights and environmental protection movements which had drastically increased the costs of doing business in the developed world.

At the economic level, the components of the globalization project center on increased flexibility and the hyper-mobility of capital, its major effects have been capital flight to less regulated countries, decentralization of production in multiple locations, informalization of labor through the use of no union and part-time workforces, and global sourcing carried out by TNCs. These components reorganized both developed and developing national economies, as TNCs played country against country in the search for what Porter calls the best 'competitive advantages'. At the national political level, in response to this strategy, nation-states deregulated and privatised their economies so as to be credit worthy and attract FDI (foreign direct investments), engaging in what globalization critics call the 'race to the bottom' (Bonnano & Constance 2008, p266).

Bonnano and Constance (2008) chose the agri-food sector for their lens through which to examine some sociological aspects of globalisation because they believe it to be one of the most globalised sectors of the economy today, and it cuts across traditional schools, or theories, and disciplines of research. Given this thesis also uses agri-food as a case study their work is of interest here. They group their chosen globalisation theorists into three 'camps': The Grand Duree – grouping authors who are generally sceptical about the analytical importance of the globalisation concept, seeing it mainly as a continuation of trends long established; The Corporate Domination Thesis – grouping authors who see TNCs as the most powerful actors in terms of their ability to shape behaviour of other actors, and open up opportunities for prosperity in a large part of the world; and the Contradictory Dimension of Globalization Thesis – authors who see globalisation as a contradictory and problematic phenomenon (Bonnano & Constance 2008, p18).

Table 2: the three 'camps' of globalisation sociological theory and related theorists from Bonnano & Constance 2008, p18

Grand Duree	Corporate Domination Thesis	Contradictory Dimension
Giovanni Arrighi	Leslie Sklair	David Harvey
Paul Hirst & Grahame Thompson	Philip McMichael	Sasskia Sassen
William H Friedland	John Dunning	Christos Pitelis
Michael Porter	Kenichi Ohmae	Terry Marsden
	Alex Rubner	

By laying out the literature in such a way, Bonnano and Constance (2008) have made it easier to compare and contrast differing viewpoints, and find common themes. Governance in particular was highlighted. The majority agreed that TNCs hold a power advantage over nation-states; however the divergence lies in how to redress the situation. Some believe that supra-national bodies such as the WTO should be the primary focus for governing TNCs, others do not. For small peripheral economies such as islands, their need for strong governance within a globalised structure such as agri-food is amplified given their distance from market and small populations leaves them with little economic influence.

Clapp and Fuchs (2009), editors of *Corporate Power in Global Agrifood Governance* believe that while international governance of the food system provides limited safeguards from negative ecological and socioeconomic consequences, the very fact that TNCs are so dominant means they have a substantive say in the rules and roles of such governance. They agree that it is because of globalisation that we have more food in both quantity and variety than ever before, however the pay-off is in having conversely less food security, and growing threats to the livelihoods of small farmers, food safety, consumer sovereignty and environmental quality (Clapp & Fuchs 2009, p11). The contradictions appear obvious:

“Democracy can be won only if the opponents of globalization can unite to exploit its contradictions, identify fruitful avenues of resistance, and expose globalization’s enchanting but often empty promises” (Bonnano & Constance 2008, p 265).

In a 2008 address to the Agriculture and Human Values Society in the USA, Constance delivered not answers, but four questions around the contradictions of globalisation, and the power of TNCs in the global agri-food system. Constance suggests that perhaps it is in these four questions; the agrarian question; the environmental question, the food question and the emancipatory question, that 'fruitful avenues of resistance' may be found. These avenues are now explored.

The Agrarian Question

The agrarian question - what influence do trans-national corporations (TNCs) have on the structure of agriculture and the quality of life for farmers and rural communities? – asks about the relationship between the structure of agriculture and quality of life for farmers and rural communities (Constance 2008, p5). Thomas Lyson (2004), in his book *Civic Agriculture: Reconnecting Farm, Food and Community* writes that it was a century ago economists realised that to industrialise food production and make more profit, as they had with the manufacturing industries, they had to separate, contextually, farming from "the community and household settings in which it was embedded" (Lyson 2004, p17). Making money in farming needed only four things; land, labour, capital and management/entrepreneurship (Lyson 2004). These were the rationalities of farming and social, environmental and other non-market issues affecting the operations were institutionalised as unimportant "externalities" (Lyson 2004). Farming was deliberately re-constructed; the holistic way of life that included family, community and environment was demolished, and replaced with 'just' a job, and the assumptions that farming inputs were extensively substitutable.

Morgan et al (2006, p54) agree that the political economic tradition has been for agri-food to follow the industrial sectors on the globalisation path, which was defined by "the reconfiguration of markets, deterritorialized corporations, and new forms of transnational corporate and inter-firm organization". Lawrence et al (2010, p2) cite Peter Rosset (2006) who suggests that the World Trade Organisation's (WTO) "neoliberal-based insistence" for the economic law of comparative advantage to be applied to the production and consumption of foods, and the powerful trans-national

corporations (TNCs) who manage the production, distribution and sale of food, and contribute to the re-orientation of agrarian values. The agri-food landscape of today is “socially denuded” (Lawrence et al 2010, p3) because the global agri-food system is driven purely for profit, with very little regard for the social and environmental consequences of an outdated, increasingly unworkable ‘economic law’.

Michael Shuman (2007) calls it ‘wreckonomics’ and says that in our current economic system “Community is just another obstacle to progress” (2007, p38).

Advocates of what Shuman calls TINA (There Is No Alternative) economic thought believe we should

“keep our bags packed so we can migrate at a moment’s notice to another job hundreds or thousands of miles away. Forget about your friends and neighbours. Tell your kids to let go of their silly attachments to teachers and friends. Put away all those memories around your house” (Shuman 2007, p38).

This is because agri-food producers are looking for economies of scale. The number of farms globally has declined, but the size of farms, and amount of hectares under cultivation have actually increased (Morgan et al 2006).

What economists ignore, says Lyson (2004, p23), is that although farming can be ‘contextually’ (and financially) separated from households and communities, it cannot literally, physically, be separated from either place or the people who live there. Thus we find affected rural communities speaking out against the industrialisation of agriculture. In the USA, perhaps the most contested arena to garner attention has been around concentrated animal feeding operations (CAFOs) and their impact on the community in which they situate. Hog CAFOs are most especially despised, and consequently rate a higher degree of academic interest. Recently Juska (2010) wrote of the protest by Lithuanian people against Danish owned hog CAFOs.

“Numerous studies have shown that areas around large CAFOs tend to become semi-waste lands. The vast lakes of manure produced by hogs aerate ammonia, methane, hydrogen sulphide and other substances. Producing sickening and irritating odours, leading to numerous symptoms such as burning eyes, headaches, dizziness, shortness of breath and an increase in respiratory diseases among local residents; manure leakage from lagoons and spray field run-offs tend to contaminate waterways and local drinking water with pathogens and increased level of nitrates. The quality of

life of rural communities tends to decline as residents become trapped in their houses – unable to open windows or go outside; property values in the vicinity of such farms tend to decline dramatically and selling homes becomes practically impossible, the development of large hog production facilities also tends to drive small hog farmers out of business and suppresses the development of alternative economic activities in rural health care and social service provision, crafts and tourism, and ecological farming” (Juska 2010, p251).

This inherent conflict can no longer be ignored, and there are oppositional strategies to industrial agriculture, such as civic agriculture, gaining momentum worldwide (Lyson 2004). One such strategy is *Whole Measures for Community Food Systems* (Center for Whole Communities 2009a) which is described as a values-based planning and evaluation tool that communities can use to help make their community food system ‘healthy and whole’. The originating funder of the project is the United States Department of Agriculture (USDA) and the research partners included the Community Food Security Coalition, the Center for Popular Research, Education and Policy and the Center for Whole Communities. The team does not use the term ‘indicators’, but does list ‘fields and practices’ against which they believe progress can be measured. Each of the six fields has four practices:

Justice and Fairness

- Provides food for all
- Reveals, challenges, and dismantles injustice in the food system
- Creates just food system structures and cares for food system workers
- Ensures that public institutions and local businesses support a just community food system

Strong Communities

- Improves equity and responds to community food needs
- Contributes to healthy neighbourhoods
- Builds diverse and collaborative relationships, trust, and reciprocity
- Supports civic participation, political empowerment, and local leadership

Vibrant Farms

- Supports local, sustainable family farms to thrive and be economically viable

- Protects and cares for farmers and farm-workers
- Honours stories of food and farm legacy through community voices
- Respects farm animals

Healthy People

- Provides healthy food for all
- Ensures the health and well-being of all people, inclusive of race and class
- Connects people and the food system, from field to fork
- Connects people and land to promote health and wellness

Sustainable Ecosystems

- Sustains and grows a healthy environment
- Promotes an ecological ethic
- Enhances biodiversity
- Promotes agricultural and food distribution practices that mitigate climate change

Thriving Local Economies

- Creates local jobs and builds long-term economic vitality within the food system
- Builds local wealth
- Promotes sustainable development while strengthening local food systems
- Includes infrastructure that supports community and environmental health

This is an excellent theoretical concept, but can it work? The Center for Whole Communities illustrates several examples of practice ‘on the ground’, including this one from New Mexico and the Taos Land Trust.

“The Taos County Economic Development Corporation provides direct marketing assistance, business development assistance, a commercial kitchen where people can prepare, package, and market their product all in one place to add value to their agricultural products. Another brand new facility is very exciting, called the “Mobile Matanza,” a mobile livestock slaughtering unit, which goes ranch to ranch, farm to farm, and slaughters and hangs livestock onsite, then takes it to another facility to age and package the meat. It’s inspected and certified and helps farmers market their meat directly to stores and restaurants, without going through a middleman. So it provides a lot more value to the product that goes directly back to the farmer or rancher.

A matanza, by the way, is a traditional celebration, a big community event that involves the cooking and sharing of an animal.” (Center for Whole Communities 2009b)

Much of Australia’s community food projects seem to be benevolent organisations focused on food access rather than local food systems. Like the United States, Australia is a large exporter of food commodities, but food insecurity exists in pockets of disadvantage nationwide. The Victorian Department of Health has launched a food policy coalition project that also has a food security focus, but with attempts to involve the wider community.

“A food policy coalition is a partnership of a broad range of stakeholders representing various food related areas and community interests. The aim of the council is to assess how the food system works in the community and propose strategies to develop and/or reorganise system to create a sustainable food supply.” (Victoria DHS 2010)

There are also examples of Community Supported Agriculture groups around Australia such as Food Connect that after starting in Brisbane have extended to include Sydney and Adelaide.

“Food Connect is an award winning social business that works in collaboration with brilliant local farmers around Brisbane to deliver the best food in the world efficiently, affordably and equitably. Our unique distribution system is flexible, convenient and most of all healthy for you and your community. We are passionate about changing the way food is grown and distributed in this and any country where exploitation of farmers and customers is rampant.” (Food Connect 2010)

This example is a clear indication that change has begun in an effort to address the agrarian question posed by Constance (2008) although, this movement is by no means ‘mainstream’. The Agrarian Question remains unanswered, however, while the question remain unanswered, the issues raised by the centre of whole communities emerges as a useful framework to interrogate food systems in regions and will be utilised to probe this question further on..

The Environmental Question

The environmental question focuses on the relationship between the structure of agriculture and the quality of the environment (Constance 2008, p6) and when Constance (2008, p6) asks 'what effect does the industrialized food system have on the environment?' responses are not that hard to find. Harmful pesticide use, soil degradation, salinity, water shortage and quality problems, excessive fertilizer use, and increased vulnerability to pests and diseases are common tales, oft repeated. Constance (2008) calls it an "inherent tension between capitalist accumulation and environmental sustainability" and many other academics agree. One, Richard Stirzaker, is an agricultural scientist, principal research scientist with the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Australia, and honorary professor with the University of Pretoria, South Africa.

"In my line of work there has been tension between those who focus on the productivity of agriculture, and those who look at the ecological footprint of agriculture" (Stirzaker 2010, p125).

In 2004 (p15), Allison and Hobbs wrote that in the Western Australian agricultural system the "species mix has been transformed for commodity production". Native vegetation has been devastated, with only 10% remaining in some areas, and the ecosystem is so distorted now that functionality in the system is almost lost. Using an economic assumption, 'all else being equal', Allison and Hobbs (2004) state that the commodity system of food production will continue to erode the resource base of agriculture, increase environmental pollution and abet social decline within agricultural regions.

"the way food is produced has changed dramatically in the last 50 years, with most of our food grown by very few people on large, specialised farms. Unlike the garden, the modern food chain is long and complex, and supplying the supermarket shelf uses far more fossil fuel energy than we derive from eating the food we buy" (Stirzaker 2010, pviii).

Science has been heralded the hero of productivity gains in food production. The 'green revolution' was geared towards reducing the potential of mass starvation, but

has since been criticized for its environmental impacts. Productivity and efficiency gains are central platforms for industrial agriculture; however they come at a price:

“if we focus on doing one thing efficiently and sustainably and do more of it, we actually make ourselves more vulnerable to the inevitable shocks that are beyond our control. We need to invest in diversity, and foster the things that are not the most profitable today, because we will need them tomorrow”
(Stirzaker 2010, p 137)

Allison and Hobbs (2004, p19) from the Murdoch University concur.

“The system has become vulnerable as sources of novelty have been eliminated and as functional diversity and cross-scale functional replication are reduced”

This raises the question of alternatives to the current industrial paradigm. Are there alternative forms of agriculture that can find a balance between production and protection? ‘Alternative’ is of itself a contested term in agricultural production; alternative to what? Is it mainstream agriculture perhaps, or commoditisation, or ‘productivism’ or the conventional agricultural systems we know today? This is another example of where rhetoric and realism collide in a grey area of certification schemes, ‘niche’ markets, and supermarket dominance of the value chain. Or as Harriet Friedmann and Amber McNair (2008, p408) ask, “Whose rules rule?” Julian Cribb (2010) in his recently released book “The coming famine: risks and solutions for global food security” states the following:

“Today the world faces looming scarcities of just about everything necessary to provide high yields of food – water, land, nutrients, oil, technology, skills, fish and stable climates, each one playing into and compounding the others....It’s a wicked problem”

Organic agriculture, permaculture, and civic agriculture have all been held up as shining examples of ‘sustainable’ agriculture (Nousiainen et al 2009, p567), but while they may use less chemicals and be more socially inclusive, successful ‘niche’ products such as organics can be commoditised, placing farmers back at square one, needing to find more value in the chain somewhere, or find another niche (Pirog & Paskiet 2004, p7).

Cribb (2010) argues that a new science based food system that is not geared towards the needs of agri-business corporations, but towards farmers large and small everywhere, is needed now. Like Stirzaker (2010) and Cribb (2010), Patricia Allen (2004, p98) is calling for a change in science emphasis because “sustainable agriculture is heir to the epistemological biases of conventional agriculture” and what is actually needed is a diversity of thought; western science does not have all the answers, so it must be “supplemented by other ways of knowing” (Allen 2004, p98). A holistic approach again is called for.

Constance (2008) not only lays the blame for environmental degradation on industrial agriculture, but also on the power of large corporations, and governance systems that have allowed such power to be accrued.

“Agricultural production and profits are predicated on externalizing environmental costs onto the public, most often through agri-corporate manipulation of state policies” (Constance 2008, p7).

Economist Ross Gittens (2010) argues that environmental costs are externalised because the environment (as with community) is seen as an externality in the economic system. The economic model we live by holds no place for the environment, and environmental exploitation is not (yet) reflected in market prices (Gittens 2010, p210). The fatal flaw in this model is that while the environment can live without the economy, the economy cannot live without the environment (Gittens 2010, p196). Gittens (2010, p196) suggests three reasons why this might be so:

- The environment provides natural resources such as food, fibre, fuel, biological diversity and drugs;
- The environment performs essential ‘ecological services’ for the economy such as photosynthesis, regulation of atmospheric gas, water and climate, formation of soil and control of pests;
- The ecosystem absorbs all our wastes – including sewerage and garbage, all fluids, solids, gases and heat.

Gittens (2010, p197) also reminds us that because the global environment is finite, “there must be limits to the extent to which the economy can grow.”

The answer, according to Gittens (2010, p210) is to “internalise the externality”. The natural environment must be bought into the economic equation because it is now one of the ‘scarce resources’ the economy is designed to re-distribute. Evidence that there are, in Australia at least, moves toward making the environment part of the economy can be seen with water pricing, the highly contested guidelines around a draft policy for the Murray-Darling River has been common media fodder for example. Also there have been discussions around carbon credits and so on. A recent report by Hogan, Berry, Ng and Bode (2011, piii) to the Rural Industries Research and Development Corporation (RIRDC) in Australia stated “a majority of farmers are struggling financially in the short term in the face of a myriad of challenges which go beyond longer terms trends in climate”. Balancing the environment and sustainable agriculture in Australia, or King Island, anytime soon, looks to be a daunting prospect.

As with the agrarian question, the environmental question remains unanswered. However it serves to refocus attention on the need for local food systems to act locally and carve a sustainable place for themselves in the value chain. This too is examined on a deeper level later in the thesis.

The food question

The food question deals with the relationship between industrial agriculture and the quality of food, and points towards nutrition and safety issues (Constance 2008, p8). Is there evidence of TNC influence in this arena that challenges agri-food sustainability?

According to Constance (2008, p8) the food question is one in which many researchers globally position themselves around such topics as organics, slow food, locavores, food policy councils, fair trade, sustainable food systems, chefs collaborative, appellations and more. This is where solutions are devised and implemented, and it is the frontier on which social scientists can work with hard science and communities to find ‘other ways of knowing’. Issues such as nutrition

and obesity and food safety and quality are high agenda items, a point well recognised by the global food system actors. According to Friedmann and McNair (2008, p409) “trademarks, brands, seals of approval and certification become central to supply chains of all kinds. They become an arena of contestation, multiplication, confusion, and therefore open opportunities for creative strategies”.

American nutritionist, Marion Nestle (2007, p1) says that even after exports, the US produces enough food to feed every American inhabitant twice over, yet despite this abundance, food for many is so expensive that close to a billion of the world's population of 6 billion in 2008 were chronically hungry (Lawrence et al 2010, p1). Nousiainen et al (2009, p 590) found that while some 'alternative' systems showed a positive relationship between themselves and their social relations, farmers in these systems were still unlikely to assert any influence on the vertical distribution channels of the globalised food chain. “The prices that globalised food chains now pay farmers will end up destroying agriculture and its resource base. They will hollow out food security.” (Cribb 2010)

The health effects of overabundance and scarcity of food, and externalised environmental and social effects of industrialised food production, have led Lawrence et al (2010, p3) to label the food provision arena as one of the most contested and controversial fields of global politics today.

If that is the big picture, then it is little wonder there is a plethora of resources devoted to lobbying for the 'right' outcome. Nestle (200, p1) claims that major food companies use political processes to obtain both professional (nutritional) and government (health department) support for selling their products. This is both legal (usually) and conventional in the American political system. All food industry sectors take pains to lobby for their own interests around health guidelines and encourage consumers to eat more, generating more sales as a consequence (Nestle, 2010).

“the industry also devotes enormous financial and other resources to lobbying Congress and federal agencies, forming partnerships and alliances with professional nutritional organization, funding research on food and nutrition, publicizing the results of selected research studies favourable to industry, sponsoring professional journals and conferences, and making sure that

influential groups – federal officials, researchers, doctors, nurses, school teachers, and the media – are aware of the benefits of their products” (Nestle 2007, p4).

Similar to the U.S. Marsden (2003) argues that corporate retailers play a key role in defining and disseminating ‘quality’ in the larger consumption spaces in Europe. They allocate the constraints and risks in the supply chain and develop their own regulatory systems (Marsden 2003, p28). This ensures, says Marsden (2003, p28), dominance over food supply systems which “has resulted in a more or less constant or declining value for the primary sector, despite rising consumer expenditure.”

Given that the food system is now a global one, it stands to reason that such practises are dominant worldwide. Growing, manufacturing and selling food is now an economic imperative, with other considerations a distant second. Both export and domestic markets have become ‘buyer’ driven (Vorley et al 2007). This would seem to suggest that buyers (retailers, who argue they are responding to consumer demand) now have more influence on quality, safety standards, packing requirements and consistency of both product and supply (Coates 2009). The value chain for food is now more heavily regulated in terms of production than ever before. According to Vorley et al (2007), such chains are now more vertically integrated, with increasingly long-term relationships of coordination between farmers/ producers/ manufacturers, suppliers/ agents, processors and retailers. To stay in this loop, farmers are requiring more structural organisation around both financial and human resources and technology, the cost of which can threaten the comparative advantage of the smaller producer. Philips (2006, p41) states “the significant role of supermarkets in deepening the vertical integration of the production process has implied more vulnerability for small farmers”.

Resistance to this has been identified through the development of shorter value chains and more direct food sales, such as farmers markets, community supported agriculture (CSA) where consumers are seen as ‘shareholders’ of a harvest by providing working capital upfront that entitles them to vegetables as and when they are harvested (Krabbe 2013, p132), and similar box schemes where the consumer feels they have a direct connection and trust relationship with the producer (Timmons & Wang 2010). The popularity of farmers markets in particular is notable,

given they are considered important market entry points for small to medium enterprises (Dickie 2007). Branding to differentiate product has also been popular, with mixed success.

Europe is well known for its regional branding legislation. '*Appellation d'origine controlee*' (AOC) has become a siren for agri-food regions across the globe. Otherwise known as geographic indicators (GIs), they have become a popular regional development tool. One reason for this may be found in Pike's (2009) assertion that brands are inescapably entangled in spatial associations, and that parts of brand equity are bound to geographical associations and meanings. This is especially true for food production and agri-food regions. Foods common to multiple regions can be differentiated in the market place through place, provenance and *terroir*, a French term that has come to conceptualise the relationship or interaction of food with the region from which it comes (the seasonality of pasture growth can affect the taste and consistency of cheese for example).

GIs however are not a panacea. Bowen (2010) found striking differences in the levels of success some regions experience under the protection of GI legislation. When comparing the French region of Comte and its cheese, with the Mexican region of Tequila and its plant based fermented liquor, she found several differences that impacted on the effectiveness of GI as a tool to protect local resources and equitably distribute the benefits of GI. These included:

- a) The complexity and breadth of the quality standards that define production;
- b) The way that the GI valorises the 'terroir' of the region;
- c) The strength of the collective organisation, and the degree to which it fosters cooperation and cohesion (Bowen 2010 p 211).

Although not sufficient reason on its own, strong, national GI legislation was found to be a necessary factor in underpinning the relative success of Comte when compared to Tequila. Overall she found that GIs were a potentially viable regional development strategy, however without the protection of strong governance they were vulnerable to co-option by the more powerful actors in the supply chain (Bowen 2010). Given that King Island operates in an environment with little GI legislation and its economy

is dominated by two powerful actors, the food question too remains unanswered, yet opens up another distinctive level for examination of local food systems. The importance of governance will be revisited later.

The emancipatory question

The emancipatory question focuses on the relationship between the structure of agriculture and the quality of civil rights (Constance 2008). Basically it asks do TNCs improve or devalue equality, cultural diversity or agency in the agri-food system of today. Much of the following argument suggests not as the push to 'get big or get out' marginalises those who have no desire - or cannot afford - to become part of a corporate regime, and presses the need for these small producers to look at other strategies for sustainability. This process is not helped when farmers and producers receive mixed messages from academics and researchers. This article is informed by academics, economists and commentators suggesting that the current agri-food value chain is unsustainable. Yet recently acting Director of the Tasmanian Institute for Agricultural Research (TIAR), Wes Ford, is reported as saying that family farmers have the option to take on equity partners, such as investment houses and corporate agriculture, to help their business grow (Prestt 2010). "If Tasmanian growers are to expand their business it will need to be done in partnership with the whole value chain" (Prestt 2010).

According to Weis cited in Lawrence et al (2009, p32) the net outcome for farmers of increased corporate control over agriculture is an escalating cost-price squeeze.

"Farmers purchase machinery and inputs in retail markets while selling to a shrinking number of outlets, with prices further depressed by aggregate productivity gains. This combination of increasing costs, low prices and reduced margins has generated pressure to expand farm size in order to survive, which in turn produces heavy debt loads and bankruptcies – with bigger and more competitive farmers able to grow at the expense of smaller less successful ones" (Weis cited in Lawrence et al 2009, p 32).

Others write that agri-food governance systems of today lead to "accumulation by [regulatory] dispossession" (McMichael cited in McMahon 2009, p5), and that value chain conditions of management "are really conditions of captive-supply and value-

extraction from farmers” (McMahon 2009, p9), because it is mainly the packers and or retailers who hold the power in the globalised, value-driven agri-food supply-chains (McMahon 2009).

Martha McMahon (2009, p8) states that “Markets are organized by power relationships: class, race and gender being the most common.” The Canadian sociologist also believes that “agri-food governance is profoundly gendered” (McMahon 2009, p1).

“The ideologically legitimating consuming-subject of globalizing agri-food governance is coded female and often construed as the hungry woman and child of the Global South and the picky, privileged female shopper of the Global North, both in need of either technocratic help or consumer protection. In part it was the perception that the fearful (if not irrational) supermarket consumer would lose confidence in her food system rather than an objective threat to food safety that legitimated changes in agri-food governance” McMahon 2001, p1).

Such patriarchal views, McMahon (2009) says are realised in public food-safety regulations that welcome if not expect corporate investment in, and consequent dominance of, food regulatory systems, leading to market relationships distorted by corporate power. McMahon (2009) argues that women farmers are dismissed because they are usually small farmers who work only to feed family and community, not the world. This ignores the fact that women are credited with growing some 60-80% of food in the developing world, and sustaining much of that population.

“The image of women farmers disrupts. It disrupts the North American cultural association of masculinity, farming and technology; it disrupts the paternalistic notion that hunger will be solved by global-market focused, capital and technology intensive agriculture; it disrupts the notion that women’s commitments to feeding their families can be addressed by reducing them to one-dimensional consumers rather than engaged citizens and food co-producers. It stretches the meaning of safe food to include relationships of production (including ecological)” (McMahon 2009, p2).

This has led women to play central roles in efforts to change the predominant global food paradigm into ones that more fully understands rights related to food. Examples McMahon (2009) identifies include the peasant movement La Via Campesina, Slow

food and other food localisation movements. Localisation she says is a “strategic pathway” (McMahon 2009, p10) to a more democratic food system.

Food democracy is echoed by Ikerd (2005) who argues for ‘food sovereignty’ – being free to choose, and he also calls for ‘interdependency’ for mutual gain instead of the weighted system of dependency and price pressure industrialised agriculture represents. Ikerd (2005) states that food security is found in food sovereignty; that much of the American population – and, it can be argued, much of the world’s population – does not have food sovereignty - or can be truly food secure - because they are not free to choose. Alternative, sustainable, re-localised agriculture allows choice (Ikerd 2005).

Constance (2008) warns against a headlong rush into re-localisation however. The romantic visions some have of a back-to-the-future shift in agri-food may include embedded inequalities that were pervasive in pre-industrial times. Sexism, racism and classism were, and are (McMahon 2009), evident in food production systems, although a more localised strategy is considered a better place to reveal the ‘isms’ and tackle them (Constance 2008). The “feminized consumer” argues McMahon (2009, p10) needs to be re-invented as an independent “global citizen” who understands that food health and quality are measured by more than the food safety regulations in place today. They should also include much broader ideas of health, economic justice, dignity and well-being, for all food producers and their economic, social and environmental sustainability.

“The neo-classical claim that the consumer is king is an illusion that justifies non democratic agri-food governance. Good agri-food governance requires that she reclaim her identity as global citizen”. (McMahon 2009, p11)

Until then says McMahon (2009, p10) “little will be accomplished.”

Marsden (2003), however, reminds us that regional, rural and social policies are designed and implemented by those who oversee the current food dynamic; a dual role that will inevitably lead to conflict. Morgan et al (2006) describes one site for resistance as ‘re-localization’ and discusses the role of the Welsh government in an attempt to redress equity for rural areas with a policy of public procurement of local

food for schools, hospitals and other public institutions. This however is contested by EU trading policy and WTO principles. Such moves would also be contested under competition policies in Australia and Tasmania. As with Constance's three other provocations, the emancipatory question remains unanswered, and once again opens up another avenue for examination, that of re-localising food and food systems to counter global food provisioning challenges

The paradox of food provision and sustainability remains. Alongside the centre for whole community's work in the U.S. there is evidence from Europe that may address at least some of the issues raised. An EU funded research project, known as SUS-CHAIN, was undertaken in the early 2000s in response to growing concerns over the future of farming and food in Europe (Roep & Wiskerke 2010). The next section discusses their findings.

2.8 A GEM of an idea? Governance, Embedding and Marketing as a tool for sustainable rural development.

In line with literature already mentioned, reports from the European Commission suggest that it "is now widely accepted that sustainability of the modern agro-food system is questioned" (Wiskerke 2002, p7). Policies implemented around food production and environmental sustainability have been useful, according to Professor Wiskerke (2002, p7), however they have failed to address other sustainability criteria "such as the distribution of value added along the food supply chain, the negotiation power of primary producers, the equality between stakeholders in decision making power, et cetera" . Some of the rules in schemes that have been actioned, he suggests, actually ignore the potential synergies of agri-food production and sustainable regional development (Wiskerke 2002).

GEM – Governing, Embedding and Marketing; A European Commission Report "Marketing Sustainable Agriculture: An analysis of the potential role of new food supply chains in sustainable rural development" published in 2002 suggests that the application of the conceptual framework known as the GEM framework can lead to a greater understanding of how sustainable food supply chains (FSCs) are constructed

and can also be used as a tool to identify target areas for greater public or institutional support within existing FSCs. The underlying argument for the use of the framework sits within the notion that to follow the 'sustainability' path, projects must involve combinations of three strategic pillars in their development platform: strong governance; deep regional connections; and innovative marketing strategies (Wiskerke 2002). These three themes are noticeably similar to the four platforms of RIS discussed earlier, particularly governance.

The first pillar, strong governance involves both process-related and structural aspects of maintaining, transforming or creating a food supply network (Roep & Wiskerke 2010, p4). Process-related governance involves how a network or chain is governed; examples include contractual arrangements, division of roles, power relationships, decision making procedures, codes of practice, and even different styles of management. Structural governance describes how the network or chain is organized; its legal status, alliances and networks, and where they fit (Roep & Wiskerke 2010, p4).

In describing the second pillar, Wiskerke (2002) says deep regional connections require 'embeddedness', a term used to describe the extent to which local actors and resources are involved in the FSC, and how deeply the values in relation to the provenance of the product are shared across the wider network (Roep & Wiskerke 2010, p4). Related variety comes to mind here.

The third pillar, innovative marketing strategies, requires the relating of the FSC to its environment, and a capacity to anticipate and adapt to market developments and consumer trends (Roep & Wiskerke 2010, p4). None of these pillars are new or even unique. What differentiates FSCs is the balance each network strikes between the three pillars; some may be more embedded than others, some may have stronger governance or better marketing strategies, the argument here is that the FSC needs to be continually 'tweaked' to ensure equity among all stakeholders to enable sustainability. This bears a strong resemblance to the RDPM.

Fourteen Lessons for sustainable food systems

The European Commission research headed by Roep and Wiskerke from the Wageningen University used fourteen case studies from seven European countries to ascertain more than a dozen lessons in why and how GEM, the governance, embedding and marketing strategies of FSCs, need to be 'tweaked' in order to ensure more sustainable FSC models. These lessons include:

1. Developing a supportive institutional environment;
2. Creating space for change;
3. A strategic alliance with chain partners;
4. Willingness to invest in a shared enterprise;
5. Mobilizing investment capital for scaling up;
6. Anticipating implications of scaling up;
7. A visionary and capable leader;
8. Building a strong brand;
9. A flexible procurement system for local sourcing;
10. Regional marketing as basic security;
11. Regional embedding as a marketing strategy;
12. Specificity as a key in aligning regional interests;
13. Promotion of regional identity and;
14. Public sector food procurement through partnerships

(Roep & Wiskerke 2010, p14).

Each of these lessons was formulated with the specifics of each FSC studied in mind. Lesson one for example came out of research into the Latvian Beef Cattle Breeders Association, lesson fourteen from the Cornwall Food Programme. The number of lessons serves to highlight the complexity of food production as a tool for regional development, and each of these lessons provides another important lens through which to examine local food systems for sustainability going forward.

Ten Barriers to constructing sustainable local food systems

The basis for all these lessons came from the general barriers and constraints for the development of sustainable FSCs identified by Professor Wiskerke (2002, p69) in his final report to the European Commission. While his research was confined to Europe, these constraints are not unique to that continent alone and are recognisable in most economies worldwide. They are:

1. The willingness of consumers to pay more for higher quality products is very limited;
2. Common goals across the whole chain is difficult to achieve given the diverse range of actors and interests;
3. Problematic competitive environments with high regulatory costs;
4. Growth of an initiative may lead to a loss of individual actor independence and changes in governance leading to imbalances in power relationships;
5. Growth for growth's sake alone can lead to an FSC losing authenticity and credibility;
6. Institutional financial support is weighted to support mainstream production;
7. Trade liberalisation continues to contribute to a cost-price squeeze with arguments that some imported foods have an unfair competitive advantage;
8. Alternative FSCs are hindered by the lack of small to medium sized production and processing facilities;
9. Power negotiations between large scale processors or retailers and smaller producers are asymmetrical and often thought of as placing unfair pressure on conditions of supply, such as price, quantity, quality et cetera and;
10. The high market share captured by large retailers undermines ethical and sustainability initiatives due to their reluctance to support place of origin labelling

(Wiskerke 2002).

It is evident now that these are recurring themes and not limited to one country or jurisdiction. They are global problems experienced by agri-food regions everywhere, so it makes sense to use these barriers as another lens to examine what a sustainable food system might look like.

2.9 Towards a conceptual framework

So far this thesis has outlined the literature that underpins the research; regional development literature to provide insight on how regions develop; and sustainable food systems literature because rural regions often rely on food production as an economic driver, and because these food systems are among the most globalised there appears to be a paradox between sustainable development and food production and provision. Certainly King Island, the case study for this thesis, relies heavily on food production as its economic base and looks to be a region in decline. In fact with King Island we see a convergence of all the aforementioned literature. King Island can be viewed as a microcosm where all these concepts from the literature meet and play out in a dynamic display of a 'wicked problem' of a sustainable local food system in a global economy.

In the literature, innovation has also been identified as a key ingredient for successful regional development. The clear message for regional development practitioners is to not only inspire innovation, but to engender and manage it for sustainable regional development. The work of Cooke (2007, 2008) is seminal here. The concept of the RIS is to bring together actors with knowledge and actors with the means to leverage knowledge to create regional development. The best way to manage this process according to Cooke (2007) is to construct a foundation for this knowledge to become innovation(s), making sure representatives from each knowledge 'platform' in the region – economic, governance, knowledge infrastructure and community and culture – were included in the process. To further refine a potential RIS, Harmaakorpi and Pekkarinen (2003) developed the RDPM as a tool able to test the appropriateness and capacity of the innovation system constructed by this process to deliver 'development', and to make changes as necessary. Who is in, who is out and whether there are further synergies or 'related variety' industries in the region that can be included.

What this extensive literature review has also identified is a strong connection between the concepts of RIS and RDPM, and the food systems work that culminated in the GEM framework. Each is a method or approach to development within which

capacity and competencies can be identified; RIS and RDPM generally, and GEM which is more specifically adapted to food production as an approach for innovative thinking that underpins locally driven, sustainable, regional development. Figure 5 links the literature pictorially and suggests that answers to the four questions of Constance, that are specifically aligned to the goals of the Centre for Whole Communities, with reference to the 10 barriers, and heeding the fourteen lessons can form the platform for a RIS based on agri-food.

Small islands, despite their size, geographical position and demography are not excluded from these types of innovation processes, and, given the cautionary notes of Baldacchino (2008b) are able, theoretically at least, to construct successful RISs for the development of their region. They too are able to leverage the knowledge, assets and community capacity they have for the benefit of their community, particularly if they are able to maintain local control of their industries.

For rural regions, food production is often culturally and economically significant, however commodity food production is no longer considered sustainable, or even desirable in some circumstances. The globalisation 'project' has left many rural regions struggling to compete for market share and so decline, leaving academics to ask why, and how this may be turned around. Consequently this thesis draws on all this literature aforementioned to provide a deep and robust examination of the selected case study.

In summary, the conceptual framework for this thesis can be drawn as a 'wicked problem' for regional development – a convergence of islands, plus regions on the periphery, plus a reliance on food (as the most globalised sector of the economy today) which provides a testing place for next generations of theory. King Island provides just such a testing ground. By using King island as the case study it actually becomes necessary to draw on all the bodies of identified literature in order to a) work out some useful concepts and actors and b) present relationships to underpin and support a way forward. The methodology chapter now sets out how this will be done.

