REPORT

MAPPING VICTORIA’S FOOD SYSTEM
PREPARED FOR THE RIPE FOR CHANGE INITIATIVE

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EXECUTIVE SUMMARY

The purpose of this research was to collaboratively develop a map of Victoria’s Food System from production to consumption. The system mapping undertaken was to inform the discussion and identification of:

- What the food system looks like
- What needs to change to make it more sustainable
- The leverage points in the system, where a small change can create a big change across the whole system

Information was gathered using a literature review, in-depth interviews with 26 stakeholders and an online survey of 44 stakeholders. The 70 participants in the research represent diverse group of actors and provide a range of different perspectives on the food system.

The following provides a summary of the key observations and perceptions about the current system by interviewees and survey respondents. It is a reflection of their views. The full results are available in Section 2. A draft system map was prepared based on these results and is available in Section 3. The findings below have been organised into the following system components:

- Actors (informal and formal, plus their values, perspectives, interests, behaviours); and Relationships (reflected in networks, trust, engagement, power)
- Resources (skills, data, knowledge, money, technology, time)
- Structures (laws, regulations, institutional rules, social norms)

What the current food system looks like

Actors & Relationships

Consumers (recognising that consumption patterns vary and are influenced by factors such as culture, nutritional needs and dietary preferences).

- Are very sensitive to the of price of food
- Have little knowledge, awareness or interest in where their food comes from or the impact of their purchasing decisions (aided by poor labelling and lack of transparency)
- Prioritise convenience in their purchasing decisions
- Have dietary preferences that are driving supplier behaviour

Larger scale supply chain actors (e.g. multinationals, large retailers, large processors etc.):

- Are undertaking a consolidation of ownership and power (and Coles and Woolworths are seen as already having too much power)
- Are increasing efficiencies through vertical integration, which can block the market access of smaller farms

Small scale supply chain actors (e.g. small processors, independent retailers etc.):

- Are under pressure to aggregate or consolidate packing and distribution
- Are price takers in a globally controlled food supply chain

Farmers:

- Have limited financial or emotional capacity to adapt or radically transform their farming systems

Society:

- Is largely unsustainable and the food system is a reflection of that broader context

Government:

- Government is too focused on the requirements of exporting and export markets
- Is unable to take a whole-of-government approach to food due to bureaucratic silos

Cross-sector collaboration is made difficult by:

- infighting in the ethical food space about the production of meat and the role of private enterprise
• alienation of the traditional agricultural sector by the alternative food movement
• Industry incumbents feeling threatened by and blocking new industry entrants with alternative business models
• Lack of evaluation and knowledge sharing leads to food movement organisations reinventing the wheel rather than learning from each other’s mistakes
• Lack of government, traditional agriculture, and large retailer engagement in the debate about transforming the food system is a barrier to traction

**Resources**

Environment, water and climate challenges included:

• The exclusion of the environmental cost of food as it continues to be a negative externality
• Rising water scarcity due to climate change, agricultural intensification and the planting of high value, irrigation dependent, crops

Economic pressures on-farm:

• Mean farmers need to prioritise productivity gains over environmental considerations
• Are exacerbated as farmers struggle to find an economically viable way to farm and be carbon neutral
• Seem to be entrenched as there is a lack of profitability for many farmers

Short term funding and grants:

• Lead to insufficient capacity and resources in the not-for-profit sector leads to burn out amongst individuals – both paid and volunteer
• Mean inadequate time to deliver an environmental outcome on-farm

Lack of infrastructure investment:

• Leads to high costs of freight transport in Australia and make us less competitive in export and domestic markets compared to other food growing nations
• Means there is a massive need for new capital in Australian agribusiness

Human capital challenges include:

• The average age of farmers is increasing
• Land is too expensive for new entrants to farming
• Farmers have too little on-farm human capital, but face cost barriers to hiring additional labour

**Structures**

Government regulations:

• Can lock out small producers that are trying to innovate, especially affecting small-to-medium meat and dairy enterprises

Exports:

• Are limited in potential by climate and water shortages
• Are at risk from other nations becoming increasingly competitive in export markets where Australia has traditional had a high market share
• Drive a push for productivity and larger scale farming
• Have significant environmental implications
• May mean that the domestic market will have to compete with global customers for organic products

Farmers markets:

• Won’t work for farmers with limited time to commute, or who are a long distance from a major centre
• Can act as a business incubator and testing ground for emerging enterprises
• Are a means to connect consumers with where their food comes from
• Have challenges include scaling up, perceptions around the cost of food, the need for fully stocked weekly rather than monthly markets, and questions around whether markets can become self-sustaining and self-funding
• Are not seen as being able to reach the scale where they play a dominant role in the food system, impeded by the lack of research on what proportion of food could be sold by this method

Domestic markets:
• Have a lack of scope to grow due to the fixed population and consumer preferences compared to export markets
• For industries such as horticulture have the potential for oversupply

On market Failure:
• Some believe there is no market failure for the environment, evidenced by the fact that a lot of farming practices are continually being made better
• Others worry that the market is quite destructive of livelihoods, communities and the environment

What would a good future for the food system look like - and what changes need to be made to make it more sustainable?

In addition to mapping the current system, this research also explored participants’ aspirations for a ‘good future’ for the food system. The following is a synthesis of both interviewee and survey respondent’s answers. What essentially resulted was a list of things that different actors should do differently. Again, it is a reflection of their views. The full results are available in Section 4. The findings have been organised by system ‘actor’, and are in alphabetical order.

Academics/ Researchers should conduct the following research:
• How to improve profitability for farmers and promote greater industry growth
• An assessment of climate resilience and risk
• An assessment of which agricultural systems build and use biodiversity as part of the agricultural process
• A stocktake of the current condition of soils and biodiversity
• Quantification of the impacts (social, economic, environmental) of farmers markets
• Creation of new climate appropriate plant species
• Development of case studies of farming best practice - with good science and economic overlays so people will adopt them

Consumers should:
• Be more food literate, including a greater knowledge of animal biology and food seasonality
• Strengthen connections to farmers and farming

Farmers should:
• Adopt new farming practices that are climate sensitive
• Adopt new farming systems that are ecology-based and regenerative, improving environmental condition, biodiversity and water cycles
• Undertake whole-of-farm planning
• Shift away from industrialised large scale monocultures to smaller more diversified farm systems

Investors should:
• Introduce innovative ways for young people to farm and own their farm
• Invest in manufacturing and food processing infrastructure upgrades
• Invest in transport and distribution infrastructure upgrades
• Invest in new meat processing facilities (e.g. mobile abattoir) for small farms

Government (Local) should:
• Advocate for and support sustainable local food systems
• Create an reward for consumers who buy local, seasonal, and cruelty-free food
• Include community gardens in urban planning
• Include large-scale food composting infrastructure (with a dedicated manager) in urban planning – and use it to create sustainable energy
• Grow food-producing plants in public spaces
• Make it more convenient for consumers to buy local food
• Encourage more people to grow their own food, including reviving home food gardens
• Support local industries to collaborate
• Support small farmers, including against unsupportive neighbours and councils
• Conduct a stocktake of public infrastructure and land available that could have alternative uses like training facilities or food hubs

**Government (State and Federal) should:**
• Amend regulations and planning policies to reduce red tape for small diversified local farming operations
• Change regulations for small scale producers for food and worker safety
• Enforce a greater supply of Victorian produce over national and internationally sourced foods
• Reform labelling to highlight nutrition, origin, production method, and environmental and resource issues
• Incorporate the environmental costs of food with a polluter pays principle
• Fine people for not being more sustainable
• Put a ban on genetic modification
• Stop signing free trade agreements
• Increase supply chain transparency
• Remove subsidies for big corporate agribusiness
• Break up the supermarket duopoly
• Create a national definition of a farmers market
• Get government and large government funded institutions (hospitals, correction facilities) to change procurement policies to source sustainable food
• Reforms to enable local, SME ownership and control of resources and decent livelihoods along the supply chain

**Media should:**
• Create avenues for enabling conversations about how agriculture can play a positive environmental role

**NGOs and advocacy groups should:**
• Educate government, educators, consumers and farmers about the impacts of our current food system
• Call for more transparency from government, retailers and distributors about the food supply chain
• Acknowledge that food is essential and all agriculture requires land and has an environmental footprint
• Make food be seen as a priority and as something that keeps us healthy
• Advocate a new paradigm that reorders our values and priorities so that food is about nourishing not money
• Align with institutional food or a customer that is big enough to scale up market share (e.g. Lite & Easy, hospitals, prisons, IBM)
• Find ways for farmers to trial selling direct to consumers

**Philanthropists should:**
• Fund fellowships for people doing awesome things, who consistently do amazing things year after year
• Create scholarships for accepted training for organic farmers
• Provide long-term support for social entrepreneurs to tackle issues
• Bring people together to focus on solutions in unlikely alliances
• Create a collaborative and safe space for stakeholders to discuss issues
• Coordinate regular events showcasing enterprises, sharing ideas and creating connections
• Make collaboration a criterion for funding
• Resource cross-sectoral local producer networks to bring farmers from different industries together on common issues and to share knowledge and expertise
• Support farmer’s markets, co-ops, food hubs and other initiatives that reach out to working class communities

**Processors and distributors should:**
• Build different logistic models and aggregation systems so people can have the option of supporting farmers and environment
• Collaborate to create better distribution points
• Collaborate to create more efficient transport options for small to medium sized farmers
• Provide less packaging and plastic
• Use local produce
• Reduce the volume of food transported long distances, nationally and internationally

**Retailers should:**
• Pay farmers fairer prices
• Stop putting downward pressure on food prices
• Stock affordable quality local produce
• Accept more competition in the marketplace
• Promote seasonality
• Provide farmers better access to large retail markets
• Give choices to farmers and consumers
• Create values based supply chains, with mutual responsibilities and partnerships not just the cheapest prices

Universities should:
• Provide more tertiary courses dedicated to food systems issues.

**How can we work together to make our food system more sustainable?**

The information obtained during the interviews and surveys was collated and made available to participants of a 2 day workshop in February 2016. This was to help inform their thinking as they considered the following questions:

• How can funders support positive change in Victoria’s food system?
• What are the most strategic initiatives which can be funded by philanthropy and impact investment?
• How can we work together to make our food system more sustainable?

What became clear during the workshop was that there was a shared goal to “transform the food system”, with the following outcomes agreed:

• Healthy natural systems
• Viable enterprises
• Healthy, equitable and accessible food
• Engaged and galvanised food movements

Workshop participants felt that the following two actions were important first steps on the path to change:

• Amplify the food systems movement by making the wide range of transformative activities underway more visible.
• Mapping out the regulatory pathways and barriers, to inform our advocacy work.

A full summary of workshop findings is available in Section 5.

The final version of the system map, modified as a result of the workshop, is available on page 34.

Overall, this project has revealed that while the food system is complex and has many avenues for transformation, it is possible to identify leverage points for change. And while there are many different stakeholders in this space, it is also possible to agree on priority outcomes and actions.
1 INTRODUCTION

This report provides an overview of findings from research conducted for the Ripe for Change initiative. The purpose of the research was to collaboratively develop a map of Victoria’s Food System from production to consumption. The system mapping undertaken was to inform the discussion and identification of:

- What the food system looks like
- What needs to change to make it more sustainable
- The leverage points in the system, where a small change can create a big change across the whole system

This research was conducted using four complementary approaches:

- **In-depth interviews**: the purpose of which was to gain an understanding of the food system by exploring the different perspectives of a diverse group of actors from across the system. A semi-structured interview guide was prepared in advance. We conducted in-depth interviews with a range of stakeholders, based on names provided by the Ripe for Change Steering Committee as well as other interviewees. Given the use of in-depth one-on-one interviews, only a relatively small number of interviews was possible. In total, 26 people were interviewed, 11 in person and 15 by phone. The benefit of this approach was that it allowed for more detailed conversations on the system. While all actors were not available in the given timeframe, we were able to access a wide range of people. The main gaps are major retailers and government. This is despite numerous attempts via various contacts. It is worth noting that the difficulty in engaging retail and government was consistent with the experience of several of the respondents to the online survey. The list of interviewees is available in Annex 1.

- **Online Survey**: In order to get more input from a larger number of people, we also conducted an online survey. This was circulated to the steering committee, some interview participants and other networks. The survey remained open from 3 December 2015 to 11 January 2016. There were 44 respondents. They were mainly consumers and producers concerned about the sustainability of the food system and therefore motivated to complete the survey. None of the following were represented: Processor/Manufacturer; Transport & Distribution; Wholesaler; Government. Selected survey results are included in the sections below. The full survey results available in Annex 2.

- **Literature Review**: In addition to conducting interviews, desktop research was undertaken to draw upon the vast amount of knowledge in existing literature. Rather than reproduce the information contained in other reports, only a small amount of this information has been synthesised and is included as Annex 3. This information largely relates to agriculture - the farming end of the food supply chain. Statistics on environmental condition are included as are industry profiles – selected to show the diversity of different farming activities that form the basis of different supply chains in the food system.

- **Systems Mapping Workshop**: With the Ripe for Change Steering Committee, the Australian Futures Project hosted a workshop that brought together members of the AEGN as well as additional participants from across government, business, civil society, media and academia to work on mapping the food system. The workshop was held over two days at Common Ground, Seymour, on 16-17 February 2016. Participants built upon the system map and interview findings, which were distributed prior to the workshop.

Interview and survey results are shown in sections 2 – 4. As described above, the 70 participants in the interviews and surveys represent diverse group of actors and provide a range of different perspectives on the food system. Section 5 provides an overview of findings from the 2 day workshop, while section 6 includes the final version of the system map.

2 MAPPING THE CURRENT FOOD SYSTEM

Sections 2-4 reports on the results of the interviews and surveys. This work was framed using a ‘systems thinking’ approach. ‘Systems thinking’ is a way to see the world that looks beyond individual parts to the interactions and patterns that characterise the whole. When seeking to define ‘the system’, it is important to not only consider the major components of the system, but also the interactions between these different components and how these influence the system. Therefore, in organising the results of the interviews and surveys, the following system components were considered:

- Actors (informal and formal, plus their values, perspectives, interests, behaviours); and Relationships (reflected in networks, trust, engagement, power)
- Resources (skills, data, knowledge, money, technology, time)
- Structures (laws, regulations, institutional rules, social norms)
This is only one way of conceptualising what the system looks like. Everyone experiences and understands the system in different ways and many themes connect and overlap. The purpose here is to help the reader gain a deeper understanding of the range of views, perspectives and experiences of the food system.

Results have not been narrated. Rather, direct quotes have been presented and organised into the categories as outlined above. To protect anonymity the 26 interviewees are coded i1 - i26. The 44 survey respondents are coded s1 - s44.

**ACTORS & RELATIONSHIPS**

*Consumers – effect of price*

I1. A lot of it comes down to price point. Consumers are a lever.

I3. There are assumptions that you can’t feed the world on ecological small scale production, that you are putting farmers out of business, and that eating environmentally is too expensive...A fishmonger costs 1/3 price. If it is about price, then why not go to the markets?

I8. Price is still a huge driver.

I10. There is so much pressure on producers because of the duopoly of supermarkets. We need to give farmers meaningful alternatives and consumers that will purchase from these.

I11. People are willing to pay more but it is still so price sensitive. Messaging is all about the cheapest. One way to influence this is to provide an option away from the current system so that it moves it. It drives sustainable farming by providing an alternative with direct marketing.

I12. There’s a general perception that food is too expensive, and people are wanting cheaper food, when the reality is that food is much too cheap to be honestly paying for all the costs involved. The trouble is that SMEs who are producing food sustainably have to compete against massive corporate mono-culture factory farms who are the main contributors to climate change within the agricultural sector, but also set unrealistic expectations in the community about the price of food.

I16. The fact that food is cheap is a bad thing. How did it happen? What has been done to get that so cheap? What corners have been cut? It is a mindset that needs to switch.

I19. It is about price price price, quality quality quality.

I20. Chickpea curry is very cheap to make, but it’s cheaper still to make beef bolognaise because of the stock piles of cows we have in Australia, we kill 16,000 cows a day, 5 times a week, each cow weights 500kg, 64% of that ends up in mince...We are consuming beef in such low price that it’s not sustainable.

S12. Availability and price are the two most important factors.

S18. Having worked in a supermarket, I have seen how important price is to consumers, particularly in low socioeconomic neighbourhoods.

S20. There is a growing demand for information about sustainability, ethics & provenance of food in the hospitality sector, however it is still more challenging to procure food of this type at an affordable price.

S29. In my opinion, organic produce is not looked fondly upon due to cost. Short term benefits (such as saving money) outweigh long term benefits (such as sustainable food system and health benefits).

S31. In my experience, the healthiest, and most environmentally sustainable options are the more expensive and difficult to access. They may be available, but the ‘path of least resistance’ leads to the worse option - always.

S34. Price is the key for most low end consumers, while brand and reputation seem to matter to higher socioeconomic groups.

S33. Ethical purchasing is often only theoretical (i.e. people ways claim they buy free range/ethical produce or whatever but in reality price points dominate decisions, particularly if people shop at major supermarket chains). Many people who do not study food systems are confounded by the over saturation of information regarding food and are therefore often unable to make fully informed decisions.

S38. In my experience, a larger number of people would like to access safe and local food but are not sure how to do this; and many who would like to get better [i.e. local] food are still lured by the cheaper price of the supermarkets.

s41. As a consumer I am aware that most other consumers are price driven primarily.
Consumers - knowledge and awareness

I3. We don’t actually know what’s going on. It is a clever strategy of the large organisations...if no one is aware, how do they know they want to fight for it until it is too late?

I4. Supermarkets tell a story of supporting farmers, rather than the reality.

I12. I wish consumers were paying way more attention to where their food comes from.

I18. To get this we need public awareness, a groundswell to change things ... politicians who think they will lose their seat will do something...The root of problem is food literacy: awareness of where food comes from, what goes into growing it, what waste is...The general public have a lack of skills and knowledge about growing food as we haven’t needed to grow things, our grandparents did.

I21. Public pressure has forced Coles and Woolies to be more transparent about labelling, production methods, and chemical use. We know we’ve been part of that.