Figure 5: The questions, goals, barriers and lessons for a sustainable agri-food system

Answers to the paradox of global food provision and sustainability:	Specifically aligned with goals for:	Being aware that:	Learning to:	Creating an RIS
<ol style="list-style-type: none"> 1. The Agrarian Question that asks about the structure of agriculture and quality of life for farmers and rural communities 2. The environmental question that asks about the relationship between the structure of agriculture and the quality of the environment 3. The food question that asks about the relationship between industrial agriculture and the quality of food pointing towards nutrition and safety issues 4. The emancipatory question which focuses on the relationship between the structure of agriculture and the quality of civil rights (Constance 2008) 	<ol style="list-style-type: none"> 1. Justice and fairness <ul style="list-style-type: none"> • Provides food for all • Reveals, challenges and dismantles injustices in the food system • Creates just food system structures and cares for food system workers • Ensures that public institutions and local businesses support a just community food system 2. Strong communities <ul style="list-style-type: none"> • Improves equity and responds to community food needs • Contributes to healthy neighbourhoods • Builds diverse and collaborative partnerships, trust and reciprocity • Supports civic participation, political empowerment and local leadership 3. Vibrant farms <ul style="list-style-type: none"> • Supports local, sustainable family farms to thrive and be economically viable • Protects and cares for farmers and farm workers • Honours stories of food and farm legacy through community voices • Respects farm animals 4. Healthy people <ul style="list-style-type: none"> • Provides healthy food for all • Ensures the health and wellbeing of all people, inclusive of race and class • Connects people and the food system, from field to work • Connects people and land to promote health and wellness 5. Sustainable ecosystems <ul style="list-style-type: none"> • Sustains and grows a healthy environment • Promotes an ecological ethic • Enhances biodiversity • Promotes agricultural and food distribution practises that mitigate climate change 6. Thriving local economies <ul style="list-style-type: none"> • Creates local jobs and builds long term economic vitality within the food system • Builds local wealth • Promotes sustainable development while strengthening local food systems • Includes infrastructure that supports community and environment health (Center for Whole Communities 2009) 	<ol style="list-style-type: none"> 1. The willingness of consumers to pay more for higher quality products is very limited 2. Common goals across the whole chain is difficult given the diverse range of actors and interests 3. Problematic competitive environments with high regulatory costs 4. Growth of an initiative may lead to loss of individual actor independence and changes in governance leading to imbalances in power relationships 5. Growth for growths sake alone can to a food supply chain losing authenticity and credibility 6. Institutional financial support is weighted to support mainstream production 7. Trade liberalisation continues to contribute to a cost-price squeeze with arguments that some imported foods have an unfair competitive environment 8. Alternative food supply chains are hindered by lack of small to medium size production and processing facilities 9. Power negotiations between large scale processors or retailers and smaller producers are asymmetrical and often thought of as placing unfair pressure on conditions of supply, such as price, quantity, and quality etc. 10. The high market share captured by large retailers undermines ethical and sustainability initiatives due to their reluctance to support place of origin labelling. (Wiskerke 2002) 	<ol style="list-style-type: none"> 1. Develop a supportive institutional environment 2. Create a space for change 3. Build strategic alliances with chain partners 4. Develop a willingness to invest in a shared enterprise 5. Mobilise investment capital for scaling up 6. Anticipate the implications of scaling up 7. Empower a visionary and capable leader 8. Building a strong brand 9. Position a flexible procurement system for local sourcing 10. Enable regional marketing as basic security 11. Use regional embedding as a marketing strategy 12. Hold specificity as a key in aligning regional interests 13. To promote a regional identity 14. Use partnerships to better engage in public procurement opportunities (Roep & Wiskerke 2010) 	<p>A sustainable agri-food system</p>

Chapter three: Methodology

The literature has identified a paradox between economic growth and environmental and social sustainability. Moreover it has exposed the tension between regional development and the current system of economic growth that becomes particularly evident in an island setting. This leads to the question of what then can regional development literature, island literature and food systems literature tell us about the sustainability of King Island's agri-food system? Can a sustainable agri-food future be conceived for King Island, and if so what might it look like? Given what the literature says about the power of TNCs in the value chain, it has all the hallmarks of a "political project in progress" (Baldacchino 2011). To restate the overarching research question – can contemporary regional development identify a future for islands? This chapter now looks at a process through which an answer may be found.

To start, such a complex issue requires a flexible, multi-faceted approach to examine it. The strategic research methodology chosen to tackle the question of agri-food sustainability and King Island is the case study approach. A comparative approach was considered, comparing King Island to another similar island; however the costs involved in undertaking such a project were outside the means of the researcher. The strengths and weaknesses of the case study as a research strategy are described in this chapter and it goes on to outline the variety of methods used within the study to tackle the complexity of the topic. In essence it has become necessary to de-construct King Island's present, and reconstruct a possible future based on what has been learned from the literature.

After identifying the appropriate literature, the next step is to collect data, and this thesis uses a range of methods, primarily a survey, and semi-structured interview based on the survey questions. Analyses of secondary data such as historical local King Island newspapers and statistics from the Australian Bureau of Statistics (ABS) was also undertaken

In an effort to locate the competencies and capabilities endogenous to King Island, a survey was undertaken, and the questions and their relationship to the literature are discussed here. A table that details each question, what it seeks to explore, its origins in the literature and the justification of its purpose is included here to aid analysis. This section of the chapter describes in detail the approach, and the choice to use three evaluation methods based on the sustainable food systems literature, RIS and constructing advantage, and the RDPM. These were deliberately chosen for their ability to examine the complexity of food system sustainability and identify possible ways forward.

To thoroughly interrogate the food system on King Island the four methods outlined in chapter two are used. These are: the four questions of Constance (2008), the goals of the Centre for Whole Communities' framework, the ten barriers of Wiskerke (2002) and the fourteen lessons learned by Roep and Wiskerke (2010). Each is included as references for the questions asked in the survey. The next step of analysis, the search for competencies to underpin RIS, made it necessary to include questions around networks. These are also considered questions that may identify capacity for a regional development platform based on agri-food, and the decision to use the RDPM as a method to examine King Island's agri-food future.

The chapter closes with discussions on the validity of the method(s) chosen, and their limitations.

3.1 The Case Study Approach

The decision to study the 'sustainability' of a particular place led to the use of a case study approach. In this place or regional sense, 'sustainability' should not be an abstract term, but an applied methodology that can underpin economic development in that place or region. Islands are peculiar places in that they often face greater challenges for economic development in a neo-liberal sense (Armstrong & Read 2002). This does not necessarily mean that being an island is and of itself a barrier to economic development (Armstrong & Read 2002); there is an intangible and complex relationship between the economy and culture of islands that enable island

societies to be resilient, sustainable and perhaps even prosper (Baldacchino 2005). Landes (1998, cited in Baldacchino 2005) states that the history of economic development tells us that culture matters; however an island 'culture' or identity is not a given just because of the place (Baldacchino 2005), there also needs to be social relationships, a 'moral community' to create the fabric of 'place' that will build resilience to counter the challenges of being an island in a global market place (Baldacchino 2005).

Baldacchino (2011) also suggests that islands cannot be "islands" and be sustainable. The romantic allure of a remote paradise must be weighed up against inconvenient truths such as the tyranny of distance, economic realities such as small local markets, and the changing and changeable nature of islands that leads Baldacchino (2011) to state that "islands are political projects in progress". This theme also helps shape the analysis.

King Island was chosen as the case study site for several reasons:

- It is geographically bound with clearly defined 'borders' allowing efficient identification of the community of interest and optimum sample;
- It has a relatively long agri-food history, and is considered a leading example of niche market, premium product branding in Australia;
- King Island enterprises trade regionally, nationally and globally allowing for subsequent comparisons with other regions;
- It is a remote island geographically with a low population affecting it with particular constraints and opportunities for regional development.

Walter (2006) posits that a case study approach to research could be more usefully described as a research strategy rather than a method. This is because the researcher is required to use multiple research methods, and to collect data from multiple sources which often require the use of a variety of techniques. For Walter (2006, p315) case study research characteristically emphasises:

- Depth of study rather than breadth of study;
- The particular rather than the general;
- Relationships rather than outcomes and end products;

- Holistic view rather than isolated factors;
- Natural settings rather than artificial situations and;
- Multiple sources rather than one research method.

Such characteristics are both relevant and useful in a regional development context that seeks data and information which is relational (cultural) as well as causal and/or indicative.

Another supporter of the case study method, Robert Yin (2013), states that case study approaches are a viable method among a range of methodological alternatives, particularly when trying to evaluate broad and highly complex initiatives such as economic and community development projects. He goes on to note that the validity of the evaluation of the case study data when there is a small number of cases, as few as one, such as this case, can be challenged unless there is a rigorous method of evaluation employed. The method used here, triangulation, is discussed later in the chapter.

Generally, the aim of case study research is to collect a wide range of information around a particular group, place or 'case'. A case can be chosen because it may be a typical representation of particular phenomena, an atypical representation, or simply for the purpose of testing theory. Mason (2002, p1), in unambiguous support of qualitative research like case studies, as a methodology, believes it capable of constructing "compelling arguments about how things work in particular contexts". Given that King Island is a 'particular context', a small island agri-food based economy in a global food system, the case study approach was considered the most appropriate in this instance.

3.2 Methods in outline

3.2.1 Methodological Conceptual Framework

As a regional scientist, understanding theories of social research is important, and how they can be used to underpin research findings is necessary.

There are a variety of perspectives and paradigms through which social research can be viewed, and broadly this research could be viewed through a social constructionist position. Lock (2010, p5) states that “we are humans who are constructed through our inherent immersion in a shared experiential world with other people.” He goes on to explain that social constructionism is “concerned with meanings and understandings as the central feature of human activities” (Lock 2010, p6) and that “meanings and understandings have their beginnings in social interactions” (Lock 2010, p7). Importantly “meaning making is inherently embedded in socio-cultural processes and specific times and places” (Lock 2010, p7).

As such, the author acknowledges a personal relationship with this research, and that the epistemology, (the way in which the researcher understands ‘knowledge’ and how it is defined, prioritised and valued (Walter 2010)) of this author is influenced by King Island as a place to live, not just a research subject. Coates has her own King Island epistemology, or way-of-knowing influenced by her time living there. As a teenager, her family moved to a farm on King Island in the early 1980s, and lived there for several years. The farm was converted from a sheep farm to a dairying operation, and the author spent some time growing up there, before moving with her new husband (who was born, raised and trained as a butcher on the island) to the Tasmanian mainland. Although not having lived on King Island for more than 20 years, personal relationships with a number of local residents are ongoing, and a deep interest in their lives and livelihoods remains.

Given the influence of her ‘King Island way-of-knowing’ the author is mindful of the need to be reflexive, and aware of personal bias and interpretive values when analysing the data, as recommended by Mason (2002). Some of the participants are well known to the author, and she to them, others not so, and some not at all. This may inform the way in which some of the participants respond to the research questions and the manner of their approach to the research in general. In an effort to avoid overt personal bias, the research method and methods of analysis are multiple and triangulated for validity.

It is important to also be aware that, looking through the social constructionist lens that the epistemology of the author as it relates to King Island, will also be reflected

in the survey questions. To overcome this, the questions are clearly positioned and justified within the literature framework later in this chapter.

3.2.2 Desktop Analysis

A broad ranging desktop analysis was conducted as part of this research. Statistical data from the Australian Bureau of Statistics (ABS) is used to demonstrate the reliance of the King Island economy on agri-food. Additionally, print media including newspapers dating from the early 1980s to 2012, and historical government reports were reviewed to provide a grounded context for research questions. Current newspaper reports and publications from community groups and local and state administrative bodies provide further data. Such data is considered important to demonstrate the cultural importance of agri-food to King Island, alongside its economic reliance.

3.2.3 The Survey

The questions raised in the review of the literature seeking to understand how a sustainable agri-food system could be constructed led, in the first instance, to the use of a survey instrument designed to gain a preliminary understanding of where King Island agri-food producers position themselves in a sustainable agri-food paradigm.

Surveys, according to Walter (2006), can be versatile and efficient for the collection of empirical data, although a little more problematic when seeking qualitative data. The questions in the survey reflect the some of the data needs implied by the conceptual framework of what a sustainable agri-food system may look like. Briefly the hypothesis asks that if a 'system' such as a localised island food system could provide answers to: a) the four questions of Constance (2008); that b) specifically aligned with the goals outlined in the six fields of endeavour (Center for Whole Communities 2009); while c) being aware of the barriers out lined by Wiskerke (2002); and learning from the fourteen lessons described by Roep & Wiskerke (2010) could it, theoretically, call itself sustainable? The survey questions were designed to find evidence of a sustainable agri-food system as described in situ.

Equally, Cooke's (2007) notion of constructed advantage and the RDPM require quantitative data questions in the survey to build a case for the presence or absence of potential for constructed regional advantage by way of a regional innovation system; In this case a sustainable agri-food system for King Island. Cooke's constructed advantage (2007) and RIS (2008) is used as the tool to theoretically model a sustainable agri-food system, with the RDPM of Harmaakorpi & Pekkarinen (2003) chosen as the method to 'test' the model.

There are many producers of agri-food on King Island, so initially, in order to gain a broad sample for quantitative data, and then drill down for qualitative data; two different approaches for data collection were considered, one for each type of data required. Stage one was to be a 'dot survey' (Dotmocracy.org 2011) based on a community engagement technique for quick and efficient data gathering known as 'dotmocracy'; where participants of a forum would be asked to indicate their responses by placing a small dot under a label or heading. Stage two built upon stage one by seeking more qualitative responses from a reduced number of participants. However, as is the want of participatory action research, conditions change and once arriving in situ on King Island the dual approach proved unrealistic. Gathering a committed number of participants to attend a forum was impeded by producer work and community responsibilities.

In response, the methods were merged and prospective participants were contacted by telephone and asked to complete the survey and concurrently participate in a semi-structured interview, based around the responses to the survey. This shortened the process for producers considerably, and with the added benefit of being able to stay in the comfort of their homes or businesses, the participation rate increased. The interview/discussion was participatory and reflexive with some the interviewees asking questions around clarification of issues, and seeking feedback as to why some questions were being asked so as to provide a more thoughtful answer. This one-on-one engagement meant the survey questions were more 'fleshed-out' and could potentially gather more data. The responses were recorded in a fieldwork journal with details provided in the appendix.

The survey was compiled around four arenas; general data, economic data, environmental data and social data. Chronologically, the questions loosely follow this order; the general data of business type and broad situation were canvassed in questions one through four, and economic based data was sought in questions five through nine. Questions pertaining to environmental sustainability were listed at ten and eleven, and industry sustainability on King Island from question twelve. The questions concerning RIS and RDPM followed; however as all the arenas are viewed through the lenses of 'sustainability', there is no intended hierarchy of importance.

The survey can be found as Appendix 1: The Survey; King Island and a Sustainable Agri-food Future? It consisted of 20 questions, with several sub questions to enable participants to expand on their answers. The following table (Table 3) demonstrates how the research relates to the literature and details the questions, what they are intended to explore, their origins in the literature and justification for their use. The questions are then discussed in detail.

Question	Seeks to explore	Origins	Justification
Your primary source of income is derived from which of the following industries? (please circle one selection only) Dairy, Beef, Fruit/vegetable, Fishing, Other – please describe	The breadth of agri-food industries on King Island	“flexibility of breadth” (Baldacchino & Bertram 2009)	Speaks to economic sustainability
How long have you been in business? 1-5 yrs, 5-10 yrs, 10-20 yrs, more than 20 yrs	Economic sustainability and industry ‘lock-in’	Cultural history and resilience of agri-food in changing economic circumstances	Speaks to economic sustainability
Please circle your indicative age bracket: Under 30 30-50 50-65 65+	The median age of agri-food producers	Demography as an indicator of regional ‘health’	Speaks to economic and social sustainability
Is this business a family tradition? Yes No	The cultural attachment of agri-food	“Worlds of food” (Morgan, Marsden and Murdoch 2006)	Speaks to economic and social sustainability
Are you an Employer? Yes No	The importance of agri-food as an economic driver on King Island	The importance of embedding industries in regions from ‘GEM’ (Wiskerke 2002)	Speaks to economic and social sustainability
Compared to previous years, how is your business treating you? For example; are you working harder? Do you have less time for sporting or social activities? Is it placing more or less pressure on your family life? Can you say on balance that your life is :Better worse about the same not sure	What is below the immediate bottom line? Where does wellbeing fit in the overall perception of success?	The agrarian question from Constance (2008)	Speaks to economic and social sustainability
Do you believe your business to be economically sustainable? Yes No What do you believe influences or impacts the economic sustainability of your business?	The perceptions economic viability of business owners on King Island	Barriers and constraints for sustainable food supply chains (Wiskerke 2002)	Speaks to economic sustainability
Do you require a second income to support your way of life? Yes No Not applicable	The perceptions economic viability of business owners on King Island	Barriers and constraints for sustainable food supply chains (Wiskerke 2002)	Speaks to economic and social sustainability
Do you believe your business to be environmentally sustainable? Yes No What do you believe influences or impacts the environmental sustainability of your business?	The perceptions environmental sustainability of individual businesses on King Island	The environment question from Constance (2008) and The ‘six fields of endeavour’ from the Center for Whole Communities (2009)	Speaks to environmental sustainability
Do you believe there is a future for your industry on King Island? Yes No	The perceptions of industry sustainability on King Island.	“creating a space for change’ Roep and Wiskerke’s (2010) lesson 2	Speaks to King Island as a resilient agri-food producing region

Do you have any concerns for the future of your industry on King Island? Yes No If you can, please describe them briefly	Perceptions of industry sustainability on King Island.	Barriers and constraints for sustainable food supply chains (Wiskerke 2002)	Speaks to King Island as a resilient agri-food producing region
What, in your opinion, could ease your concerns? Again, if you can, please describe them briefly	Perceptions of industry sustainability on King Island.	Barriers and constraints for sustainable food supply chains (Wiskerke 2002)	Speaks to King Island as a resilient agri-food producing region
Do you believe stronger relationships between, and/or formal networks of, King Island businesses to be important to King Island's agri-food future? Yes No Further Comments?	The potential for collaboration as a driver for economic development	"Fourteen Lessons" Roep & Wiskerke (2010)	Speaks to RIS (Cooke 2008) and RDPM (Harmarkoorpi & Pekkarinen 2003) and constructing regional advantage
King Island's infrastructural assets include an airport, sea port, abattoirs, cheese making plant etc. Can you identify further infrastructural assets King Island has, and comment on their current status?	The infrastructural base for potential growth scenarios	Construction Regional Advantage from Cooke (2007)	Speaks to Cooke's (2007) constructing regional advantage based on a strong infrastructural platform
Are you supportive of a King Island Brand? Yes No	The potential for collaboration as a driver for economic development	The importance of Marketing from GEM (Wiskerke)	Forms part of Cooke's (2007) governance platform for constructing regional advantage
How important is a King Island Brand to your business? Very important, reasonably important, not important	The importance of a strong King Island brand	The importance of Marketing from GEM (Wiskerke)	Forms part of Cooke's (2007) governance platform for constructing regional advantage
Do you have any concerns about the King Island Brand? Yes, No. If yes, can you briefly explain your concerns:	The importance of a strong King Island brand	The importance of Marketing from GEM (Wiskerke)	Forms part of Cooke's (2007) governance platform for constructing regional advantage
Do you have any aspirations for your business? Yes No What sort of help/changes do you believe would help achieve these aspirations? Please provide a brief description	The perception of their future in agri-food production	"Fourteen Lessons" Roep & Wiskerke (2010)	Speaks to economic sustainability
Do you have a succession plan? Yes No	The perception of their future in agri-food production	"Fourteen Lessons" Roep & Wiskerke (2010)	Speaks to economic sustainability and industry resilience

Table 3: The origins of and justification for the research question

Question one sought to identify the breadth of agri-food type industries on King Island. This is in response to the 'flexibility of breadth' scenario as fertile ground for entrepreneurs mentioned earlier (Brock 1998, cited in Baldacchino and Bertram 2009). Understanding strengths of regions is also important in light of Cooke's (2007) constructed advantage scenarios. Beef and Dairy were expected to be well represented industries, with other options – fishing, fruit/vegetable and others less so.

Question two asked about business longevity. This can indicate economic sustainability, experience and embeddedness, and perhaps also industry 'lock-in' (Cooke 2008, Lambooy 2010). In addition, any indication of new or recent enterprises can be viewed as a form of cultural 'optimism' and overall health of the agri-food industries on King Island. Question three sought confirmation of the above, with a slight twist. While age may imply experience, it may also indicate prospective life of current businesses, particularly where there is no succession plan in place. Question four, about family tradition, explores the cultural attachment to agri-food in line with the Center (sic) for Whole Communities (2009) goal for vibrant farms and healthy communities. It can also reinforce the assumptions of question two.

Question five was the first of the explicit questions around economic sustainability. The ability to employ staff is an indicator not just for the individual business, but also for the King Island economy with the capacity to add to the local or regional economic 'flow' (Dawkins 2003). It has social sustainability connotations as well; having staff often enables employers to take a break every now and then, reduce their workload, or ramp up production. Question six is aimed at exploring economic and social sustainability. "Compared to previous years, how is your business treating you?" seeks responses outside the current season and turnover figures. It deliberately focuses the participant beyond the bottom line, allowing for 'wellbeing' as a parameter in the sustainability discourse, part of the Center (sic) for Whole Communities (2009) discourse. This then leads to questions seven and eight, specifically on economic sustainability that respond to some of the ten barriers of Wiskerke (2002) and the outside influences that affect the profit margins of the business. Question nine asks the same question in a different way to further tease out the perception of economic sustainability. While the requirement of a second income may be evidence of an unsustainable business, it may also be evidence of

the passion and commitment the participant has for their industry and their life on King Island. The word 'require' was used to differentiate between economic needs and personal choice such as social or career orientated considerations.

Question ten is the first of two that apply solely to environmental sustainability, as identified in the literature by Constance (2008). This is not to say that environmental sustainability is not important in the realm of agri-food, but that it forms part of a whole system (Center for Whole Communities 2009). Most agri-food producers are landholders, and are very aware of their custodianship and responsibility to their physical environment. The questions relate only to the respondents own perception of environmental sustainability, not a defined academic definition, and to what may help or hinder their moves toward *their* goal of environmental sustainability, not one imposed by another.

Question twelve begins the investigation into the bigger picture on King Island, and perhaps identifying a space or spaces for regional development platforms.

Participants were asked if they believed their industry on King Island had a future, whether or not they had any concerns about the future of their industry in context to the island, and what, if anything would alleviate those concerns. This question and question thirteen seek to explore the perceptions of industry sustainability on King Island, and have their origins in the barriers and constraints for sustainable food supply chains as identified by Wiskerke (2002). The responses are expected to identify gaps that an application of a RDPM analysis could address. Question fourteen is looking to examine the potential for collaboration as a driver for economic development, based on Roep and Wiskerke's (2010) lessons three and four of fourteen. As such, it seeks to identify latent support for RDP, and give an early indication of professional networks on King Island, both formal and informal.

Additionally, questions fifteen to eighteen are based around identifying the elements needed for the application of RDPM around King Island and agri-food sustainability. Physical assets such as infrastructure and marketing assets like the strong King Island brand are central to any successful regional development project, which makes understanding the role both tangible and intangible assets play on King Island an important part of this research.

In an effort to understand how King Island agri-food participants perceive their future, questions nineteen and twenty seek to explore future economic sustainability, with the notion of aspirations intended as predictive indicators of future needs to underpin sustainability for generations to come. Again, they are based on a number of the fourteen lessons identified by Roep and Wiskerke (2010) including lesson two, creating a space for change and lesson five, mobilising investment capital for scaling up. The idea of a succession plan allows for some form of control over path direction, with a lack of one hinting at future vulnerability, not necessarily for the business itself, but for industry resilience as a whole. For example Bristow (2010, p156) believes that resilience implies industry sectors should be relatively small scale so that no one sector or company dominates, and that there is “capacity to adapt” in the event of industrial decline or structural change. Given the size and remoteness of King Island, small changes to industry balance, such as a dairy farm being sold to beef or forestry interests, may have a significant impact on the level of industry, employment prospects, tacit industry knowledge, fertiliser use, power consumption and more.

3.2.4 The Research Sample

The sample of people to take part in the research was purposively selected, participants were deliberately chosen as the research had a specific purpose (Walter 2006), to understand more about the agri-food system on King Island. Sampling in qualitative research is not as clear-cut as sampling for statistical or quantitative research (Mason 2002), and for practical reasons, normally associated with costs, qualitative samples are usually small. Purposive sampling does not enable generalisations, or extrapolation to a wider community (Walter 2006); it is contextual so it becomes necessary to establish a direct link between the sampling strategy, the process of analysis and the type of argument to be constructed (Mason 2002). In this instance, given the particular nature of the research, that is agri-food sustainability, only responses from those participating in agri-food industries on King Island were sought. This links to the process of data analysis as, in this thesis, it is informed by sustainable agri-food systems literature, and the argument to be constructed involves the presence of, or the potential for, a sustainable agri-food system on King Island.

Self-identification with agri-food on King Island through telephone or internet directories, advertising and publicly listed industry and group membership led to the initial contact with participants via mail, email and telephone. After initial contact, snowball sampling - where participants help the researcher find additional participants (usually by word of mouth recommendation) to increase the size of the sample (Walter 2006) - identified a further number of participants who were then invited to take part.

3.2.5 Context Construction

Alongside the survey/interview instrument the understanding and knowledge of King Island is added to by way of developing a narrative. The story of King Island's agri-food history is necessary context for constructing a sustainable agri-food future for King Island. Circumstantial connections such as social relations, or patterns of behaviour, culture or traditions, are able to provide researchers with evidence of underlying processes or causal mechanisms not always overt in data (Mason 2002), and so are considered important subtexts for social researchers to examine. Additionally, qualitative research is often not the most appropriate way to construct categorical arguments; however the use of narrative construction enables interpretive arguments (Mason 2002).

Nestle (2007) constructs a narrative from a range of sources to contextualise the data used to argue that the United States of America has intractable issues with obesity, and that the reasons why are many and varied. Similarly, Barham (in Hinrichs and Lyson 2007) uses narrative construction focusing on Charlevoix Lamb to explain how product of origin labelling can be used as a regional development strategy. The story she tells of how and why the brand was created is important context in understanding the present situation.

King Island has a similar narrative. For this reason, a desktop analysis of historical texts and newspapers will be used to construct a valid narrative that can reasonably and meaningfully position data in context. These sources of data reveal a historical and cultural reliance on agri-food as well as precedent for government intervention in

cases of market failure. The course of development for King Island has been talked about for generations and this thesis unites the discourse under a sustainability/resilience umbrella. Texts included government reports, local media articles, and a personal essay published by a leading actor in agri-food on King Island in the 1980s.

3.3 Taking King Island apart; exploring the data

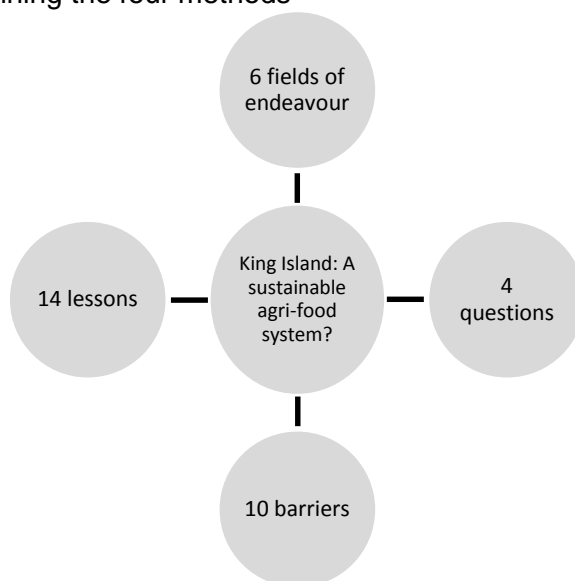
This thesis is more than the reconstruction of a narrative of knowledge about King Island. The aim is to examine these stories and evidence to determine, in effect, its future. To do this it returns to the theories explored in chapters one and two. This next phase of the methodology describes how the data will be analysed using the sustainability frameworks identified. The data collected from the desktop analysis, the surveys and interviews, and the historical narrative will be examined via three stages, step one involves the application of the 1) sustainable agri-food systems work of Constance (2008) and the four questions; 2) the Center for Whole Communities (2009) whole measures approach; 3) the ten barriers identified by Wiskerke (2002); and 4) the fourteen lessons learned described by Roep and Wiskerke (2010).

Having teased out key knowledge the second step centres on the work of Cooke (2007, 2008) and analyses of the data in context to regional innovation systems (RIS) and constructing regional development based on the four platforms he says are necessary for success: governance, economy, knowledge infrastructure and community and culture. The third step then examines King Island in light of the regional development platform method (RDPM) as outlined in chapter 2 of Harmaakorpi and Pekkarinen (2003). These in particular address the issues around King Island as a host to a sustainable agri-food system. For example we can ask if the present agri-food paradigm on King Island as sustainable one in light of the literature, and whether or not it can be more sustainable or resilient, and perhaps even what a more sustainable agri-food system on King Island might look like.

3.3.1 Step one; analysing the King Island agri-food system

As identified in chapter two there are four key themes from the sustainable agri-food systems literature that will illuminate sustainable food systems. Each of these, Constance (2008) and the four questions for sustainable agriculture; the six fields of endeavour that exemplify a sustainable agri-food system (Center for Whole Communities 2009); the ten barriers to building a sustainable agri-food system (Wiskerke 2002); and the fourteen lessons learned when trying to do so (Roep and Wiskerke 2010) shed light on various aspects of sustainability of food systems. A matrix of analyses that underpins the first framework of the evaluation is shown in Figure 6. Each literature theme will be used as a lens to examine the data to evaluate the level of sustainability the King Island agri-food system embodies:

Figure 6: matrix outlining the four methods



To apply this method the data is interrogated using four key questions:

1. How do agri-food systems on King Island respond to the four questions posed by Constance (2008)?
2. What evidence is there of the six fields of endeavour (Center for Whole Communities 2009) on King Island?
3. Are their similar constraints to those identified by Wiskerke (2002)?
4. Can any of the fourteen lessons learned (Roep & Wiskerke 2010) be applied in the King Island context?

Expectations around the answers to these questions are mixed. Certainly, given the longevity of agri-food industries on King Island, a certain level of sustainability is to be expected; it is the nature of that sustainability that is in question, and whether or not it can be maintained.

3.3.2 Step two: Regional Innovation Systems and Constructing Advantage

The next level of evaluation seeks to explore the possibility of a (more) sustainable/resilient King Island agri-food system and what that might look like. To answer this it is useful to draw on the literature of Cooke (2007) on constructing regional advantage and regional innovation systems (RIS), as well as the work of Harmaakorpi and Pekkarinen (2003) and their regional development platform method (RDPM). This gives the project an added depth and complexity, because it seeks to understand the type of infrastructural and institutional elements in situ that form the platform for the development of a sustainable agri-food system, what elements are absent, and which need to be strengthened, and perhaps design an alternative agri-food system with all of the above in mind. This then allows for a more nuanced understanding of 'related variety' (Lazeretti et al 2009, Boschma et al 2011) to be brought to the discussion alongside the notions of knowledge bases and policy platforms.

Cooke (2007) argues that to construct regional advantage, policy platforms actively supporting regional development must first be in place. The four key areas that should be specifically targeted for policy levers are the economy, governance, knowledge infrastructure and community and culture. These policies must be cross-sectoral, and as the term 'platform' suggests, provide base-load support with the capacity to nurture innovative and/or entrepreneurial opportunities that may present in a region. As Boschma et al (2011, p4) point out, "major innovations are more likely to occur when knowledge spills over between sectors, rather than within one sector, but only as long as the sectors are related in terms of shared competences." In order to leverage knowledge spill overs and innovation for regional development the process needs to be managed. If opportunities are to present themselves from

this process, how are they to be best organized for regional advantage? This is where the RDPM comes to the fore.

3.3.3 Step three: Regional Development Platform Method

Harmaakorpi and Pekkarinen (2003) argue that not all perceived opportunities are robust enough to be acted upon, and advocate a thorough investigation of both pitfalls and potential. This they suggest can occur through the use of the regional development platform method (RDPM) which consists of eight phases (Harmaakorpi & Pekkarinen 2003):

- i. Benchmarking through the assessment of RIS theories. While each region is different, Harmaakorpi and Pekkarinen (2003) still believe it is useful to find which practises identified in regional development literature might be more suited to the region under investigation;*
- ii. Background study of the industries and areas of expertise in the region. This phase is designed to provide a snapshot of where the region currently stands, usually through the use of statistical data, state of the region reports and similar analyses;*
- iii. Expert panels. This phase looks to leverage tacit or latent knowledge available in a region by bringing together those with a broad perspective of business as it happens in the region;*
- iv. Assessment of future scenarios. Increasingly for regions the status quo is no longer an option so Harmaakorpi and Pekkarinen (2003) advocate the importance of looking to future technological and entrepreneurial trajectories;*
- v. Analysis of statistical and empirical information. Once the first four phases have been completed the working group or expert panel is in a better position to define potential development platforms by analysing the statistical and empirical information gathered to this point ;*
- vi. Conceptualisation of the RIS. This phase looks to develop a 'shared vision' (Harmaakorpi and Pekkarinen 2003) that will underpin the design of the regional innovation system – the people, the strategies and programmes thought best to respond to the identified opportunities;*
- vii. Search of core processes of the RIS. This stage is designed to define the process that will exploit the potential identified. For example the process will bring together a group of executives regularly to discuss upcoming projects that may be too big for a company individually, but manageable through collaboration and cooperation, and then they will work together to secure such projects for their region;*
- viii. Definition of knowledge creation and management system. The vehicle via which this collaboration occurs, and the knowledge and innovation generated, needs to be codified in order to convert such knowledge and innovation into true regional advantage. How the information is disseminated and shared is too important to be left to chance (Harmaakorpi & Pekkarinen 2003) and a system to manage the quality, embodiment and dissemination of data, knowledge and information is needed. This may be a separate management company, or trusted knowledge broker or any number of possible scenarios including not-for-profit organisations.*

A closer examination of the eight phases listed above reveals that while a RIS looks for innovation and the capacities and competencies of a region to engender innovation, the RDPM is also concerned with the governance of the innovation(s) identified, linking strongly to Baldacchino's (2008) call for local ownership, and the GEM framework of Roep and Wiskerke (2010).

3.4 Validity

The validity of this research strategy and evaluation method is now outlined, beginning with the choice of the case study approach. The use of a case study is in line with the literature underpinning much of this research. Vorley et al's 2007 *Regoverning Markets*, Roep & Wiskerke's (2002) *Nourishing Networks*, Morgan et al's 2006 *Worlds of Food* and Hinrichs and Lyson's 2007 *Remaking the North American Food System* are all compilations of case studies conducted into various agri-food systems around the globe. As with any methodological approach there are advantages and disadvantages to the use of case studies as shown in the Table below:

Table 4: Advantages and disadvantages of case studies

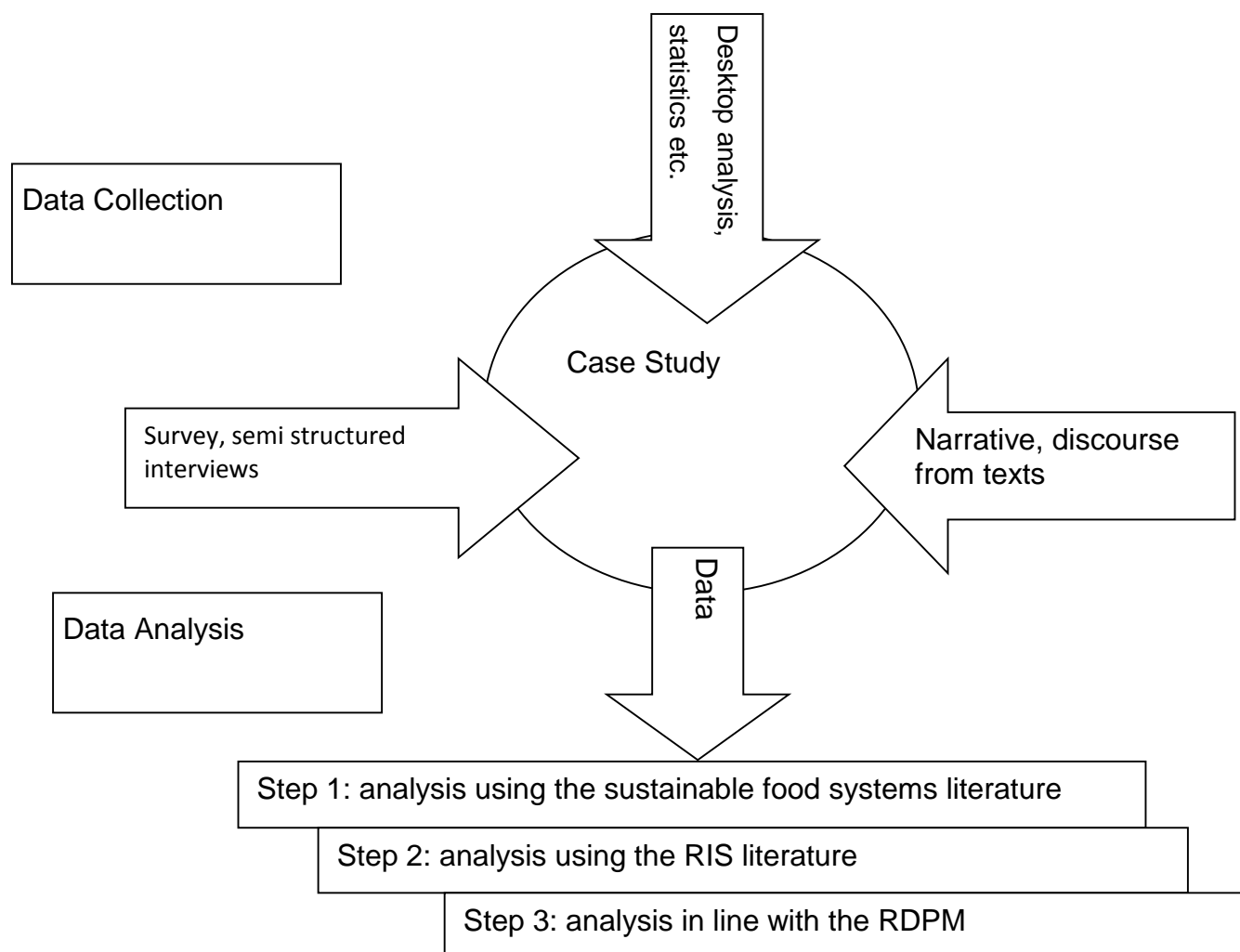
Advantages	Disadvantages
Allows the researcher to focus on one or a few instances and deal with the subtleties and intricacies of complex social situations.	Negotiating access to case study settings can be difficult.
Allows for a more detailed and more interconnected understanding of what is going on.	Creates vast amounts of data that might be overwhelming.
Allows the researcher to examine relationships and social processes in ways that other methods do not.	Requires high investments of time and energy.
Allows for the use of a variety of methods.	The observer effect may operate when those being studied might act differently from normal, knowing that they are the subject of the research. (the Hawthorne effect)
	Issues of generalisability need to be addressed.