I22. There are constructions around cooking being difficulty. What if you don’t have the skills to prepare food? The rise of MasterChef doesn’t help. Although people are cooking more it also makes it overwhelming. You feel you have to be special and fancy... It is a confidence thing...School gardens can help with confidence, esteem - seeing food growing, demystifying it.

S1. A shift is taking place. There is more awareness about our dysfunctional industrialised food systems. Middle class are demanding and willing to pay for ethical food.

S6. Very little understanding of organic food and why it's important.

S9. In Victoria, there are a lot of food options that are more ethical, environmentally friendly and support local communities. The awareness of sustainable/ethical consumption is high too. In comparison, just to give an example, Malaysia has a lot of land and environmental resources, yet their reliance on imported food is extremely high, and there is low awareness of ethical/sustainable consumption.

S11. Branding/marketing/buzzwords have the highest impact - no one reads fine print labels.

S14. There is an increasing awareness among consumers about issues related to getting food to the consumer.

S15. Grass roots, citizen led food movements seem to thrive in Vic - there has been community leadership in this area.

S21. Consumers, in my experience, are willing to be dogmatic about being ill informed.

S27. Much of the food eaten and chosen by Victorians are recognised by brand (especially of processed foods - Kraft, Nestle, Arnott’s supermarket brands etc.) rather than producers/food origin/type of produce (fruit, veg, meat).

Consumers – preference for convenience

I3. Pre-packaged options are growing as people are increasingly time poor. They don’t have time or space to think about purchasing...Supermarkets are good at what they do. Supermarkets are meeting a demand. People are asking for cheaper food, vast quantities, at any time of day regardless of seasonality.

I8. Consumer trends data shows consumers want more convenience and choice – whether the products are organic or not.

I24. People are trained to shop in convenience not think where food is coming from... all the marketing makes it very easy to be swooped into that system and very hard to get out of it, the behaviour change required is a ‘huge step’ ... it’s the opposite of the way we’ve been trained up to shop. We need to provide options to make it easy for people to transition but also the recognition that we can’t do what the supermarkets are doing.

S23. Retailers are in the business of selling convenience which is what they understand customers want.

S26. It seems most people’s priorities are saving money and convenience which is perhaps why so many shop at supermarkets rather than farmers markets or alternative food outlets.

Consumers – dietary preferences

I8. It is about the consumer globally (especially in Asia) and their preferences and tastes and changing diets...The consumer is king and they are going to be ever more demanding. The supply chain will put in place products and services to meet their needs. As long as they are getting affordable, safe, food, then they couldn’t care less who owns the supply chain. If farmers getting a decent price they probably don’t care either.
I20. I want to try and run my business along the lines of thinking about everything we consume down to the toilet paper, it has to be of worth to the earth and that we’re not depleting it… but I’m a hypocrite as I have to give people what they want – sugar, vegemite – but I’m trying, using organic.

**ONLINE SURVEY QUESTION**

<table>
<thead>
<tr>
<th>What sort of issues have the most impact on your decision making about food (whether in your business, as a researcher or how you shop)?</th>
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<tbody>
<tr>
<td>Top responses were:</td>
</tr>
<tr>
<td>1. origin of produce (where it is made)</td>
</tr>
<tr>
<td>2. environmental factors (e.g. method of production, greenhouse gas emissions, packaging etc.)</td>
</tr>
<tr>
<td>3. quality of produce</td>
</tr>
<tr>
<td>4. social factors (e.g. supporting local produce, labour conditions etc.)</td>
</tr>
</tbody>
</table>

**Supply chain actors - power and consolidation**

I8. Both in Australia and South East Asia, we are seeing a change in ownership and dynamic consolidation around the supply chain. We are seeing big multinational companies looking at how they manage their supply chain… A lot of foreign capital is coming in – not just at the farming level, but at all those levels - processing distribution and retail. It is a very dynamic trend around consolidation of the supply chain and changing ownership globally… Farmers are getting bigger and the ownership structure is changing. Where you might have had 20 players, there are now 1 or 2. That is where people get concerned – what is the dynamic around the supply? If you control the supply chain you have a lot of influence on the signals from the consumer to the grower and back again.

I10. Large scale farms are increasingly the supplier to large scale supermarkets… there are fewer and fewer points in between actors in the system.

I11. If there is a small shift in percentage market share then the supermarkets respond. It is about understanding their drivers, not telling them what to do. Their drivers mean they have to make certain decisions.

I13. The scary thing is we are not even going to own the farms in 2050. We are not going to own the logistic supply.

I18. The duopoly in Coles and Woolworths has the power. It takes power out of the farmers hands. Power also exists in the smaller number of farms - a concentration of power in the food system which is scary… because how do you bring that power back if we want to?

I21. The producers themselves have no idea what power they have.

I23. Where I see the limitation [for Australian horticulture] is in that middle, the bit that is taking the product from the farm into the market place. Compared to NZ or Chile or even South Africa, the model looks quite different. In those other places, you’ve got larger growers or you’ve got a packing or distribution/sales entity that aggregates a whole lot of product. That is starting to happen but by far the majority of farmers are still trying to do it all… We have so many pack houses. Therefore the transport industry really struggles because it has multiple pick-ups. It is much more complicated than it needs to be. There needs to be consolidation of loads. Meanwhile our biggest competitors are selling massive volumes in integrated supply chains. …The Australian psyche somewhere there says we need to be in control of our own destiny and wanting all these options. So we still do our own marketing, packing, distribution… some of them are really struggling to maintain momentum and position in the supply chain, but they seem unwilling to consider a system alternative.

S5. Food is over processed, travels too far, and farmers do not have a decent market share or power.

S35. In my experience, retailers have too much power over producers… There isn’t enough government disaster relief to prevent further concentration in ownership at times of crisis and there isn’t nearly enough consumer education.

S40. The producers/farmers have little power in the supply chain therefore are forced to become price-takers in a globally controlled food supply chain.

**ONLINE SURVEY QUESTION**

<table>
<thead>
<tr>
<th>Out of the stakeholders in the food system (producers/farmers, processors, government, retailers, consumers etc.) who do you think has the most power?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retailers</td>
</tr>
<tr>
<td>(26 respondents)</td>
</tr>
</tbody>
</table>
Sector stakeholders - conflict and collaboration

I3. There is infighting in the ethical food space. People question can it be environmental if it supports the production of meat. But without meat you alienate a whole body of people. Mindful consumption doesn’t require cancelling out food groups. It is about getting people to relate to the impact of their purchasing decisions.

I5. The traditional agricultural sector needs to step up. Creating a real discourse within the agricultural sector is important.

I6. Our current project is being blocked by the big stakeholders... I’ve only been in this industry for a few years and I was amazed how entrenched and antagonist the big end was to the small end doing things more innovatively and in a value added way. Industry bodies would rather see this end of the industry go. They see it as a nuisance and potentially dangerous. It has been a big frustration.

I10. I’m not sure how the push of really large farming bodies has changed. They seem to be big business dealers now rather than union reps of farming cohorts. There is so much money and so much concentration across a few different players, this flows in to their representation of their members … I don’t think if you’re a small farmer you’d feel particularly represented by the National Farmers Federation for example.

I11. There is suspicion of SMEs [small-to-medium enterprise] and private enterprise without understanding how they got to be at the current model.

I17. In a state like Victoria where agriculture is significant economically we have to start involving producers … we’re not doing the right things to get them to the table, we don’t think to invite them… and when they come to events, the language used is not inviting e.g. “industrial agriculture”. We need to be inclusive, not critical, in the use of language.

I22. Within this space you must be willing to try new things and do things differently... At the same time, you see a lot of the same ideas... We need to be careful with food hubs. A lot of areas are doing feasibility studies but not going further. Let’s work out the southeast food hub first. What happens next? How can it be made sustainable? We should take it to the next level before we create all these other ones. We need to be collectively smart rather than all getting to the same stumbling blocks.

S25. Relationships are more important than anything.

S39. In my experience, there are plenty of grassroots organisations and important networks emerging, such as Sustain: The Australian Food Network is trying to draw these groups together and, at the same time, engage government at various levels. Unfortunately the lack of government involvement has meant many grassroots efforts at transforming the food system are either thwarted by government or simply fail to thrive without more government support. We need to find a way to engage state government and connect up the bureaucratic policy silos which food straddles.

<table>
<thead>
<tr>
<th>ONLINE SURVEY QUESTION</th>
<th>MOST COMMON RESPONSE</th>
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<tbody>
<tr>
<td>Out of all the different stakeholder groups (e.g. farmers and processors; government and consumers etc.) which do you think would be MOST likely to COLLABORATE with each other to achieve a common goal?</td>
<td>Producers/Farmers and Consumers (19 respondents)</td>
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<tr>
<td>Out of all the different stakeholder groups (e.g. farmers and processors; government and consumers etc.) which do you think would be LEAST likely to COLLABORATE with each other to achieve a common goal?</td>
<td>A mixed response. Retailer (16 respondents) and government (11 respondents) were the most common.</td>
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Farmers - capacity and adaptation

I1. It is a pretty conservative industry. People have been making [cheese] for a very long time. They are not particularly open to change.