The author's familiarity with the island and some of its people redress some of the disadvantages in this situation. Her epistemology or King Island way-of-knowing, made accessing the case study setting relatively easy, and reduced the likelihood of the Hawthorne effect coming into play. It may however shape the construction of the survey, making it necessary to be very clear as to their theoretical base and justification for inclusion in the survey.

Surveys as instruments for data collection are popular because they are a versatile and efficient means of collecting data (Walter 2006). What they can lack, although not always, is nuance, which is addressed in this instance with concurrent semi-structured interviews to draw out as much data from participants as possible in a short time. The relationship between the survey questions to the underlying literature is outlined in the question descriptions above. The same literature is then used to evaluate the data, ensuring a high level of relevance.

The questions underpinning the evaluation are important because change is inevitable, and the need for flexible, resilient food supply systems locally and globally is paramount. They seek alternatives and innovations within a rigid economic structure that demands efficiencies and growth. The use of three frameworks against which to analyse the data enables a 'triangulation' of the results. Comparing and contrasting King Island with international case studies and sociological thought builds a theoretical base for the argument of this thesis; identifying 'platforms' on which competitive advantage can be constructed (or not) adds another layer of support; and evaluating the potential RIS in line with a demonstrably successful method enables a robust analysis of the future of King Island as a sustainable agri-food system. See Figure 7

Figure 7: Pictorial representation of data collection and analysis methodology



Yin (2013) believes taking a theory/perspective triangulation approach to data evaluation supports the validity of the case study results however evaluating the data against a number of parameters or ‘triangulation’ does not necessarily make it ‘true’ or enable the construction of just one vision. What ‘triangulation’ can do is encourage the researcher to analyse the data in a multi-dimensional way (Mason 2002). This leads to the question of validity of interpretation. The use of several methods in this research strategy to collect data and construct a narrative provides a robust tool for a valid interpretive argument in this case.

3.5 Research Methodology Limitations

The number of interviews conducted for this research was disappointing, only 13, yet the calibre of those who agreed to participate is very high. However King Island is a small place, where everyone knows everyone, and while assertions can be made as to the quality/qualifications of the interviewees selected as leaders in their field, the roles they play in their industries and community cannot be stated as it would lead to their identification. Where role identification was explicit in some contextual discussions; for example with the former Mayor of King Island; the role is identified with their permission recorded in the field work journal.

King Island makes for an interesting case study, particularly suited to a multi-disciplinary approach of analysis, meeting the criteria of the research problems. The community of King Island is as multi-layered as any other community, and as such cannot be viewed through only one lens. One of these layers is a rich agri-food history that perhaps lays the foundations for a path-dependent future, instead of potential development based on the energy of innovation, renewal and opportunity that the regional development literature, and island studies literature, suggests is optimum. It is for this reason that the next chapter begins the analysis of King Island with a contextual narrative. This is constructed from historical texts and newspaper reports, and uses data from the Australian Bureau of Statistics to identify an island as buffeted by economic and political winds just as strong as those of the naturally occurring 'roaring 40s', and a community resilient in the face of them.

Chapter Four: King Island – contexts, politics and change

In developing the story of King Island, one of the early and striking themes is that the story is very much shaped by public policy, in line with Baldacchino's (2011) provocation that islands are political projects. The data found in the desk top research suggests that the King Island of today remains affected by the consequences of public policy over time. This has shaped, and continues to shape, King Island's relationship to the wider world. The discourse however has moved beyond the patriarchal 'dependency' relationship between the island and its political guardian Tasmania, and is evolving to respond to the current global economic paradigm. This chapter begins by looking at statistics, demonstrating a decline in the value of agricultural production to the King Island economy, then moves toward constructing the King Island story from historical texts and newspapers, particularly the local paper, the *King Island Courier*. In addition, surveys and interviews were carried out on King Island in July 2011, and the responses are included here, providing a deeper, fuller context for consideration

Briefly the data points to agri-food being an economic driver for King Island, albeit one with inconsistent returns given its exposure to the global marketplace owing to its heavy reliance on two TNCs. It is clear that agri-food is culturally embedded on King Island, and industry participants believe it to be economically and environmentally sustainable. However the majority of those who participated in the survey held concerns for the future of their industry. There were also concerns with the overseas ownership of the processing facilities, particularly lack of local control over the exported products, and the King Island brands. A discussion around a current brand development initiative on King Island also informs the King island story.

Additionally, and perhaps obviously, King Island is not geographically positioned for sustainable competitive advantage given its distance from export markets. The costs of freight goods to and from King Island were seen as major barriers for economic sustainability, as was the ageing port infrastructure, alongside fuel and motor vehicle registration costs. The cost of power and lack of flexible labour supply were also seen as the result of King Island being a small island, distanced from other economic centres. In

this vein the chapter closes with a description of the island's infrastructural assets and their potential to be part of a sustainable King Island future.

4.1 King Island: a tale of richness and decline

Geographically speaking, King Island measures approximately 1,100 kilometres square. It lies in the western edge of Bass Strait, halfway between mainland Australia and Tasmania, on the forty degree south parallel. It is often subject to the 'roaring forties', strong winds that have not seen land since South America (Khamis 2007). According to the Australian Bureau of Statistics (ABS) (ABS 2011) in 2009, the population on King Island was 1700, made up of 932 males and 768 females, living in approximately 650 households. Only 22 persons were recorded as being unemployed. Recently, a limited range of statistics from the 2011 census has been released (ABS 2013). These show that King Island's population has declined to 1567; more than 100 of those who left were men, and approximately 30 were women. The median age has risen from 40 in 2006, to 44 in 2011, indicating the population to be quite static.

In 2006 almost 69,000 hectares (more than half the island's land mass) was under agricultural production, only three hectares were recorded as being used for vegetables for human consumption and 46 hectares were used for non-cereal broad acre crops (for example tree plantations), while none was set aside for cereals/grain, orchards or fruit production. There is little change in these statistics in 2011. The total gross value of agriculture on King Island was \$30.7m in 2006, \$16.4m (53%) from beef production and \$11.5m (37%) from milk production (ABS 2011). In 2011 the figure had risen only slightly (less than 1%) to \$30.9m with a rise of \$4.4m to \$20.6m (66%) from beef production and a decline of \$2.7m to \$8.8m (28%) from milk production (ABS 2013). Over that same time the average inflation rate was 3.033%².

The total number of people employed on King Island in 2006 was 917. Of this 275 were employed in the agriculture, forestry and fishing industries, and 187 in

² Based on the annual average inflation rates 2006 -2011 = 3.5%, 2.3%, 4.4%, 1.8%, 2.8%, 3.4%/6 = 3.033% (<http://www.rateinflation.com/inflation-rate/australia-historical-inflation-rate>)

manufacturing, the bulk of which is food manufacturing, suggesting almost half of the King Island employed population is employed in the agri-food arena. In 2011 the number of employed people on King Island had dropped by 211 persons to 706, with 161 (114 less) in agriculture, forestry and fishing and 130 (57 less) in manufacturing. More than 80% of the jobs lost during this time came from these areas, and less than a third of the total employed population on King Island now find employment in the agri-food arena. It is useful at this time to remember that these statistics were collected prior to the closure of the abattoir in 2012.

The following table is a compilation of data from the 2006 and 2011 (ABS 2013) census showing the change in agricultural production and agricultural production values recorded for King Island over that time. A striking feature is the increase in the number of beef cattle and the value of beef production, but a decrease in the number of businesses conducting beef production, suggesting a rationalisation of the industry. In 2011 the value of beef production was 66% of total gross agricultural production for King Island, and yet in 2012 the abattoir operators deemed the processing facility unviable and walked away, mothballing the factory, leaving producers to carry the cost of exporting their stock to Tasmanian or mainland processing facilities. It has been estimated 40,000 cattle would need to be shipped off King Island every year (Hanson 2012) costing the farmers an extra \$100 (approximately) per head (Harris, pers. Comm. 2012).

Table 4: selected ABS data for King Island 2006 & 2011

Selected King Island statistical measure	2006 census	2011 census	Difference
Number of dairy cattle	12846	5689	-7157
Number of dairy businesses*	21	19	-2
Number of meat cattle	78782	98571	+19789
Number of meat cattle businesses*	143	116	-27
Number of sheep	20080	11793	-8287
Number of sheep businesses*	19	16	-3
Number of pigs	139	27	-112
Number of pig businesses*	1	1	-
Total gross value of agriculture	\$30.7m	\$30.9m	+\$0.2m
Total local (farm gate) value	\$29.3m	\$28.9m	-\$0.4m
Gross value of livestock slaughtered	\$16.4m	\$20.6m	+\$4.2m
Local (farm gate) value of livestock slaughtered	\$15m	\$18.6m	+\$3.6m
Gross value of milk production	\$11.5m	\$8.8m	-\$2.7m
Local (farm gate) value of milk production	\$11.5m	\$8.8m	-\$2.7m
* known as businesses in 2011 and establishments in 2006			

Milk production on King Island has obviously declined in value for dairy farmers. There are fewer farms, fewer cows and a drop in the value of dairy production by more than 20%. As recently as March 2013 the dairy operations owner, Lion Australia, announced it had purchased a second dairy farm on King Island to shore up supply (Ryan 2013). This investment means that Lion Australia, the only processor on the island now owns two of the twelve currently operating dairies, and this consolidation is expected to continue (Ryan 2013). There are also fewer sheep and sheep farmers, and an 80% drop in the number of pigs. These figures suggest that agricultural production is not diversifying, placing further pressure on the value of beef and dairy to the King Island economy.

4.2 Policy from a distance: a walk through time

The Island of today was born of political imperative. Unsure as to the intentions of French explorers at the time, in 1802, New South Wales Governor King, for whom the island had been named, sent an expedition to proclaim the island as British territory – lest the French annex ‘his’ island for France first. Early surveyors considered the land virtually worthless with no decent timber to speak of (Edgecombe 1993), and the island was inhabited by ‘sealers’ harvesting seals and sea elephants for their skin and blubber.

Neither the French explorers under the command of Baudin, nor the English expeditions headed by Lieutenant Grant on the *Lady Nelson* recognized human life on King Island prior to the establishment of the seal trade. French Zoologist Peron, who was part of Baudin’s expedition and is credited with making a significant contribution to the study of Tasmanian aborigines (McFarlane 2008), made particular note of the absence of indigenous human life (Khamis 2007); however evidence of early aboriginal settlement now exists, with the discovery of remains almost 15,000 years old in a cave on King Island in 1988 (Khamis 2007, Edgecombe 1993). Despite this, there is little to suggest permanent settlement on the island after the land bridge between Australia and Tasmania was lost to the sea more than 10,000 years ago, and the region first became an island. Shell finds from two midden sites

dating from 1,000 to 2,000 years ago suggest a small number of aborigines may have lived there during that time, however they are considered to be lucky survivors of storms, blown there from waters off north-western Tasmania and unable to return home (Edgecombe 1993). While the politically convenient position that Tasmania or Australia as a whole could be considered *Terra nullius* - land that is “practically unoccupied, without settled inhabitants” (McFarlane 2008, p xi) - is now considered untenable (McFarlane 2008), and rejected outright in the Mabo case for indigenous land rights (Borch 2001), King Island can be considered one of the very few examples where colonial occupation was not contested by indigenous inhabitants.

While sealers were recorded at the turn of the 19th century as being based on King Island, in less than 20 years the population of seals and sea elephants had been decimated, and the majority of the sealers had left. The hardy that remained traded fur from wallabies (Edgecombe 1993). It is 1836 when the government first lets King Island to lease holders as a farming opportunity (Edgecombe 1993), with little development initially and only a few individuals attempting commercial agricultural practices (Khamis 2007). Early farm settlement on King Island was not overtly successful (Edgecombe 1993). Coastal areas became the graveyard for much of the imported stock, due to poisonous plants and ‘coastiness’ later found to be a copper deficiency (Edgecombe 1993).

It was another 50 years before surveyors declared some 90,000 acres of land to be of agricultural value, and, although hindered by the lack of a good harbour, King Island is opened, by decree of the Crown, for selection in 1888 (Edgecombe 1993). In 1910 and 1911 more than 200,000 acres is taken up (Khamis 2007), and by 1914 a temporary jetty was in place to land the supplies needed for a more permanent structure on the relatively sheltered eastern shore known as Naracoopa (Button in Addison 1995, p14).

In 1919, the first of the soldier settlement schemes designed to support returning soldiers after both world wars was allocating land on King Island, and some fifty new farms were established (Khamis 2007). Unfortunately, as with other areas of Australia, the farmers were left largely unsupported (Khamis 2007) and according to Edgecombe (1993) and Fisher (Fisher in Maloney 2010) most of the soldier

settlement blocks were too small to be viable – for example, in 1946 the land Division of the Agricultural bank of Tasmania bought a total of 20,000 hectares of land to provide 200 farms of only 100 acres each (Edgecombe 1993, p98). Many of the settlers were inexperienced and under-capitalised, and some forced to abandon their land. Addison (1995) has recorded many ‘old timers’ who reminisced over their hard times, during and between both world wars;

“There was no work about. Dad used to do a bit of snaring; he’d get a bit of road work now and then. Most of the time there was no work; he never had any money.....Snow, Johnno and Jim was out somewhere working, milking cows or whatever they could get. It was in depression time. I’ve never seen a depression since then.” (Williams in Addison 1995, p102).

Bush fires were also a part of King Island’s history at this time. One of Addison’s (1995, p16) interviewees, Alma Enniss recalls;

“I can remember the ’39 fires. I was with my grandmother at a picnic at Naracoopa. We were out at the jetty when it came through and I can remember them taking me out; wading us out under the jetty in the water. I remember Uncle Bas telling me they kept soaking nappies and blankets and holding them in front of us”

Another, Brady Crack (Crack in Addison 1995, p35) remembers herding cows into a neighbour’s turnip field to avoid the flames;

“I was in the turnips, they weren’t very high, every now and then I would put my head down in amongst the turnips to get fresh air. It’s not a very pleasant thing to be in a bush fire.”

Colin Lancaster (Lancaster in Addison 1995, p42) remembers it as a terrifying experience, but he also remembers large trees;

“I can still remember some of those big trees, part green. They covered our farm once but now there are none left. They had all been scorched in an earlier fire but there were some still living. That fire was in the 1890s...that fire must have been horrific. It was said you could walk from here to Grassy under the trees there was so much cover above, there was no undergrowth.”

Aside from the fires, manual land clearing was mainly done by the settlers (Hodgman in Addison 1995). Colin Lancaster (Lancaster in Addison 1995, p42) tells;

“It was a wonderful experience; the challenge of clearing the land. I think the pioneering age had something very satisfying, making productive pastures from uneven ground that was covered with tree stumps and fallen trees, scrub and bracken fern...The main aim was to get pasture growing to make a living.”

Unfortunately it was undertaken with inconsistent advice and support from the settler scheme management, the Agricultural Bank, and some settlers were not as hardy as the Lancaster family. As Bernard Hodgman (Hodgman in Addison 1995, p 26) recalls;

“We had some very good supervisors on the Agricultural Bank. Gordon Hughson was one and Lance French, those fellows were methodical. But the top brass, all it could consider was rushing in and getting as many acres seeded down in a year as was possible. That was one of the main reasons why there was such a huge turnover of settlers. I mean... the poor buggers would come and their farms were so rough that they couldn't even mow the paddocks for hay. They were ground into the dirt. There were a number of them absolutely ruined through it.”

Others fared better. Easton Johnstone (Johnstone in Addison 1995, p53) recollects;

“Up until they gave us the extra land we were struggling to make a living. Things were much better once they gave us the extra 200 acres and redeveloped it for us. Things were much easier then.”

Arthur Marshall's family (Marshall in Addison 1995, p18) was also helped by the Agricultural Bank;

“Dad went into a partnership with Angus McKenzie but things were so tough they couldn't make it work. Dad went to the Ag Bank, they took over and helped him out. That's how it came to be a settlement farm.”

Historically then, agriculture on King Island has been a political construct, not an organically grown industry built on comparative advantage of good soil, high rainfall and proximity to markets. Government policy dictated that King Island would become a farming community. As a result, when times were tough, many turned to Government for support. This is repeated in the next section which outlines the nature of the agricultural industries on King Island. It can be argued that disadvantages of an agricultural industry with King Island's size and position would

always need to be diffused with government support, and a cultural dependency has since evolved.

4.3 The Dairy Industry



“A terroir unlike anywhere else in the world” (King Island Dairy, 2013)

The first dairy operation on King Island was built in 1902, and dairying has been a mainstay. Cheese was being exported to Melbourne as early as 1914, and was prize winning even then (Edgecombe 1993), although it has not always been financially successful. A Bureau of Agricultural Economics (BAE) report from 1977 states the dairy was in receivership at this time, and that “analysis shows that substantial and sustained financial assistance will most likely be required for the dairy and farms on King Island if they are to achieve adequate financial returns in the short and longer terms to enable them to become economically viable” (BAE 1977, p64). One long time King Island resident told Addison (1998);

“The history of the Dairy Products itself is rather chequered, and at one stage in fact were declared bankrupt and the business was sold to Bill Kirk” (McCarthy in Addison 1998, p33).

In 1978, the dairy was purchased by the Kirk Family, and, with state government loans, they turned the prospects of dairying on King Island around. In a self-published essay Bill Kirk states:

“The Kirk family bought the King Island Dairy from a receiver in 1978. The Dairy was an incredible mess; it had been producing butter and casein; none of the staff knew how to make cheese; and the quality of the farmers’ raw milk was poor. Over a period of 8+ years to November 1986 we made thousands of decisions to improve operations. We trained staff to make cheese. We employed a person to help farmers produce better quality milk. We spent about \$1 million to improve the factory. We created gourmet dairy products that won acclaim across Australia. In doing all that, we turned the dairy into a

profit machine and bought jobs and credit to King Island and Tasmania” (Kirk 2008, p1).

This was achieved, according to Khamis (2007), with a pitch to sell high quality butter and double cream that was both novel and effective. Kirk reportedly thumbed through a Melbourne telephone directory searching for specialty delicatessens (Khamis 2007, p19) that he then approached individually to create a high-end market for his products. He launched the successful brie in April 1985, and is credited with much of the success the brand enjoys today;

“Bill Kirk had a few critics, but he certainly in my opinion put King Island on the map to the extent that he really worked at marketing the local product. He went mostly to the specialty shops, and he was able to sell the product at a very much better price than if he had gone to the supermarkets and that sort of business. The King Island product was very good, and Bill took some part in developing new products, and they were very successful, and that’s part of the reason why King Island produce is so well known throughout Australia” (McCarthy in Addison 1998, p31).

Coinciding with this push, the demand for brie and camembert variety cheeses in Australia grew by approximately 15% between 1980 and 1990, reflecting a global trend and real change in the Australian market (Khamis 2007). For cheese enthusiasts King Island cheese was second to none (Khamis 2007). Accordingly, Kirk had grand plans for the company, but alas, not the capital. Later in 1985 he approached the Tasmanian Development Authority (TDA) to extend him another loan for more plant upgrades, but they refused. Stocks of products had been building up, and payments to farmers were being delayed, and this was an era of neo-liberal restructuring nationwide and most governments were selling non-core assets, not propping them up. In November 1986, King Island Dairy Products Pty Ltd, the family company that owned and operated the dairy, went into receivership with debts that totalled over \$1 million. More than half of this was owed to the State Government.

King Island dairy was later sold for just \$300,000, to an equity firm, Transequity Ltd, much to the disgust of Kirk. He labelled the new owners “squatters” and “mates of the Liberal Government” and lamented the low purchase price left him unable to pay farmers (Kirk 2008, p7). Despite the hyperbole, operations of the dairy under

Transequity, soon to become part of the Agricorp group, continued, and they widened the product range and appeal.

However this did not lead a growth in the number of dairy farms on King Island. The amount of land utilised for dairy remains reasonably constant, yet the number of dairy farms was reduced from 41 in 1978 to just 15 in 1989 (Tourism Tasmania 1989). This raised concerns that demand for products was placing pressure on the dairy with “problems associated with ensuring the adequacy of supply” (Tourism Tasmania 1989, p27). This was turned to advantage when the dairy set up very clear marketing that was vigilant in its authenticity. Khamis (2007, p20) uses a quote from board director Mark Holcombe;

“We set up very clear marketing. Anything produced with the King Island brand had to come from King Island. In 1998, when there was a drought, we ran short of products. But rather than get the cream made elsewhere, we just ran out.... This is important in our marketing, but it is also true – the products are creamier because of the milk.”

In the intervening years since, ownership of the dairy processor has changed hands a number of times, and is presently under the ownership of Lion, a division of the Japanese brewing company Kirren. Lion operates a number of sites in Australia and Tasmania, and when the company recently announced they would review their operations, the Tasmanian Government immediately offered assistance lest they reduce or remove their Tasmanian interests. This has proved, in the main, unnecessary, however discussions continue around waste management treatment at their Burnie plant, which they are now upgrading. Lion have upgraded the King Island plant to meet environmental regulations, but have no plans to grow productive capacity there, despite developing two new brie varieties released in February 2013. This led one farmer to state that the dairy industry on King Island would eventually die; no growth means no investment, and for this farmer nearing retirement, the beginning of the end.

Bill Kirk led the turnaround of King Island Dairies by focusing on endogenous assets such as brand quality and imaginings of place. This occurred in the 1980s, a decade before provenance and place became integral to platforms to underpin regional development. Others in Tasmania and Australia have used King Island as an

example of successful place-based marketing. However the case of King Island Dairy also highlights the challenges the local community faces when, unable to source financial capital, local ownership of prime local assets is lost. This serves to confirm Baldacchino's (2008b) assertion that local ownership is important to local development, and also reflects a lesson learned from the research of Roep and Wiskerke (2010) and their GEM methodology. This lesson, the necessity of regions and enterprises anticipating the implications of scaling up, is discussed further in chapter five.

4.4 The Beef Industry

It seems the beef industry on King Island has been beleaguered by similar challenges to those of the dairy industry. An abattoir opened in 1955, strategically positioned near the aerodrome for timely transport in an era before refrigerated containers. Ken Payne (Payne in Addison 1998, p87) tells;

"...visitors would ask why the abattoir is so close to the airport. When you think back it was because it was envisaged that air transport was going to be a very important part of moving freight on King Island. The Bristol Freighters operated from the abattoirs, taking out the carcasses and also the live lambs."

The King Island abattoir was known as the second 'air abattoir' (Edgecombe 1993, p46) in Australia, and once supported the biggest airlift of meat recorded in this country (Edgecombe 1993). It has always had an export orientation, and was complying with food regulations for marketing into the United States of America as early as 1967 (Edgecombe 1993), however, according to newspaper reports, the abattoir had never really been successful (King Island Courier 1984). One farmer recalls the beef 'slump' of 1976;

"A little hiccup came again in 1976 when beef slumped. I again applied for a job at the Scheelite Mine, this time driving a fork-lift in the Store yard. I was there for two and a half years until the beef came good" (Skipworth in Addison 1998, p 75).

By 1977 concerns were being raised. A Bureau of Agricultural Economics (BAE) report from that year identified the abattoirs as being run as a semi-government

authority. It did not purchase or market the meat, only supplied the services required. These services for slaughter and associated weighing and inspection requirements were charged at rates close to half of those charged at mainland sites, and losses of more than \$1,384,000 had been recorded since it had opened some twenty years earlier. These had been met out of consolidated revenue held by the Tasmanian Government, as policy required charges be kept low to attract buyers, and provide the island producers with market alternatives (BAE 1977).

By the 1980s a company known as King Island Exports (KIE) was leasing the abattoir from the Tasmanian Government, but was consistently reported in the media as being under financial stress, and unable to continue maintenance of the aging infrastructure;

Not a week has gone by without something going wrong at the works since we commenced our lease and we want the Government to accept its responsibility on the building (Bishop in King Island Courier 1984, p1).

KIE was exporting to Japan, and actively seeking Japanese investment with little success. They continued to call on the government for support with the ongoing maintenance, suggesting that production at the plant could double “provided Government compensation for maintenance was forthcoming” (King Island Courier 1985a, p1). In June of 1985 the TDA was reportedly preparing a brief for the government on whether or not to financially support KIE. In July 1985, local producers voted to ask the government to apply a levy of 2% to all live animals leaving the island for processing with the proceeds to go in support of the abattoir (King Island Courier 1985b). This was rejected, and by November 1986 - ironically the same week the dairy was placed in receivership - the government was in talks with a Tasmanian based firm to take over the lease (King Island Courier 1985c). This was quickly formalised and RJ Gilbertson Pty Ltd had taken control of the abattoir by January 1987. They upgraded the plant and expanded production and marketing in Japan.

11/11/85

KING ISLAND COURIER

PRINTED AND PUBLISHED BY
R. J. AND A. C. CONLEY
TRADING AS
KING ISLAND DAILY PRINT
P.O. BOX 285, CURRIE
KING ISLAND 7256
TELEPHONE (084) 62 1422

SUPPORTING YOUR VIEWS
PROMPTING YOUR INTEREST
CIRCULATING — Victoria
New South Wales, South Australia
Tasmania and King Island

Vol. 2 No. 3 Wednesday, 20th November, 1985
Australia Post Publication No. 0919
Price 30 cents

K.I.D.P. in Voluntary Receivership

King Island Dairy Products has been placed into voluntary receivership, and its biggest creditor, the Tasmanian Development Authority, will continue to allow the King Island Dairy Products to keep trading.

Acting as a spokesperson on behalf of the Tasmanian Development Authority on King Island, Mr. Geoffrey Dodge stated that Touche Ross has been appointed as the receiver.

Touche Ross already handle the Scheme of Arrangement which the company is under presently.

Mr. Dodge stated he expected the Tasmanian Development Authority to place the appropriate personnel in position to enable King Island Dairy Products to continue operating.

Mr. Dodge continued when he stated the I.D.A. would not do anything to jeopardise the dairy industry on King Island.

Farmers will continue to be paid on a monthly basis for milk deliveries to the company.

Gilbertsons to Operate Works?

JOBS SECURE

It now appears almost certain that R.J. Gilbertson Pty. Ltd. will operate the King Island Abattoir and the boning room, for the next five years with an option to extend that further, if it so desires.

At the time of going to press the Premier, the honourable, Robin Gray, M.H.A., and Cabinet were expected to make the announcement on R.J. Gilbertson Pty. Ltd. being the successful leasee of the abattoirs and boning room.

Gilbertsons are expected to commence operations early in January and Mr. Jack Gilbertson told The Courier that jobs at the King Island Abattoirs would be secure, and it was his company's intention not to close the boning room as the abattoirs would not run without it.

Mr. Gilbertson pointed out that probably one of the greatest concerns his company held was that the boning room was too small.

M.V. STRAITSMAN SCHEDULE

Wednesday	20th	MELBOURNE
Thursday	21st	GRASSY
Friday	22nd	MELBOURNE
Saturday	23rd	GRASSY
Sunday	24th	STANLEY
Monday	25th	GRASSY
Tuesday	26th	MELBOURNE

Goods Stolen — \$1000 Worth

T.G. and D.J. Perry's toy and sporting goods store was broken into last Thursday night between the hours of 10 p.m. and opening hours Friday morning.

Approximately \$1000 worth of goods was stolen from the premises. Entry was gained through the smashing of a toilet window at the rear of the premises.

Police are investigating.

Dentist Saga to Continue?

King Island could once again find itself losing a dentist, unless something is done soon to solve problems which may well arise during the next six months.

Support for the dentist so far has been excellent, most children now have good teeth, and one 350 adults have been seen, however work is now tapering off.

TEETH IN BAD CONDITION

It was a considerable shock to Doctor Charles to find the children's teeth in such a state of disrepair, as he had been led to believe by the school dental service that the children of King Island had good teeth. (This fact was even published in the Australian Dental Journal).

Because of the disrepair it has been a very expensive.

Cont. on Page 7



Lions Neil Ellis and Easton Johnstone inducting new member Gordon Gray; Neil Ellis will be particularly keen to see the outcome of the King Island Abattoir.

DIRECTOR TO VISIT

Mr. Bruce Overall, a director of Gilbertsons visited the Island yesterday where he met two or three producers and inspected the King Island Abattoirs, and looked at what work needed to be carried out.

TREMENDOUS WORKING CAPITAL

Mr. Gilbertson told The Courier that for the works to be successful, one must support the other as millions of dollars are needed in working capital to operate an abattoir today.

NICHIREI A GILBERTSONS CLIENT

Nichirei Corporation are a client of Gilbertsons and that is expected to continue into King Island; Gilbertsons also provide meat to three other Japanese companies.

Gilbertsons operate in every state in Australia except Western Australia and Northern Territory and employ 2500 people approximately.

Cont. on Page 8

Cargo Enquiries

Melbourne 14 South Wharf (03) 646 1825
King Island Ph. 61 1225
Stanley Ph. 58 1385

Terminal Office Hours: 8.30a.m. - 3.00p.m.

ALL GENERAL CARGO TO BE PRESENTED WITH ACCOMPANYING WEIGHBRIDGE DOCUMENT

SHIPPERS ARE ADVISED

To ensure that cargo is booked and that they confirm receiving and delivery times at the ports of loading and discharge.

HOURS 7 A.M. TO 7 P.M.
Seven Days a Week

Town House Laundrette

Main Street, Currie, King Island

SAME DAY DRY CLEANING

In by 8 a.m. out by 5.30 p.m.

Bulk soap and detergent available at all times at competitive prices

Mick and Rita Bennett
A.H. 61 1347

KENDELL AIRLINES

LEADS THE WAY

to the scene of some of Australia's most beautiful places

ALBURY • COOMA • HAMILTON • KING ISLAND • MERIMBULA • MT. GAMBIER • MILDURA • PORTLAND •
 • WAGGA WAGGA • WARRNAMBOOL

TELEPHONE: 62 1322

REMEMBER YOUR DAILY FLIGHTS TO MELBOURNE ARE AVAILABLE FROM US

Figure 8: Front page of the King Island Courier, November 20, 1985

Since then the abattoir has been sold to private interests, and presently it is owned by South American based multi-national JB Swift (JBS) who own meat processing facilities across Tasmania and Australia³. Being privately owned however did not mean the end of government support. Upgrades to the plant required for compliance with environmental guidelines would make the plant unviable according to JBS, and in 2011 the plant was closed for several weeks while the Government negotiated an interest free loan with the company to ensure its ongoing operation of the site, saving 90 jobs in the near term. Despite this, JBS closed the abattoir permanently in September 2012.

For this author Baldacchino's (2011) muse that islands are a "political project in progress" resonates like a clarion call. Not only buffeted by the roaring 40's, King Island is subject to the fickle wind of politics and policy, and the global commodity market for agri-foods. The Tasmanian Government bought in to King Island's agri-food future, and then sold out. A multi-national corporation bought into King Island's agri-food future and then left, leaving the plant mothballed and unable to be used. Yet through it all the people of King Island remain stoic and resolute that their agri-food industries are sustainable, and that this little island will survive despite the odds. This is because the community is also aware that it is important to diversify, and there have been a number of attempts over recent decades to do so.

4.5 King Island: Efforts to diversify

King Island's economy is not based on one single driver. Alongside dairy and beef there are a number of other economic drivers on King Island that contribute to local wellbeing. In the 1960s and 70s King Island boasted a large scheelite mine that employed hundreds of people, and as mentioned earlier provided a handy safety net

³ "JBS Australia is a division of JBS, Brazil's largest multinational in the food sector, and the world's largest meat company. JBS, a family owned company, exports to more than 110 countries and attributes its success worldwide to ensuring that all its facilities and processes are fully compliant with the demanding international market. In Australia, JBS Australia has an extensive presence along the eastern seaboard, with operations including 11 meat processing plants and 5 feedlots. JBS Australia has a number of brands that have strong domestic and global recognition, including AMH, King Island Beef, Royal, Swift Premium, Tasman Meats and Tasmanian Premium Beef". From <http://www.jbsswift.com.au/> viewed 5 March 2013.

for farmers when prices for their beef or milk were low. The mine closed in the late 1980s. The last few years however have seen increases in mineral prices, and the mine owners, King Island Scheelite are currently seeking capital to fund a re-start. Silica mining also has a presence of the east coast of the island.

Another consistent supplement to on farm incomes has been kelp harvesting. A number of locals have licenses to harvest cast bull kelp to supply a local processor, which turns tonnes of wet seaweed into dry, powdered alginates that are sold world-wide. King Island is also home to a small wind farm that provides alternative energy to the local grid, and sits alongside a bank of solar panels that supplement the power supplied by large diesel generators. There are preliminary plans by Tas Wind, a state government owned entity, to increase the wind farm to some 200 turbines supplying mainland Australia via underwater cable. This is contested however, and its viability may be impacted by changes to the Federal Government's Renewable Energy Targets.

Tourism also has a place on King Island. Accommodation houses, hire cars, tours and trail rides are all available to locals and visitors alike. Visitation is expected to increase substantially in the near future following the completion of two world class golf courses able to tempt and challenge golfers from around the world. At the time of writing, principals from one of the developments, Ocean Dunes King Island, were still seeking investment according to the literature on their website (<http://www.oceandunes.com.au/> viewed May 28, 2014).

It would seem like history repeating itself. Once again government in the form of Tas Wind is looking to buy into King Island, and off-shore companies are looking to exploit King Island's natural assets. It would appear the lessons of dairy and beef industries are slow to learn, however with each subsequent disappointment, the people of King Island continue to stand firm. The next section reveals more of their thoughts identified in the surveys and interviews.

4.6 King Island: other forms of capital and competencies

Surveys and interviews were carried out on King Island in July 2011, prior to the closure of the abattoir in September 2012. As mentioned in the methodology, the number of interviews able to be conducted for this research was disappointingly small, yet the calibre of those who agreed to participate was very high. Unfortunately, the validity of this assertion remains necessarily opaque because to identify the businesses or roles of the participants may lead to identification of the individuals involved.

Half of the participants in the survey were producers in the beef industry, a quarter from the dairy industry, and the rest were made up of other producers, such as fruit and vegetable, fishing industry participants and more. None of the respondents was under the age of 30, 15% were aged less than 50, half were aged between 50 and 65, and one was older than 65. This is in line with ABS data that the median age of farmers nationally is now 53 years of age⁴. More than half of the survey participants had been in business for more than 20 years, and only one had been in business less than five years, suggesting most to be stable businesses. Approximately half of the businesses were considered to be a family tradition (many were descendants of soldier settler families) and 70% were employers generating income for other King Island families, underpinning the importance of the agri-food industry to the King Island economy.

The majority considered themselves to be economically sustainable yet only a third felt they were 'better off' than in previous years. To underscore the inconsistency of agri-food production fortunes on King Island again one third believed they were worse off, and the remaining third believed they were 'about the same' as previous years. These responses were consistent across both the dairy and beef industry participants. A third of the interviewees required a second income to make ends

⁴ Figure from ABS website.

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/1301.0Main+Features3032012> viewed March 5 2013

meet, and interestingly all of this group were beef farmers, none were dairy farmers. Despite this, all but one of the beef farmers believed their operations to be economically sustainable, as did most of the dairy participants. One dairy interviewee declined to answer this question.

Most of the survey participants were also able to make comments as to what they believed influenced their economic sustainability. Half alluded to macro-economic forces as their major concerns; the high Australian dollar, global competition and the like. Some made comments alluding to the micro context of King Island such as labour availability, freight issues, the cost of living on the island, and the decision of the dairy company to hold production levels steady into the foreseeable future. The lack of a plan for growth for the King Island dairy was of some concern to a number of dairy farmers.

All of the survey participants believed themselves to be environmentally sustainable, and again, many were able to make informed comments as to what influenced this part of their business. The use and cost of fertilizer was raised by several farmers, as were concerns over ongoing access to water. Some believed that economic factors constrained proactive environmental management, and one felt that constant legislative changes influenced his decisions. One participant was happy to explain about an environmental risk analysis conducted several years ago that had assisted in their planning decisions. A constant theme that arose when talking to these producers was that 'it made business sense' to look after the environment in which they operated. Only one respondent raised animal welfare as a consideration in environmental sustainability, and another lamented the lack of a small animal processor leading to a waste of potential revenue. Bull calves born to dairy herd are generally euthanized at birth as they are unable to be processed for the more lucrative baby veal or milk-fed veal market.

At the time the interviews were conducted, all the participants felt that their particular industries had a viable future on the island, however most held some reservations. Competitive pressures were identified, as were transport and freight issues, offshore ownership, and the high cost of doing business on King Island, particularly energy and freight. These could be alleviated, some suggested by a larger port and greater

freight capacity, institutional support such as an improved freight equalisation scheme, growth strategies and longer term plans, and a recruitment/skills strategy. Almost all participants held aspirations for their businesses, and cited continued research, a recruitment strategy, improved infrastructure and education and training as important considerations for their ongoing success. Less than half of the participants had formulated succession plans that could contribute to the sustainability of their industries on the island.

When asked if they believed stronger relationships or networks between businesses on King Island were important to the future of agri-food production, all respondents said yes, and believed positive outcomes could accrue from greater communication.

The branding of 'King Island' had universal support from the participants, with almost all considering it to be very important, and one reasonably important, to King Island's agri-food future. Once again, most of the interviewees held concerns for the future of the brand, most particularly around brand integrity, promotion, and ownership.

4.7 Brand King Island

As noted earlier, Bill Kirk, a man perhaps before his time, is credited with creating a strong brand for King Island dairy products based on its natural, local assets long before many others in Australia had thought to do so. This has led to other successful branding initiatives, such as the beef, seafood and water bottling operations. In the literature today, 'branding' is considered a genuine regional development tool, however it is not without its problems. Brand ownership, integrity, and promotion were highlighted as issues in the responses collected from surveys conducted on King Island in July 2011, and the future of the King Island brand is very important to all those interviewed. One farmer was concerned that the brand "relies on perception not fact" leaving it open to criticism. In an effort to maintain brand integrity, the King Island Brand Management Group (KIBMG) was formed, as a special committee of the King Island council, in an effort to redress the perceived misuse of the King Island name. King Island is a geographical place, and under Australian law no one company or individual is able to trademark 'King Island'

however it can be used as an indicator to suggest a relationship between product and place as 'King Island Dairies' and 'King Island Beef' do . The difficulty lies in ensuring the validity of such claims.