I2. People don’t realise what the Millennium Drought did to resilience and productivity capabilities and the emotional and financial ability to drive change. We have to acknowledge some of the fatigue and the capacity challenges... Cultural change requires head space and emotional energy as well as a financial return... There is a great deal of fatigue in those communities and each of those businesses. The capacity to engage in philanthropy or any sector wanting to achieve a positive impact - it is just much more fragile than we are truly are aware of.

I6. Certified organic is not just a marketing thing – we will be held to those standards when times are tough and you want to go ‘stuff this’.
I9. There has been a significant change in farmer education activities. It is increasingly hard to get landholders off-farm for an education session on how to get in to whole farm planning. The time poor landholder bar is lifting as every year goes by. Just three years ago it wasn’t so hard to get 20 people in the room. Now there needs to be a more direct incentive as opposed to a concept of an off-farm workshop. Where an incentive has been provided then uptake is higher.

I12. One thing I have learnt is there no point solving a problem people don’t think they have…There’s a lot of resistance and defensiveness by conventional producers to organics, and so I don’t think it’s the only or best way to influence changes in land practices. The Regenerative Agriculture movement offers lots of different models for improving land practices that aren’t about being certified organic, but lead to higher soil carbon and humus, and are often combined with improved connections between farmers and consumers and more control over the supply chain for farmers.

I14. To make practical change in agriculture is difficult because agriculture isn’t just a business, it is an identity. For example, the small beef farmers in the Hunter Valley who chose to quietly go broke in a slow painful way rather than switch to more profitable chooks. They saw themselves as cattlemen…There are a whole lot of easier and more profitable ways of making a living than going farming. They are driven by something other than their business ethic. Farmers don’t sit there through a drought for the money. Tribalism is a big deal.

I15. One of the major gaps to farmers changing practices would be what the industry bodies do is they support the mainstream with tried and trusted well formalised agricultural practices. We don’t support the innovators enough. For example, Col Seis is still funding his own research. Scientists attempt to replicate it without him. It is disrespectful. They aren’t supporting the innovator to find out what is going on. And often the agricultural research is done in trial plots or conventional systems – there is a danger there they are studying semi-pathological systems (like failing kidneys).

I25. What I found surprising was the openness of the old school conventional farmers to our arrival. Most of those interactions with farmers have been positive and supportive. They were really quite interested. Especially as soon as we talked about being profitable. As soon as you can prove you can run a profitable model off an ethical system then people are much more interested. We don’t get a lot of push back.

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<tr>
<td>Out of the stakeholders in the food system (producers/farmers, processors, government, retailers, consumers etc.) who do you think has the most TRUSTWORTHY reputation?</td>
<td>Producers/Farmers (30 respondents)</td>
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**Society-at-large**

I3. Everyone has to eat. Everyone is a participant in the food system.

I4. Food reflects society. The challenges are as big as the system.

I14. Our societies in general aren’t sustainable and agriculture is a reflection of that.

**RESOURCES**

*Environment, climate, water*

I14. We’ve got used to nature being an externality. States (nations) take care of basics like health. States should look after natural capital better. Water was a disaster by the States. We need different ways of managing.

I15. The stock of healthy land that is productive, resilient and adaptive is declining. The quality of food is also declining as well. And they are linked…systemic and catastrophic. If we can’t address those then we aren’t going to put the system on an upwards trajectory.

I12. Agriculture is one of the biggest contributors to climate change, but if the correct practices are used, of course it can actually be one of the most effective and affordable remediation strategies as well. The thing is, we need to get all our farmers aware of the importance of soil carbon and humus, and changing their farming practices so they are increasing soil carbon, rather than decreasing it. Of course there are a whole lot of ways they can do this, and organisations like the North Central Catchment Management Authority (and no doubt other CMA’s as well) are starting to offer some cool extension services for farmers like cell grazing workshops, and compost workshops - but these practices (and the many other practices that work) are still well outside the mainstream.
I19. Arguably the most greenhouse gas emission efficient beef you can buy are the ones that go through the feedlots. It challenges lot of the retail softer end of the meat buyers, if you want a slow finish grassed animal.

I26. Water is going to be more fundamentally important than land in the long term. Most farms sell for the water and the land gets thrown in…There will be a shortage of water… More intensive. More water use. Lots more nuts going in. It is a big industry. 20% less water will be available from the consumptive pool. But nut growers can pay whatever price they need to pay to buy water….there are a whole raft of things you can’t grow at more than $200/mega litre water. We aren’t in that world anymore. You need to grow crops that can deal with a much higher water price.

S25. Food miles are a red herring - carbon emissions are in the type of agriculture not transport.

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<td>Out of the stakeholders in the food system (producers/farmers, processors, government, retailers, consumers etc.) who do you think acts in the most ENVIRONMENTALLY SUSTAINABLE way?</td>
<td>Producers/Farmers (20 respondents)</td>
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**Economic pressures on-farm**

I1. The goal is to grow the volume of produce and the value of the products…Business as usual means an emphasis on a more profitable industry to trigger growth.

I9. There are a good number of landholders, even at corporate scale, that do take account of responsible natural resource management, but they are very much driven by efficiencies…There is a perceived loss of productivity and land due to shelter belts. Counter facts presented on this have helped - showing that cows heat up or cool down less and therefore shelterbelts improve milk production. It relates to production rather biodiversity. If the promotion and the selling of natural resource management is expressed in economic terms it seems to get more of an audience.

I12. So many small farmers work for very little, and carry all the risk for when things go wrong and they experience crop loss, which happens not infrequently. It's a very risky profession, and I don't think that's recognised or generally supported by government or consumers…There's a general lack of business skills amongst a lot of small farms. We didn't understand what viability actually means, or have a plan in place to achieve it, until we almost went broke after a major flood event. That led to us getting business training, which we've continued to this day, and which has made a huge difference to our business.

I19. We have a good perennial system and good ground cover rules. It is a lot more sustainable, but not organic. We can’t make it work economically. We could with a more consumer ready market…We really are driving on carbon, finding out what it would look like to make a carbon neutral operation… Under a meat based system at scale, the only way we are going to do it is technological breakthrough on genetics and feed conversion.

I24. We started off looking at the problem of sustainable production, and why more farmers weren’t being sustainable, even if farmers want to do amazing stuff e.g. Landcare, it’s very difficult if you are stuck in commodity markets because (profit) margins are so small, even if you want to do the right thing you drive your land harder than you want to.

I26. Thinking about the landscape we manage, we’ve put in the most efficient irrigation we can…We are working at reducing our carbon footprint. We recently put in a pilot solar array to run one of our pump stations, although it still only covers 40%.

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<td>Out of the stakeholders in the food system (producers/farmers, processors, government, retailers, consumers etc.) which group do you think has the most RESOURCES AND NETWORKS?</td>
<td>Retailers (25 respondents)</td>
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**Funding challenges**

I3. On the ground projects are getting funded because it is not hard for them to fit into a category. Whereas capacity building is really hard for fundraising. But we can’t run an organisation for free. And communications and marketing always get left off.

I5. There isn’t funding to match the extent of interest in food systems. There has been a surge in interest in the last 8-10 years… People are ready to go but there are no job roles to match the interest and skills…It is all little pots of short term small money. A bit like the welfare sector, there is burnout, resentfulness as well as passion…Community engagement is not easy to do well. In food systems there is great potential but it falls over because of the funding and because you can’t just start an idea in a community from
the outside. It has to be embedded, moulded for buy-in, so when funding stops there is ownership…Pulled funded sends a signal and has a ripple effect… Community relies so much on volunteers.

I19. The problem is I find philanthropy pretty hard work. They come with a value set. They are prepared to buy a kilo or biodynamic organic beef or lamb at double the price but others can’t. It is very price based. They might find it quite challenging on how others actually do it.

I21. How can we build capacity when we don’t have capacity?…Commercial [farmers market] operations aren’t eligible for philanthropic funding. Our income is based on number of stallholders. It is a very challenging space to be achieving anything greater than simply relying on vagaries of other people’s businesses to attend to meet our objectives… There are thousands of people working in this sector and collectively they are about to walk away. It can feel pretty lonely out there.

I26. If I were to whinge about something it would be government policy around environmental programs… the problem with grant programs is they are short term. The priorities change readily. Making any sort of long-term program is impossible. We are talking about a legacy that is 150 years in the making. You can’t fix it with a 3 year grants program. You need 20-30 years of data before you can see if you can make a difference… We need other money in here than government. There is a fundamental failure, proven by the State of the Environment reports. It won’t get any better under current paradigm…if people are thinking we are going to protect and enhance based on 3 year funding cycles on the whim of the government it just isn’t going to happen.

Infrastructure and investment

I1. There has only been one new dairy factory built in the last 10 years.

I13. For many products, 30% of costs are in getting it to port… airfreight is as competitive as shipping. There is no case for rail freight.

I23. For the Victorian Government, food and fibre is one of their chosen 6 industries. They are also saying in same breath we are going to be smart net exporters, with valued added products rather than commodities. The thing that I think eventually has to come to light is how are you going to do what you say you will do? The reason the iron ore boom was so effective was because they had an infrastructure and they could get it out of the ground and on the boat better than anyone else could. For Australia, infrastructure is our big issue and it is not being talked about. In mining, they had the resources to build their own. I don’t think food will do that… Eventually the question will be asked, if we want to build these exports and trade - what is going to happen in relation to building an infrastructure that facilitates this and makes us competitive? It isn’t about a few government grants. It is about vision in terms of road networks, ports - it is nation building stuff.

S43. Australian investment for agribusiness is pitifully low. Investment readiness needs to be rectified and superannuation funds should be drawn by profitable opportunities.

Human capital

I8. Human capital – whether in grains or more broadly – is another trend. Who is going to be farming? Where do we get the top 20% of farmers from if they aren’t in a position to buy the farm?

I23. Growers have got to start thinking about what it is that they want to spend their time doing and make some smart decisions about what they can and can’t do… if you are a farmer then you have 2 decisions – you can either become tourism (farmers markets) and you don’t need a sophisticated supply chain. Or you concentrate on growing a product… I think the small farmer can be more sustainable – if the farmer was just the farmer, and created the loose material and didn’t try to do all the other things, then that is by far more sustainable. He can manage 500 acres better than someone could manage 5000 acres. But in horticulture, the farmer is essentially organising to get the milk to the supermarket chain. In other industries we wouldn’t think of doing that. But in fruit we do.

I24. Young farmers are coming through but the majority are aging. A lot of the good ones involved in Landcare are trying to figure out how to retire.

I25. Labour is the other real sticking point and I don’t have a clear solution to it in mind. I think models like ours with “more eyes per acre” are required, to quote Joel Salatin. It employs more people. It revitalises rural communities. The hardest bit is being able to employ someone and not having to grow the farm to cover wages.
STRUCTURES

Regulation - of small scale farmers and processors

I3. There are less little abattoirs. Animals are travelling further, housed for longer,
I10. There is a flourishing of small alternatives that bubble along but are swamped by grants, government support, tax breaks, and subsidies that support the existing model… Lots of regulations and practices lock out small producers that are trying to innovate.
I16. Overregulation of meat production is a barrier. There are very few small manufacturers – all small artisans have disappeared…PrimeSafe has a bullying culture. So many of the systems are geared for the big guys… Processing is a challenge for small meat producers. Often the meat at farmers markets – genetics and breeds - isn’t available in the supermarket. The abattoir closes and suddenly all these small producers have got nowhere to go…In WA someone is talking about a mobile abattoir (for small meat processors). That would be awesome in Victoria.
I25. We have designed a system that is completely outside the old one. We don’t sell in to long supply chains. Where it does cause problems is regulation. The regulation is designed for long visible supply chains. It is inappropriate to our scale and our transparency. Everyone can see everything we do. Literally. It is too much. And it is expensive - the cost of meeting our regulatory requirements. It is a time cost as well. The culture of the meat regulator (PrimeSafe) is appalling. We are tired of them treating small producers as criminals trying to poison the world… That they did a consultation around “novel supply chains” was very telling around their attitudes…They don’t understand our system at all. They don’t know how to regulate us… In terms of food safety, they don’t have anyone knowledgeable about the risks for a supply chain like ours…It is a growing part of the food system so we really need regulation to catch up.
S3. The regulations relating to meat processing are unduly restrictive and also don’t meet with consumer desires (e.g. consumers would be happier to buy meat that was butchered on farm but this is basically not possible). Another thing that is problematic for small scale farms is planning provisions and the ridiculous definition of intensive farming which doesn’t look at the whole farm.
S7. I think there are too many obstacles/regulations in the way of small scale farming which makes it difficult for them to survive.
S10. Regulatory frameworks, processing and retailers, all stifle food production by small diverse farmer/producers
S22. I think government has a significant role to play, to ensure that a level playing field is provided for businesses that want to adopt sustainable food production practices.
S42. Victoria is the most difficult state to be a food producer in. Small scale food production is too regulated, there needs to be an under $40K small food licencing system that creates a clear and simple food standard.

Export markets

I1. We get a free kick because we are already doing the things Asia is looking for…green paddocks, a sense that products are more healthy, cows eating grass, good food safety reputation…Coming off the back of a drought, Australia has not produced the same volume of milk since before the millennium drought. Filling supply contracts is hard and we’ve lost buyers. Australia is unreliable, but a small increase in demand is manageable. We can’t ramp up dramatically in only 1-2 years… We [dairy] can’t compete with NZ in the bulk commodity markets on price.
I8. Now in the Black Sea and Ukraine – production there is growing markedly. And because oil has come down they can get product in to Southeast Asia very competitively. The demand in Southeast Asia is a big trend, but we also risk losing market share… If you look at countries like Indonesia, Vietnam and other ASEAN countries, we’ve already got a large market share and it is growing. Middle income is growing and consumers are becoming more sophisticated. There is huge demand and potential for growth. That isn’t just wheat or grains for pasta, bread, bakery but also barley and malt for beer…Everyone is trying to find productivity gains. This is affected by more climate variability and water scarcity. If you are going to feed those [Southeast Asian] markets through those supply chains, then we need access to product, but there is only so much we can produce. We don’t have the production capacity.
I10. The food system is seeing a greater concentration of power and an increased push for productivity driven by wanting to export. Practises associated with this are probably less sustainable than what could be done… The large scale farms aren’t the most sustainable and that kind of productivist drive to always create more for export leads to practices that rely on synthetic fertilisers and mechanistic practices. These aren’t all bad but they have a far greater impact than if you were aiming to be sustainable… focusing on exporting comes at a cost to other aspects - your land, soil, acidification, water… Pushing and pushing to be Asia’s food bowl is part of what is driving that productivist focus.
I11. The environmental implications of our exports are huge…Government food policy is export focused. DPI is export focused…Trade agreements are a big unknown. Even with the pressure for environmental regulations. Can we enforce anything anymore?…But I don’t want government to define where food is produced. If food is produced well, then it doesn’t matter if it is exported.
I12. The organics industry is currently predicting a large increase in demand for organic produce, particularly from Asia, as their growing middle class demands cleaner food. Bellamy’s organic baby formula is a case in point - Bellamy’s is a Tasmanian company, but they can’t source enough local organic milk and are having to import it… Growth in the organics industry is one way to influence the environmental sustainability of the food system in terms of getting more land under regenerative agricultural practices, but a lot of organic produce may actually end up being exported in the next few years - good for the soil (and therefore the environment and having a positive impact on climate change) - but not helpful in terms of making organic produce more accessible to Victorians.

I13. We aren’t going to be Asia’s food bowl. Australian agriculture feeds 60 million people. Maybe we could get to 120 million with arable land. This is compared to 3 billion in Asia… We are talking about a whole other scale. If Chinese tourism grows rapidly in terms of international travel, there won’t be enough aeroplanes or pilots to meet the market. In Singapore, massive industrial storage spaces are being built 100 metres underground.

I17. Export oriented big agriculture is a significant feature of the food system…there is the idea that smaller more sustainable production isn’t as economically important.

I26. I can’t see Australia competing on world markets at a mass production scale. We are going to have to be nuance and have a branded product… We (Australia) are not going to be bulk suppliers of anything. It will be branded stuff, clean, green, certified in one form or another…. You can see that being saleable, just on the growth in organics. There is unmet demand…whether that flows on to a market for protecting stuff I don’t know. Just add it in to the GST somewhere.

**Farmers markets**

I13. Farmers markets won’t work for farmers with limited time to commute. I’m not discounting other options of middlemen…Regional Vic has a lack of options. The good stuff is going to the city.

I15. Re-localising food is a tricky thing. It is hard to reverse to small scale from big scale. I don’t know how to reverse it to be honest.

I16. It is interesting the number of small to medium enterprise farms that have been emerging in recent years. With varying success. None could have been established without the farmers markets movement. It keeps the other retailers out of the way. You get a good price for your produce. You get feedback. It has been instrumental in getting small farms established… Small farms aren’t just hobby farms. Small farms have the capacity to run incredible high integrity sustainable food system but also need high integrity sustainable work system as well. To get going, all the small farmers we know of rely on farmers market to launch product.

I12. What works really well are farmers markets. Farmers markets are absolutely brilliant because they are solving a whole lot of problems for farmers, consumers, and the whole system. Farmers are given the chance to be price setters. Consumers are connecting with their food…But it has hit some barriers. There are a whole lot of perception in the community that farmers markets are niche and expensive. They have grown a lot in that last ten years. But they are not being what they could be. Which is where people do all their shopping. One of the key things is markets need to be weekly. Not where you go once a month…moving it from being a tourist experience to where you have necessities

I16. Farmers markets have been the re-emergence of an old trend over the last 15 years. It has grown exponentially since they began in 2002. Small producers mostly…they take back control of their product, sell direct to consumer, get paid on that day, get pull price for their efforts, plus direct feedback.

I21. Many store holders become successful businesses that found their confidence, place in the market, a platform, and were able to experiment and incubate their business on next to nothing at our farmers markets. … A store holder rang to say they were making the decision to switch to an accredited market in their region. To us that is a success to see them move on.

I23. There is room in the market place, but if the whole industry said we’d all become farmers markets, I can’t see society going back and looking like that. There is a space for it. But it is probably relatively small. There is no research on the numbers – on what total percentage of food could be sold by that method of farmers markets. That was how we did food distribution 100 years ago. Then we went in to supermarket environment… ‘Pick your own’ are like farmers markets with steroids. I think that is a fantastic measure to educate people and give them experience. They might do that 4 or 5 times a years and rest of the time they are going to buy product from a retailer. It would work for people who are geographically located near a major centre. Not for a farmer in Swan Hill.