The residents of King Island are noted as having a “passionate attachment to the place” (Housego 2006, p2), and had by the turn of the 21st century recognised that they were not leveraging King Island’s reputation as a producer of fine food well enough to engender growth and development for King Island. This resulted in a project to further strengthen the brand for the betterment of the entire community funded by federal, state and local government authorities. The final report, *King Island Place Brand Project: Sharing the King Island Way* (Housego 2006) was presented to the King Island Council in October 2006. While acknowledged as only a starting point, the aim of the report was to encourage the development of the brand beyond a mere logo to encompass a more comprehensive strategic approach, with stronger governance, that would give substance and authentic value to the vision reflected in the King Island brand.

Housego (2006 p6) suggests that, similar to other small communities, the type of investment King Island would like to attract should be compatible with the island’s values. They types of investment targeted should include tourism, agri-business, value-added products with an export focus, and residential development to aid King Island’s goal for growing their population. This concept is in line with the ‘related variety’ theme outlined in the literature in chapter two. The core values to underpin brand King Island as identified by residents in a community forum conducted for the report were community/belonging, environment (including island-ness), produce quality, safety, freedom, generosity, creativity, casualness, contentment, passion and simplicity (Housego 2006, p10). These were considered key attributes of the brand as they were seen to demonstrate an authentic community producing authentic, quality food.

The King Island Council, in October 2007, instituted the King Island Brand Management Policy to establish the KIBMG as a special committee of the council (King Island Council 2012). The objectives outlined for the group included the development of best practise guidelines, to promote King Island and its values, to

investigate funding opportunities for the brand, and to develop criteria for the promotion of product under the King Island umbrella brand. While it is not usually the role of local government to promote economic development, this initiative is in line with Bennett's (2009) call for a greater role for government to become involved in identifying and incorporating values into strategic promotion and planning to assist its regions producers.

Figure 9: King Island Brand Management Group Letterhead and Logo



The brand management group, consisting mainly of volunteers, has institutionalised terms of reference for membership of the King Island Brand⁵ that attempts to protect its authenticity, and includes some very specific guidelines, particularly in relation to the branding of King Island Beef. The terms of reference clearly state that beef claiming the name King Island must be processed on the island. The test now comes in the form JBS who 'own' "King Island Beef", however, since the closure of the abattoir, no longer comply with the intent of the brand. At the time interviews were conducted on King Island in July 2011, one beef farmer commented that JBS were "using the brand well", now others lament that the brand is lost to them (Graham 2012).

Prior to this, in an effort to re-invigorate and reclaim the King Island brand, marketing consultant, and the woman behind the successful branding of King Island Dairies almost 20 years ago, Helen Waterworth, had been commissioned to help design a new 'all-encompassing' vision for King Island. A slide show presentation of what she had in mind was shown to the newly formed King Island Chamber of Commerce in July 2011, and while it held great appeal for many, it appears unlikely to garner the

⁵ available at <http://www.kingisland.tas.gov.au/page.aspx?u=272> viewed March 6 2013.

financial support it needs. This is because both the dairy and beef industries have vested financial interest in the brands they already have. It would be improbable that either would underwrite a vehicle that may cannibalise their individual market profile. Given the closure of the abattoir, it is now less likely than before that JBS would support an umbrella King Island brand, particularly in light of the terms of reference for membership discussed above.

Brand King Island is a clear demonstration of community spirit and social capital on King Island. If will alone could determine economic success, they would be a wealthy food producing region. The lack of financial capital has consistently stymied them, and loss of local ownership has meant King Island is less able to use brand King Island for economic development.

The closure of the abattoir has other ramifications for the whole of King Island, not just the beef producers. Estimates of up to a thousand head of cattle needing to be shipped off the island each week places more pressure on the island's freight and shipping capacity, and reinforces one problem of island-'ness', the tyranny of distance.

4.8 The problem with island-'ness'

Although surveyors of the 1890s believed some land on the island to be useful for farming, they also acknowledge the lack of a good harbour would be problematic for industrial agricultural success (Edgecombe 1993). However a small shipping and fishing port evolved near Currie, in a sheltered cove on the south-west shore. Additionally, on the east coast at Naracoopa, the government built at first a make-shift jetty and then a more permanent structure to aid the soldier settlers. Much of the shipping was privately operated until 1919 when the government was asked to break the monopoly enjoyed by the Holyman family. A subsidised service operated for 10 years before it was withdrawn, and Holyman's continued until they sold their operation in 1954 (Edgecombe 1993).

In 1972 a larger port was constructed at Grassy, on the south-east coast, to support the growing scheelite mine. A specially designed ship the *Straitsman* was built and introduced to the service in the same year, but the cost of building the ship bankrupted the operator within six months, and the Tasmanian government bought the ship and continued to operate the service at a loss (Edgecombe 1983).

It seems a striking omission today that a report from the then Bureau of Agricultural Economics (BAE) titled “King Island: A viability study of the rural economy” (BAE 1977) would not discuss shipping as an issue, after all locational economics as a theory had been developed more than 100 years previously. It did discuss the need for farmers’ incomes to be supplemented by off farm work to sustain the dairy industry; however the 1977 BAE report refers to shipping and freight only as a variable production cost, the broader theme of the economics of shipping as an issue for sustainable agriculture is not mentioned. In their defence though, this is a time of high productivity at the scheelite mine, so shipping efficiencies may not have been considered a problem. By the mid-1980s however, they were.

Figure 8: Currie Wharf photo courtesy of the author, July 2011



Figure 9: Naracoopa Jetty, photo courtesy of the author, July 2011



Figure 10: Grassy Harbour, photo courtesy of the author July 2011



Running concurrently with the dairy and abattoir strife of the 80s, the scheelite mine at Grassy was winding down and eventually closed, placing pressure on shipping efficiencies. Also, the withdrawal of government shipping subsidies as part of the era's neo-liberal (Labor party supported) agenda was impacting on King Island. Local media reports that at one time it was cheaper to send a bale of wool piece meal by post than it was to send it by sea. By late 1985 the government was looking to withdraw the *Straitsman* from service, and entered into a joint venture with the shipping company Brambles with the intention that Brambles would take over the operation using their own larger ship. A year later there were calls for a feasibility study into shipping on King Island because Brambles had withdrawn from the joint venture, forcing the government to call for expressions of interest to take over the run.

Today, a Tasmanian freight company Sea Road Shipping operates the *Sea Road Mersey* on a weekly, weather permitting schedule to King Island. Concerns around the cost of freight and shipping were consistently reported in the survey results compiled for this thesis, mainly from beef farmers. This has only been aggravated by the closure of the abattoir. Recently Sea Road announced plans to upgrade to a larger vessel to service the island; unfortunately the ship they plan to commission is too large to fit into the Grassy harbour. This has the King Island community deeply concerned, and a shipping group was formed to investigate alternatives, including smaller ships and more frequent services. This led to a call for expressions of interest in taking over the run, and while the group received several responses, the only operator deemed viable by the group was Sea Road Shipping.

To add to the mix, the owners of the scheelite mine are actively seeking investment to re-open the mine, and a sand mine has reopened on the east coast. The sand mine operators hold a 15 year lease, and are working with the King Island Council to improve road and bridge infrastructure. Such activity adds to the demand for efficient shipping services. There is yet no deadline for the withdrawal of the *Sea Road Mersey*, and no formal approach to the government for expanding the port to accommodate the larger vessel has been made. The future of shipping to and from King Island is in limbo.

Curiously, there is no passenger service by sea. The only way on or off the island for the public is by air, and recently the main operator to provide a link between Tasmania and the island was placed into receivership, leaving some passengers stranded and out of pocket. A smaller operator continues a reduced service; however the aircraft are hampered by bad weather, which has resulted in numerous delays and cancellations in recent months. A cheaper, more reliable service operates to the mainland of Australia, but it is restricted by government policy to operate only between King Island and the mainland, and is unable to provide a link to Tasmania at this time.

When survey participants were asked to comment on the range and use of other infrastructural assets on King Island there was a mixed response. Mobile phone coverage and internet speeds were considered sub-standard by some, there was a lack of affordable housing for low income earners identified, processing facilities such as a small abattoir and UHT plant were closed, as were a number of shops in the major town of Currie. Some of the more positive comments included the construction of a fertiliser depot allowing for greater flexibility and efficiency of fertiliser application, the availability of accommodation and other amenities such as restaurants and the golf and bowling club, a restart of silica mining at Naracoopa, and the potential restart of the scheelite mine at Grassy that has yet to come to fruition.

That King Island is structurally disadvantaged when competing in a global market paradigm is obvious, but that does not stop the island community trying to create economic advantage for themselves through dairy and beef production. However difficult this may be, King Island appears committed to this path, the producers are passionate about the place and the product, and proud of the reputation it has garnered. Exogenous policy by both government and non-government organisations has deeply influenced the way King Island has evolved, and continues to do so. Much of what has been detailed here concerning the dairy and beef industries have been overt instrumentalities, however some of the impacts of policy from a distance are less obvious. To tease this out from the data this thesis now applies the first of three lenses of analysis, using the sustainable food systems literature outlined in chapter two.

Chapter Five: Regional development and food systems analysis of King Island

This thesis is about islands and asks whether contemporary regional development approaches can help guide sustainable futures. For some islands, King Island in particular, this question is made all the more difficult because the local island economy is based on “old” industries such as an agri-food. As chapter two establishes, such economies are especially fraught. If King Island is to make something of the regional development approaches, regional innovation and sustainable platforms it will require a detailed understanding of the agri-food economy as the predominant economic focus – this is done to yield prospective resources, competencies, capabilities and more to work with. Chapter four sets the scene and gives a context, history and geography, however this is not enough. What is needed is a more nuanced interrogation to search out both the opportunities and constraints. Chapter two establishes the global and highly commoditised context of agri-food but that there are a range of useful approaches which allow a closer analysis of agri-food. This chapter applies several of these frameworks.

Three different approaches are applied to the story and data of King Island. A further perspective is gained by taking the GEM framework developed by Wiskerke (2002) through its application to 14 case studies by Roep and Wiskerke (2010). Because King Island is a case study it seems appropriate to add additional richness to the study by considering what the case study research conducted using GEM might reveal for King Island. As was established in chapter two, the application of the GEM study (and the 14 case studies) emerges as especially relevant as it aligns closely with the activities of contemporary regional development practitioners. This is then further elaborated in the following chapter.

Thus against this backdrop outlined in chapter four it is appropriate to undertake a closer analysis to unpack the complexity of trying to create a sustainable future for agriculture on King Island. Chapter two elucidated the four sociological questions as posed by Constance (2008) along with a call for whole sustainable food system benchmarks laid out by the Centre for Whole Communities and their six fields of

endeavour. This chapter adopts these questions to consider King Island. In addition the ten barriers for a sustainable agri-food system identified by Wiskerke in 2002, and the fourteen lessons learned by several small European food systems transitioning into a global economy identified by Roep and Wiskerke in 2010 are also applied. This is done to gain a fuller comprehension of King Island's place, for good or ill, in a global agri-food system.

5.1 King Island and the Four Questions raised about the relationship between industrial agriculture and the rural and regional communities that depend on it

The four questions posed by Constance (2008) are designed as provocations to the academic sociological community worldwide to examine the relationship between globalisation and the power of TNCs in the global agri-food system, and the contestations that arise when we seek to supply more and more food, cheaply, from finite and sometimes diminishing resources. The previously outlined agrarian question asks what influence do TNCs have on the structure of agriculture and the quality of life for farmers and rural communities; the environmental question similarly asks what influence do TNCs have on the structure of agriculture and the quality of the environment; the food question asks about the relationship between the current paradigm of industrial agriculture and food quality and safety; and the emancipatory question asks about the relationship between industrial agriculture and the quality of civil rights. Constance (2008), aware of the paradox of global food provision and sustainability, uses these provocations as a call for researchers to work towards bringing about "a more just and equitable agri-food system" (Constance 2008, p3). The analysis begins with how King Island responds to the agrarian question.

5.1.1 King island and the agrarian question

The agrarian question - what sort of influence do TNCs have on the structure of agriculture and the quality of life for farmers and the King Island community? – deals with the relationship between the structure of agriculture and quality of life for farmers and rural communities (Constance 2008).

The survey data reveals ambiguity around this question. When asked how their businesses are treating them in comparison with previous years, roughly a third felt they were better off compared to the year before, the same number felt they were worse off, and slightly more felt their business was treating them about the same as previously. For example, while one farmer believed he had never had a better season, another said he was managing lower returns with prudent spending, and yet another lamented the lack of relief milkers was placing pressure on his ability to engage with his community and sporting commitments. Another suggested that he was “Definitely working longer hours for less pay but I am happier working for myself”. Each of these responses highlighted the tug of war over competing values some agri-food producers face.

In yet another aspect, those who enjoy volunteering for the community found that balancing farm work with their community roles had become increasingly difficult; “Local organisations need so much time e.g. ambo (volunteer ambulance officer), NRM (Natural Resource Management volunteer), CoC (Chamber of Commerce member), KIRDO (King Island Regional Development Organisation committee member)”. Maintaining an interest in community life for some agri-food producers on King Island was impacted by the structure of agriculture under which they operated.

Almost half of the respondents said they needed a second off-farm income to support their way of life. The same number had been in business for less than twenty years, but there was no correlation between the two. Some of those that had been in business for more than twenty years still required additional income to support their way of life, some who had been in business less than twenty years did not. The length of time in agri-business on King Island does not necessarily equate to sustainability or financial success.

While globally it can be argued there is a clear indication that change has begun in an effort to address the agrarian question – through the ideals of civic agriculture for example – there is little evidence of such change on King Island. The multi-national company Lion is investing in the dairy operation on King Island (and Burnie in mainland Tasmania), to improve productivity; however ABS data suggests that such productivity gains are not returned to the farmers through better farm-gate prices.

One dairy representative disclosed that negotiations around price paid to King Island dairy farmers for milk hinge not on King Island circumstance, but on the global economic and competitive pressures of the day. The agrarian question highlights King Island's dilemma, yet no answers are clear.

5.1.2 King Island and the environment question

The environment question as posed by Constance (2008) asks about the structure of agriculture and the quality of the environment. On the face of it, King Island appears to be well managed. Agri-food participants on King Island are well aware of how important good environmental management is to the sustainability of not only their businesses, but King Island as a whole. The farmers interviewed believed their businesses to be environmentally sustainable, with a few qualifying remarks, particularly around the use of fertilisers. Nevertheless, water management and treatment, and government policy were also mentioned as influences on environmental sustainability.

Some specific concerns expressed were clear in the connection between the structure of agriculture and the environment; for example comments such as "Consumer driven ideology of cheap products within environmental constraints"; "Better prices would lead to a more proactive environmental approach"; and "Economic factors" all reflect the contest between sustainable environmental management and agricultural production. One farmer surmised that it made good business sense to look after the land; he had improved drainage on his farm and planted more trees. To a large extent the environment is front of mind for King Island farmers as they plan for the future.

That is not to say that the environment of King Island is not impacted by the structure of agri-food industries on King Island. However, given its size and geographic location, it can be argued that the quality and structure of the environment has a much larger impact on the quality and structure of agri-food industries on King Island. Specifically this is around the way in which the major King Island brands rely heavily on the clean, green image for marketing of King Island products, and the way in which the King Island Council looks to protect agricultural land for food production

through a council by-law prohibiting the planting of tree plantations (King Island Council 2010).

These responses however are not without politics. In an effort to respond to the clean/green claims, both the dairy and the abattoir began investing in plant infrastructure to comply with environmental guidelines, however JB Swift threatened to close the abattoir, at a cost to the island of 98 jobs, if they did not receive government assistance to upgrade their waste systems (King Island Courier 2009). Although not the view of the company, this move may be seen as a multi-billion dollar, multi-national company leveraging its power in the market place to minimise the effects of an 'externality' on its bottom line (King Island Courier 2009). The action of the council to ban tree farming on King Island also created debate within the Tasmanian Government on the legality of the move under state guidelines for planning schemes, however despite this, the ban on intensive forestry on King Island remains (King Island Council 2010). The environmental question highlights the clean/green provenance of King Island however also simultaneously highlights the 'power' differential of large corporations in the local food system.

5.1.3 King Island and the food question

The third question about food and industrialised agriculture (Constance 2008) relates to what can now be termed 'food systems'. Themes addressed by this question include new thinking such as organics, locavores, slow food, fair trade, food policy councils and more. It can also incorporate branding, appellations, and trademarks – the 'system' around how food is grown, marketed and sold. Food safety, security, nutrition, verification, certification, and to a growing extent, food education are all part of a global food 'system' this question seeks a response to. In light of the food question, King Island farmers were asked how these issues sometimes played out, and specifically here the focus is on brand and branding of King Island products.

The responses revealed some interesting ambiguity. Almost immediately the vagueness of the question was highlighted by one respondent. Was the survey seeking responses about 'a' particular King Island brand, such as the dairy or beef

brands, or a more holistic ‘the’ King Island brand, which is an abstract, not an absolute, term? Upon explaining that an abstract King Island brand was the focus, the participant responded they felt quite strongly in favour of an umbrella brand that enabled all who participated in King Island agri-food industries to become party, not just those in “the hierarchy”. This reflects the moves of the KIBMG, yet indicates there is still some way to go, particularly in building relationships of trust and reciprocity. The conflict between beef processors Greenhams, who buy King Island cattle and process them at a facility in Smithton, Tasmania, and JBS about the use of the King Island brand spilled over at one point to King Island producers, although tensions have eased now.

The issue of brand reveals additional conflict on King Island, and the dilemma of brand integrity. Brand management on and off King Island has become a major concern. Recently some islanders rejoiced on hearing that a Melbourne meat business was successfully prosecuted by the Australian Competition and Consumer Commission (ACCC) for the misuse of the King Island Beef brand. Such court action is often out of reach for many individuals, yet agri-food producers and others on King Island effectively lobbied the ACCC after becoming concerned about the use of ‘King Island’ by a Victorian retailer. This misuse was deemed serious enough by the ACCC for legal action to be taken.

For one respondent, keeping the promise of the brand is not easy. He suggested that the King Island brand relies on perception, not fact, leaving it vulnerable to questioning should the market, or activists, have a mind to do so. Another commented that it is important to maintain a good image of the brand, which is driven by on-island best practise. The closure of the abattoir also impacts on the perception of brand; if beef is no longer processed on King Island, what guarantee is there for the consumer that the product is in fact from King Island. Traceability has now become an issue and a new challenge for King Island food producers. The matter of brand is a vexed one for King Island with the issues of brand and provenance revealing both prospective competencies and conflict.

5.1.4 King Island and the emancipatory question

The emancipatory question focuses on the relationship between the structure of agriculture and the quality of civil rights (Constance 2008, p9). Do TNCs improve or devalue equality, cultural diversity or agency in the agri-food system of today? On the surface, this question would seem to have little relationship with a first world country such as Australia, and so for Tasmania and King Island. However ABS data suggests that the average wage on King Island is significantly lower than that of Tasmania - \$37,186 as opposed to \$39,398 - and Australia as a whole with an average salary and wage income of \$48,907 (ABS 2013b). Observations on King Island suggest a widening income gap between those that are self-employed and lived on their farms, and those who work in the factories or on those farms. The low wages make it difficult for many workers to save for the future, considering the inflated cost of living on King Island, and the lack of affordable housing.

There is a limited amount of public housing on King Island, and much of the rental accommodation is privately owned. There have been suggestions that local landlords are unwilling to lease to some of the imported labour employed at the factories, with some concerned about damage to their properties and non-payment of rent. In an effort to offset this, one company took it upon themselves to hire a property manager for the leased premises, and garnered wages to cover the rents. This move however did not achieve the desired results. According to one interviewee, instead of providing surety and peace of mind for the landlords, it was viewed by some as an opportunity to increase rental income at the expense of the company involved, and so the initiative was allowed to lapse.

While the abattoir was still operating, there was a shortage of rental accommodation on King Island, and rental prices reflected this. Since the abattoir has closed this pressure has eased, however weekly rental rates remain relatively high; a two bedroom home in the middle of Currie for example was quoted at \$250 per week, while a quick internet search found similar homes available for rental in Devonport on Tasmania's north coast for \$230 per week; Burnie, 50 kilometres west of Devonport averages were less than \$200 per week, and Smithton, the closest regional town to King Island quoted three bedroom homes at these levels and below.

House prices are also relatively high; older three bedroom weatherboard homes are quoted at around \$200,000 in Currie, while in other towns along the north coast of Tasmania average prices are tens of thousands of dollars lower.

Additionally, there is little in the way of public transport on King Island aside from school bus runs, indicating a high necessity for private vehicle ownership for residents to commute to places of employment. The only way to travel to or from King Island for residents and visitors is by air. This is costly, prohibitively costly for many low-income earners, and the service itself is influenced by economic forces outside those of local control. As recently as September 2011, the major Tasmanian air link provider was placed into receivership, with all flights cancelled and pre-purchased tickets un-refundable. Another air service has since taken over this route; however it is widely viewed as an unsustainable venture given the small population in situ on the island. These factors of poor income coupled with expensive housing and transportation, high energy costs and more, all point to serious inequalities. It suggests that the emancipatory question reveals serious issues around equity and access to scarce resources.

The emancipatory question reveals other inequalities. The choice for farmers in deciding to whom, and at what price, they want to sell their product is also restricted. In the dairy industry the major buyer negotiates seasonally with farmer representatives, to deliver a mutually beneficial price. As this is a multi-national organisation, negotiations are conducted with reference to the global commodity price for milk and milk products. King Island farmers are not immune from global commodity downturns and are beholden to accept the price per litre or butterfat kilogram they are offered for their milk. In recent years there has been an attempt to introduce competition to the dairy company, with the construction of an ultra-high temperature (UHT) milk processing plant. Ultimately, this venture was unsuccessful; the plant was purchased by the dairy company and is now used as a storage facility.

Similarly, the beef industry had a choice of two buyers; the owners of the abattoir and a Tasmanian wholesaler who ships live cattle off the island for slaughter. This had caused major divisions on King Island. The King Island Beef brand was being seen, by some producers on the island, to be exploited by an offshore company who

process King Island grown (not necessarily bred) beef, without contributing to the infrastructure, or community, of King Island. This led to calls of loyalty, and peer pressure on some farmers to support the abattoir, despite the prices on offer from elsewhere.

The free and unfettered right of entry to and exit from markets is constrained for agri-food producers on King Island. Now that the abattoir has closed, and all cattle must be shipped for processing, the debate has subsided, however the inequity remains.

King Island, as a distant market, is a problematic one for government authorities. Distance and low population alone makes it difficult to service, and it has an economy based almost entirely on agri-food, which in turn is dominated by beef and dairy production that must be exported. The emancipatory question highlights that King Island shares the dilemma of distance and access for island communities, with few solutions readily apparent.

5.1.5 Implications of the analysis of the four questions and King Island

Baldacchino (2008, p 188) suggests that smaller states, being what they are, are disproportionately affected by external events, “to the extent that, the smaller the jurisdiction, the larger is the influence of external events on its goings on.” King Island is an exemplar of this. Approximately 90 jobs were lost with the closure of the abattoir, from a total population of 1570 people. When the 18% of the population recorded as being under the age of 14 in 2010, and the 16% over the age of 65 are excluded this leaves approximately 1000 employed persons on King Island at that time. The loss of 90 jobs reduces the employment capacity on King Island by almost 10% - if this were to happen in Tasmania some 20,000⁶ jobs would be lost. Smaller jurisdictions competing in a global market place are less able to absorb global economic ‘shocks’, giving rise to concern about the dominance of large corporations in small economies. Add to this the concern about global agri-food production

⁶ Based on Australian Bureau of statistics figures for 2011 which measured the labour force at 232,124 persons. Viewed February 18, 2014

<http://www.abs.gov.au/AUSSTATS/abs@nbp.nsf/Latestproducts/6Economy12007-2011?opendocument&tabname=Summary&prodno=6&issue=2007-2011>

systems creating more food, but conversely less food security and growing threats to small farmers, food safety, consumer sovereignty, and environmental quality (Clapp & Fuchs 2009), the challenges posed by Constance and his four questions reveal consistent and specific dilemmas for King Island.

The response to the agrarian question identified declining agricultural returns and global competitive pressures for King Island producers. If the economic return for food production is not sustainable, how then can the community, so tied to agri-food production be sustainable? As Marsden (2003) points out, the current model of economic growth is inherently unsustainable, and this is reflected in King Island's agri-food system. Debate around the environmental sustainability of food production is also live for King Island. Responses to the environmental question identified a production system bound to and by place; the impacts of fertiliser use, water and waste management issues and environmental planning and regulatory frameworks were highlighted, as was the perception of clean and green to the King Island brand. The importance of the environment cannot be discounted in any food system (Allen 2004) and certainly not on King Island. The community relies on its physical sustainability and its perceived environmental sustainability, yet the quality of the environment, both clean and green, suggests some opportunities in an increasingly homogenised and industrial food world.

For example, the King Island brand is a headline response to the food question but issues around brand integrity, particularly participation and governance were clearly demonstrated. The matter of brand is a vexed one for King Island given that it is looking to renew its capacity as a development driver through the KIBMG. In this context Bowen (2010) stresses the need for strong governance if brand is to be integrated as part of a regional development strategy and although the King Island community has relied on the strength of its two major brands for more than 20 years, the lack of local control leaves the perception of a King Island brand vulnerable.

This vulnerability is played out largely because of the dominance of two major TNCs in the small King Island agri-food system. It engenders concerns of agency and sovereignty as responses to the emancipatory question. The value-chain of food production and sales is effectively controlled by TNCs (Friedmann 2005) and they

determine where the value is to be distributed, from consumers, through producers and processors and then retailers. The pressure from the value-chain to produce cheap food results in lower returns for farmers. Low incomes and high cost of living make King Island a challenging place to live, and power imbalances between producers and processors make it a challenging place to do business. Real choice that underpins agency and sovereignty is difficult to identify on King Island.

The four questions Constance (2008) uses to describe a sustainable food system reveal vulnerabilities and possible competencies in the King Island context. These are worth investigating further through another approach outlined in chapter two. Specifically, there are other benchmarks that can be looked to in an attempt to find a sustainable path for King Island, and this thesis now uses the work of the Centre for Whole Communities and their six fields of endeavour to explore the issue further.

5.2 King Island and the six fields of endeavour designed to underpin a sustainable agri-food system

The Centre for Whole Communities is a Vermont (USA) based leadership development organisation that began more than a decade ago. Their core principles, as outlined in chapter two, are based on relationships between people and the environment, and systems-thinking approaches. This is manifested through education programmes, including leadership retreats, which are designed to ‘inspire change’ and:

“strengthen the capacities of environmental and social sectors by connecting their leaders to one another, by helping them to develop more durable and compelling responses to problems that cannot adequately be addressed in isolation, and by transforming their movements to act in concert with each other’s goals and aspirations” (Center for Whole Communities 2009a).

As part of their mission they have developed *Whole Measures for Community Food Systems* (Center for Whole Communities 2009 1.) which is described in chapter two as a values-based planning and evaluation tool that communities can use to help make their community food system ‘healthy and whole’. Originally the project was funded by the United States Department of Agriculture (USDA) and research

partners included the Community Food Security Coalition, the Center for Popular Research, Education and Policy and the Center for Whole Communities. The approach does not use the term ‘indicators’, but does list six ‘fields and practices’ against which they believe progress can be measured: justice and fairness; strong communities; vibrant farms; healthy people; sustainable ecosystems and thriving local economies. Each field in turn has four practices that relate to how progress can be measured.

The next section ‘benchmarks’ King Island against these measures. Table 6 reflects where the data collected on King Island, through the surveys, interviews and desktop research, shows an alignment to, or not, the six fields of endeavour outlined by the Center for Whole Communities (2009). If evidence suggests the King Island agri-food system responds to the challenge, the corresponding box is highlighted in green, if it partially responds, or is a work in progress the box is highlighted with orange. If the King Island fails against one of these parameters, then the box is highlighted with red.

The table shows that less than half of the benchmarks that indicate a sustainable food system were met on King Island, although some were a work in progress. Each of the fields is then discussed.

Table 5: King Island and the Six Fields of Endeavour. Taken from the Whole Measures Approach used by the Centre for Whole Communities (2009).

Justice and Fairness	
Provides food for all	
Reveals, challenges, and dismantles injustice in the food system	
Creates just food system structures and cares for food system workers	
Ensures that public institutions and local businesses support a just community food system	
Strong Communities	
Improves equity and responds to community food needs	
Contributes to healthy neighbourhoods	
Builds diverse and collaborative relationships, trust, and reciprocity	
Supports civic participation, political empowerment, and local leadership	
Vibrant Farms	
Supports local, sustainable family farms to thrive and be economically viable	
Protects and cares for farmers and farm-workers	
Honours stories of food and farm legacy through community voices	
Respects farm animals	
Healthy People	
Provides healthy food for all	
Ensures the health and well-being of all people, inclusive of race and class	
Connects people and the food system, from field to fork	
Connects people and land to promote health and wellness	
Sustainable Ecosystems	
Sustains and grows a healthy environment	
Promotes an ecological ethic	
Enhances biodiversity	
Promotes agricultural and food distribution practices that mitigate climate change	
Thriving Local Economies	
Creates local jobs and builds long-term economic vitality within the food system	
Builds local wealth	
Promotes sustainable development while strengthening local food systems	
Includes infrastructure that supports community and environmental health	

5.2.1 Justice and fairness (field 1)

The first challenge outlined in the Justice and fairness field of endeavour is the ability of the local food system to provide food for everyone in the community; ideally food that is fresh and healthy, affordable and culturally appropriate. The reason for including this challenge is because this type of tension in a food system is not just evident in developing countries, but in many rural regions. Given the quality and quantity of food exported from King Island, it would be easy to assume that King Island community is food 'secure'. This is not necessarily the case. Much of the dairy products, packaged beef cuts and fresh seafood are exported. There is a small shop attached to the dairy which sells the gourmet cheeses locally; however access to the beef and seafood is more restricted. Eggs are produced on the island, but not poultry. There is a small market garden for organic vegetables, and one family pasteurises and packages milk for local consumption. One local baker makes fresh bread daily, along with other pastry products less frequently. There is also a water bottling enterprise.

Ironically, the importation of food is one of the Island's greatest costs. Some comes in by airfreight, but the majority comes by sea. This is usually reliable; however the weekly sailing of the vessel has been hampered by bad weather on a number of occasions. It also unloads on a Sunday; this attracts penalty rates to the wages of those employed in this procedure, adding additional costs to the service. The list of imported food includes fresh meat, smallgoods and dairy products, fresh vegetables, bakery products including fresh bread, eggs and poultry, frozen seafood and other staples including flour and rice. Like many islands, King Island is not self-sufficient in food, but it can afford to import its requirement where necessary. In so far as the whole food system on King Island is able to provide food for all, this challenge is considered met.

The second challenge for food systems to be included in the Justice and Fairness field of endeavour is the ability of the food system to reveal, challenge and dismantle injustice in the food system. This is considered to be done by upholding the dignity and quality of life for all who work in the food system, at the same time supporting the relationships between local people and their land, and envisaging the creation of

fair alternatives to unjust food systems. King Island is part of a 'first world' community, as such it is able to provide a relatively high standard of living for its employees. It is however challenged by global trading conditions that are uneven. The small local market cannot adequately support emerging alternatives to the current system, as required by this challenge, leaving them vulnerable if circumstance leads to the departure of the two TNCs. A viable community system of agriculture would be able to operate in concert with the TNCs and act as a buffer if current circumstances change. The challenge of this practice is only partially addressed on King Island.

Third amongst the four challenges described in this endeavour is the ability of the food system to create a just food system structure and care for food system workers with policies that protect workers and cultural diversity. As ascribed in the previous challenge, King Island's agri-food system is supportive of its workers. The TNCs are equal opportunity employers and import labour, at the same wage rate, when necessary from overseas countries. It is factors outside the food system that relate more to the island's isolation, than to the food system, that impact on the workers equal opportunity. Travel to and from King Island and access to markets is restricted to expensive air services; aside from hire cars and school buses there is almost no public transport, and housing is limited and consequently expensive. The minimum wage paid to workers on King Island, while adequate for urban and peri-urban residents in larger regions, is often insufficient given the additional expenses that living on King Island can perpetuate. Because the current agri-food system cannot compensate for isolation, this challenge is difficult to address, and designing a sustainable agri-food system that can compensate for isolation may be equally difficult.

Challenge four for the justice and fairness field of endeavour is the ability to ensure that public institutions and local businesses support a just community food system with public procurement policies for schools, and support for local community stores and local food processing facilities that are able to act a viable community and economic drivers. In so far as they can, the King Island council supports the agri-food system. In line with community expectations, the King Island Council has taken on an economic development role with a strategic plan that includes a target population of 3,000 people, equitable access to the island and to export markets,

power price parity with other Tasmanian communities, improved education and work skills, natural resource management and the King Island Brand (King Island Council 2004). The council facilitates groups of volunteers that work on a diverse range of issues such as a population strategy, branding, shipping, networks such as a chamber of commerce, tourism, arts and culture and more. Beyond that, their influence is limited.

The Tasmanian Government holds legal jurisdiction over King Island, and as such is committed to providing public services for the community there. Historically the state has supported agriculture of King Island; however, for more than two decades it has had only a limited role in the development of the agri-food system. Recently the state was placed in a position by the abattoir owner that necessitated deeper engagement, and they provided an interest free loan to the company for upgrades to plant to ensure compliance with environmental requirements, and the threat of closure of the plant was averted for the short term, however, ultimately, and the literature would suggest, inevitably, the plant closed. Other state government support is indicated by the interest of the Department of Economic Development, Tourism and the Arts (DEDTA) in forming ongoing relationships with the King Island community (King Island Council 2012). Federal government support is evident in a recent visit by Enterprise Connect seeking to assist in strategic alliance building with existing networks. There has also been talk of a government funded feasibility study for a local group to buy and run the abattoir, however there is no indication that the present owner will sell.

The King Island community depends on a strong agri-food system, and most of the local businesses support the local industries up to a point. They do, as they should, seek value for money, and if the King Island product is priced higher than a substitutable equivalent, loyalty is tested. There is also an issue of continuity of supply. Produce on King Island, particularly seafood and fresh fruit and vegetables, is seasonal. This makes it necessary for some businesses to seek additional suppliers at certain times of the year. This challenge as outlined above is only partially addressed.

5.2.2 Builds strong and resilient communities (field 2)

The second field of endeavour outlined in the Whole Measures template calls for a food system that builds strong and resilient communities. The first challenge in this endeavour is to improve equity and respond to community food needs. This involves bringing a broad range of community members together to define and support food-related goals, and build capacity for the community to have some measure of control over its food resources and assets. For Whole Measures this builds resilience to threats such as food insecurity, violence, disease, illiteracy, and fuel and energy shortages.

Similar to the emancipatory question outlined by Constance (2008), equity on King Island has become a challenge with some arguing there is a widening gap between the 'haves and have nots'. Those who own the land and businesses are substantially better off than those who work for minimum wages in the two major industries. Both the dairy and the abattoir have expressed difficulties with finding and retaining staff, particularly at the rates of pay they are able to offer. Much of the local youth leave for the opportunity of brighter prospects and workers are being imported from overseas countries in an effort to fill the gap. This left one local to lament that there was no longer the certainty of casual work for King Island students returning from their studies off island. This had traditionally been a reliable source of supplementary income for many students who are forced to continue their studies away from home.

The fact that two TNCs control the two major economic drivers for the island means the locals have little control over their major food assets. There are however, other, smaller food industries on King Island looking to wrest back the King Island 'brand' for the benefit of King Island, and they are assisted in this by the local council. This is evidence at least that there is some capacity for local empowerment. While not wholly resolved, the challenge of improved equity is partially addressed.

Challenge two in this field of endeavour is the ability of the food system to contribute to healthy neighbourhoods by ensuring a space for food production in the community, with an understanding that the food goals of a community must be balanced with the need for housing, transport and social goals. Both of the TNCs with assets on King

Island understand they must have a healthy relationship with their local community, particularly the local farmers that grow beef or supply milk to their enterprises. They employ local King Island residents where they can. That they do so within the constraints of an uneven global market paradigm leaves them constrained to do much further in this particular field of endeavour. There is little capacity in the current system to balance economic imperatives with community social goals such as affordable housing, public transport, or volunteerism. This challenge is not addressed under the current agri-food system.

The third challenge in the field of endeavour to build strong and resilient communities is to build diverse and collaborative relationships, trust, and reciprocity through the cultivation of a learning community. A learning community open to dialogue, research and education, and change is strengthened in its capacity to create and maintain relationships along the whole food chain. In support of this, there are moves in the community on King Island to construct more collaborative relationships. Local initiatives include the King Island Beef Group, The King Island Chamber of Commerce, the KIBMG, the King Island Regional Development Organisation, and the King Island Shipping Group. There has also recently been an alliance building workshop conducted on King Island by the federally funded Enterprise Connect team that drew representatives of these groups together to seek common ground around particular King Island issues (Jones 2012 pers. comm.). These groups are seeking to build constructive relationships that cross industries and expertise and while the TNCs have representation to these groups, they are not leading the process. This challenge is partially met.

This field of endeavour is rounded out by the fourth challenge, the ability of the food system to support civic participation, political empowerment, and local leadership which respects the community and empowers their decisions around their local food system through improved access to local government agencies that can support their endeavours. It is evident that the agri-food system on King Island is dominated by two TNCs in turn creating a power imbalance with the local community. Decisions made elsewhere often influence the ability of the King Island community to make any change to their own agri-food system. Property prices on King Island are linked by these companies to global food prices, and a drop in milk prices for example may

lead to the devaluation of dairy properties, with farmers turning to beef, or vice versa. This could lead to imbalances with too few farms producing enough milk for the dairy, and too much beef for slaughter.