I24. There has to be a way to scale up alternative markets. Alternative distribution is still a really small proportion of the market… farmers markets are a really small proportion of what is going on. It is hard to get to the next level of consumers and bigger scale producers.

S8. In our town the Farmers Market has thrived since starting in 2014, which is really good to see, but most processed food is too expensive there [at the market].
**Domestic markets**

11. A lot of drivers are outside the industry. Population in Australia is fixed. Consumer preferences are fixed. There is some opportunity to grow domestically but not a lot. We will grow [dairy] by supplying Asian markets... How can we support farmers to get more wealth from their business? We need to establish markets and trust in these markets.

17. There is a huge demand in Australia for really top quality dairy products made with integrity and where the farming practices are acceptable to the consumers. The high end – restaurants and retailers - people who appreciate top quality cheese are driving that demand... it is good for food identity... and of interest to the younger generation because it is viable... There are always going to be the big markets. This is a different market.

111. There are unsung heroes in retail. The independents that are holding their own. They deal direct with the farmer. And farmers have relationships with the green grocer and the butcher.

123. The vast majority of [horticultural] product is for domestic consumption. We have a relatively small domestic market. It is a good domestic market. But if you are wanting to significantly increase your production it is unlikely you’ll be able to stimulate demand... if every grower in Australia doubled production we’d be in a massive oversupply situation.

**Market Failure**

11. There is no market failure. We get food and even export food. Our environmental footprint is bigger than we want it to be but it isn’t devastating. It isn’t dreadful. A lot of practices are continually being made better.

13. Food retailers don’t have community health as a core driver. Their biggest worry is shareholder needs not food access or food that will keep us healthy.

14. The market is quite destructive of livelihoods, communities and the environment. It doesn’t address how to feed the world sustainably. The wider system has an extractive, exploitative approach based on a rationalist efficiency perspective... The industrial food system breaks co-dependency with the environment.

114. In Australia, agriculture is not subsidised, it is market driven... The market is aiding diversity. What it isn’t supporting is long-term issues.

115. We should be supporting the ecological innovators – who are changing their practices to get much better use of their ecological functions. There isn’t a produce pull through. They buy less chemicals, so Monsanto won’t sponsor it. Nor can CSIRO do it because they need to do commercialisation. Good food, good leather, good wool – they are the only things that get sold. It is a real market failure.

124. With supermarkets, commodity markets, wholesale markets - there is a huge concentration of players in the middle. It’s basically a market failure – monopolistic behaviour which doesn’t work for the majority of farmers and consumers ... it doesn’t support long term sustainable agriculture, it’s very short sighted and not in the interests of the people growing our food.

126. There is no money in ecosystem services... we always hoped for carbon, biodiversity, salinity credits. It hasn’t happened... There are millions of opportunities to invest in agriculture but bugger all you can do to invest in ecosystem protection... There are corporates who will spend $100 million at a time. They don’t want bits of the landscape that don’t make money... Unless they get a market mechanism around this stuff it will go overnight... The scale at which corporates can change landscapes makes it imperative for payment for protecting and enhancing ecosystem services.

S8. There is too little competition between supermarkets. Government needs to intervene.
It should be noted that this map is a simplified representation. It isn’t a reflection of the relative size or scale of different supply chain actors or the power relations between them. This system sits within the context of broader environmental, cultural and socio-economic systems and influences.
4 ENVISIONING THE FUTURE SYSTEM

WHAT WOULD A GOOD FUTURE FOR THE FOOD SYSTEM LOOK LIKE? (INTERVIEWEES)

Choices available for alternative supply chains

I3. It is about giving choices to farmers and consumers…A good future would be that if our food growers want options outside the food market, then they exist and are logically possible…. building different logistics systems so people can have the option of supporting farmers and environment – broadening our options…Distribution and processing are so critical - and alternative logistic models and aggregation.

I11. A good future would include the local ownership and control of resources and ecosystems in a way that can benefit all people in that catchment and beyond. This is about the whole economic system….decent livelihoods along the supply chain, scope for SMEs to buy in… values based supply chains broader than profit, with mutual responsibilities and partnerships not just the cheapest prices….Food systems shouldn’t be driven by private shareholders because they are that important.

I12. CSAs, open food networks - there are lots of different models. Broadly speaking the farmer base isn’t aware of a lot of those options. Farmers tend to be quite siloed. At the moment everyone has their own solution for how they sell their produce. There are lots of opportunities to take more control over the supply chain, but I don’t think they are getting together and having those conversations.

I16. The power of the duopoly needs to change. I don’t know how. The balance is so out. You see and hear of small butchers and bakers and green grocers falling by the way side. It is taking away our food choices, traditions, cultures. The consumer is choosing. One day you won’t have a choice. For me, it is the most concerning thing in our food culture now. …Time and time again you can see it is all driven by profit at the peril of our farmers and our choice. My kids may not have a choice.

s2. In my experience, the most important connection is between the growers and the consumers however this is the least supported and resourced area of activity.

s13. Take out the middlemen as much as possible, and both producer and consumer wins!

s36. For some reason farmers think they have to grow lots of the one food item and sell for cheap to super markets or to the general market. They don’t consider selling direct. We need to shake up this mind set.

s44. There is a need for farmer's markets, co-ops and other initiatives to reach out to working class communities.

Research

I1. We need research to shore up profitability for farmers… The good years are really good. The bad years are really bad…Price takers are at the whim of volatility of price and climate. To continue to grow there needs to be better capacity… in terms of a good future, growth is probably the right thing for the industry.

I10. Australians haven’t really properly looked at where our climate resistant areas are. There hasn’t been a good soil survey in Victoria since the 1970s … no one knows what is happening in land degradation… without knowing that kind of stuff we can’t know what to protect. It’s naive and reckless how little planning there is on where we can feasibly grow some things that have really specific growing climate. There needs to be a lot more research to identify what the issues are and where we should intervene within the system to make it more sustainable. We need more research to underpin good decision making…

I14. A good future would include research and social effort into working out agricultural systems that use nature to build biodiversity as part of the agricultural process. But the world’s research funds go to GM, pesticides - there is no commercial model.

I15. Soil erosion, biodiversity loss- nobody has compiled it and pulled it together…it is a major gap for us. Without that information we are constrained in our ability to act. If we don’t have the real picture we don’t know where the hotspots are or the good spots are. We don’t know what the trends are.
121. We’d like to be able to quantify our impact… we are missing the data and evaluation to go with the anecdotal stories of impact… It is hard to counter the marketing budget of the duopoly… but it [farmers markets] is a good news story in agriculture… It is such an incredibly powerful thing amidst all the doom and gloom in agriculture, and yet all we can do is see the challenges because it is so bloody hard to get the work out and the reality out and any recognition.

**Infrastructure**

I1. We will need changes in infrastructure. Rationalisation is occurring. There are a lot of little factories, not much automation. We need infrastructure upgrades.

I5. We need a place for new ideas, for training… There is a lot of community housing and infrastructure that needs to be revamped. But it isn’t audited. We have no idea what’s available. Finding out what’s around is the first step – the assets - then decide on usage.

I8. It costs us a lot of money to get our product to those consumers and that is a logistical and infrastructure issue. Trains are too slow, volume too small, cost per tonne too high… We are good at agriculture but by gee they are good at agriculture in the Black Sea as well and they are good at agriculture in Southern America, and they are good at agriculture in Northern America. We can’t take it for granted. We need to be competitive… R&D is not so sexy these days but if you look at productivity rates, is the incremental change going to be enough? One of the big step changes will be around genetically modified (GM) food. We still don’t have GM. What else are we going to do to make a step change? If we could increase production in a sustainable way and if we had a more competitive supply chain, with targeted collaborative public private partnerships, then we’d be in a good situation… To not be complacent – that would be my magic wand. If we think ‘we are the only country that is good at agriculture, we are on the doorstep of Asia, and we will be fine down here’, that is a big mistake. There is a lot of capital not being spent in Australia.

I24. Provide access to land and infrastructure for production, distribution and selling alternative food. Often existing infrastructure can be utilised. It doesn’t have to be a big investment and there is huge potential to unlock land… new institutions are separating land from enterprises: land trusts; community ownership; enterprises working under a land management plan.

I25. The highest risk point for us is the abattoir. It is the risk of infection. I’d love to have a mobile abattoir or one on farm.

**Consumer awareness**

I1. At the consumer end there is a poor understanding of agriculture practices. People can only know so much. But a lot of issues in the industry we worry about when consumers find out about practices… There is a lack of knowledge that milk is seasonal. There is a lack of knowledge that mammals have to be pregnant to produce milk, calving annually. There is no understanding of the basic principles of animals, seasons, breeding.

I3. I’d love people to recognise that food isn’t eternally available, so if the market sells out tomatoes, that’s it. Celebrate the seasons. Build a food culture.

I4. Activists need to be funded to tell the stories and have the conversations. Events and stories. Opportunities for alternatives. Education, literacy, awareness, systemic strategic dialogic conversation.