It is not just King Island farmers who own farming land on King Island. King Island Scheelite, a mining company, once held extensive rights to land on which they grazed beef cattle. Managed investment schemes hold several thousand acres and some are said to export the cattle live to mainland Australia, by-passing the local abattoir. A number of dairy farms are held by off-island companies but managed locally. Given the diverse range of actors and power imbalances in the agri-food sector on King Island, the local community is less empowered to act on their own behalf, or in their own best interests.

5.2.3 Vibrant Farms (field 3)

The whole measures approach believes vibrant farms to be an important field of endeavour for creating sustainable food systems. The first challenge in this endeavour that a local food system faces is the ability to support local, sustainable family farms to thrive and be economically viable. Explicitly this refers to capacity of the farmer to be environmentally friendly with policies that support SMEs in particular as they move to 'alternative' markets or regimes. Farmers who were interviewed on King Island felt their operations were environmentally sustainable. As environmental restrictions around shelter belts and water ways were imposed, the farmers had complied, although with some reservations. The requirement to fence water ways and shelter belts had improved the habitat for local wildlife, however has exacerbated a management problem that sees valuable pasture lost to wallabies, a species that has no natural predators on the island.

As well, the issue of fertiliser use was having an environmental impact that would need to be addressed in future. Water resources were not seen as a pressing issue; King Island is blessed with regular rainfall, and has access to natural ground water storages. The farmers of King Island are proud of their clean, green image, and find it a useful marketing tool.

The second challenge in the endeavour to create vibrant farms is the ability of the food system to protect and care for farmers and farm-workers which includes the rights of workers being upheld, fair wages and working conditions are consistently applied, and the capacity within the system to retain and attract new farmers. To this end, farmers and farm workers on King Island are protected by national and state work place policies that are designed to ensure safe working conditions and fair pay. Given market conditions however the ability to attract new farmers is difficult at this time. This challenge, while met with legislative provisions, is pressured by fluctuating market conditions.

Challenge three in this endeavour is the ability of the local food system to honour stories of food and farm legacy through community voices, with historical lessons providing context for any future planning. The research found that the farming community on King Island is a strong one; however the historical context of King Island is based on its maritime strengths. Many landmarks, beaches and rocky outcrops are named for the ships that came to grief there, leaving the relatively short and uneventful history of food production on King Island to be told as oral histories (see Addison 1995 & 1998). For visitors to King Island it is difficult to buy fresh local fish, and the supply of local beef to the few dining establishments is limited. Culturally, preparing and eating local food is not as embedded as food production. The export focus of the food industries is balanced with the importation of many and varied food stuffs, including fresh fruit and vegetables.

The final challenge for the vibrant farms field of endeavour is the capability of the food system to respect farm animals with safe, humane practises, while the animal lives, and through to the slaughter processes. As with industrial relations for workers, farm animals on King Island are protected by legislation for their humane treatment. There is a resident vet who adequately cares for the sick and injured animal population. Economic realities do however impact in some areas of production. The lack of processing facilities means that any bull calves born on dairy farms are usually killed and buried straight away. Also, veterinary treatment for farm animals is normally weighed up against productivity outcomes. Since the abattoir closed, all cattle for processing must be shipped to offshore facilities, and this has raised some

concerns about animal stress levels, however each beast must be rested for several days after shipment before slaughter.

5.2.4 Healthy People (field 4)

Whole Measures' also believes a food system should promote 'Healthy People', the fourth of their six fields of endeavour. The first challenge to the local food system lies in its capacity to provide healthy food for all; meaning that all community members have access to healthy affordable food, that is able to encompass cultural diversity, and increase access, through policy if necessary, to ensure ongoing availability of land for food purposes. The community of King Island is required to import the food it does not produce for itself, and while there are at times cost and quality pressures, most on King Island could be said to be food secure. Land use on King Island is also protected for food and fibre provision by an act of the local government that prohibits forestry plantations on the finite grazing land.

The second challenge for a food system to promote a community of healthy people is to ensure the health and well-being of all people, inclusive of race and class, through deeper understanding of interrelationships between inequity and food security. On King Island at this time, there are no visible pressures of food security caused through inequity that would undermine the health and well-being of the King Island Community.

Challenge three for the endeavour to promote healthy people is the way in which the food system connects people and the food system, from field to fork, through a range of connections between producer and consumer, consumer and the environment, and the consumer with deeper food knowledge. While food production is culturally embedded, food consumption is generally a private concern and not an overtly cultural experience as can be seen in some European countries for example. There is little evidence of connectivity between the producers and consumers of King Island agri-food products. This challenge is not yet met on King Island; however it could be argued that the development of networks relating to brand and brand promotion could work toward addressing this issue.

The capacity of a food system to promote healthy people is also challenged by the way it is able to connect people and land in a way that promotes health and wellness, allowing safe access to rural experiences, equity between access to land and food production, and the promotion of shared food experiences; growing, cooking and eating. The lived experience of King Island allows for deep connection between food production and the landscape. Fences are designed to keep livestock in, not people out. It has a constant rural vista of enviable amenity, free-grazing cattle and sheep on green pasture, naturally fenced by rolling seas. This strengthens the image of quality King Island depends upon to sell its products. The consumption of food is generally separate to the production of food. In a uniquely island way, there is however one particular food experience of note: The harbour at Currie boasts a restaurant with no food; a re-built boat shed with tables, chairs, crockery and cutlery that can be used by the public who bring their own food and beverages. This experience enables visitors to relate to the local environment while cooking and eating a meal. This gives support to the observation that this challenge is partially met and suggests opportunities.

5.2.5 Sustainable Ecosystems (field 5)

According to the 'whole measures' philosophy, sustainable ecosystems are based on interdependent relationships. The first challenge for the local food system to promote this lies in its capacity to sustain and grow a healthy environment. King Island agri-food producers understand that caring for their land and animals is an important part of their ongoing viability and sustainability. Local farmers accept that it makes economic sense to look after the land, and most believe that it is just another part of carrying on a good business. This challenge is not only met on King Island, farmers are able to leverage sustainability concepts for productivity benefits.

The second challenge in creating sustainable ecosystems is the ability of the food system to promote an ecological ethic. The food system on King Island understands the context of a sustainable environment and food production, but producers struggle with poor soils that require extensive fertiliser use for any necessary productivity gains. Further research and extension from research institutes would assist farmers in this challenge, however once again the constraint of isolation and small population

make it costly to service. Organic agriculture is practised by only a handful of people on King Island, and while several farmers do their best to work toward greater environmental sustainability, some admit that the rate of return they receive for their product leaves them unable to proactively pursue this goal as much as they would like. This suggests there is more work to be done on this challenge before it proves beneficial for King Island farmers.

Challenge three for the local food system to promote sustainable ecosystems lies in its capacity to enhance biodiversity. The present biodiversity of King Island's flora and fauna is a consequence of its history. Massive land clearing, large uncontrolled fires, and indiscriminate hunting have seen much of the original biodiversity lost. What remains now is protected by law. The current food production system on King Island works within these constraints, however it does not actively promote greater or enhanced biodiversity. Individuals remain committed to creating safe environments for protected bird species, for example, but as a system King Island remains passive in this area. This challenge is not met.

The remaining challenge for the whole measures approach and its endeavour to create sustainable ecosystems rests on the ability of the local food system to promote agricultural and food distribution practices that mitigate climate change. As a remote island, this is a vexed issue. The use of fossil fuel to freight products on and off the island is necessary, and a heavy cost to the system on King Island. Energy needs on King Island are met with a mixture of wind and solar generated power, alongside energy from large diesel generators. Discussions around increasing the capacity of renewable energy on King Island continue. Since the research phase of this work was conducted in 2011, the Tasmanian Government, through their government business enterprise Hydro Tasmania, have created TasWind King Island, a concept to build 200 wind turbines on the island and export the power to mainland Australia via an undersea cable (TasWind 2013). This is a highly contested issue on the island and one, while peripheral to this research, which will influence any regional development project going forward. Consequently this challenge is a work in progress.

5.2.6 Thriving Local Economies (field 6)

Thriving local economies for 'whole measures' approach relies on the ability of the food system to form decisions that ensure the wellbeing of future generations in place. Challenge one in this endeavour is to create local jobs and build long-term economic vitality within the food system. As indicated earlier, this is not historically the case for the food production system on King Island. It remains subject to the vagaries of global market forces, with peaks and troughs of local employment and economic strength. The economic restructuring of the 1980s saw significant upheaval and uncertainty in the community and the recent closure of the abattoir is further evidence that the present food system on King Island does not meet this challenge, nor has it been successful in finding solutions.

The second challenge in the endeavour to create thriving local economies lies in the capacity of the local food system to build local wealth. This again is a vexed issue for King Island. Some individual producers on King Island are able to build their own wealth, and distribute most of it within the community, however while the major processors are owned by offshore companies, profits from those businesses will continue to head off shore. Additionally, while the community continues to import many food stuffs, they will continue to spend much of their income outside the local community. Statistics referred to earlier indicate that the overall wealth creating capacity of King Island is in decline and consequently this challenge is not met.

As outlined in chapter four, the population, and wealth generated within the agri-food system on King Island is in decline, so the third challenge in creating thriving local economies through sustainable food systems - the ability to promote sustainable development while strengthening the local food system - is proving to be a difficult one for King Island. The dairy industry has rationalised significantly with larger, but fewer farms, including a number of operations with absentee and/or corporate owners. The beef industry is again under immense pressure with the closure of the abattoir. The structure of the food system on King Island has not, in recent years, proven to be a reliable economic driver for the community, nor a robust platform on which King Island can potentially base a sustainable future. The dominance of the two TNCs in the local food system, and the reliance of the community on these

TNCs has not been able to forge a sustainable path to date. This challenge is not met.

The last challenge to be posed for the creation of thriving local economies through a sustainable food system is the ability of that system to maintain infrastructure that supports community and environmental health. Much of the physical infrastructure on King Island is aging, and struggles to meet current needs. Issues have been identified around the port capacity, disused processing facilities, empty shops, costly access issues, and more. There is little capacity within the King Island agri-food system to address this challenge and infrastructure that has previously been available for public use, such as slaughter services for local meat consumption, have been withdrawn with the closure of the abattoir. Shipping services are also under review. The challenge of building and maintaining infrastructure for the benefit of the whole community is not met by the current agri-food system on King Island.

Overall, a quarter of the challenges outlined by the six fields of endeavours required to create a sustainable local food system are met on King Island. The current food system is able to provide food for all, protect and care for farmers and farm workers, respect animals, ensure the health and well-being of all those on King Island, and sustain and grow a healthy environment. Another seven challenges are partially met, or works in progress, providing opportunities for improvement with some minor tweaking. Almost half the challenges faced by communities as they strive for a sustainable local food system are not met on King Island; however this should not be seen as a failure. It actually encourages a deeper look at the system in order to identify where changes can be made, and how that might be done.

5.3 King Island and the Ten Barriers to creating a sustainable agri-food system

In an effort to identify where changes to improve a local food system can be made, it is necessary to examine the value chain within which the system sits. This thesis uses Wiskerke's (2002) final report to the EU from the SUS-CHAIN QLK5-CT-2002-01349 project, *Marketing Sustainable Agriculture: An analysis of the potential role of*

new supply food supply chains in sustainable rural development, to identify similarities between systems in Europe and King Island, and issues that need to be addressed when trying to construct a development platform based on agri-food.

Wiskerke (2002) suggested that sustainability concerns around modern food supply chain had led to additional rules and regulations to support food safety, animal welfare and quality assurance schemes. In Wiskerke's (2002, p7) opinion, these rules

have failed to incorporate other sustainability criteria, such as the distribution of value added along the food supply chain, the negotiation power of primary producers, the equality between stakeholders in decision making power, et cetera . In addition, rules and schemes aimed at regulating conventional food supply chains have also ignored the potential synergistic links between food supply chains and sustainable rural and regional development.

This report by Wiskerke (2002, p69) then identified ten constraints or barriers that food supply chains face when trying to respond to such concerns, and attempt to incorporate sustainability within their systems. The King Island data will now be analysed in this context in an effort to reveal possible endogenous responses to and offer some ideas as to how these barriers can be turned into opportunities.

5.3.1 Barrier One: The willingness of consumers to pay more for higher quality products is very limited.

Wiskerke (2002) found that price seemed to be the most important barrier for sustainable consumption as it had been mentioned either directly or indirectly in each of the countries of his case studies. This is also the lived experience on King Island. Some farmers believe that there is limited understanding of the costs of production by consumers, and that this affects their willingness to pay. Economic rationalisation is now normative in Australia, and the structural constraints of being a remote island trading in a global environment raise little sympathy. Several of the farmers on King Island suggested that the willingness of consumers to pay more for

quality products is a constraint to the growth of their industries, and also limits their aspirations for environmental stewardship.

Limited consumer knowledge can be addressed says Wiskerke (2002) with education and the communication of information surrounding the true nature of the food system. This he suggests can be done through better contact with consumers, continuous dialogue to enable improved knowledge, and a limitation in the number of sustainability labels whose number and language confuse rather than educate consumers (Wiskerke 2002, p71). The moves of the King Island Brand Management Group (KIBMG) to re-invigorate the brand are supported by these findings. The findings may also suggest a possible way forward which is to target the brand marketing in a way that particularly tackles the reluctance of consumers to pay more for sustainable food.

5.3.2 Barrier Two: Common goals across the whole chain are difficult to achieve given the diverse range of actors and interests.

This is also true on King Island. Prior to the abattoir closing, consensus was difficult to achieve within the meat processing sector, particularly around the meaning of the King Island brand. As evidenced above, there is a diverse range of actors in the agri-food system on King Island. They are trying to work together, but a power imbalance is evident. One producer commented that the benefits to accrue from collaboration was dependent on “your place in the hierarchy”, suggesting that some groups were more inclusive than others.

Wiskerke (2002), McCall (2010) and others call for a common goal or vision that all actors in the chain can commit to with energy and enthusiasm, with strong governance and transparent motives. Actors in the chains include producers, processors, retailers and consumers. All need to be on the same page, and it can be argued that the KIBMG is working toward this goal. However it is constrained through lack of resources to make a significant push, particularly in relation to the governance of the brand. More needs to be done in this area as there could be an opportunity here to leverage the advantage of the long history many producers on King Island share.

5.3.3 Barrier Three: Problematic competitive environments with high regulatory costs.

Wiskerke (2002, p69) suggests that modern, or as he terms them conventional, food chains cause “substantial external costs” and also says they support schemes that may hamper fair competition. Friedmann (2005) agrees, as does Kaplinsky (2000) who suggests that regulatory regimes imposed on producers by supermarkets (but not funded by supermarkets), and governed by supermarkets, results in supermarkets capturing the value created by this ‘quality’ assurance rather than the producer.

High regulatory costs were also a concern for King Island producers. Food production in Australia is highly regulated. There are a range of both private quality assurance schemes imposed by supermarkets, and public auditing regimes overseen by environmental health authorities that impact on food producers, large and small, which must be taken into consideration when examining the sustainability and viability of King Island’s agri-food system. For example each batch of cheese must be tested for microbiological threats such as listeria. These cost, through public testing authorities in Tasmania, approximately \$100 a time. For larger batches, the cost is more easily absorbed; for smaller boutique or niche batches the cost, which must be passed on to the consumer, is more prohibitive. If the batch is only a 100kg batch, this adds a dollar per kilogram to the cost of production. If the batch is 1,000kg, then it adds only ten cents per kilogram to the cost of production. This is a clear case for efficiencies of scale, which some small food systems cannot, or do not want to, engage with.

Wiskerke (2002) calls for support for smaller food supply chains mainly through a form of government funding, much more likely in the EU than it is in Australia. King Island will need to look to other options to overcome this barrier, necessitating further research.

5.3.4 Barrier Four: Growth of an initiative may lead to a loss of individual actor independence and changes in governance leading to imbalances in power relationships.

The growth or scaling-up of an enterprise or initiative may lead to, according to (Wiskerke 2002), negative effects within the food supply chain. The growth of one particular enterprise may lead to “a less even distribution of power” (Wiskerke 2002, p69), or a loss of self-governance, as evident on King Island. The growth of the dairy processor on King Island in the 1980s led to the loss of local control. There was not enough local financial support for the dairy when it faced financial difficulties at the time, and it was sold to off-island interests. This returned King Island farmers to the status of price-takers, and not price-makers, with little influence in the milk supply chain.

Additionally, the growth of the abattoir on King Island, to the point where it had to continue to grow, or achieve productivity gains, to remain viable, placed pressure on individual actor independence. As with the dairy, lack of local capital led to the sale of the abattoir offshore in the 1980s. In 2011 the international owner called for higher throughput of cattle to enhance its productivity, leading to pleas for no cattle to be shipped off for processing. This placed pressure on beef farmers who, for reasons of their own, did not wish to sell to the abattoir. Again, despite the work of farmers to support the abattoir owner in its push for productivity gains, their lack of influence in the food supply chain was made clearly evident with the closure of the abattoir in 2012.

Economies of scale, so important to the current economic paradigm, and continuing efficiency and productivity gains, are difficult to achieve in small food supply systems, but it is doable. There is an opportunity here for small systems to look to alternative markets that actively seek differentiated products, and to reduce their dependence on commodity markets that place constant pressure on farm gate returns. In the 1980s, actors on King Island such as Bill Kirk sought to do this, and he was successful to the point that the enterprise grew beyond him and his family, highlighting the need for a cautionary approach to growth strategies.

5.3.5 Barrier Five: Growth for growths sake alone can lead to an FSC losing authenticity and credibility.

For Wiskerke (2002), the issues around scaling-up of initiatives include issues of perception, particularly the claims of credibility and authenticity. 'Home-style' for example loses much of its rigour if the product is manufactured in a large factory, untouched by human hands. A larger enterprise may also service larger markets that local production may not be able to adequately supply, as they are impacted, for example, by seasonality, requiring imports to fulfil market requirements. How is the consumer to know the difference?

For its part, King Island has worked hard to maintain its authenticity in the market place by initiating action against those who would misuse the King Island brand. They have also, through the brand management group, instituted a requirement that for a product to carry the King Island name, it must have undergone some form of transformation, or value-added, on King Island, and so add to the King Island economy. The issue remains constant however, as King Island products are only a very small part in the very large machines that 'own' them. There is no guarantee that substitution will not dilute or sabotage the brand from within the companies that control them. Now, with the closure of the abattoir, the authenticity of the King Island Beef brand is severely diluted. Strong governance is then seen as vital to maintaining authenticity and trust (Bowen 2010, Cooke 2008). This also serves as a reminder that while enterprise growth is generally good for regional development; local ownership (embeddedness), governance and strong relationships are also important factors for the sustainable economic development of islands and other rural regions (Baldacchino 2008, Rupasingha & Goetz 2013).

5.3.6 Barrier Six: Institutional financial support is weighted to support mainstream production.

This report by Wiskerke (2002) is based on the EU experience, and Wiskerke is discussing the use of subsidies that are targeted at agricultural production for the world market, sidelining small, alternative systems. Such overt subsidies are no longer part of the Australian food system. However there are other forms of

institutional support that can be used to assist agricultural producers, such as research and development, business planning, information sharing, drought and flood relief where appropriate and reduced asset thresholds used when determining eligibility for social security payments. None of these however are peculiar to agricultural production.

In Tasmania there has been a large public investment in water infrastructure to improve growing conditions in areas perceived to be underutilised. This is an ongoing project, however as suggested by Coates in 2009, if this more expensive water is used for low value commodity crops, its strategic influence for the development of Tasmania is somewhat diluted, in line with Morgan et al's (2006) 'commodity ghetto' scenario. Similarly, the public investment in the dairy industry in Tasmania has been targeted at milk production for low-value milk powder products, a commodity, as opposed to higher value quality cheese and milk products.

Governments of all levels have supported King Island food production in the past, and remain interested in its future. Historically, given the sale of the dairy to repay government loans, there is a mistrust of the Tasmanian government funding schemes. Unfortunately there are too few on King Island willing or able to take advantage of the financial support available. Initiatives to facilitate stronger networks, and funding for a feasibility study into the abattoir are recent public investments, however they are seen as peripheral to the real issue of creating a sustainable food system in an era of unsustainable trading conditions.

5.3.7 Barrier Seven: Trade liberalisation continues to contribute to a cost-price squeeze with arguments that some imported foods have an unfair competitive advantage.

Wiskerke (2002, p69) asserts that trade liberalisation contributes to a cost-price squeeze and there are perceptions in European countries that food imports are "unfair competition for domestic producers due to less strict regulations", and there is a recognition of the need for clearer country of origin labelling. King Island also shares this sentiment, along with Tasmania, and Australia generally. King Island competes in a global market, and almost anywhere else in the world would be able

to produce a similar product more cheaply. In calling for clearer country of origin (COO) labelling, Wiskerke (2002) reflects the EU experience. Australia has limited COO regulations, and moves to strengthen these are often contested by TNCs.

It is difficult to see where the political will lies to combat the effects of trade liberalisation on Australian farmers. In February 2013, Australia's farming lobby group, the National Farmers Federation (NFF) pleaded for more investment in research and development in agriculture to drive innovation and productivity (NFFa 2013), however this has been contested by the Institute for Public Affairs (IPA) who have called for all federal research and development to be abolished, as to date it had been ineffectual (NFFb 2013). The friction between sustainable agriculture and the economy is manifest in Australia.

5.3.8 Barrier Eight: Alternative FSCs are hindered by the lack of small to medium sized production and processing facilities.

The EU has seen the closure of smaller-scale abattoirs in large numbers (Wiskerke 2002). Wiskerke (2002, p70) sees this as evidence of a "stripping out" of the mid-range producer/processor as a consequence of global competition. These businesses have grown to a point where they are too big to be niche, but too small to leverage the economies of scale required for global competitiveness. This in turn he says makes it harder for micro-enterprises to scale-up; a 'stepping stone' is missing, and for many small enterprises looking to grow, the process of scaling up is seen as a bridge too far.

King Island's abattoir is one example of a mid-range facility closed as a consequence of competition. The dairy factory remains open, but must also be vulnerable to this trend. Smaller facilities, such as a small animal abattoir and processing facility, and a milk drying plant were built in the early 2000s however neither have been successful and both are now closed. It remains difficult for alternative food systems to gain a foothold on King Island, and much focus has been on maintaining the markets they already have, not creating new industries.

5.3.9 Barrier Nine: Power negotiations between large scale processors or retailers and smaller producers are asymmetrical and often thought of as placing unfair pressure on conditions of supply, such as price, quantity, quality et cetera

In many of the reports for the SUS-CHAIN project headed by Professor Wiskerke (2002), an asymmetry of power existed between small-scale producers and large scale processors/retailers, a trend that was evident even where 'quality' products were involved. This is as true on King Island as it is in other areas of Tasmania and Australia. Often farmers are reported as price-takers, and negotiations around conditions of supply are heavily weighted in favour of the large processors. Wiskerke's (2002) response calling for small producers to coordinate their actions when attempting to negotiate contracts of supply is already in action in Tasmania and on King Island, to little avail. Recently the NFF called for a mandatory code of conduct for supermarkets to prevent the misuse of market power (NFFc 2013), demonstrating the seriousness of this as a barrier to creating sustainable food systems not only on King Island but in Australia as a whole. The concentration of power to too few large TNCs needs to be addressed at a national level before truly sustainable food systems can be envisaged.

5.3.10 Barrier Ten: The high market share captured by large retailers undermines ethical and sustainability initiatives due to their reluctance to support place of origin labelling.

Wiskerke (2002, p70) reflects a widespread recognition that "large retailers will only promote a particular initiative if it is in their own commercial interest to do so". This is seen as a major bottle-neck for those promoting more sustainable food systems, given the high percentage of market share the large retailers enjoy. If they wish only to promote lower prices, not sustainable, or local products, the message the latter groups are trying to convey is often lost. In Australia, the two major supermarkets rail against requirements for clearer COO labelling at the point of sale, and this filters through much of the retail sector. King Island has pressured the ACCC to prosecute the misuse of the King Island brand, with some success, however the lack of legislation to protect place of origin labelling remains problematic for all regions trying to differentiate their product. This reluctance to integrate COO in standard

retail promotions in Wiskerke's (2002) opinion undermines ethical or sustainable attributes of a product and their ability to be leveraged in the market place.

Each of the ten barriers Wiskerke (2002) identified in the creation of sustainable food supply chains is clearly evident on King Island. In response to these barriers identified in Europe, Wiskerke (2002) developed a framework to promote stronger governance, deeper regional embedding, and better, more strategic marketing that may address some of the issues identified. Known as GEM (Wiskerke 2002), the framework will now be applied to the King Island data.

5.4 King Island and the fourteen lessons learned when trying to develop sustainable agri-food systems in Europe

The King island case study demonstrates that there are gaps in the current food system that need to be addressed in order for it to be a sustainable one. Another approach to identify possible ways forward comes from the GEM framework. The fourteen lessons for developing sustainable agri-food systems outlined here comes from research into how GEM – or Governance, Embedding and Marketing (Wiskerke 2002) – played out on the ground in fourteen different case studies from seven European countries.

Roep and Wiskerke (2010) found that some local food systems required more governance, some required a deeper connection or embeddedness with their community, and others looked to stronger marketing campaigns from the development of their chains. As discussed earlier this is a very relevant lens through which to examine King Island. Indeed, the data collected on King Island revealed that if the community is to have a sustainable agri-food system they would do well to heed most of the lessons learned in the European case studies described by Roep & Wiskerke (2010).

5.4.1 Lesson One: Developing a supportive institutional environment.

The first lesson Roep and Wiskerke (2010) discuss is 'Developing a supportive institutional environment', which emerged from the case study of the Latvian Beef Cattle Breeder's Association (LBCBA), and their attempt to create a sustainable beef industry in Latvia. This development required a huge paradigm shift in a country used to eating beef only when the cow was no longer producing milk. While the operating environment on King Island is substantially different to that of Latvia, issues around mutual trust between processors and producers, and the bargaining power of large retail chains have some resonance. Roep and Wiskerke (2010) call for a strong, linked-up policy framework that can assist LBCBA and similar groups to support their industry chains in: understanding the market place and its constraints (governance); building trust and strong relationships between chain partners (embedding); and educating consumers about what quality beef looks and tastes like, with the assurance and labelling schemes to back it up (marketing).

While much of this discourse is familiar to King Island, there is a disconnection at the policy level in Tasmania and Australia. Without a coherent food policy, one that encompasses economic, environmental and social policies, to guide initiatives to strengthen regional food chains, much of what can be done to support King Island agri-food producers can only be a part measure. One example is where the local King Island council acted against Tasmanian state planning regulations when arguing to stop the take up of grazing land for forestry practises. Commercial forestry practises are prohibited on King Island under regulation 3.10.4(b) of the planning scheme (King Island Council 2010). Another example is a weak consumer and competition regulatory body (ACCC) that cannot hope to prosecute every breach of copyright against a King Island brand should another be developed. As in Latvia, greater cohesive and coherent institutional support would be welcomed to support the creation or re-creation of a sustainable agri-food system on King Island.

5.4.2 Lesson Two: Creating a space for change

In the European studies, lesson two came from a small pork supply chain in the Netherlands. The pork industry in the Netherlands is dominated by large

concentrated processors and retailers, and Roep and Wiskerke (2010) believe that this case study shows the importance of aligning small producers with non-commercial, societal stakeholders to 'create space for change'. The De Hoeve family wished to create distinctiveness by moving away from intensive pig breeding and towards organic approaches however legislative, economic and social pressures left them little space to do so (Roep and Wiskerke 2010, p28). With the support of external societal and environmental organisations however, they have achieved a measured level of success. First through an environmental licence for their unique housing system, then through an environmental assurance label, and then scaling up with the assistance of feed producers and a local butchers network that helped secure the funding required. The De Hoeve family now have a network of pig breeders using their certified system and producing pork under the Milieukeur pork brand.

In comparison King Island trades heavily on its 'clean, green' image, however there is little by way of certification to support the claims. As mentioned earlier, the producers are aware of the importance of a quality environment to support production and marketing, nevertheless there are concerns that the perceptions in the market are not necessarily underpinned by reality on the ground. There are supporters of 'organics' on King Island, there are those concerned with bio-diversity and habitat protection on King Island, and there are also those concerned with water quality and environmental degradation and salinity issues on King Island, yet these people are not coherently organised toward achieving a common goal. More could be done to galvanise and organise these parties and more to work in tandem with the brand management group for example to design and legitimise a fresh, socially inclusive and environmentally friendly brand that many could leverage in the market place. One constraint on this as a legitimate alternative strategy is its reliance on volunteers and/or innovation champions already working hard within the current agri-food system, and the lack of institutional coherence highlighted earlier. Looking outside traditional supply chain partners for the rejuvenation of 'King Island' remains however an intriguing option for further consideration.

5.4.3 Lesson Three: A strategic alliance with chain partners

The necessity for and value of a strategic alliance with chain partners is the third lesson taken from the Roep and Wiskerke (2010) cases studies. The experience of a Belgian dairy cooperative demonstrated for them that just selling a product, without mutual commitment or shared marketing concept around values, does not provide the differentiation required for a sustainable agri-food system. The cooperative has been unable to develop a strategy for their niche products, or their brand, that is clear or coherent, and so has been unable to link successfully with consumers.

This is a timely warning, and a lesson worth heeding, for the KIBMG. While some of the volunteers are working very hard to develop an umbrella brand, there remains scepticism that it will work for everybody, or convey a message clear enough for chain partners to adopt and then leverage in the market place. The contention around the branding of King Island Beef and what the King Island Beef brand actually means, and for whom, is a clear example of this. This is made more difficult when you consider that the two multi-national corporations that dominate the King Island agri-food chain already own established brands, and would not look to engage in a marketing campaign that would diminish their individual value.

5.4.4 Lesson Four: Willingness to invest in a share enterprise

Leading on from Lesson 3, Lesson 4 suggests that if a shared vision and collaboration is achieved, and a food supply chain can be renewed, and perhaps scaled up, then a 'willingness to invest in a shared enterprise' becomes necessary for all chain partners. The De Westhoek region of Belgium was identified by one EU organisation as being in need of "revitalisation" (Roep & Wiskerke 2010, p51), and five core actions were defined in response:

- i. The reinforcement of the economic fabric of the region;
- ii. Further development of tourist infrastructure;
- iii. Continuation of agricultural and horticultural activities in the region;
- iv. Continuation of offshore fishing and;
- v. Education and training.

One project to develop from this was De Westhoek Hoeveproducten designed to increase sales of farm products, and add value, by way of collective action and brand development. It began by exploring the legislation governing on-farm processing and sales to develop a how-to-guide to assist producers with compliance issues. Then a website and other collective selling mechanisms were developed to group products and farmers and give them new methods of distribution. When funding for this initiative ceased, some twenty farmers, spanning three industries were combining efforts, and sometimes products, and had begun to generate extra sales. This was followed by a common label, underpinned by a quality control regime and internal verification system, and direct marketing extension services.

The point of difference here is that farmers still sell individually, maintaining direct contact with consumers, while leveraging the benefits of cooperation to enhance marketing and communication results, and reduce some transaction costs by collective negotiation for delivery of services. DeWesthoek Hoeveproducten has become a not-for-profit legal entity (that still receives some external funding) can own and acquire property, and take out loans, without personal indemnity as a requirement. This legal entity requires a board of directors, five of whom must be members of DeWesthoek Hoeveproducten, demanding a deeper level of commitment to the cooperative. To scale-up further however, Roep and Wiskerke (2010) believe farmers must also be prepared to value DeWesthoek Hoeveproducten as a real extension to their farming operations, not just as 'pin' money useful when their usual markets are slow. This can be viewed as a demonstration of related variety (Asheim et al 2009, Lazaretti et al 2009) leading to innovation; the producers are still growing beef and selling it to their own markets, additionally they are working with a group of related producers to source and develop future marketing opportunities.

King Island shares some obvious similarities with this region of Belgium, however as a small island economy the opportunities for farm gate sales are almost non-existent, and investment in on-farm processing unviable for most. That is not to say the strategy is not a valid one for King Island. There is untapped potential for diversification if a direct marketing campaign can be established. Certainly there is increased potential for leveraging the value of tourism following from the construction

of two world class golf courses on the island. The implication here is that agri-food participants, and other social and economic actors on the island must be able to see the value of the initiative and act accordingly to work together for mutual advantage.

Given the declining returns and soft financial conditions at present, the level of commitment required for such a venture however may be a bridge too far at this time. For such a strategy to succeed on King Island, a level of external funding will be required.

5.4.5 Lesson Five: Mobilising investment capital for scaling up

Lesson five, 'Mobilising investment capital for scaling up' became apparent to Roep and Wiskerke (2010) after identifying a very successful dairy business in Germany. This company was able to attract funding from a range of public and private sources, as well as non-financial support, which has enabled growth and accompanying regional development. The role of advisory services to develop expertise and know-how, and government support in meeting legal requirements and applying for grant funds was an important aspect for this venture.

King Island, and similarly Tasmania and mainland Australia, does not receive government support for agriculture, as is evident in Europe. There is also an inconvenient truth that when government funding was supplied, and subsequently withdrawn, from the King Island Dairy in the early 1980s, several farming families, and the dairy operators, were deeply affected. Recently the operators of the abattoirs have received an interest free government loan to upgrade the waste system; however this was only to bring the plant up to environmental standards and save it (unsuccessfully) from closure, as the multi-national company involved was reluctant to invest in King Island further. In current economic circumstances, it is more likely that agricultural extension services will be further withdrawn than be increased to help the farmers of King Island help themselves. Personal equity, private bank loans and venture capital appear to be the only real options for King Island at this time.

5.4.6 Lesson Six: Anticipating implications for scaling up

Anticipating implications of scaling up, lesson six, has been demonstrated on King Island with the loss of local ownership when companies became too big to remain locally owned, and perhaps heeded the realisation they needed to wrest some form of control back. The case study from the European study, NaturaBeef, a brand owned by the Swiss Beef Breeders Association, had the foresight to imagine what scaling-up might mean and how they could safeguard their founding principles (Roep & Wiskerke 2010). The key aspect of this was for the association to retain ownership of the brand, and maintain control over quality assurance along the supply chain. According to Roep and Wiskerke (2010, p69), “This was crucial in maintaining a well-balanced, mutually dependent, relationship between them and the retailer.”

Baldacchino (2008) also promotes local ownership as vital for regional development in an island context. Many agri-food producers on King Island are beginning to understand this, as evidenced by the development of the KIBMG. The group was born not of a financial impetus, but of a management one. The use and/or misuse of the King Island Brands by the parent companies, and some operators wholly unconnected to King Island has been the driving factor in a move to regain some form of control over the brand and what it should mean in the market place, particularly in relation to assurances of provenance, quality and social well-being.

There are other examples of this becoming problematic at the state level, with foreign ownership of some Tasmanian sawmills. Actions of a parent company in other areas of the world are being linked by environmentalists to the Tasmanian industry in an effort to discredit the company in the market place, and tarnish the reputation of Tasmanian timber as being sustainably harvested. Once brand ownership is lost to local interests, so is their ability to maintain any influence along the supply chain.

5.4.7 Lesson Seven: A visionary and capable leader

A visionary and capable leader, lesson seven of fourteen, can be a vexed issue (Roep & Wiskerke 2010). Cooke (2007) advocates for a visionary leader or

champion, and for the Harmaakorpi and Pekkarinen (2003) model for constructed regional advantage to work, it needs a dedicated driver of the process. The passion and energy of a strong leader is essential for creating a differentiated food system, however there is always the question of what happens next – particularly when the vision becomes fully realised and too large for any one person to manage. Two of the points made by Roep and Wiskerke (2010) when discussing a Latvian dairy supply chain were that with growth comes increased complexity, the management of which must at some point become a shared responsibility, and that a de-centralised team of management or governance is more open to innovation and collective learning.

The King Island dairy has had two champions that have driven regional development on King Island. Bill Kirk is credited with re-vitalising the industry in the late 1970s and early 1980s, before striking issues with capital and government loans. Helen Waterworth was bought in by subsequent owners to re-brand and revitalise the dairy in the 1990s, with enormous success. However the departure of both left vacuums of the energy and impetus needed to maintain course. The unevenness of management and ownership can be unsettling and discourage local investment, so part of the anticipation of scaling up must include change management strategies and systems that support the individual to share their knowledge and expertise with a number of associates, enabling an easier transition of one style of management to another. While the future is always uncertain, change is inevitable, and the earlier contingency plans can be made, the better.

5.4.8 Lesson Eight: Building a strong brand

Regional development researchers globally support the notion that building a strong brand, lesson eight, is essential to move from high volume/low value commodity markets to more niche, lower volume/high value markets. CONO is a mid-sized dairy cooperative, based in the Netherlands. Their successful niche marketing strategy began in 1995, and has been solidly defended ever since. CONO's size is not considered a threat to larger dairy cooperatives (Roep and Wiskerke 2010), and as a consequence there has not (yet) been an attempt by the larger companies to enter the niche market CONO supplies. In trying to keep interest in their product high, they

have reinvigorated their packaging and have formed a strategic alliance with a packaging company. They were awarded an innovative packaging prize in 2005. The brand is not allowed to sit idle, it remains locally owned, and farmers are paid a premium for their milk.

The case study used from Europe is but one of a plethora of examples that demonstrate the value of branding to regions. King Island itself is a shining example of good branding practice – to a point. It is also a cautionary tale. The value of a brand to regions and regional producers is retained only when it remains locally owned. This is what Pike (2009) may call a ‘sticky’ or political issue. The value of some brands can sometimes be seen in the market as so lucrative that they outgrow the capacity of their place of origin to maintain them, and are sold to enable future growth. What has also been sold is the capacity to maintain control over brand values, and influence in the supply chain that had ensured fair and equitable returns to stakeholders. Both the King Island beef and dairy brands have been sold several times and local farmers now accept the returns they are given as just being part of a global agri-food system, not dissimilar to the place they were before. This disappointment is compounded by their lack of capacity to have any influence over ‘their’ brand values.

This says Pike (2009), should be the ‘canary in the coalmine’ warning regions that they need to examine when they discuss issues of local development, and promote discussion as to the type of development that is being sought. Brands like the King Island brands whose value and equity rely heavily on strong geographical attachments should be viewed as collective and public assets that are embedded in place, and that with institutional regulatory support, can be managed by civic associations to sustain quality and encourage regional innovation to further enhance regional values (Pike 2009). Regional development cannot rely on the endowment of a sole investor. Even geographical identifiers (GIs) as brands may be counter-productive say Morgan et al (2006, cited in Pike 2009) as they convert geographical attributes and local knowledge into potentially tradeable private assets. If branding is to be a source of regional development the question must be asked – to what end? This will be examined further later in this thesis.

5.4.9 Lesson Nine: A flexible procurement system for local sourcing

A flexible procurement system for local sourcing – lesson nine - is an interesting future concept for King Island. The case study (Roep & Wiskerke 2010) of rural cooperative supermarkets in the United Kingdom bears little resemblance to the King Island situation. One example is the retailing cooperative Waitrose, who have developed several specific initiatives to enable them to work effectively with small, local and regional producers, importantly with regional food groups as gatekeepers (Roep and Wiskerke 2010, p110). While this is not a usual mode of practise in Australia, both the major retail companies are beginning to realise the value of 'local' and the idea that supermarket managers should actively engage local producers to supply the local market is not without merit.

King Island is not self-sufficient in food production, and imports tonnes of perishable food products every year. While sea freight is on the whole reliable it is subject to bad weather conditions and breakdowns. Food security issues in this instance would deem a more diverse and larger fruit and vegetable production infrastructure on King Island useful. Local retailers would also do well to actively engage local producers to supply the immediate market, resulting in more money staying within the King Island community.

5.4.10 Lesson Ten: Regional marketing as basic security

Regional marketing as basic security is the tenth lesson to come from Roep & Wiskerke's (2010) research. Their case study, a Tuscan organic beef organisation, had opted for national marketing and an exclusive deal with one large retailer, who, when sales for organic beef began to decrease, cut their purchases dramatically making the beef organisation vulnerable to the point of crisis. This in turn forced the group to look to regional marketing as a strategy in an effort to re-connect with their region's values and create a steady, dependable market for their meat. This coincides with research conducted by Tasmanian cheese maker and Nuffield scholar Jane Bennett (2009) who found that support for a regional brand peaks in the region of origin, and becomes less important for consumers not connected with that place.

That said, the capacity to maximise marketing within regions, to locals and tourists alike, becomes essential for any regional food strategy (Bennet 2009 iii).

Once again, King Island's small local market would suggest regional marketing to be an inefficient use of resources. However, this would depend on the scope of the marketing campaign, and the willingness of King Island locals to support their own branded products. The act of eating a meal on King Island does not guarantee that you are eating King Island produce. Consistency in this regard may improve the visitor experience to King Island and so grow the tourism industry there. Once again this instils visions of the related variety concept by linking tourism to food. Direct marketing campaigns to ex-locals and their friends living off-island could also prove useful. A move away from commodity distribution will require a more strategic marketing approach, and using regional attachments to leverage loyalty seems a logical approach, as yet untested on King Island.

5.4.11 Lesson Eleven: Regional embedding as a marketing strategy

Regional embedding as a marketing strategy, lesson eleven, leverages regional know-how and embeddedness to create room for small producers in agri-food supply chains. The case study discussed by Roep and Wiskerke (2010) that demonstrated this, "Tegut", was different to others discussed in their book in that it is the only case to be a private, commercial retail company that held economic success to be a pre-condition of operation. If this strategy did not work, it would be abandoned for more commercially viable options. 'Tegut' is a family owned supermarket chain in Germany that has operated for more than 60 years. Its longevity is credited to constant renewal of its strategic goals that have included entrepreneurship based on social responsibility, and sustainable development including environmental and community needs. They implement these philosophies through a number of initiatives committed to certain aspects of their goals such as an organic bakery, and they have created and maintain complete control over a professional supply chain that includes a variety of organic producers, processors and packers. They also maintain an informal, yet demonstrable, network of regional actors and institutions, regularly collaborating with local farmers markets, NGOs and 'alternative' agricultural producers, and educational institutions. This ensures they remain in touch with

community attitudes and needs, and also ensures that their suppliers are informed and well-trained. It demonstrates for Roep and Wiskerke (2010) a mutually beneficial interdependency; the region depends on Tegut to sell its products, and Tegut depends on the region to supply high quality products. The relationships embedded in the region support both goals.

The lesson for King Island is that while TNCs are able to leverage King Island's regional characteristics for economic benefit, these companies are not locally owned, and are not particularly embedded in the region. While some investment in infrastructure has been made recently there is little evidence that they intend to grow the King Island brands through greater collaboration or sustainable objectives to underpin brand integrity. Any future brand initiatives should encompass whole of King Island values and goals and this is more likely to be achieved through local collective ownership.

5.4.12 Lesson Twelve: Specificity as a key in aligning regional interests

Specificity as a key in aligning regional interests, lesson twelve, has been useful in Europe where traditional methods of production are protected by AOC, and resist the homogeneity push of the global food paradigm (Roep & Wiskerke 2010). Food regulatory policies set by Food Standards Australia and New Zealand (FSANZ), such as the requirement to pasteurise milk – aside from the production of some hard to very hard cheeses (FSANZ 2013) - and other health requirements in Australia make it difficult to replicate the on-farm production culture idealised in Europe. As such, the ability to preserve 'specificity' or type of production method and leverage it for marketing purposes is not applicable in this instance. What King Island can learn from this lesson is that tradition matters, and the ability to document it with stories that are able to underpin provenance becomes important, particularly if 'related variety', through food tourism for example, becomes part of the strategy for regional development.

King Island attempts to align regional interests through provenance with a brand requirement that some form of value added must take place on the island. As an example if a bovine is grown on King Island, but not processed there, it is unable to

claim King Island Beef status. Also, milk exported from the island for processing cannot then claim to be King Island Cheese. Generally, these codicils are respected by the dairy operators at this time, although the closure of the abattoir has made this much more problematic for beef farmers. This lesson demonstrates that stronger links to the people and place of King Island must be demonstrable in the market place in order to create a marketing advantage.

5.4.13 Lesson Thirteen: Promotion of Regional Identity

Promotion of regional identity, lesson thirteen, understands that the marketing of sustainable agricultural products “is first and foremost a commercial affair” (Roep and Wiskerke 2010, p146). Regional branding is normally left to a collective of private regional actors; however a case study from Switzerland highlights an instance where a regional authority developed a multi-product regional brand as a regional development exercise. It enabled a number of smaller producers to be ‘bundled’ together to create synergies and so contribute to a territorial strategy based on the growth of local agri-food production. This has grown to a point where the authorities that instituted the brand now have to step back and allow the operators to decide its further evolution in the market place.

King Island through the brand management group is attempting this, however is stymied by lack of financial resources. There is room here for local, regional, state or federal bodies to step in with both expertise and financial support that will enable King Island to harness the energy of all its producers as it strives to become more sustainable. Recently at the rural campus of the University of Tasmania (UTAS), academics and community members worked with a range of local, female producers to improve their skills to enable their products, and themselves, to be market ready – in this instance local farmers market ready (Allison, Fernon, Fletcher and Eversole 2009). Similar relationships to those forged by UTAS on Tasmania’s North West Coast could be useful for small King Island producers.

5.4.14 Lesson Fourteen: Public sector food procurement through partnerships

Public sector food procurement through partnerships is a popular European economic driver, with examples in Wales (Morgan et al 2006) and other regions. Roep and Wiskerke (2010) take their case study for this lesson from Cornwall, the Cornwall Food Programme (CFP) and their drive to secure local procurement for the National Health Service (NHS) hospitals in the region. This required the mobilisation of people and local food producing capacity to respond to a need identified in the region, not dissimilar to the benchmarking of the RDPM and the construction of a RIS outlined earlier. Perchance the idea corresponded to a time when a government report suggested that a sustainable future for food and farming in the United Kingdom could be enhanced significantly through public procurement, and the CFP acted as an example of best practise.

The local market is too small to make any significant difference to agri-food sustainability on King Island, and government procurement policies are not so fiercely loyal that they insist on local produce over non-local produce at any price. The lesson here is how regional advantage was constructed by leveraging local assets in response to a local need. CFP brought together a range of actors, institutions and skills that was able to create a local food system that began with a contract from the hospital to procure local sandwiches, and grew to the development of a food supply chain able to seek funding to build a food processing unit. The idea to deliberately bring actors from a range of industries, spanning a number of sectors together, to strategically construct regional advantage has worked well in this instance. There is scope for this to happen on King Island.

King Island can take counsel from each of the fourteen lessons learned in the European case studies. These can all be seen as opportunities to examine the local food system in greater depth as King Island looks to adjust from its traditional reliance on conventional agri-food systems. There is potential here for a more sustainable system.

5.5 Agri-food and Island futures: analysis in summary

This chapter began the analysis of the King Island data in the context of the literature by implementing the first step in the evaluation which sought to identify the presence of, or elements of, a sustainable agri-food system on King Island. This was done by using the work of Constance (2008) and his four questions, the six fields of endeavour from the Centre for Whole Communities (2009), the work of Wiskerke (2002) and the ten barriers to creating a sustainable food system, and then Wiskerke's work in partnership with Roep (Roep & Wiskerke 2010) outlining the fourteen lessons learned from European case studies of food systems seeking to engage in a paradigm shift from conventional agriculture to a more economically, socially and environmentally sustainable path.

The provocations of Constance (2008) ask what the conventional structure of agri-food production and supply chains brings to the sustainability of agrarian communities, local physical environments, local food security and safety, and the equity and human rights of local agri-food participants. In review, the current conventional agri-food system as it plays out on King Island does not adequately address any of the four questions or provocations as outlined by Constance (2008). Some are works in progress, however it is difficult to conclude King Island's agri-food system is sustainable against these measures. What this examination did find was, as Constance (2008) describes, avenues for resistance against the status quo, paths via which a more sustainable food system can be envisaged, such as a greater focus on the provenance of clean and green.

Similarly, only a quarter of the challenges outlined in the six fields of endeavour (Centre for Whole Communities 2009) said to underpin sustainable food systems were judged as met on King Island. Other challenges, while not met, or are only partially addressed, are viewed as opportunities for improvement of the King Island system and can add to the discussion going forward. These opportunities reside in taking a holistic approach to food production on King Island, and viewing the system as a whole, instead of the silo mentality at play at present. Using these measures, a

sustainable system is possible in the future, but cannot be recognised as such at present.

Wiskerke's (2002) suggestion that the current conventional food system presents barriers to the construction of more sustainable systems is also evident on King Island. Each of the ten barriers outlined by Wiskerke (2002) in his report to the EU is recognisable as constraints for a sustainable agri-food system on King Island. These will need to be addressed before a more sustainable future can be imagined for the island. Also, for Roep and Wiskerke (2010) and their contributing authors, the ability to support a sustainable food system requires an ongoing cycle of development, and the strategic combination of governance, embedding and marketing (GEM). The fourteen lessons learned in this European context all held a level of relevance for King Island food producers, indicating a possible way forward to a more sustainable era.

The previous section has revealed significant impediments, but also some promise. The evaluation of the King Island agri-food system as a whole structure revealed a startling number of possibilities that align with contemporary regional development thinking. GEM equates well with RIS and this first step has identified opportunities through stronger networks that may be able to be systematised through Cooke's (2007) RIS.

Before embarking headlong into this challenge though it is necessary to view King Island through the regional development literature more broadly. What can this deep local knowledge of King Island, at present based so heavily on agri-food, reveal for regional innovation and the basis of a regional development platform? Cooke's (2007) platforms for constructing regional advantage emphasises the need for governance structures, community and cultural connections, knowledge creation and dissemination capacity, and a flexible economic base to be organised into a systematic approach that supports development through innovation. Known as regional innovation systems (RISs), they are able to be purposefully designed and implemented to strategically leverage local assets to build capacity and construct regional advantage. The next chapter turns now to the review of King Island through this lens.

Chapter Six: Constructing Advantage

Chapters four and five have examined King Island thoroughly, and drawn a picture of what Baldacchino (2008) would call the 'island condition'. Chapter five shows that King Island has a range of assets, present and emerging, that can be leveraged for local economic advantage. There is a clear conceptualisation of place on the island, in that it has a strong agri-food system supported by natural resources, and it has an image of being both clean and green. There is also evidence of significant place attributes such as social capital and other capitals with confirmation of strong collaborations, a culture of food production, a maritime history and an abundance of human capital. The challenge of regional development is to re-configure these assets in such a way as to engender economic development. This is where the work of Cooke becomes integral.

Cooke (2007) argues, to construct regional advantage, policy platforms actively supporting regional development must first be in place. The four key areas that need to be specifically targeted for policy levers are the economy, governance, knowledge infrastructure and community and culture. The policy platforms designed by the system must be cross-sectoral, and as the term 'platform' suggests, provide base-load support with the capacity to nurture innovative and/or entrepreneurial opportunities that may present in a region. This way the region has the potential to be more than just a sum of its parts.

This chapter begins by applying the dimensions of Cooke's four platforms on the basis, it will be argued, that it demonstrates latent capacity for a RIS on King Island. It then moves to analyse the potential of the RIS by applying the Regional Development Platform Method (RDPM) of Harmaakorpi and Pekkarinen (2003), and identifies a possible response, a geographical indicator (GI) for King Island (KI).

GI for KI as a response is then further tested for validity by analysing it as a response to the issues highlighted by GEM in the ten barriers and fourteen lessons from chapter five. While literature alone may suggest a future for King Island, GEM is a response to real agri-food case studies, and so its application to this case study

ensures a more robust response. GEM is able to identify strengths, weaknesses, opportunities and threats to the proposal of GI for KI. As the literature suggests, strong governance is a very large part of the potential success of GI for KI. With the *embeddedness* and *marketing* aspects of the GEM framework implicit in the construct of GI for KI, it is for this reason *governance* is a particular focus of this chapter, what is its form and function, and how can it best be managed for development on King Island?

Table 6 demonstrates the synthesis of the concepts identified in the literature and why the paradox of global food provision and rural and regional sustainability has been used to de-construct King Island's present agri-food system. It also gives an indication of why this chapter now takes the opportunity to re-construct a future for King Island using governance and innovation as a response to that paradox. The search for innovation begins with the analysis of King Island and Cooke's (2007) Regional Innovation System.

Table 6: The Paradox of Sustainability and Governance as a Response

The paradox of global food provision and rural and regional sustainability			
The problems	The provocations	The ideals	The barriers
<p>Imbalances in the food system lead to the paradox of the 'starved' and 'stuffed' Patel cited in Lawrence et al (2010)</p> <p>Only some consumers can afford expensive quality standards Friedmann (2005)</p> <p>'Commodity Ghetto' Morgan et al (2006)</p> <p>'Race to the bottom' Marsden (2003)</p> <p>Understanding local food systems in context of their resource use. Duram & Oberholtzer (2010)</p> <p>Worlds of Food paradigm Morgan et al (2006)</p>	<p>Constance (2008)</p> <p>Question 1: the agrarian question asks about the structure of agriculture and quality of life for farmers and rural communities</p> <p>Question2: the environmental question asks about the relationship between the structure of agriculture and the quality of the environment</p> <p>Question3: the food question asks about the relationship between industrial agriculture and the quality of food, pointing towards nutrition and safety issues</p> <p>Question 4: the emancipatory question focuses on the relationship between the structure of agriculture and the quality of civil rights</p>	<p>Center for Whole Communities (2009)</p> <p>Justice & fairness</p> <ul style="list-style-type: none"> - Provides food for all - Reveals, challenges and dismantles injustice in the food system - Creates just food structures and cares for food system workers - Ensures that public institutions and local businesses support food system <p>Strong communities</p> <ul style="list-style-type: none"> - Improves equity and responds to community food needs - Contributes to healthy neighbourhoods - Builds diverse and collaborative relationships, trust and reciprocity - Supports civic participation, political empowerment and local leadership <p>Vibrant farms</p> <ul style="list-style-type: none"> - Supports local sustainable family farms to thrive and be economically viable - Protects and cares for farmers and farm workers - Honours stories of food and farm legacy through community voices - Respects farm animals <p>Healthy people</p> <ul style="list-style-type: none"> - Provides healthy food for all - Ensures the health and wellbeing of all people, inclusive of race and class - Connects people and the food system, from field to work - Connects people and land to promote health and wellness <p>Sustainable ecosystems</p> <ul style="list-style-type: none"> - Sustains and grows a healthy environment - Promotes and ecological ethic - Enhances biodiversity - Promotes agricultural and food distribution practices that mitigate climate change <p>Thriving local economies</p> <ul style="list-style-type: none"> - Creates local jobs and builds long term economic vitality within the food system - Builds local wealth - Promotes sustainable development while strengthen local food systems - Includes infrastructure that supports community and environmental health 	<p>Wiskerke (2002)</p> <p>(1)The willingness of consumers to pay more for higher quality products is very limited;</p> <p>2) Common goals across the whole chain is difficult to achieve given the diverse range of actors and interests;</p> <p>3) Problematic competitive environments with high regulatory costs;</p> <p>4)Growth of an initiative may lead to a loss of individual actor independence and changes in governance leading to imbalances in power relationships;</p> <p>5) Growth for growths sake alone can lead to an FSC losing authenticity and credibility;</p> <p>6) Institutional financial support is weighted to support mainstream production;</p> <p>7) Trade liberalisation continues to contribute to a cost-price squeeze with arguments that some imported foods have an unfair competitive advantage;</p> <p>8) Alternative FSCs are hindered by the lack of small to medium sized production and processing facilities;</p> <p>9) Power negotiations between large scale processors or retailers and smaller producers are asymmetrical and often thought of as placing unfair pressure on conditions of supply, such as price, quantity, quality et cetera;</p> <p>10) the high market share captured by large retailers undermines ethical and sustainability initiatives due to their reluctance to support place of origin labelling</p>

Governance and Innovation as a Response			
The lessons	Islands focus	Platforms for Innovation	Codified Governance
<p>Roep & Wiskerke (2010)</p> <p>Lesson 1: developing a supportive institutional environment</p> <p>Lesson 2: creating a space for change</p> <p>Lesson 3: a strategic alliance with chain partners</p> <p>Lesson 4: willingness to invest in a shared enterprise</p> <p>Lesson 5: mobilizing investment capital for scaling up</p> <p>Lesson 6: anticipating implications for scaling up</p> <p>Lesson 7: a visionary and capable leader</p> <p>Lesson 8: building a strong brand</p> <p>Lesson 9: a flexible procurement system for local sourcing</p> <p>Lesson 10: regional marketing as basic security</p> <p>Lesson 11: regional embedding as a marketing strategy</p> <p>Lesson 12: Specificity as a key in aligning regional interests</p> <p>Lesson 13: promotion of regional identity</p> <p>Lesson 14: public sector food procurement through partnerships</p>	<p>Baldacchino (2008)</p> <ol style="list-style-type: none"> 1. Local ownership, meaning majority or exclusive control of the firm vested in native islanders; 2. Small size, meaning firm has up to 50 employees or outworkers; 3. Manufacturing; meaning firm is producing a commodity that has weight, volume or form, which can be separated from its producer in the act of sale or purchase; 4. Export orientation, meaning the bulk of the firm's manufactures are destined to markets and clients elsewhere, and have been doing so for many years; 5. Technology adaptation, meaning that any key technological processes used by the firm in the manufacturing has been customised, if not invented by the locals. 	<p>Cooke (2007)</p> <ul style="list-style-type: none"> • Platform 1: Economy; for Cooke this means "regionalization of economic development; 'open systems' of inter-firm interactions; integration of knowledge generation and commercialisation; smart infrastructures; strong local and global networks"; • Platform 2: Governance; "multi-level governance of associational and stakeholder interests; strong policy support for innovators; enhanced budgets for research; vision-led policy leadership; global positioning of local assets; • Platform 3: Knowledge Infrastructure means that universities, along with public sector research, intermediary agencies, professional consultancies and the like all need to be involved for their problem solving abilities in a structured way; • Platform 4: Community and culture embodies "cosmopolitanism; sustainability; talented human capital; creative cultural environments; social tolerance" 	<p>Harmaakorpi & Pekkarinen (2003)</p> <ol style="list-style-type: none"> I. Benchmarking through the assessment of RIS theories. II. Background study of the industries and areas of expertise in the region. III. Expert panels. IV. Assessment of future scenarios. V. Analysis of statistical and empirical information VI. Conceptualisation of the RIS. VII. Search of core processes of the RIS. VIII. Definition of knowledge creation and management system.

6.1 King Island and RIS

The four tenants on which to base a RIS are described by Cooke (2007, p186) as follows:

- a) Economy; “regionalization of economic development; ‘open systems’ of inter-firm interactions; integration of knowledge generation and commercialisation; smart infrastructures; strong local and global networks”.
- b) Governance; “multi-level governance of associational and stakeholder interests; strong policy support for innovators; enhanced budgets for research; vision-led policy leadership; global positioning of local assets” (Cooke 2007, P187).
- c) Knowledge Infrastructure for Cooke (2007) means that universities, along with public sector research, intermediary agencies, professional consultancies and the like all need to be involved for their problem solving abilities in a structured way.
- d) Community and culture; “cosmopolitanism; sustainability; talented human capital; creative cultural environments; social tolerance” (Cooke 2007, p188).

Evidence of their existence on King Island is first outlined in chapter four and is now discussed further, beginning with a discussion of King Island’s economic base.

6.1.1 The economy of King Island

As detailed in chapter four, King Island’s economic platform, or island condition, consists of a number of economic drivers. Predominantly they are resource based. Along with the dairy and beef industries, there is a small commercial fishing industry, and kelp harvesting with a processing plant that supplies dried granulated kelp to the alginate market for further processing into a variety of household products sold worldwide. It employs less than ten people directly but supports the local economy further by seasonally contracting self-employed kelp harvesters to collect the primary product (King Island Kelp Industries 2013). A number of King Island farmers use this industry to supplement their farm incomes.

Figure 11: Hanging kelp on King Island, July 2011. Photo courtesy of the author.



The clean and green provenance of King Island is also resource based. Alternative energy is also being discussed as an important economic driver for King Island going forward. Presently the state government owned Hydro Tasmania is canvassing the possibility of expanding the small wind farm by up to 200 turbines, constructing a power cable to the mainland of Australia, and exporting the renewable energy. The number of turbines being considered is said to have the potential to cover up to 20% of the island's land mass, and the debate about its suitability for the King Island community is ongoing (www.facebook.com/KingIslandWindFarm). Currently the energy from the six wind turbines already in use is supplemented by diesel generated power and solar energy.

Figure 12: King Island Power Station July 2011. Photo courtesy of the author.



Environmental and leisure tourism also have a visible presence on King Island. Rare bird species such as the orange bellied parrot, numerous ship wrecks and a long distance running event, the King Island Imperial, draw visitors to the island every year. Tourism is supported with two small hire care enterprises, tour operators and visitor accommodation including a hotel, a motel and several holiday homes available for short stays.

Silica mining has been reintroduced to the east coast of King Island, generating some employment, and giving work to a few of the residents that lost jobs with the closure of the abattoir. The sand mine lease has little more than ten years to run, and is not seen locally as a truly sustainable industry, but a useful short term economic stopgap. There is also discussion of a possible re-start of scheelite (tungsten) mining, with owners presently processing the slag heap before a potential re-opening of the underground mines. King Island Scheelite is seeking further investment to re-develop the Dolphin mine and Bold Head mine near the south-

western township of Grassy. A report on the company's website suggest the current concentrate price for tungsten is high enough to make the re-development viable (King Island Scheelite 2013), but to date no start has been made on the project.

Due to the export focus of King Island, global networks for trade are clearly evident, in some part due to foreign ownership, but also due to the hard work of King Island entrepreneurs, such as King Island Seafood, a company processing fish for a range of local and Bass Strait fishermen and then export the product regularly to Asia, and King Island Cloud Juice, a water bottling enterprise targeting high-end consumers.

Economic networks on the island are sectoral for the most part, although information flows are quite strong between sectors; most of it is of a social nature, making it difficult to quantify investment or commercial opportunities resulting from inter-firm interactions. There is potential for a RIS to strengthen the economic platform on King Island through formalising social and tacit relationships that can drive more strategic and innovative responses to current economic opportunities. This could be as simple as a co-operative approach to shipping and logistics, or as complex as a regional brand. The point is that by analysing the whole King Island economy in such a way connections become evident, and relationships can be scrutinised for potential.

One of the themes to emerge from the analysis of the King Island economy is that it is a system based on natural resources. More importantly it is a system that has worked towards creating added value, and there is emergent evidence of related variety. The clean and green aspect of fresh grass and unpolluted water, alternative energy and a laid back island lifestyle value add to the food resources, and create interest for visitors. The sense of untamed nature acts as a lure for surfers, golfers and history buffs and King Island's tragic maritime history is reflected in the names of some of the cheese varieties produced there. There is a myriad of opportunity here to further link and leverage related variety for a whole King Island experience.

However it is not all good news. The costs of travel and shipping are problematic, and getting this right will take some innovative thinking. This is important not just for the economy of King Island, but for the health and wellbeing of its people as well. This reinforces the necessity of viewing the King Island economy as a whole system,

the utility of which can be improved by stronger relationships spanning all sectors and enterprises, a key plank of the RIS.

6.1.2 The governance platform on King Island

Chapter five gave evidence that while local assets as mentioned above are globally positioned, governance and leadership to effectively manage these assets for the benefit of the community on King Island are noticeably absent. An interview with the local council's economic development officer brought to light that it was on the urging of residents that the council took on an economic development role. Discussions and consultation take place around such issues as a population strategy, affordable access to King Island, power price parity with mainland Tasmania, improving education and work skills, natural resource management, the King Island "Brand", and tourism. While high levels of foreign ownership are seen as a threat to King Island's sustainability, the council accepts that this is a result of free-market enterprise, and that governance in its present guise has little influence. While the economic development officer was happy to respond to any request for low-level support from the council, the 'community' is responsible for their own areas of interest, and unfortunately there is evidence of 'volunteer fatigue' impacting in this area.

Some in the community on King Island are looking to take back ownership of the King Island brand for the community, rather than it being 'owned' by the multi-national corporations that leverage it. The King Island Brand Management Group (KIBMG) has been formed and is looking to institute an 'umbrella' brand, that smaller producers can use and leverage in the market place. This is not yet a clear picture of what the 'rules' of the brand will be, however most conversations on the subject suggest that at least some form of value-add must take place on King Island for it to be useful. For all the discussions taking place, the suggestion from chapter five is that there is little evidence of change to this point. Local government on King Island is not leading development, it is responding to community concerns, and while there are some excellent individuals working hard on King Island to grow their businesses and their community, there is no structured, systematic approach, nor 'champion' for the cause. One dairy farmer suggested that there needed to be more state or federal

government control rather than council control because this would “get more things done”.

Again themes arise from this analysis. Local government plays an important role on King Island as a trusted facilitator between sectors, and is positioned as the most likely vehicle to broker and facilitate relationships that will underpin any prospective RIS, and already takes on this role in relation to brand management. Trust in the council has however diminished of late. There are some in the community who view the council as being biased toward the TasWind project, and not acting in the best interests of all King Island residents. This serves to underline the fickleness of human nature and the importance of a trusted broker when aligning relationships for constructed regional advantage.

King Island’s most important asset is of course its people. A RIS is a social system able to leverage innovation ‘spill-overs’ when people work together to realise synergies and related variety. A leader capable of managing a diverse range of people and agendas is very important to the governance platform of King Island, however there appears to be a dearth of volunteers able to galvanise the commitment needed to take on this role.

Volunteerism is another important facet to King Island. The King Island community has the capacity to form a staggering number of special interest groups that all work toward creating a better lifestyle for those who choose to live on King Island. Aside from the brand management group there is a local chamber of commerce, the King Island Shipping group, a group of beef producers who work together, a kelp carters association, a tourism association, a population committee and more. However as the population dwindles so too does the number and capacity of volunteers able to take on yet another role, particularly one with the heavy responsibility of bringing together these groups in a deliberate strategy to improve King Island’s economy. This leader (or leaders) will also need to bring into the RIS representatives from the knowledge infrastructure platform on King Island.

6.1.3 Knowledge infrastructure on King Island

Analysis in chapter five also revealed that examples of connections between or networks including producers and knowledge infrastructures such as universities or industry bodies were few on King Island, but for one notable initiative – the King Island Beef Group. Originally designed to develop a rapport with the processor, the group has developed other relationships as well, which for one beef farmer interviewed had led to noticeable improvements on the ground. By bringing in their own ‘experts’ such as academics from the Tasmanian Institute for Agriculture (TIA), the Meat and Livestock Australia (MLA) and others, farmers have been able to improve their grazing techniques and fertilizer utilization. The same beef farmer suggested that this now needed to be extended to a whole of food chain group to discuss issues across sectors.

Movements toward this goal are evident, with the King Island shipping group being formed in response to a lack of communication with the current shipping operator. The group members included local livestock agents, livestock carriers, freight forwarders, JBS Australia, King Island Dairy, King Island Council, KI TFGA, Tas Ports, I.P.L., Impact Fertiliser, Currie Cargoes, Greenhams Pty Ltd, King Island Stockfeeds, a number of King Island business houses and King Island Kelp Industries (King Island Shipping Group 2011). They conducted research to provide background tender information. This resulted in a nine page, detailed document that included data and statistics of King Island’s freight movements and needs, and a description of the Grassy harbour and port facilities. While they did not immediately achieve their objective of a more equitable service, they have succeeded in creating a network of people able to argue for a secure, regular, cost-effective service and more efficient shipping infrastructure. This reflects the King Island is already cognisant of the lesson outlined in chapter five prescribing alliances with chain partners. Debate around the future of shipping continues on King Island, with an upgrade of the Grassy port included in discussions around the wind farm expansion.

There is also scope to include the local high school (KIDSHS) and other education providers in the King Island RIS, particularly in research and development for agri-food and alternative energy. Given the increasing importance of alternative energy to global sustainability it makes sense to at least debate the role of alternative energy on King Island. There is opportunity here for development not just to be done *to* King Island, but also *by* King Island, a chance for development from the inside out. This can be seen via the narrow confines of trade training, or purposeful courses able to up-skill locals for participation in a new workforce, or even the positioning of dedicated research centres of excellence. It can also be seen in context to the value-add for the primary products. A poultry producer in Tasmania already leverages his use of wind-power as a productivity gain and a marketing tool, and there is no reason why King Island could not do this too.

This will prove to be easier said than done of course. There has already been conflict around the wind farm proposal, and that was just to seek permission from the community for TasWind to take the project to the feasibility stage. The discussion about whether or not to approve such a project for the island is yet to be had. This discussion will necessarily involve all of King Island, which, as with any other community, is made up of various and unrelated people who chose to live there for a number of different reasons. This is why the community and culture platform also becomes integral to a successful RIS.

6.1.4 King Island and the community and culture platform

Cooke (2007) argues strongly for social capital as part of any RIS, and, given that a RIS is a social construct, it makes sense to include a broad range of community and cultural exponents able to add ideas and capacity to regional development projects. Chapters four and five reveal that King Island has a strong volunteering community including ambulance officers, fire fighters, community transport and more. There is also a vibrant social leisure culture. The community is able to field three Australian Rules football teams, a number of netball teams and a strong community of horse lovers with annual horse racing events and a pony club educating King Island children in horsemanship. There is also an annual long distance run, the King Island Imperial, able to bring in visitors every year, including well known long distance

runners such as one time Australian Olympian Steve Monaghetti. The course for this road race runs from Naracoopa on the east coast to Currie on the west coast, and as part of the festival weekend this event also includes a fund-raising 'free willy' run, where men get together and sprint along a local beach, naked. Surfing is a popular pastime, as is golf. The development of two world class golf courses on King Island will also position King Island as a leisure destination.

Field naturalists and local bird watchers also support tourism with tours, as do historical icons, such as the Cape Wickham Lighthouse recently celebrating its 150th birthday and grand opening on the same day. The committee charged with organising this event was able to secure Australia's then Governor, Quentin Bryce, to cut the tradition-inspired opening ribbon alongside some local children. This is a clear example of a strong community working together to bring advantage to King Island and the island can be considered unsurpassed in Tasmania for its level of volunteering for community organisations – King Island recorded more than 31% of the population volunteering for community organisations compared with other Tasmanian regions averaging between 22 and 24% (ABS2 2011). However, as mentioned before, volunteer fatigue is obvious in some parts, with too few doing too much.

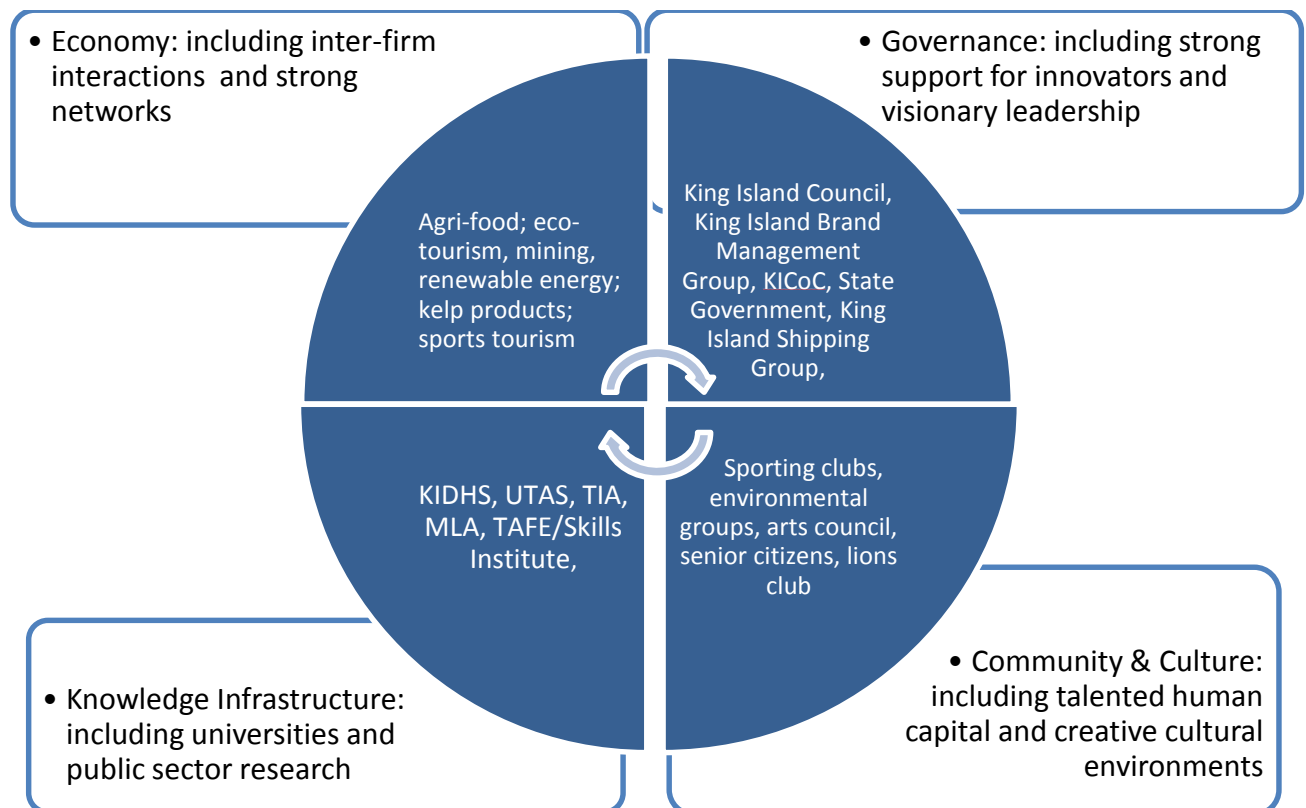
The task of bringing together all views into a discussion around a way forward for King Island will not be an easy one, hence the need for a strong, trusted leader able to guide the process based on shared goals, and an agreed clear vision such as McCall (2010) calls for. As the research suggests the agri-food producers of King Island at least agree that a strong umbrella brand is a good idea. It will also be necessary to make that brand work for other areas of the community as well.

6.1.5 RIS and King Island analysis in summary

In summary there is clear evidence that the application of Cooke's theory of RIS is relevant for King Island. Although small, there are a number of groups and networks arrayed across the four platforms Cooke (2007) calls for: economic, governance, knowledge infrastructure and community and culture.

They can be drawn as follows:

Figure 13: King Island and Cooke's (2007) platforms that underpin RIS theory



The RIS has proved to be a useful tool in locating potential related-variety and synergies already in place, however latent, on King Island. It is more in depth and robust than oft prescribed 'asset maps' undertaken by community and regional development practitioners. It is not done just to ascertain the presence or absence of assets, but to also ascertain their strengths and potential to be reconfigured to drive productivity and economic growth. The RIS as a methodology actively seeks innovation of process, how one region can pull together all of their local assets and position them to better advantage in a market place, thus engendering local regional development.

While there is some evidence of Cooke's (2007) platforms for development in situ on King Island, the question still remains as to what form of development should be supported by these platforms, and who gets to decide the strategic investment trajectory to be followed (Uyerra 2010). Harmaakorpi and Pekkarinen (2003)

advocate that not all perceived opportunities are robust enough to be acted upon, and need a thorough investigation of both pitfalls and potential. This requires research, and a benchmarking tool, to test any RIS for validity and robustness. The regional development platform method (RDPM) of Harmaakorpi and Pekkarinen (2003) is one method able to conduct a complete inquiry into a project before too much money or time is wasted on a proposal not suited to a region's strengths.

6.2 King Island and the RDPM: an analysis

Development, as discussed here, is considered to be more sustainable when it is constructed by a region, of a region, and for that region. Baldacchino (2008) suggests the same for the development of island communities. In this vein, Harmaakorpi & Pekkarinen (2003, p1) state that:

Regional development strategies should be based on the sound assessment of regional resources, capabilities, competences and core competences, as well as on dynamic capabilities aiming to develop the resource configurations in order to form regional competitive advantage

To facilitate this, Harmaakorpi and Pekkarinen presented a model at the European Regional Science Association Conference in 2003, a tool which attempted to design and manage RIS. Known as the Regional Development Platform Method (RDPM) it consists of eight phases:

- i. benchmarking through the assessment of RIS theories;
- ii. background study of the industries and areas of expertise in the region;
- iii. expert panels;
- iv. assessment of future scenarios;
- v. analysis of statistical and empirical information;
- vi. conceptualisation of the RIS;
- vii. search of core processes of the RIS;
- viii. definition of knowledge creation and management system.