I14. To philanthropy I would suggest a media project about telling the stories of all the farmers building sustainability while producing food. Doing it in an intelligent and professional way - a media outlet of some kind, convener of conferences and meetings, bringing together the food system, a hub for enabling conversations about how agriculture can be a proactive builder of the Anthropocene environment… Thousands of people are interested in this space. All around the world each are doing individual things. We don’t get to see a lot that draws ideas together and is farmer focused (rather than consumer). It is siloed… Humans aren’t animated by statistics. They are animated by stories. Data never changed the world. Humans do.

I18. You need to know how to raise awareness and inspire behavioural change and to do that you need the numbers… Politicians respond to numbers and evidence and people do too, but you have to make it emotive… The changes and effects of the unsustainable nature of things need to be tangible… you need to get inside people’s finite pool of worry.

**New farming practices**

I1. Climate is changing and affecting farming practices. Climate sensitive farming will need different practices. For example, we are going to need a new species of grass – not rye grass.

I9. As much as we’ve battered it around in 100 different meetings, the best tool that seems to be available to underpin sustainable use of resources seems to be whole farm planning. It might sound old hat but it isn’t really. The planning includes everything from the shelter belts to determining what the water requirements are.
I14. Agriculture is already in our environment...If the food system had a good future, it wouldn’t look vastly different. Broad acre would still be broad acre and smaller niche production, high value production, would still use water and the good land available. All agriculture should be an environmental act. Building biodiversity, water cycles. It should be a creative generative process. Not just about food. Tweaks would be needed to policy settings, psychology, farmers and farming, economics.

I19. Farmers instinctively want to protect their own world and their bigger world. It is in their own interest to be sustainable. In terms of practice change, I still think the principals of having good exemplars out there with good science and economic overlays so people will adopt them so it makes money. If you can keep producing those then farmers will adopt.

**Regulatory changes – to support small and local producers**

I10. Look at what planning policies might be holding back smaller producers, what contracts are holding back smaller producers and what alternatives you might be able to provide to assist them and looking at what pressures they are under, what planning mechanisms could work and what government would get on board with.

I24. There are small things government could do with big impact like change regulations for small scale producers. It is incredibly difficult to set up processing on farms and the barriers for food and worker safety is set by industrial players and is out of whack for small and medium players in distribution.

S32. There should be more Victorian produce and less national and international available.

**Regulatory changes – to labelling**

I12. I wish governments were paying way more attention to labelling.

I18. To tackle things you could also look at nutritional bang for your back, similar to the traffic lights system for food they are currently introducing - if it was tied in environmental, resources issues. How many nutrients does it have to justify the resources to make it?

I21. If the food industry was accountable for labelling in plain English information then the public would be much more aware. It is hard to interpret the fine print. This would be levelling the playing field. It would have a ripple effect to the industry and the public. If everyone had to lift their game we’d be on the same playing field.

**Regulatory changes – to enforce sustainability**

I3. I’d like to see a government that enforces what we can be proud of and regulates against practices that we don’t stand for.

I20. The problem with sustainability is that there isn’t any… Most people are greedy and don’t give a f*ck. There are lots of small little things happening, people high fiving each other, but there is no change… We should be fining people for not being more sustainable … we should be making money from sustainability…there are a lot more people who could start caring about it more rather than the dollar.

I24. Big systems like government and corporate powers probably won’t change, so there is a need to undertake ‘acupuncture’ in the system, target small but significant areas to make the system more sustainable. E.g. put a ban on genetic modification, don’t go through with the TPP, don’t provide corporates with subsidies.

**New paradigms**

I1. If I could have one thing, I would want an acknowledgement that food is essential, that food is not negotiable and we move from there...We’ve all got concerns about the environmental footprint. Organic agriculture needs even more land. You have to accept that you are taking up land.

I3. A good future equals a fairer food system where farmers can make a living and we value food production in a sustainable way like we value iPhones. Food is seen as a priority. Culture shifts and we realise food is something that keeps us healthy and out of hospital. Food is a body of teaching, thought and interest and people understand the importance of having sustainable food production close to cities – urban planning.

I4. A good future would be a global movement of grassroots change. Deep democracy. Social justice. Long-term change. A shift from an ontology of separation and alienation to one of healing and connectedness…We need a mass transition away from high input, high intensity, industrial agriculture. A new paradigm, transformation and the reordering of our values and priorities. It can’t be simply about the extraction of money. What is the food system for? It is for nourishing.
Collaboration

i14. Focusing on problems never got us anywhere...We aren't building new things. Let's build new stuff involving pulling together people in new and unlikely alliances. People love being in unlikely alliances...There is an immense desire for solutions in this space...Tapping into sources of energy that are already there, bursting to go, but don't have an outlet – combined into something. Try something. Start somewhere.

i17. The best way to make the food system more sustainable is to create a collaborative/safe space for stakeholders to discuss issues. We haven't created those sorts of structures in the past ...The consequence of not having this is people are still polarised on issues and not understanding each other’s perspective e.g. production constraints, climate change drivers, and no common language to move forward on the issue...The most significant place to make a difference is the way stakeholders work together... I'd like to see strategic funding of bigger picture stuff, particularly in Victoria...the stuff where you need to come together...a springboard that moves everything forward...e.g. creating a food policy council, bringing together government and non-government, is the obvious next step.

i24. Coordinate regular events, bi-monthly, two-hours, showcasing enterprises that need help, with an open invitation to share ideas and connect. Make collaboration a criterion for funding – there are lots of awesome projects are happening but people are not working together as well as they could or should – and make knowledge sharing a criterion too.

Food hubs

i5. We need a decent pot of money to incubate, leverage and match for impact. You could create a food hub for $500k for 5 workers per year. You could link in with big organisations like hospitals. There is disruptive potential - integrating community activity. For now we are reliant on exceptional individuals. Social enterprise is sustainable to some degree. But funding operational costs is still a barrier. If there was funding it would happen within a year...We need leadership to show it is possible. We need vision to seed more than a pot of money. We need to bring people along. It needs to be more than a pilot project.

i25. What I’ve thought would be good for someone to do a feasibility study on is to demonstrate how to make a regional hub for meat processing – with onsite sales, processing, abattoir, boning centre, co-operatively owned by eaters of the region, farmer incubator model...Farmers have access to whatever different points of the hubs that they want. The idea is that it would have a regional branding opportunity...Imagine one of those in each region.

Producer networks

i6. We think we could build a support network for small dairies that assisted with getting everyone being organic and having a whole lot of values in how they look after their land. The network could support that. There could be on-farm production but the capacity to do centralised manufacturing. This creates options. You can share labour, knowledge, processing, hay lots, expertise, training, workers.

i12. My magic wand would be to resource our local producer network. I’d love a cross sectoral local farmer group – no matter what people are growing – to have the resources for building a strong community in that sector. There is no where they come together but so many issues that we all have in common.

Fellowships

i11. Burnout is a big problem. People are doing a lot of work for not much money...Getting everyone together can be a big recharge...Having the capacity for funding like Ashoka Fellowships for people doing awesome things. People who consistently do amazing things year after year. Why not get behind them and support them?

i24. Create scholarships for organic farming production. This would also help providers of these courses and other providers could pop-up. There isn't a lack of demand; it just needs a lower price. The National Environment Centre in NSW has the only accepted training for organic farmers which costs $12,000 a year so it is inaccessible for younger and poorer growers...Provide support for social entrepreneurs e.g. Scholl Foundation, or a School for Social Entrepreneurs that supports people long term to take potential/issues.

Institutional food procurement

i10. Having government and large related institutions (hospitals, correction facilities) have their procurement come from smaller farmers.
I15. To kick off a new market you need to help it get big enough to be self-sustaining…if I was going to do food I’d go for corporates, with a clear line of sight for alignment. Institutional food - Lite & Easy, hospitals, prisons, IBM who is trying to be sustainable. A customer that is big enough.

*Farmers markets*

I16. Good farmers markets should have all of it. Meat, veg, seafood, fruit, dairy, baked items. They need to be weekly – you’ll keep out of supermarket if you know there is a weekly market.

I21. A good future would include a national definition of a farmers market; education of the consumer; and recognition of the farmer.

*Local Government involvement*

I20. You could create sustainable energy by composting at a large scale - picking up from any large scale manufacturer/ vegetable market/ fish market and turning it into amazing compost.

I22. We feel local government is a strong place to advocate, to create more sustainable local food systems… Local government has the capacity to do things in a lot of communities.

### WHAT CHANGES ARE NEEDED TO MAKE THE FOOD SYSTEM MORE SUSTAINABLE? (ONLINE SURVEY)

In the online survey respondents were asked ‘What changes (if any) do you think need to happen to make the food system more sustainable? And which stakeholders would need to make these changes?’ Rather than include every individual answer (which are available in the Annex, responses have been summarised below under stakeholder types.