As outlined in chapter two, this method seeks to test ideas, then evaluates and strengthens them so as they can better serve as RISs to construct regional

advantage. Phase one for example seeks to position the idea or concept in the literature as a demonstration of its validity. Phase two then looks to examine the credentials of the region and its capacity to engage in the industry(s) under scrutiny. Phase three brings together a number of cross-sectoral experts to discuss possible ways forward before presenting them to a broader audience of stakeholders in phase four. This broader audience is then able to bring to the conversation particular assets and knowledge (phase five) before deciding for themselves if they wish to participate further. Phase six formalises the relationships of those remaining in the conversation by determining a clear goal or vision (phase seven) and defining the vehicle by which this vision will be delivered (phase eight).

The method has previously been cited by McCall (2010) who analyses the RDPM in a discussion paper about Tasmania's Innovation Strategy. This strategy holds the further development of agri-food production and processing in Tasmania at its core, and so the method of analysis is considered pertinent here. McCall (2010) argues that the strength of RIS lies in how it converts knowledge into 'productive outcomes', and alongside others (Jussuame and Kondoh 2008) recognises social capital as instrumental in this process. The challenge for the RIS is to deliver successful innovative outcomes when harnessing social capital (McCall 2010).

The RDPM is tasked to not only identify possible futures, but to also concurrently manage the instability, and limitations, that social capital presents, particularly around the issues of self-interest and trust (McCall 2010). These issues can be mitigated up to a point by a coming to an agreement on a 'shared vision', or what McCall (2010) calls a 'knowledge vision', which he insists gives direction to the course of knowledge creation, and resultant management system. McCall (2010) argues the knowledge vision is codified agreement on what the RIS could do, what it should do, how, why and in which direction it should be pointed. The application of the RDPM to the RIS results in a clear description of the strengths, weaknesses, opportunities and threats attached to this vision, and then is able to propose more robust mechanisms by which to achieve the vision's goals.

Such a vision can be created by the King Island community. A clear rallying point, or shared vision, for all producers on King Island is a King Island brand. This was

demonstrated in chapters four and five however the question remains as to whether or not this can be codified into an RIS able to deliver sustainable development. Certainly Pike (2009, p621) identifies in brands similar characteristics to those outlined in Cooke's (2007) platforms;

"The spatial and multifaceted nature of brands, for example, makes them simultaneously 'economic' as goods and services in markets, 'social' as collectively produced, circulated and consumed objects, 'cultural' as entities providing meanings and identities, and 'political' as regulated intellectual properties, financial assets and traded commodities."

Brand then can be viewed as a net able to capture actors from across sectors, each with their own perceptions of brand. For King Island, brand encompasses images of fine food with images of a clean and green environment, a unique provenance including traceability, and strong local connections and embeddedness. The challenge of the RDPM is to turn this shared perception of brand into a RIS, and so construct advantage for the whole community. This method is now used to examine brand on King Island to determine whether a brand or geographical indicator (GI) can help create a sustainable agri-food future for King Island.

6.2.1 RDPM and Brand King Island

Pike (2009, p619) argues the "brands are entangled in inescapable spatial associations." Brands have geographical contexts and associations embedded within them. GI are more specific in their definition. Bowen (2010, p209) for example defines GIs as "place-based names that convey the geographical origin, as well as the cultural and historical identity, of agricultural products." GIs are often seen as successful regional development tools (Bowen 2010), and are particularly visible in Europe as regions look to differentiate themselves in the market place; Roquefort cheese, Champagne sparkling wine, Kalamata olives and Prosciutto di Parma are a few examples.

For its part, King Island is looking to take back ownership of the King Island 'brand' for the community, rather than being 'owned' by the multi-national corporations that leverage it. In line with what has been identified in Europe and outlined in chapter

five in relation to lesson eight and building a strong brand, the KIBMG has been formed and is looking to institute an 'umbrella' brand, that smaller producers can use and leverage in the market place. The use of the RDPM can evaluate such an idea by analysing the robustness of GI as a strategy, and its potential for successful application in a King Island context.

It begins with phase one of the RDPM; *benchmarking through the assessment of RIS theories*. This thesis has already demonstrated that RIS theory can be applied to King Island, through reference to the constructing regional advantage theory as outlined by Cooke (2007), and supported by Harmaakorpi and Pekkarinen (2003), McCall (2010) and Coenen and Moodysson (2009). RIS and RDPM are well-documented approaches, with demonstrable outcomes, that can underpin an agri-food RIS on King Island. Theories around brand and GI can also be introduced here with Pike (2009) who argues that brands and brand equity are geographically entangled, and that agri-food brands particularly are inherently geographic in nature; and Bowen (2010) who argues that despite unevenness of application globally, GIs are still a viable approach for regional development initiatives. Phase one of the RDPM has been successfully dealt with.

To further demonstrate the capacity of RDPM as a useful tool for King Island, phase two of the model, *'background study of the industries and areas of expertise in the region'*, this thesis has already identified some of the assets already in place on King Island. As described in chapters four and five, most of the agri-food expertise required for a successful RIS is in place on the island; however more knowledge concerning brands and marketing is required. This phase is also able to identify interested parties off King Island, such as the person behind King Island's first real branding initiative that featured King Island dairy products, Helen Waterworth, who has been assisting the KIBMG with their recent endeavours. This phase also presents an opportunity to identify gaps in capacity; for example it was noted in the analysis of Cooke's (2007) platforms, that governance and strong leadership needed extra facilitation on King Island. Governance is discussed further later in the chapter, however it is worth noting here that it is through this RDPM process that issues and limitations can be addressed sooner rather than later. The second phase of the RDPM has been constructively applied to the concept of a King Island agri-food RIS.

Phase three of RDPM, the selection of an expert panel to analyse the potential for innovation within the RIS being considered, is an opportunity for the proponents to look beyond the usual stakeholders and bring 'related variety' (Asheim et al 2009, Lazaretti et al 2009) into the conversation. Entrepreneurial thinkers able to see prospects beyond those already in play, strategically positioned knowledge brokers and governance actors able to leverage research and financial assistance, alongside well-respected local actors are able to be introduced here. The design of this phase is to create a team capable of analysing future scenarios (phase four) that the RIS can look to for potential development.

The application of phase four of the RDPM, *assessment of future scenarios*, highlights that an agri-food RIS on King Island may well see the increasing wealth of Asian countries, particularly China, and the coinciding increased demand for protein, as an opportunity for expansion. The demand for Dairy products in China has also expanded with more potential here. Additionally the rise in environmental protection concerns may be leveraged by a King Island agri-food RIS. Environmental claims such as clean and green, when verified, can strengthen brand attributes and equity in the market place (Pike 2009, Bowen 2010). Alternative energy has a marked presence on King Island, so it too should also be considered as a form of related-variety that can add value to a King Island brand. Shipping and concern around 'food miles' may be a risk to consider however, and should be included here. Once again, the application of the RDPM has proved a worthy tool for King Island through its ability to identify opportunities and threats in this fourth phase that can then be addressed.

The ability of phase four to identify opportunities and risks, and the capacity of the expert panel recognized in phase three able to evaluate these opportunities and risks is a major strength of the RDPM. For example if King Island were looking to construct advantage through GI, it would be useful for the expert panel to acknowledge Bowen's (2010) unevenness argument at this point. In her research of GIs, Bowen found that government and legislative support for GI were key elements in their success or failure as regional development tools. Given that Australia lags behind Europe and other regions in this area, every effort must be made to ensure 'GI for KI' has a strong organisational structure to champion its endeavours. This

would include being mindful of power relationships in the agri-food supply chain, so as any value created by the RIS cannot be captured by one or two of the more powerful actors.

Discussions such as those mentioned above would lead into phase five of the RDPM, defined by Harmaakorpi and Pekkarinen (2003) as the phase for *analysing of statistical and empirical information*. In other words; what has the RIS got in terms of opportunities, assets, people and capacity? Chapters four and five have identified a community unanimously supportive of a King Island brand. Already, with pressure from the KIBMG, the Australian Consumer and Competition Commission (ACCC) have successfully prosecuted action against the improper use of 'King Island' as a brand name, despite weaknesses in the legislation. This is proof of the embeddedness of the brand in the King Island psyche, a shared vision a la McCall (2010) perhaps. Also, the group may have considered other issues around GI. For example, according to Bowen (2010 p211) GI as an organisational structure can provide greater equity in some circumstances and she describes three characteristics that in her opinion define effective GIs:

1. The complexity and breadth of the quality standards that define production;
2. The way that the GI valorises the '*terroir*' (quality determined by regional characteristics) of the region;
3. The strength of the collective organisation and the degree to which it fosters cooperation and cohesion.

They could then reflect that although King Island is well recognised in the market place, not all on King Island are confident the benefits of this recognition are diffused through the local economy in a transparent or equitable manner.

This is in line with McCall's call for RDPM to codify a vision that will engender trust and goodwill among the stakeholders. Even when agreement is reached on 1 and 2 above, strong management is required. KIBMG have made a good start with characteristic 1 and have already outlined their rules for an umbrella King Island brand, and designed a logo. More needs to be done to strengthen characteristics 2 and 3.

When considering phase six, the *conceptualisation of the RIS*, it needs to be remembered that RIS is first and foremost a social system. It is made up of people, and the skills, knowledge and context they bring. What they construct is necessarily unique, and often inimitable, because the competitive advantage stems from the relationships embedded in the RIS, not the product(s) they sell. Leveraging the value created by improving and supporting regional relationships is key to successful RIS, because the value-add revealed in this circumstance is not transferable to other regions attempting similar moves. GI can manifest this. As an example it can bring together a range of people representative of Cooke's (2007) four development tenants identified earlier for the development of GI for KI.

Formalising strategic relationships between the stakeholders in the RIS is crucial, and creating a common goal or vision they can all work toward in their own businesses, and together, is a core feature of the RIS. Identifying the synergies and leveraging them for constructed advantage is the core process of the RIS. "GI for KI" is an example of a management vehicle for the RIS.

This is not to suggest that GI for KI will be the only option for a King Island RIS. As chapter five reveals, there are other opportunities around alternative energy that can link into this project for example. The best use of assets for development will be decided by the stakeholders in the RIS, the RDPM simply helps them evaluate what that best use might be.

Once the best configuration of assets has been decided, phase seven is the point at which stakeholders decide the ultimate purpose of the RIS. When stakeholders are *searching for the core process* of the RIS they will need to decide what the RIS will actually do in order to realise the shared vision. For King Island for example, and premising that the GI is well managed and supported, GI for KI as a RIS can deliver for King Island a strong, consistent message to the market, and an identifiable reputation, not for just one or two strong brands, but for all King Island producers and much of the community in which they live.

This is supported by Pike (2009) who believes that reputations are important for risk-averse consumers, who are willing to pay more when a reputation of trust can reduce uncertainty around purchase decision-making. A trustworthy GI or brand can,

says Pike (2009 p630), become an asset which can “accrue further rents from intellectual property rights through franchising, licensing and merchandising.” While this sort of growth may be limited in King Island’s case - given its finite size and population - GI can nonetheless underpin economic sustainability for King Island as protection against commodity peaks and troughs. GI for KI cannot grow the produce, protect the environment or create a sustainable agri-food future – it can however assist producers on King Island to do so through creating a strong, trustworthy brand that consumers are willing to pay more for; a necessary ingredient for niche market success.

The vehicle for managing the process defined at phase seven needs to be articulated in phase eight of the RDPM known to Harmaakorpi and Pekkarinen (2003) as the definition of knowledge creation and management system. This vehicle could take the form of a company, a trust, a cooperative or even a social enterprise so long as the communication is clear, the decision making processes are transparent and accountable, and the governance and management structures are robust enough to engender trust among all stakeholders.

When considering a management vehicle for GI for KI chapter five shows that a marketing company or similar vehicle that works only with King Island produce is unlikely to generate enough revenue for a viable private enterprise, although it may make enough to support an innovative form of social enterprise. This social enterprise could work as a marketing company for King Island’s goods and services, a quorum of related variety, with a mission to promote King Island as custodian of enviable quality and lifestyle. Membership would be restricted to King Island ‘locals’ who, along with their community, will be the beneficiaries of a stronger, more encompassing marketing strategy.

In summary the analysis of King Island through the RDPM has proved very useful in identifying not one, but several avenues for a way forward to a sustainable future. Agri-food may or may not be part of this future; however it seems the most likely option at this time. Table 7 offers a short list of potential stakeholders in an agri-food RIS, linked but not limited to their sector. There is definitely room here for some cross-sectoral thinking and innovation based on new relationships and networks. A

shallower analysis of King Island and its people would be less likely to identify such potential.

Table 7: Cooke's (2007) tenants and potential stakeholders of GI for KI as a RIS

GI for KI			
Economic Platform	Knowledge Platform	Community and Cultural Platform	Governance Platform
King Island Dairy King Island Beef King Island Seafood King Island Cloud Juice King Island Organics King Island Tourism	Marketing expertise Education and training opportunities Research projects Tacit knowledge	'terroir' Sustainable King Island Initiative King Island Planning scheme Carbon neutral policy Alternative energy platforms On-farm environmental management Environmental conservation Population strategy	KIBMG King Island producer representatives Processor representatives King Island Council Community representatives marketing Administration, brand rules, legal and compliance A 'champion'

6.2.2 GI for KI: a legitimate response?

Having evaluated King Island through the perspective of the RDPM it is argued that King Island is in a position to create an RIS through RDPM, however, GI is not a definitive answer for King Island and a sustainable agri-food future. GI is not actively supported by the Australian or Tasmanian governments for fear of its inconsistency with World Trade Organisation (WTO) free trade policies. Jena and Grote (2010) believe there to be fear among some countries that GIs act as less-than-transparent protection measures capable of threatening their own export opportunities. In spite of this, the research of Jena and Grote (2010) points to some strong economic reasons for the active protection of GIs, including the value of intellectual property rights, their institutional capacity to oversee market governance, their ability to reduce transaction costs by simplifying the marketing message and in turn support developing countries through fair trade ideals that reduce poverty and expand employment opportunities.

That said, in the Australian context, GI is used by wine producers at a national level, at a state level in West Australia, Tasmania and others and more local and regionally in other regions. However GI does not rate a mention in the recently released green paper on Australia's draft food policy, nor the Tasmanian government's current economic strategy. It is important to note however that it is not possible at this time

to register a non-wine GI in Australia (Wine Australia 2014), and Bowen (2010) sees strong national GI legislation as a necessary factor in the success of GI as regional development tools. While not the only determining factor, Bowen (2010) believes it plays a key role in whether the GI works for the whole community or just one or two powerful actors in the regional supply chain.

The concept of GI for KI could be a social enterprise that brings together local actors to leverage local assets for local advantage. Local ownership is important, and as evidenced above, *retaining* local ownership is crucial for sustainable regional development. A social enterprise would be 'owned' by the community, not one or two powerful actors, and as such be able to address some of the questions posed by Constance (2008). The value created by a successful brand would accrue to the producers rather than off shore interests, and so would partly answer the agrarian question. A better return to the farmer for most would ensure better environmental protection, particularly if the *terroir* of the GI is embedded in King Island's 'clean, green' image.

Value is also accrued to the community through ownership of the brand, enabling a stronger response to the food and emancipatory questions. Benchmarks ascribed by the six fields of endeavour and associated practises would also become more attainable with a successful social enterprise leveraging King Island's agri-food assets. It aligns clearly with the goals for a just and fair system, strong communities, vibrant farms, healthy people, sustainable ecosystems and thriving local economies. This is because the value created by the RIS stays in the community, making agri-food more valuable economically, environmentally, socially and culturally.

Baldacchino (2010) points out that branding is not just useful for lifting the profile of island products, it can also highlight an oft imagined island allure, that of lifestyle. A good brand may be able to attract what Baldacchino (2010, p 378) calls 'lifestyle entrepreneurs', who, captured by the imagination of an island lifestyle, may consider to invest in projects aligned with the values of the island community, and assist in its development economically, environmentally and socially.

Theoretically at least GI for KI looks promising as a regional development vehicle. However as identified earlier in the European work of Wiskerke (2002) and Roep

and Wiskerke (2010) there are real world issues to be considered when trying to find a method able to construct sustainable food systems. To further test the robustness of GI for KI as a strategy it is now analysed using the ten barriers to creating sustainable food systems and the fourteen lessons learned when examining real European case studies.

6.2.3 GI for KI and GEM

The following tables are used to analyse first the ability of GI for KI to address the ten barriers to creating a sustainable food system, and then how GI for KI responds to the fourteen lessons learned when trying to create a local, sustainable food system. While it is not an answer for every barrier, or lesson, a locally owned GI will give the local producers great control over their destiny, and reduce the need for political or institutional intervention:

Table 8: the ten barriers to creating a sustainable food system and GI for KI as a response:

10 barriers	GI for KI response
<ol style="list-style-type: none"> 1. The willingness of consumers to pay more for higher quality products is very limited 2. Common goals across the whole chain is difficult to achieve given the diverse range of actors and interests 3. Problematic competitive environments with high regulatory costs 4. Growth of an initiative may lead to a loss of individual actor independence and changes in governance leading to imbalances in power relationships 5. Growth for growth's sake alone can lead to an FSC losing authenticity and credibility 6. Institutional financial support is weighted to support mainstream production 7. Trade liberalisation continues to contribute to a cost-price squeeze with arguments that some imported foods have an unfair competitive advantage 8. Alternative FSCs are hindered by the lack of small to medium sized production and processing facilities 9. Power negotiations between large scale processors or retailers and smaller producers are asymmetrical and often thought of as placing unfair pressure on conditions of supply, such as price, quantity, quality et cetera 10. The high market share captured by large retailers undermines ethical and sustainability initiatives due to their reluctance to support place of origin labelling. 	<ol style="list-style-type: none"> 1. A direct marketing campaign that shortens the value chain will enable cost competitiveness 2. The goals of GI for KI are not sectoral or individual, they are common to the community 3. Greater networking capacity may help reduce regulatory costs 4. As a social enterprise, growth is not an individual pursuit, but a collective one, so power remains shared 5. A deep embeddedness of pride in the brand corresponding social conscience will regulate this 6. The need for external institutional support should be reduced 7. This remains outside the control of GI for KI 8. King Island only has small to medium size facilities allowing for flexibility and breadth of scope 9. As a collective searching for alternative markets outside that of larger retailers, negotiations around price should be more equitable 10. Again, this is outside the control of GI for KI

Table 9: The fourteen lessons learned when trying to develop sustainable food systems and GI for KI as a response.

Fourteen lessons for the creation of sustainable agri-food systems	GI for KI as a response
1. Developing a supportive institutional environment	1. A collective would be able to broker stronger relationships, and develop policies to support the GEM platform
2. Creating space for change	2. A more inclusive brand would be more supportive of 'alternative' and new initiatives that would strengthen the environmental and social sustainability claims of the brand
3. A strategic alliance with chain partners	3. GI for KI would have clear goals, and deliver a clear message for all chain partners to adopt and leverage
4. Willingness to invest in a shared enterprise	4. As a social enterprise, the collective could attract group funding to fund a strategic business plan worthy of further investment by the collective
5. Mobilizing investment capital for scaling up	5. Greater strength in numbers will create greater opportunity for funding opportunities.
6. Anticipating implications of scaling up	6. There is finite opportunity for growth of a food system on King Island. Any investment would need to be strategic. The collective would heed lessons from the individual growth of the dairy and beef industries and its impact.
7. A visionary and capable leader	7. The process of the RDPM to construct this RIS could identify suitable candidates
8. Building a strong brand	8. This would be the core process of the RIS
9. A flexible procurement system for local sourcing	9. The King Island community must be given the opportunity to demonstrate support for its local product. The collective will need to ensure that it treats its local base as well as its export base
10. Regional marketing as basic security	10. The local market is small, but the collective will be in a position to recruit locals as ambassadors to sell product to friends and family offshore
11. Regional embedding as a marketing strategy	11. The collective will need to re-energise the King Island brand, focusing on near neighbours first
12. Specificity as a key in aligning regional interests	12. The collective can ensure the brand attribute of place, and that any product from King Island can be traced to its origin.
13. Promotion of regional identity	13. The collective will be in a stronger position financially to market its regional identity
14. Public sector food procurement through partnerships	14. The opportunity for local procurement is small. The greater capacity of the collective however may enable competitive bids for contracts elsewhere.

What these further evaluations reveal is that 'GI for KI' is essentially a governance tool. RIS and RDPM are designed to not only enable endogenous innovation, but to also manage (govern) innovation for regional advantage. This is consistent with other literature. Food systems literature including value chain analysis also highlights the importance of governance mechanisms to exploit value. Baldacchino (2008) and other island researchers call for strong local governance and ownership where possible.

In essence, if we are to argue that RIS and RDPM are useful for islands we must make sure that the management and governance of the resulting innovation remains place-based. As the King Island case study demonstrates, once local control of local assets is ceded to external bodies, their value as a regional development tool is limited. This of course has implications for funding models. With constraints on external funding models and with government stepping back, how can regions be empowered to create advantage for themselves? The strategically designed mix of people and assets, aware of such constraints, may find truly innovative ways to do this. Nevertheless, to truly capture the value of local assets including local innovation, all of the literature used here, and the case study, suggest strong local governance of innovation is as important as innovation itself.

6.3 Agri-food, Regional Development, Innovation and Islands: a question of governance?

In drawing closer to an answer as to how or if contemporary regional development theory and method can help identify a future for King Island, and indeed islands more generally this thesis has reached a point where scrutiny and evaluation, applied via multiple lenses, suggests that place and provenance, expressed in food as a GI, is an innovation for King Island and a potential way forward. The analysis also highlights the platforms, some present, some not, needed to go forward. The analysis did extract examples of emergent innovation, and there are capabilities and resources on King Island that can be re-configured to support this emergent innovation. There is also a 'vision' (McCall 2010) that stems from a strong and enduring attachment to place that can be leveraged by a GI for market advantage.

GEM, while calling for levels of governance, embedding and marketing for sustainable food systems is flexible in so far as it recognises different systems require different levels of these three key attributes. Embedding is already strong on King Island, and marketing is implicit when discussing brand on King Island. What is also essential to a successful GI in KI however, and consistent with other studies, is the strength of its governance.

This section seeks to bring the issue of ‘governance – at what level?’ into stronger focus, arguing that there is not necessarily a lack of governance in agri-food systems; it is just not evenly applied for the benefit of all actors in the system. This is highlighted by contrasting Cooke’s four platforms (2007) for regional development with the four worlds of food paradigm outlined by Morgan et al (2006) and identifying where the gaps in agri-food system governance lie, and how it impacts on regional development. Figure 17 at the beginning of the chapter summarises the literature surrounding the paradox of global food provision and rural and regional sustainability, and then governance and innovation as a response to this paradox.

6.3.1 Governance – at what level?

Governance, in the guise of strong social capital, has been identified in the literature review as an issue for the development and embedding of sustainable agri-food systems in regions. Most of the responses identified here as responses to the paradox of sustainable global food provisioning are strategies for stronger, localised governance; GI for KI is but one example. Globalisation has made short shrift of 20th century economic growth theories and strategies (Baldacchino 2005) and traditional growth theories based on human and physical resources, technology transfers, trade and governmental structures have been unable to adequately account for the uneven development trajectories of recent experience (Rodriguez-Pose & Storper 2006). Many believe the reason for this lies in a general underestimation of the importance of social capital (Rodriguez-Pose & Storper 2006, Cooke 2007, Waite & Williams 2009, McCall 2010), which is often overlooked because it “remains fairly intangible, multi-causal and highly complex” (Baldacchino 2005, p33). This thesis posits that it is social capital, in the guise of strong local governance, which is

missing from small agri-food supply chains in their effort to remain viable and sustainable in a global food paradigm.

Morgan et al (2006) imagine this global food paradigm as a 'worlds of food paradigm', based on Storper's 1997 'worlds of production' theory. They cite evidence of an industrial world of food with perhaps the fast food monolith McDonalds the most obvious example. There is also a science-based intellectual resource world of food that began with the green revolution and is yet to peak. Then there is a market world of food that is constantly looking for market share in the 'mass market', and is located in the standardisation of food and production processes in a diverse range of market 'niches' - the commoditisation of organic agriculture for example (Lyons in Lawrence et al 2009). And then there is an interpersonal world of food based in local and cultural spaces of production where relationships matter; relations to place, to food, the environment and each other matter. Four worlds of food; all have different economic, environmental, social and political constructs that can and do impact of rural and regional places. As vehicles for regional and rural development how do they align with Cooke's (2007) four platforms?

Two of the worlds of food outlined by Morgan et al (2006) can be situated in Cooke's 2007 economic platform – the industrial world of food and the market world of food. The science-based intellectual resource world of food can be situated in Cooke's knowledge platform, and the interpersonal world of food finds a home in Cooke's community and culture platform. The four worlds of food align with only three of Cooke's platforms necessary for constructing advantage and sustainable regional development. Food production systems, as a regional development tool, or regional innovation system, have the potential to fail because of an absence of alignment with Cooke's governance platform.

Table 10: Cooke's (2007) Platforms and the Four Worlds of Food (Morgan et al 2006)

Cooke's (2007) Four Platforms	Four Worlds of Food (Morgan et al 2006)
Economic Platform	Industrial world of food Market world of food
Knowledge Platform	Intellectual resource world of food
Community and Culture Platform	Interpersonal World of Food
Governance Platform	The missing link that allows for unevenness of development and environmental degradation?

This is not to suggest that governance is entirely missing from the worlds of food paradigm, the contrary is true. There are many layers of governance that pervade world food systems, it is just that the bulk of them are internal forms of governance that pertain to the management of the business, or the supply chain, not the management of a sustainable food production system. Who then is responsible for the sustainability of food systems and the regions that depend on them? Given Van Der Ploeg and Renting's (2000) assertion that we cannot separate the rural from agriculture, it makes sense that governance must come from the region itself. This governance, as a form of social capital may then help balance the regional economic development quandary of uneven trajectories.

This mean then wresting some form of governance of food systems back from the economy driven by endless growth and powerful TNCs becomes necessary. The benchmarks outlined within the six fields of endeavour call for stronger local governance of food systems to best support the local community. Cooke's (2007) platforms for regional development call for stronger local governance. The RDPM (Harmaakorpi & Pekkarinen 2003) seeks to codify strong local governance within the RIS to leverage the value created by the innovation for local advantage. Baldacchino (2008) says that for islands to be sustainable they must have strong local

governance while remaining outward looking for opportunity. The contention lies with the inescapable truth that the economy is globally governed.

Globalisation has hollowed out regional, and sometimes national, governance (Ikerd 2005). The rise and fall of national economies dictate national policy, not the other way around, as witnessed by the recent global financial crisis largely blamed on the financial sector including large multi-national banks, not government (Blankenburg & Palma 2009). Yet it is government left to pick up the pieces, and as this thesis shows, there is a myriad of literature pointing to regional development policies implemented globally in response. Amin (1999, p375) however volunteers a cautionary note that “No amount of imaginative region-building will be able to sustain a spiral of endogenous economic growth in the absence of a conducive macro-economic framework.” More recently, in Australia some commentators have raised the point again; “A small country highly integrated unto the global economy is going to be very sensitive to international crises” (Berg 2013 online). Australia is a small country, with little or no control over its economy (Berg 2013) and so its regions and islands. Unfettered global economic development does not work for regions or islands, and as such the role of government needs to be examined, particularly when it is widely accepted that they have a responsibility to intervene in instances of market failure.

6.3.2 Governance – who decides?

If governance, as argued here, is an appropriate response, then what should the nature of the intervention be? Should governments prop-up multinational companies that are too big to fail? Or would they be better to invest in new and innovative industries? How would the transition be managed? And by whom? Baldacchino (2005, p39) asks “Development ‘from the outside in’ looks and feels like common sense; but as long as it is not ‘from the inside out’ can it ever be good sense?” and he goes on to state that “small islands find themselves poised to take upon themselves increased autonomy and responsibility for their own fate” (Baldacchino 2005, p41). Yet how can they? Not only are small islands constrained by distance and population, many are dependent on SMEs for economic turnover and prosperity and for Waite and Williams (2009, p499)

Unfortunately SMEs are often at a resource disadvantage when venturing into international markets. Specifically with regards to marketing activities SMEs suffer from constraints such as lack of resources, lack of time, lack of finance and lack of information to market themselves effectively.

Development 'from the inside out', or from the ground up, necessarily requires local innovation. Not just of products, or science and technology, but also needs to include innovation around processes and how it can be engendered in the local population. Baldacchino (2008) calls for a 'glocal' approach with support for locals to travel globally and glean as much as they can through trade missions and more before returning home with new ideas.

Cooke (2007) progresses such notions by attempting to systemically capture and utilise the innovation(s) (i.e. governance) that may arise from these individuals through RIS. The RIS is an attempt to identify and systematise innovation of processes; a collective of individual thinkers working together to progress local assets. A milieu of assets has the potential to create a milieu of innovative and distinctive approaches to regional development. GI is but one example, however, as Bowen (2010) points out, unless GI is institutionally and politically supported it will not have the governance capacity necessary for it to be useful as a vehicle for regional development.

Thus the thesis returns to the issue of stronger localised governance being at the heart of regional development *in context with* the outside world. The argument from Bowen (2010) above serves as a reminder that one can create a governance system for regional development at the regional level, but it cannot be done in isolation from national or supra-national levels of governance. Policy from a distance is a real issue often overlooked in strategies aimed at supporting local populations. The global economy is 'policy' from a distance; to imagine an RIS without reference to it is untenable. The RDPM (Harmaakorpi & Pekkarinen 2003) attempts to address this with their eight phase model that is able to identify and contextualise governance at a number of levels before drilling down for real alternatives and opportunities, however this is a European model, designed for European circumstance. Before it can be applied it to King Island, Tasmanian or Australian innovation systems,

exponents must be fully cognisant of the Australian circumstance, and the circumstances that govern local economic systems.

Governance then, like Baldacchino's (2005) description of social capital, can be highly complex, and often fairly intangible, but nonetheless necessary to sustainable food systems. If food industry stakeholders are to truly understand how to make their food systems more sustainable, and resist the paradox of global food provision, they must understand the complex internal governance processes applied by the TNCs to foster control and capture value for themselves. Armed with this knowledge a region may wrest back for itself some value from the chain(s) they engage in, and construct for themselves regional advantage based on their endemic regional strength, in King Island's case, growing quality food.

Chapter Seven: Conclusion

King Island and its people can be described as resilient. Yet despite the 'clean, green' image it likes to portray, it cannot be described as sustainable. To be sustainable requires more than that. For King Island to be home to a sustainable agri-food system requires so much more than that. The regional development literature confirms this, as does the sustainable food systems literature, and King Island's own know the status quo is not enough, despite their bravado. The returns from agricultural production are in decline, the population is in decline, and businesses are moving away. As suggested in the introduction, planning for islands is complex and this thesis set out ask; what can regional development theory tell us about the sustainability of King Island's agri-food future? More than that, what can the convergence of the literatures tell us about islands, especially those, like King Island, so reliant on agri-food?

This research found that the emergent regional development literature gives insights that are important to the future of islands because it reveals that innovation and strong regional relationships are vital. Cooke's (2008) notion of constructed regional advantage using regional innovation systems of inter connected people from economic, governance, knowledge infrastructure and community/culture arenas can guide policy and support as the community seeks a way forward. The regional development platform method of Harmaakorpi and Pekkarinen (2003) can test ideas for such systems for robustness and validity. However the system sought for King Island is a sustainable one, able to engender economic development, and, given King Island's reliance on agri-food trading in a global food paradigm, it made sense to look to sustainable food systems literature as well.

The sustainable food systems literature is also significant for islands, and regions dependent on agricultural resources, because it outlines some of the problems inherent in this global food paradigm: Morgan et al (2006) speaks of a 'worlds of food paradigm' that allows for commodity ghettos in rural United Kingdom and Europe. Patel (cited in Lawrence et al 2010) notes there is a global ability to feed the world but imbalances in the food system lead to the paradox of the 'starved' and 'stuffed'.

Marsden (2003) believes agricultural systems to be in a 'race to the bottom'. Friedmann (2005) believes consumers are separated into groups and only some can afford expensive quality standards institutionalised in western supermarkets. Duram and Oberholtzer (2010), Ikerd (2005), and Gittens (2010) are among many believe there is a need to start to understand local food systems in context to their resource use. And then there are others such as Hogan et al (2011) and Cribb (2010) who included the difficulties farmers face in responding to climate change challenges in the discussion.

The decline of King Island's economy outlined in chapter four, heralds calls for change, and resistance to the unsustainable global food paradigm. Some of the ideas as to what this change may look like are outlined in the four questions/provocations pitched by Constance (2008), and another important contributor, the Center for Whole Communities (2009). These are useful in that they seek to outline how local food systems may respond, or create alternatives to, the current model used to supply and distribute food worldwide. These were applied to the King Island data in chapter five, and revealed gaps in the economic, socio/cultural and environmental capacity of King Island to respond to the 'sustainability' challenge.

Additionally, the theories of Wiskerke (2002), from research conducted in Europe for the EU, outlines ten barriers that make this a complicated proposition, and then with Roep (Roep & Wiskerke 2010) he details the fourteen lessons learned from case studies in Europe that should be heeded if a region is seeking to follow a viable, sustainable path for their local food system. All these literatures converge to reveal the sustainability of food producing regions to be a 'wicked' problem, one to which King Island must respond if it is to prosper into the future.

That global food provisioning is complex and difficult is not under question. The question is how can tiny islands located hundreds of miles from markets and consumers survive in this paradigm? They cannot hope to respond to economic or development cues as larger regions can. Inflows and outflows are not smooth or automatic, leading Armstrong and Read (2002) to suppose small islands to be vulnerable to exogenous shocks. Baldacchino and Bertram (2009) critique this

vulnerability hypothesis as not taking into consideration the ability of islands to flexibly and strategically respond to exogenous shocks. So the question then moved to how King Island responds. To answer this it was argued there was a need to understand King Island in context to the literature outlined. The approach taken was to analyse King Island against the literature lenses, in essence to deconstruct the King Island food system.

The analysis reveals that King Island does not meet the definition of a sustainable food system. None of the questions posed by Constance were satisfactorily addressed. The reply to the agrarian question identified declining agricultural returns and global competitive pressures for King Island producers. Additionally, debate around the environmental sustainability of food production is also relevant for King Island, particularly because of the important perception of clean and green to the King Island brand.

The King Island brand is also the headline response to the food question, and issues around brand integrity, particularly participation and governance, were obvious in the findings. The King Island community has relied on the strength of its two major brands for more than 20 years, and the decreasing level of local control leaves the perception of a King Island brand vulnerable. As to the emancipatory question, low incomes and high cost of living make King Island a challenging place to live, and power imbalances between producers and processors make it a challenging place to do business. Real choice that underpins agency and sovereignty is difficult to identify on King Island.

The next method of evaluation also revealed sustainability challenges for King Island's food system. The current King Island system failed to meet most of the benchmarks required by the 'whole measures' literature. Overall, a quarter of the challenges outlined by the six fields of endeavours required to create a sustainable local food system were met on King Island. Another seven challenges are partially met, or works in progress, providing opportunities for improvement with some minor tweaking. Where the major work for a regional development initiative lies is with the unmet challenges posed by the Center for Whole Communities. These challenges – from each of the field of endeavours, were mainly social and environmental

challenges faced at the local level, and in areas that TNCs generally choose to ignore. A regional innovation system that holds people and social capital at its core will go some way to redressing this.

All ten constraints (barriers) to the creation of a sustainable agri-food system operating in a global market world-of-food were also evident on King Island, pointing to the conclusion that food as a commodity is not a sustainable market for King Island into the future. The question here that a RIS is able to answer is which market is the appropriate one for King Island? Is it truly food? The RIS and RDPM can ask, and answer, the appropriate questions for sustainable projects in reply to these barriers.

That King Island would do well to heed the fourteen lessons learned in Europe, as outlined in chapter five, is another indicator that sustainable food producing systems are complex and difficult to manage for on-going regional prosperity. The GEM framework, Governance, Embedding and Marketing, based on the lessons learned, is clearly relevant to the King Island case study, and highly reminiscent of the concepts underlying RIS.

As it stands King Island is languishing in path dependency, reacting to global influences, losing population and relevance as their brands diminish, but importantly, still there. The resilience of the community is tested, yet it is this resilience that will be key in any future economic development initiative. It is also this resilience that a locally devised RIS could support, in three main areas; constructing advantage, flexibility and strong, local governance.

Constructed Advantage

This thesis finds that when King Island is examined through a regional development lens, there is reason to hope that a sustainable agri-food future is at least possible. Regions like King Island are made up of *people*, the *place* in which they live and the *relationships* and networks endemic to them. There are a number of capitals, including social capital that are strong on King Island and this research shows that networks are seen as important to the agri-food producers on King Island; most are

already involved in some form of network, be it the brand management group, the shipping group or the beef producers group. There is capacity latent in most regions that can build growth and sustainability through stronger governance, King Island is no different; however the ability to leverage such capacity according to Cooke (2007) relies on a regional networks ability to be innovative. The RDPM model is clearly able to be applied to any or all of the King Island networks, and re-configure them as Harmaakorpi and Pekkarinen (2003) suggest, empowering innovative, endogenous development initiatives that are designed by the local community. This in turn, captures value and constructs advantage for the local community. Whether this may be a re-invigoration of the King Island brand, or a new future based on renewable energy, or an increased tourism industry based on golf, or yet another initiative unimagined by this off-island author, the regional development literature suggests the King Island community has the capacity to respond.

Flexibility

Additionally, by bringing a range of stakeholders together, the RDPM model is able to support Baldacchino and Bertram's (2009) claim of potential flexibility in island economies. GI for KI is only one example of innovation that may stem from a RIS on King Island; a demonstration of the usefulness of regional development theory when tackling wicked regional problems of global financial pressures, declining income and population, and an economic power imbalance that cedes governance to TNCs and not the regions on which they depend. There are a range of potential futures King Island can engage in; given its history, a sustainable agri-food future is only the most obvious. Should greater energy infrastructure be built on King Island for example, a RIS and the RDPM have the potential to identify strategies where value can be accrued locally, and not lost through exogenous governance and policy. Development, as Baldacchino (2005) would suggest, from the inside out, not from the outside in.

Strong local governance

The idea that sustainable regional development hinges on strong local governance led to the discussion in chapter six outlining the quandary of governance. There are

a myriad of levels of governance; some regions can influence, and some they cannot. It is the ability to recognise the difference that may be telling in the success or failure of regional development policies. Millions spent in supporting manufacturing industries may not be helpful if the global market for the manufactured product(s) is changing, or influenced by circumstances outside the regions control. Any investment must be tied to strategic development outcomes focused on opportunities, or supporting transitional arrangements, rather than ignoring the obvious and supporting the status quo. If a region, or island, is to operate successfully and sustainably in a global economy it must have a comprehensive knowledge of the market and value chain in which it operates, and its own relative position. Context matters, and it can be identified using the RDPM.

In this instance it is governance, particularly the governance pertaining to local economic drivers, where contemporary regional development theories and strategies should be employed to best tackle the wicked problem of sustainable development for islands. For King Island, the governance of any new branding initiative must remain local, however further research into how investment in the island can be maintained to support new initiatives is needed. Further research comparing islands and the governance structures of their economic drivers would add greater depth to, and a broader understanding of, the importance of local governance for islands and regions generally.

To go back to the original question, can contemporary regional development theory and method help identify a future for islands and other regions on the periphery? Yes it can. When faced with the challenges of 'doing' regional development on islands the King Island case study shows contemporary regional development theories offer, as Baldacchino (2008 p 50) would hope, "a fuller, deeper appreciation of the island condition." The work of Cooke (2007) and Harmaakorpi and Pekkarinen (2003) can systematically and strategically help development practitioners identify and implement initiatives to construct advantage that are not only theoretically sound, but based on, and manifested in, place. They all spell out quite clearly that it is important to get the governance of any project or initiative right, and as this research confirms, that that governance must come from within – not without.

For regional communities to build platforms for development, and RISs, the regional development literature asks for a fuller, deeper appreciation of context. The convergence of the literatures used in understanding King Island demonstrates a method that can be used to understand context, and form problem-solving strategies that work on overcoming not only the complex 'island condition' but also the paradox of global food provision. In short, this thesis finds that contemporary regional development is as relevant to the study of islands as it is any other region. It adds another lens through which islands can be viewed, and works as an additional tool to reveal insights and strategies via which island futures may be shaped.

References

- Addison, M.1998. *King Island; A Time of Change*. King Island, Marylyn Addison.
- Addison, M. 1995.*King Island: A Glimpse of the Past*, King Island, Marylyn Addison.
- Allen, P. 2004.Together at the Table: Sustainability and Sustenance in the American Agrifood System, Pennsylvania, The Pennsylvania State University.
- Allison, J, C Fernon, N Fletcher and R Eversole (2009) 'Make it to Market: Nibble, Enjoy, Savour - Leveraging the Farmers' Market.' Funding application to the Department of Agriculture, Fisheries and Forestry. Burnie: Institute for Regional Development (February).
- Allison, H. & Hobbs, R. 2004. Resilience, Adaptive Capacity and the 'Lock-in Trap' of the Western Australian Agricultural Region. *Ecology and Society*, 19, 3-19.
- Amin, A. 1999. An Institutional Perspective on Regional economic Development. *International Journal of Urban and Regional Research*. 23(2):365-378
- Anderson, L. 2006. Analytical Autotethnography. *Journal of Contemporary Ethnography*. 35:373-395
- Armstrong, H.W. & Read, R. 2002. The Phantom of Liberty?: Economic growth and the vulnerability of small states. *Journal of International Development*. 14: 435-458
- Asami, Y. & Isard, W. 1989. Imperfect Information, Uncertainty and Optimal Sampling in Location Theory: An Initial Re-Examination of Hotelling, Weber and Von Thunen. *Journal of Regional Science*, 29, 5-7-521.
- Asheim, B., Boschma, R. & Cooke, P. 2009. Constructing Regional Advantage: Platform Policies based on related variety and knowledge bases. *Papers in Evolutionary Economic Geography*, 7, 1-34.
- Australian Bureau of Statistics. 2013. Statistical files 71250DO036_200506, 71250DO025_200506, 75030DO008_201010, 71210DO010_201011.
<http://www.abs.gov.au>
- Australian Bureau of Statistics. 2013b. Estimates of Personal Income for Small areas 2009/10 series. Viewed March 13 2013 at
<http://www.abs.gov.au/ausstats/abs@.nsf/mf/6524.0.55.002/>

Australian Bureau of Statistics. 2011. March 3 2011 4pm

<http://www.abs.gov.au/AUSSTATS/abs@nrf/Latestproducts/LGA63410Industry12005-2009?opendocument&tabname=Summary&prodno=LGA63410&issue=2005-2009&num=&view>

Australian Farm Institute (AFI). 2008. Value in Value Chains: Collaborative Business Models and Farm Accreditation Systems Examined. Surrey Hills, Australian Farm Institute.

Baldacchino, G. 2011. "Island Enclaves: Tasmania s a sub-national jurisdiction" Public Lecture University of Tasmania Sandy Bay Campus, February 18, 2011.

Baldacchino, G. 2010. Island brands and 'the island' as a brand: insights from immigrant entrepreneurs on Prince Edward Island. *International Journal of Entrepreneurship and Small Business*. 9(4):378-393

Baldacchino, G. 2008a. Studying Islands: On whose terms? Some Epistemological and Methodological Challenges to the Pursuit of Island Studies. *Island Studies Journal* 3(1): 37-56

Baldacchino, G. 2008b. Entrepreneurship in smaller jurisdictions: Appraising the glocal elite. *Comparative Education*, 44, 187-201.

Baldacchino, G. 2005. The contribution of 'social-capital' to economic growth: Lessons learned from Island jurisdictions. *The Round Table*. 94(1): 31-46.

Baldacchino, G. & Bertram, G. 2009. The Beak of the Finch: Insights into the economic development of small economies. *The Round Table*, 98, 141-160.

Bennet, J. 2009. *The role of regionality in the marketing and branding of food*. A report for the Nuffield Australia Farming Scholars. Nuffield Australia. Available at: http://www.nuffieldinternational.org/rep_pdf/1248050899Jane_Bennett_2008_Nuffield_Report.pdf

Berg, C. 2013. Politicians are powerless over Australia's economy. Commentary on *The Drum* viewed 30 July 2013 at <http://www.abc.net.au/news/2013-07-30/berg-economics-government/4853252>

Blankenburg, S. & Palma, J.G. 2009. Introduction: the global financial crisis. *Cambridge Journal of Economics*. 33:531-538

Bolwig, S., Ponte, S., duToit, A., Riigaard, L & Halberg, N. 2010. Intergrating Poverty and Environmental Concerns into Value-Chain Analysis: A Conceptual Framework. *Development Policy Review* 28(2):173-194.

Bonanno, A. & Constance, D. 2008. *Stories of Globalization: transnational corporations, resistance and the state*, University Park, Pennsylvania, The Pennsylvania State University Press.

Borch, M. 2001. Rethinking the origins of terra nullius. *Australian Historical Studies* 32(117):222-239

Boschma, R., Asheim, B. & Cooke P. 2011. Constructing regional advantage: platform policies based on related variety and differentiated knowledge bases. *Regional Studies* 45 (7):893-904

Bowen, S. 2010. Embedding Local Places in Global Spaces: Geographical Indications as a Territorial Development Strategy. *Rural Sociology*. 75(2):209-243

Bristow, G. 2010. Resilient regions: re-'place'ing regional competitiveness. *Cambridge Journal of Regions, Economy and Society* 3:153-167

Bureau of Agricultural Economics (BAE). 1977. *King Island: A viability study of the rural economy*. Canberra. Commonwealth of Australia

Byerlee, D., De Janvry, A. & Sadoulet, E. 2009. Agriculture for Development: Toward a New Paradigm. *Annual Review of Resource Economics*, 1, 1-20.

Campbell, H. 2009. Breaking new ground in food regime theory: corporate environmentalism, ecological feedbacks and the food from somewhere' regime? *Agriculture and Human Values*, 26, 309-.

Christopherson, S. & Clark, J. 2007. Power in Firm Networks: What it means for Regional Innovation Systems. *Regional Studies*, 41, 1223-1236.

Clapp, J. & Fuchs, D. 2009. *Corporate Power in Global Agrifood Governance*, Cambridge, Massachusetts Institute of Technology.

Clapp, J. & Murphy, S. 2013. The G20 and Food Security: a Mismatch in Global Governance? *Global Policy* 4(2): 129-138

Centre for Whole Communities. 2009a. *Whole Measures for Community Food Systems*, Vermont USA, Center for Whole Communities.

Centre for Whole Communities.

2009b .http://www.wholecommunities.org/alumni_blog/?p=32

Coates, L. 2013. How do you Eat the Elephant in the Room? Agri-food Sustainability and King Island, in Farman-Bowers, Higgins and Millar (eds) *Food Security in Australia: Challenges and prospects for the Future*. New York. Springer.

Coates, L. 2009. Tasmania: Food Bowl or Commodity Ghetto? *Institute for Regional Development*. Hobart, University of Tasmania.

Collins, J. 2005. New Directions in Commodity Chain Analysis of Global Development Processes in *New Directions in the Sociology of Global Developments*. Buttle, F & McMichael, P (Eds). Amsterdam, Elsevier Publishing.

Constance, D. 2008. The four questions in agri-food studies: a view from a bus. 2008 AFHVS presidential address .*Agriculture and Human Values*, 26, 3-14.

Cooke, P. 2008. Regional Innovation Systems: Origin of the Species. *International Journal of Technology Learning Innovation and Development*, 1, 393-409.

Cooke, P. 2007. To Construct Regional Advantage from Innovation Platforms First Build Policy Platforms.*European Planning Studies*, 15(2):179-194.

Cooke, P. & Schwartz, D. 2007. *Creative Regions: Technology, Culture and Knowledge Entrepreneurship*, London, Routledge.

Cribb, J. 2010. *The Coming Famine: risks and solutions for global food security*. Viewed 24.08.10
<http://www.sciencealert.com.au/features/2010804.html>

Dawkins, C. 2003. Regional Development Theory: Conceptual Foundations, Classic Works, and Recent Developments. *Journal of Planning Literature*, 18, 131-172.

Dickie, M. (2007) *Field Days 2009: A Report on a Scoping Study for a Proposed Trade Show for Queensland's Innovative Agri-food Sector*, Prepared for Queensland Department of Primary Industries and Fisheries, by Quay Consulting, Sydney; August 2007.

Dotmocracy .org 2011 viewed 29 April 2011 at http://dotmocracy.org/what_is

Duram, L. & Oberholtzer, L. 2010. A geographic approach to place and natural resource use in local food systems. *Renewable Agriculture and Food Systems*, 25, 99-108

Edgecombe, J. 1993. *Discovering King Island: Western Bass Strait*, Thornleigh, NSW, J.M. Edgecombe

Fearne, A., Collins, R., Clark, R., Dent, B., Bonney, L., Parker, M. & Mendham, J. 2008. *Value Chain Innovation Research*. A report for the Tasmanian Institute for Agricultural Research, the Australian Vegetable Industry Development Group and HAL Horticulture. Burnie, Tasmanian Institute of Agriculture.

Fingleton, B. & Fischer, M. 2010. Neoclassical theory versus new economic geography: competing explanations of cross-regional variation in regional development. *Annals of Regional Science*, 44, 467-491.

Fletcher, L. 2011. "....some distance to go": a Critical Survey of Island Studies. *New Literature Review* 47-48: 17-34

Food Connect 2010. Viewed August 24 2010 <http://www.foodconnect.com.au/>

Food Standards Australia & New Zealand (FSANZ). 2013. Raw Mild Products viewed 26 March 2013 at <http://fiidstandards.gov.au/foodstandards/primaryproductionprocessingstandardsaustraliaoly/dairymilkproducts/>

Friedmann, H. 2005. From Colonialism to Green Capitalism: Social Movements and Emergence of Food Regimes in *New Directions in the Sociology of Global Developments*. Buttell, F & McMichael, P (Eds). Amsterdam, Elsevier Publishing.

Friedmann, H. & McNair, A. 2008. Whose Rules Rule? Contested Projects to Certify 'Local Production for Distant Consumers'. *Journal of Agrarian Change* 8(2-3):408-434

Fujita, M. 2010. The evolution of spatial economics: from Thunen to the New Economic Geography. *The Japanese Economic Review*, 61, 1-32.

Gittens, R. 2010. *The Happy Economist: Happiness for the Hard-Headed*, Crows Nest, NSW, Allen & Unwin.

Grabher, G. & Hassink, R. 2003. Fuzzy concepts, scant evidence, policy distance? Debating Ann Markusen's assessment of critical regional studies. *Regional Studies* 37 (6&7): 699-700.

Graham, R. 2012. Interview with Leon Compton, ABC morning radio Hobart, December 6, 2012.

Gulumser, A., Baycan-Levent, T. & Nijkamp, P. 2010. Measuring Regional Creative Capacity: A Literature Review for Rural-Specific Approaches. *European Planning Studies*, 18, 545-563.

Harmaakorpi, V. & Pekkarinen, S. 2003. The Concept of the Regional Development Platform and Regional Development Platform Method (RDPM) as a Tool for Regional Innovation Policy. *43rd Annual Conference of European Regional Science Association*. Jyväskylä, Finland.

Higgins, B. & Savoie, D. 1995. *Regional Development Theories and Their Application*, New Brunswick, Transaction Publishers.

Hinrichs, C. & Lyson, T. (Eds) 2007. *Remaking the North American food system: Strategies for sustainability*. Lincoln, USA. University of Nebraska Press.

Hogan, A., Berry, H., Ng S.P. & Bode A. 2011. *Decisions made by farmers that relate to climate change*. Rural Industries Research and Development Corporation (RIRDC) publication number 10/208. Canberra. Sighted on line February 22, 2011 <https://rirdc.infooservice.com.au/items/10-208>

Housego, A. 2006. *King Island Place Brand Project: Sharing the King Island Way*. A report prepared for the King Island Council by Anna Housego Strategic Communication presented in October 2006

Ikerd, J. 2009. *Sustainable Capitalism*. Viewed March 12 2010 <http://web.missouri.edu/~ikerdj/papers/WI-Madison%20Sustain%20Capitalism.htm>

Ikerd, J. 2005. Reclaiming Our Food Sovereignty from the Global Economy. *Hartwrick College Guest Lecture Series 'Food in Our Lives'*. Oneonta, New York.

Jena, P.R. & Grote, U. 2010. Changing institutions to protect regional heritage: A case for geographical indications in the Indian agri-food sector. *Development Policy Review* 28(2):217-236

Juska, A. 2010. Profits to the Danes, for us - Hog Stench? The Campaign Against Danish Swine CAFOs in Rural Lithuania. *Journal of Rural Studies*, 26, 250-259.

Kaplinsky, R. 2000. Globalisation and Unequalisation: What can be learned from value chain analysis? *Journal of Development Studies*, 37, 117-146.

Kevin, T. 2009. *Crunch Time: Using and Abusing Keynes to Fight the Twin Crises of Our Era*, Melbourne, Scribe Publications Pty Ltd.

Khamis, S. 2007. Gourmet and green: the Branding of King Island. *Shima: the International Journal of Research into Island Cultures*, 1, 14-30.

King Island Council. 2012. *Partnership agreement between the Tasmanian Government and the King Island Council*. 26 October 2012. Viewed December 2012 at <http://www.kingisland.tas.gov.au/webdata/resources/files/2012%20October%2026%20Signed%20Partnership%20Agreement.pdf>

King Island Council. 2010. *King Island Planning Scheme 1995*. Available at: http://www.kingisland.tas.gov.au/webdata/resources/files/KI_Planning_Scheme_1995_%28current_08-06-10%29.pdf

King Island Council. 2004. *King Island – 2013. Strategic Plan 2004-2008*. King Island Council. Viewed June 2011 at http://www.kingisland.tas.gov.au/webdata/resources/files/Strategic_Plan_2013_-_Final.pdf

King Island Courier. 2011. ACCC takes action against Vic meat suppliers claiming 'King Island' origin. *King Island Courier* 37(4) p1. Currie King Island .King Island Quick Print.

King Island Courier. 2009. Abattoir closed for assessment of viability. *King Island Courier* 25(19) March 25 2009, p1. Currie King Island, King Island Quik Print

King Island Courier. 1985a. Abattoir Manager Peter Jensen says Production Could Double. *King Island Courier* 1(13), February 6th, 1985 p1, Currie King Island. King Island Quik Print

King Island Courier 1985b. \$1 million on Offer to Government. *King Island Courier* 1(38) July 31st 1985 p1. Currie King Island, King Island Quik Print.

King Island Courier. 1985c. K.I.D.P in Voluntary Receivership. *King Island Courier* 2(3) November 20 1985, p1. Currie King Island, King Island Quik Print

King Island Courier. 1984. Government Should Accept Abattoir Maintenance Responsibility. *King Island Courier* 1(2).November 14, 1984, p1. Currie King Island. King Island Quik Print

King Island Dairy. 2013. *The King Island Dairy Story*. Viewed February 28 2013. <http://www.youtube.com/watch?v=QjkDGpg3L4s>

King Island Kelp Industries. 2013, King Island Kelp Industries Pty Ltd viewed March 26, 2013 at <http://www.kelpind.com.au/kabou.htm>

King Island Scheelite. 2013. *Dolphin Project*. Viewed March 26 2013 at <http://www.kingislandscheelite.com.au/index.php?id=18>

King island Shipping Group. 2011. *King Island Shipping Group EOI Information Package*. Viewed March 26 2013 at <http://www.kingisland.tas.gov.au/page.aspv?u=305&c=1029>

Kirk, WJ. 2008. *King Island Dairy Saga*. Moorabbin, Vic. WJ Kirk

Kinnear, S., Charters, K. & Vitartas, P. (eds) 2013. *Regional Advantage and Innovation: Achieving Australia's National Outcomes*. Heidelberg, Germany. Springer-Verlag.

Krabbe, R. 2013. Community Supported Agriculture and Agri-Food Networks: Growing Food, Community and Sustainability? In *Food Security in Australia: Challenges and Prospects for the Future*. Farman-Bowers Q., Higgins, V. & Millar, J (eds). Springer, New York.

Lambooy, J.G. 2010. Knowledge transfers, Spillovers and Actors: the role of context and social capital. *European Planning Studies* 18(6):873-891

Lawrence, G., Lyons, K. & Wallington, T. 2009. *Food Security, Nutrition and Sustainability* London, Earthscan.

Lazeretti, L., Capone, F. & Cinti, T. 2009. The Regional Development Platform and "related Variety": some evidence from Art and Food in Tuscany. *European Planning Studies*, 18, 27-45

Lock, A. & Strong, T. 2010. *Social Constructionism*. EBook Cambridge University Press

Lyson, T. A. 2004. *Civic Agriculture: Reconnecting Farm, Food, and Community*, Medford, Massachusetts, Tufts University Press.

Marsden, T. 2003. *The Condition of Rural Sustainability*, Assen, The Netherlands, Royal Van Gorcum.

Mason, J. 2002. *Qualitative Researching*. 2nd Edition. Sage Publications. London

- McCall, T. 2010. *Spatial Innovation in Tasmania: Constructing Advantage through Regional Development Platform Methods (RDPM)*. AIRC Working Paper Series WP/0510. Australian Innovation Research Centre, University of Tasmania, Hobart.
- McFarlane, I. 2008. *Beyond Awakening. The Aboriginal Tribes of North West Tasmania: A History*. Fullers Bookshop, Riawunna, & the University of Tasmania. Launceston.
- McMahon, M. 2009. Standard fare or fairer standards: Feminist reflections on agri-food governance. *Agriculture and Human Values*, online first. Viewed October 28 2010 <http://www.springerlink.com/content/973714052507u251/>
- McMichael .P. & Friedmann, H. 2007. Situating the 'Retailing Revolution' in *Supermarkets and Agri-food Supply Chains: Transformations in the Production and Consumption of Foods*. Burch & Lawrence Eds. Cheltenham, Edward Elgar Publishing
- Morgan, K., Marsden, T. & Murdoch, J. 2006. *Worlds of Food: Place, Power and Provenance in the Food Chain*, Oxford, Oxford University Press.
- National Farmers Federation (a). 2013. *Growing Australian ag: NFF launches election priorities*. Viewed 25 March 2013 at <http://www.nff.org.au/read/3892/growing-australian-ag-nff-launches-election.html>
- National Farmers Federation (b). 2013. *More research into rural R&D facts would benefit IPA*. Viewed 25 March 2013 at <http://www.nff.org.au/read/3901/more-research-into-rural-facts-would.html>
- National Farmers Federation. 2013 (c). *Farmers call for mandatory code for supermarkets*. Viewed March 25 2013 at <http://www.nff.org.au/read/3896/farmers-call-for-mandatory-code-for.html>
- Nestle, M. 2007. *Food Politics: How the food industry influences nutrition and health*, Berkeley, University of California Press.
- Nousiainen, M., Pylkkänen, P., Saunders, F., Seppänen, L., Mikko Vesala, K. & Hogskola, S. 2009. Are Alternative Food Systems Socially Sustainable? A Case Study from Finland. *Journal of Sustainable Agriculture*, 33, 566–594.
- Oosterveer, P. & Sonnenfeld, D. 2012, *Food, Globalization and Sustainability*, e-book, accessed 18 June 2013, <http://utas.ebib.com.au.ezproxy.utas.edu.au/patron/FullRecord.aspx?p=981787>

Organization for Economic Co-Operation and Development (OECD). (2009) *How Region Grow*. OECD Policy Brief March 2009

Peck, J. 2003. Fuzzy old world: A response to Markusen. *Regional Studies* 37(6&7):729-740

Perrem, K. 2013. Innovation in Regional Australia: Effective, Lagging or Under-Utilised? Chapter Two in Kinnear, S., Charters, K. & Vitartas, P. (eds) 2013. *Regional Advantage and Innovation: Achieving Australia's National Outcomes*. Heidelberg, Germany. Springer-Verlag.

Phillips, L. 2006. Food and Globalisation. *Annual Review of Anthropology*, 35, 37-57

Pike, A. 2009. Geographies of brands and branding. *Progress in Human Geography*. 33(5):619-645

Pirog, R & Paskiet, Z. 2004. *A Geography of Taste: Iowa's Potential for Developing Pace-based and Traditional Foods*. Leopold Center for Sustainable Agriculture. Iowa State University. www.leopold.iastate.edu/pubs/staff/files/taste.pdf

Presst. K. 2010. Agricultural Institute says there is hope yet. *The Advocate*. October 19, 2010. P5

Pritchard, B. 2013. *The reality of food aid*. A presentation to Technology, Entertainment and Design (TED) Conference, Sydney, May 2013. Viewed 18 June 2013 at <http://tedxsydney.com/site/item.cfm?item=6DC220E4C290F6C97F0E31D1E91EFBB>

Reed, J. 1991. *Nuggets Place (King Island)*. John Reed. Geneva Press, Latrobe, Tasmania.

Richards, C., Bjorkhaug, H., Lawrence, G. & Hickman, E. 2012. Retailer-driven agricultural restructuring – Australia, the UK and Norway in comparison. *Agriculture and Human Values* 30:235-245

Rodriguez-Pose, A. & Storper, M. 2006. Better rules or stronger communities? On the social foundations of institutional change and its economic effects. *Economic Geography* 82(1):1-25

Roep, D. & Wiskerke, H. 2010. *Nourishing Networks: Fourteen lessons about creating sustainable food supply chains*, The Netherlands, Rural Sociology Group, Wageningen University.

Roep, D. & Wiskerke, H. 2010. On Governance, Embedding and Marketing: Reflections on the Construction of Alternative Sustainable Food Networks. *Journal of Agricultural and Environmental Ethics*. Published online August 2010.

Rupasingha, A & Goetz, S. 2013. Self-employment and local economic performance: evidence from U.S. counties. *Papers in Regional Science*. 92(1):141-162

Scott, A & Storper, M. 2003.Regions, Globalization, Development. *Regional Studies* 37(6-7): 579-593.

Shuman, M. 2007.*The Small-Mart Revolution: How Local Businesses are Beating the Global Competition*, San Francisco, Berrett-Koehler Publishers Inc.

Stimson, R., Robson, A. & Shyy, T. 2009.Modeling regional endogenous growth: an application to the non-metropolitan regions of Australia. *Annals of Regional Science*, 43, 379-398.

Stirzaker, R. 2010. *Out of the Scientists Garden: A story of water and food*, Melbourne, CSIRO Publishing.

Stratford, E. 2013. The Idea of the Archipelago: Contemplating Island Relations. *Island Studies Journal* 8(1):1-7

TasWind. 2013. *Welcome to TasWind King Island*. Viewed November 14, 2013
<http://www.taswind.com.au/>

Timmons, D. & Wang, Q. 2010. Direct Food sales in the United States: Evidence from State and County-Level Data. *Journal of Sustainable Agriculture*. 34(2):229-240

Uyerra, E. 2010. What is Evolutionary about 'Regional Innovation Systems'? Implications for Regional Policy. *Journal of Evolutionary Economics*, 20, 115-137.

Van der Ploeg, J. & Renting, H. 2000. Impact and Potential: A Comparative Review of European Rural Development Practices. *SociologicaRuralis* 40(4):529-543.

Victorian Department of Health. Viewed August 24 2010
http://www.dhs.vic.gov.au/_data/assets/pdf_file/0010/276436/FoodPolicyCoalitions.pdf

Vorley, B., Fearne, A. & Ray, D. 2007.*Regoverning Markets: A place for small-scale producers in modern agrifood chains?*, Hampshire, England, Gower Publishing Inc.

Walter, M. (ed) 2010. *Social Research Methods, second edition*. South Melbourne Oxford University Press

Walter, M. 2006. *Social Research Methods: An Australian Perspective*. South Melbourne. Oxford University Press.

Wine Australia 2014. Web page viewed October 15, 2014

<https://www.wineaustralia.com/en/Search%20results.aspx?m=AnyTerm&q=GI>

Wiskerke, H. 2002. *Marketing Sustainable Agriculture: An analysis of the potential role of new food supply chains in sustainable rural development – Final Report*. The Netherlands, European Commission.

Yin, R. 2013. Validity and generalization in future case study evaluations. *Evaluation*. 19(3):321-332

Appendix 1: The Survey; King Island and a Sustainable Agri-food Future?

Agri-food producer survey

1. Your primary source of income is derived from which of the following industries? (please circle one selection only)

Dairy describe	Beef	Fruit/vegetable	Fishing	Other – please
-------------------	------	-----------------	---------	----------------

2. How long have you been in business?

1-5 yrs	5-10 yrs	10-20 yrs	more than 20 yrs
---------	----------	-----------	------------------

3. Please circle your indicative age bracket:

Under 30	30-50	50-65	65+
----------	-------	-------	-----

4. Is this business a family tradition?

Yes	No
-----	----

5. Are you an Employer?

Yes	No
-----	----

6. Compared to previous years, how is your business treating you? For example; are you working harder? Do you have less time for sporting or social activities? Is it placing more or less pressure on your family life? Can you say on balance that your life is:

Better	worse	about the same	not sure
--------	-------	----------------	----------

Further comments?

.....

.....

7. Do you believe your business to be economically sustainable?
- | | |
|----|-----|
| No | Yes |
|----|-----|

8. What do you believe influences or impacts the economic sustainability of your business?

.....

.....

.....

9. Do you require a second income to support your way of life?

Yes	No	Not applicable
-----	----	----------------

10. Do you believe your business to be environmentally sustainable?
- | | |
|----|-----|
| No | Yes |
|----|-----|

What do you believe influences or impacts the environmental sustainability of your business?

.....

.....

.....

11. Do you believe there is a future for your industry on King Island?
- | | |
|----|-----|
| No | Yes |
|----|-----|

12. Do you have any concerns for the future of your industry on King Island?
- | | |
|----|-----|
| No | Yes |
|----|-----|

If you can, please describe them briefly

.....

.....

13. What, in your opinion, could ease your concerns? Again, if you can, please describe them briefly

.....
.....
.....

14. Do you believe stronger relationships between, and/or formal networks of, King Island businesses to be important to King Island's agri-food future?

Yes

No

Further

Comments?
.....
.....

15. King Island's infrastructural assets include an airport, sea port, abattoirs, cheese making plant etc. Can you identify further infrastructural assets King Island has, and comment on their current status?

.....
.....
.....
.....

16. Are you supportive of a King Island Brand?

Yes

No

17. How important is a King Island Brand to your business?

Very important

reasonably important

not important

18. Do you have any concerns about the King Island Brand? Yes

No

If yes, can you briefly explain your concerns:

.....
.....
.....

19. Do you have any aspirations for your business?

Yes

No

What sort of help/changes do you believe would help achieve these aspirations? Please provide a brief description

.....
.....
.....

20. Do you have a succession plan?

Yes

No

If you have any queries or concerns please contact Lea Coates at Lea.Coates@utas.edu.au

Appendix 2: Survey Results

1. Your primary source of income is derived from which industry?						
dairy	beef	Fruit/veg	fishing	other		Total
3	6	1	1	1		13
2. How long have you been in business?						
1-5 years	5-10 years	10-20 years	20+ years			
1	2	2	8			13
3. What is your indicative age?						
<30	30-50	50-65	65+			
0	5	7	1			13
4. Is this business a family tradition?						
yes		No				
6		7				13
5. Are you an employer?						
yes		No				
9		4				13
6. In comparison with previous years, how is your business treating you?						
better	worse	same	Not sure			
4	4	5	0			13
Further Comments:						
Increased stocking rate consistently over life of business. Managed increase work load by building better infrastructure and strategic use of contractors and employment of labour; Financial returns have never been better and season has been ideal. Costs, whilst rising, can be managed by prudent spending; Hard to find relief milkers for holidays; Pressure on sporting & leisure activities – not enough time for them as we would like; Working harder, less down time; Market improvement; I love what I am doing. I definitely have less time for sporting activities but still have a healthy social life. Definitely working longer hours for less pay but I am happier working for myself; Local organisations need so much time e.g. ambo, NRM, CoC, KIRDO; Lesser hours but we are employing more people on a casual/seasonal basis; Work farm as a business, not a slave to debt.						
7. Do you believe your business to be economically sustainable?						
yes		no			N/R	total
11		1			1	13
Comments on what influences or impacts on their economic sustainability:						
World markets – both inputs, exports and financial. Local infrastructure e.g. shipping. Weather conditions Australia wide e.g. drought in Queensland drives prices down; Australian dollars / freight costs / fuel costs; Australian economic conditions affect our income as we supply milk for high end cheese products which tend to be not purchased in harder economic times; Consumer demand, cost of manufacture, skills in team members, secure/stable workforce, ingredient supply; Cost of inputs outstrips income – need a better return; Prices achieved. Cost of inputs; Weather conditions play a big role in what works and what doesn't with fruit and vegetables. Too much rain and lack of sunshine impacted badly on production last year (2010); Workers, cost of living on KI, rego costs etc; Labour and the ability for the dairy industry on King Island to grow; Fluctuating lobster/abalone catch. Less Kgs landed less \$ in our bank; Environmental constraints legislation /implementation/ delivery. Unrealistic expectations of the community. Animal welfare concerns; Still expanding; Production costs, freight issues, state of market – seasonal						
8. Do you require a second income to support your way of life?						
Yes		No				total

5		8				13
9. Do you believe your business to be environmentally sustainable?						
yes		No				
13		0				13
Further comments on what influences environmental sustainability: Continued access to water, influenced by decisions of government regarding groundwater and climate, cost of fertilizers; Possibly the applications of fertilizer is the only issue that may impact the environmental sustainability of my operation; Consumer driven ideology of cheap products within environmental constraints; Waste water treatment, bi-product disposal; Better prices would lead to a more proactive environmental approach; Economic factors; Land conversion, fertilizer prices; Audits by TIDA, NRM and environmental risk analysis done 4 years ago; Government legislation which changes constantly may have a detrimental impact on our business; Lack of shipping, input costs, fertilizers; Drainage and trees, makes business sense to look after the land; Rainfall and dustbowl effects.						
10. Do you believe there is a future for your industry on King Island?						
yes		no				total
13		0				13
11. Do you have any concerns for the future of your industry on King Island?						
yes		No				
11		2				13
If so can you describe them briefly? The ability of our processing sector to remain cost competitive with their mainland competitors; KID (dairy) needs to grow there (their) business to consolidate in the dairy industry's future here; Cost of production (cost to consumers), increase in export product availability to Australia, team stability/retention; Abattoirs small operation so it is vulnerable. Multi-national ownership – less concern for locals. Shipping/freight costs; Cost of doing business – power etc. freight costs and flexibility; Scale of production to cost at abattoirs, dairy; The ability of the industry to grow; Fisheries have plans to segregate the state into more areas (zones), this is being objected to by industry members; Multi-national companies calling shots; Transport, both sea and air; Production costs, freight issues.						
What in your opinion could ease your concerns? Cost disadvantages compared to our mainland competitors and most of those can be alleviated by government policy e.g. freight equalisation; Growth in the industry in terms of milk production and amount of dairy farms; Long term recruitment/skills strategy for KI as a whole; Certainty of processor/facilities. Continued reliable shipping/air services that are affordable for all; Don't have too many concerns; External regulations and cost of compliance; If national foods would allow the industry to grow; Longer term plans – but hard when experts (advisors) of government work on 4 year terms (sometimes shorter), no anecdotal evidence from fishermen is taken into consideration when making decisions; Enlargement of Port of Grassy; Boat is obsolete and replacement ship bigger – too big for Grassy. Can't afford to go smaller; Freight costs. Locally grown grain and fodder crops.						
12. Do you believe stronger relationships between, and/or formal networks of, King Island businesses to be important to King Island's agri-food future?						
yes		No				Total
13		0				13
Further comments: Working together as producer group and working with meat processor will benefit both parties. Opportunities to diversify will come from strong networks; On proviso that all those involved adhere to guidelines common to betterment of all concerns; Promotion as a King Island brand name covering all products on the island; Chamber of commerce functioned well – brand plan has great potential; Whole of food chain; From an organic viewpoint the more agricultural businesses which are organic the better, it is the future! It interests people from away. King Island desperately needs to create more boutique businesses to facilitate a healthy tourism industry; CoC, beef group etc. NRM all help; More communication = less 'doubling up' of efforts from many human resource poor industries. Also can help to combine efforts to maximise outcomes; This is crucial to the betterment of the industries (communication at community level); 'us and 'them' not useful. Stronger relationship very important. Swifts very good, best people dealt with, quick reliable payers, competitive in market; Depends on your place in the hierarchy.						
13. King Island's infrastructural assets include and airport, sea port, abattoirs, cheese making plant etc. Can you identify further infrastructural assets King Island has, and comment on their current status?						

Fertiliser shed at Impact allows better targeting of fertiliser, allows special mixes and smaller quantities to be purchased. Hydro generation and distribution facilities important. Seem to be operating well although resistant to alternative energy. Copper wire and fibre important. Next G delivery of mobile and particularly internet barely sufficient; Housing for low/semi-skilled workers essential to the operation of processing plants on island – affordable housing; Accommodation/restaurants/pub/clubs/golf club; Mines potentially restarting. Lack of housing; Under use port in relation to cost. Unused UHT building and small abattoirs that can handle sheep, pigs, wallaby etc; Local small goods abattoirs; Seafood processing plants working. Grassy butcher closed, grassy craft centre (old school) closed, cultural centre working, KIRDO working (underutilised) Currie main street shops x 2/3 closed; Retaining quality air travel at reasonable prices – high prices limits tourism opportunities; Harvesting wallaby not really viable, regulation overkill; Kelp industries, scheelite mine, sand mine, fishing industry, eco-tourism, cloud juice.

14. Are you supportive of a King Island brand?

yes		no				total
13		0				13

15. How important is a King Island brand to your business?

Very Important		Reasonably important		Not important		
	12		1		0	13

16. Do you have any concerns about the King Island brand?

yes		No				
11		2				13

If yes, can you briefly explain your concerns?

It is important to maintain a good image of brand. This is driven by on-island best practise. Misuse of name reduces value of brand and reduces opportunities for on-island value-adding; Misuse of the King Island 'name' in market place by individuals not associated with or using product produced and processed on KI; Needs to be further promoted and protected; Not leveraged as a whole, needs to be done well with a holistic view (not individuals in it for themselves) which appears going great from presentation @ C of C (chamber of commerce); Brand management/ownership – led to competition concerns – re Greenham's pressure but relaxed now; Abuse and misuse of KI name; I am concerned about the illegal use of the name King Island for products which don't originate from the island, if there is too much of this people (customers) might shy away from; It relies on perception not fact very easy to be hijacked by environmentalist and animal welfare activists; Under-utilised / local usage or not tagging onto brand awareness off island; Multi-nationals take the branding (king island) if hey for some reason choose to terminate their agreements; Better now than 5 years ago, swifts using it well.

17. Do you have any aspirations for your business?

yes		no				total
11		2				13

What sort of help/changes do you believe would help achieve these aspirations?

Continued research is required for both agricultural practises and environment; Try and improve our budgeting and continuing to benchmark our business. Improve our pasture uptake working with TIAR etc.; A plan for sustainable recruitment for KI; Better return on product to allow for future improvements and build equity; Long term sustainability; I need a lot more infrastructure and equipment to facilitate growth. This takes time (money) to get; Good port structure and a method of cost control into future; Expanding into 2 more lines, will need extra employees and training; Better education delivery e.g. high schools, tertiary institutions, lobby groups and employees, which in turn upgrades managers skill sets for local businesses, local government and risk management plans; To produce top quality – continual improvement programme.

18. Do you have a succession plan?

yes		no				total
5		8				13