<table>
<thead>
<tr>
<th>What CHANGES (if any) do you think need to happen to make the food system MORE SUSTAINABLE? And which stakeholders would need to make these changes?</th>
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<tbody>
<tr>
<td><strong>State and Federal Government should:</strong></td>
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<tr>
<td>Introduce regulations to:</td>
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<tr>
<td>• Increase supply chain transparency</td>
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<td>• Incorporate the environmental costs of food with a polluter pays principle</td>
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<td>• Create better labelling about food origin and production method</td>
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<td>• Change procurement policies of large government funded institutions to source sustainable food</td>
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<td>• Reduce red tape for small diversified farming operations</td>
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<td>• Remove subsidies for big agribusiness</td>
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<tr>
<td>• Break up the supermarket duopoly</td>
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<tr>
<td>Introduce subsidies and grants to support:</td>
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<tr>
<td>• small-scale local food production</td>
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<tr>
<td>• farmers selling direct to consumers</td>
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<tr>
<td>• sustainable farming practices</td>
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<tr>
<td>• young farmers entering the industry</td>
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<tr>
<td>• consumer education on ethical and sustainable food consumption</td>
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<tr>
<td><strong>Local Government should:</strong></td>
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<tr>
<td>• Create an incentive for consumers who buy local, seasonal, and cruelty-free food</td>
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<td>• Include community gardens in urban planning</td>
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<td>• Include large-scale food composting infrastructure (with a</td>
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<tr>
<td><strong>Large retailers/ supermarkets should:</strong></td>
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<td>------------------------------------------</td>
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<tr>
<td>• Pay farmers fairer prices</td>
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<tr>
<td>• Stop putting downward pressure on food prices</td>
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<tr>
<td>• Stock affordable quality local produce</td>
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<td>• Accept more competition in the marketplace</td>
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<td>• Promote seasonality</td>
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<tr>
<td>• Provide farmers better access to their retail market</td>
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<tr>
<th><strong>Processors and distributors should:</strong></th>
<th><strong>NGOs and advocacy groups should:</strong></th>
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<tr>
<td>• Collaborate to create better distribution points</td>
<td>• Educate government, educators, consumers and farmers about the impacts of our current food system</td>
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<tr>
<td>• Collaborate to create more efficient transport options for small to medium sized farmers</td>
<td>• Call for more transparency from government, retailers and distributors about the food supply chain</td>
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<tr>
<td>• Provide less packaging and plastic</td>
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<tr>
<td>• Use local produce</td>
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<td>• Reduce the volume of food transported long distances, nationally and internationally</td>
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<tr>
<td>• Get a political education in how to work with, change and implement political processes</td>
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<tr>
<th><strong>Investors should:</strong></th>
<th><strong>Universities should:</strong></th>
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<tbody>
<tr>
<td>• Introduce innovative ways for young people to farm and own their farm</td>
<td>• Provide more tertiary courses dedicated to food systems issues.</td>
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**Feedback from the online survey**

<table>
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<tr>
<th>ONLINE SURVEY QUESTION</th>
<th>MOST COMMON RESPONSE</th>
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</table>
| If you had to choose one type of **PROGRAM** to invest in to improve the sustainability of the food system, which would you choose? | Top responses were:  
- Changes in labelling to show environmental and social impacts (8 respondents)  
- Leadership development of individuals across all stakeholder groups (7 respondents)  
- Advocacy to government to change regulations (7 respondents)  
- Citizen education and food engagement strategies to increase “food literacy” (6 respondents)  
- A public awareness campaign to change consumer behaviour (6 respondents) |
| If you had to focus on a specific **OUTCOME** to improve sustainability of the food system which would you choose? (Choose no more than two answers). | Top responses were:  
- Supporting food enterprises that are producing or distributing fair and sustainable food (20 respondents)  
- Increasing availability to consumers of locally grown food (14 respondents)  
- Building strong adaptive farming communities (10 respondents)  
- Building the economic viability of sustainable agriculture (10 respondents) |
| If you could focus on one part of the food **SUPPLY CHAIN** to make it more sustainable, where would you focus? (Choose no more than two answers). | Top responses were:  
- On farms (21 respondents)  
- Retail - major supermarkets (15 respondents)  
- Transport and distribution (9 respondents)  
- Preparation and consumption in the home (6 respondents) |
| If you had to focus on one type of **AGRICULTURAL INDUSTRY** to improve sustainability, which would you choose? | Top responses were:  
- Other - responses were mixed but included meat, crops and non-answers (10 respondents)  
- Beef (9 respondents)  
- Dairy (7 respondents)  
- Grains & oils (6 respondents)  
- Vegetables (6 respondents) |
5 THE SYSTEMS MAPPING WORKSHOP

This section includes a summary of findings from the Systems Mapping workshop on 16-17 February 2016.

DAY ONE: FRAMING

Welcome & Introductions | Plenary
- Introductions to set scene and expectations from AEGN perspective (Hayley & Esther)
- Roadmap for the two days (Ralph and Fiona)

System Mapping | Presentation on research findings (Fiona)

Morning Tea

Deep dive into the food system | 2 x (15 minute presentations + 5 mins Q&A)
- Cullen Gunn, CEO, Kilter Rural
- Sonya Rand, Community and Sustainability Manager, Corporate Affairs, Coles

Lunch

System Mapping | Small Group Work
- System mapping exercise – a refined map is attached based on this session (see below).

Leverage Points | Small Group Work to identify leverage points in the system to make it more sustainable

The top 12 were:
1. Disconnect between consumers and producers
2. Paradigm = Technology makes life easier
3. Paradigm = More inputs equals food outputs
4. Paradigm = Abundance, convenience, freshness, food preferences
5. Quantity versus quality debate.
6. Externalities not priced
7. Rising farm costs
8. Housing and farming debt affecting how much people spend on food.
9. Misaligned incentives contrary to human health and land health
10. Lack of “citizen” engagement (rather than passive consumers)
11. Politics of food
12. Addressing structural ways to change food system (not just focusing on consumers)

Possible solutions were also suggested:
- Interface between urban agriculture and consumers (e.g. at schools)
- Reregulation of definition of shareholder value via corporate law
- Good research about the value of ecosystem services
- Localising community and ownership and building resilience
- Better labelling on provenance so people know where the food comes from
- Intervening in the way the group of actors works together. More opportunities to create discussions amongst broader sets of actors in the food systems. And to address power imbalances so conversations on different (equal) terms.
- Need for shared infrastructure so smaller growers have critical mass (shared warehousing)
- Entry and training for young people
- Ethical standards in labour practices
- Cultural importance of food and health

**Afternoon tea**

Leverage Points | Small Group Work + Plenary

Four groups formed, choosing challenges from the list of 12 above.

**GROUP 1 CHALLENGE:** The disconnection between consumers and producers (partly driven by a fabricated view of the food system presented by the supermarkets as in fresh, cheap, convenient)

**SOLUTIONS:**
- Making it cool – consumer awareness (granny skills, backyard gardening)
- Farmers markets and intermediaries around regional food
- Farmer coops and shared investment farms to bridge the divide
- Food education from the places we learn about food (pop culture, curriculum etc).

**GROUP 2 CHALLENGE:** We want to put value on the intangible aspects of farming, both the costs and benefits

**SOLUTIONS:**
- Fund the transition for farmers to sustainable farming systems, based on paying them for ecosystem service and carbon sequestration
- Fund public R&D
- Fund Extension services including peer-to-peer

**GROUP 3 CHALLENGE:** Food industry causing health crisis (because unhealthy food is easier to produce and access – it is processed, cheaper, full of preservatives).

**SOLUTIONS:**
- Education around healthy food choices
- Prioritise access to fresh food for all.
- Legislation, planning for everyone having access to fresh food – prioritise, make it in all communities, e.g. must have fresh food within 2 kms from everyone
- A health system reform. When go to doctor or hospital, can prescribe need to get involved in community garden and cooking skills
- Community food centre in every community

**GROUP 4 CHALLENGE:** Democratising the Victorian food system – structural issues around power imbalances and corporate concentration in the food system, especially in retail.

**SOLUTIONS:**
- Map out regulatory barriers/pathways to a more sustainable food system.

**Closing reflections**
- Struck by comment you have to make everything available all the time or the consumer will go elsewhere. How do you work with that?
- Is the only answer to reduce everything to the logic of the market?
- Overriding aspect of what role government plays and what influence they have and have we captured it in our thinking?
- Conversations over a cup of tea. There are always fabulous little initiatives already happening that address all of these things. Is there something that is missing and are we reinventing the wheel? How do we link things that are already going on with funders in a meaningful way? And what has been learnt? Esp. for the people that don’t have the time talking about it.
- Need stories about what has worked - to know what is possible.

Dinner, Commonground

**DAY TWO: FOCUS**

<table>
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<th>Check-In – Overnight reflections</th>
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<tr>
<td>Leverage Points</td>
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<tr>
<td>• Reviewed the list of leverage points from Day One</td>
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<tr>
<td>• Sense-check the list</td>
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<tr>
<td>• Iterated opportunities/solutions (groups and share)</td>
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Revised list of challenges:

- Disconnects – right along the food system (e.g. consumer and producer/consumer disengagement/ disconnect farmers and researchers/farmers and financial institutions)
- Paradigm - Technology makes life easier
- Paradigm - More inputs equals food outputs
- Paradigm - Supermarkets say abundance, convenience, freshness and set food preferences
- Quantity versus quality debate.
- Externalities not priced
- Rising farm costs
- Housing and farming debt affecting how much people spend on food.
- Misaligned incentives are contrary to human health and land health.
- Politics of food.
- Focus on consumer choice v structural change
- Health crises being linked to food industry, cheap food, preservatives, processing
- Food for vulnerable
- Co-operatives
- Clear vision (ends)
- Capacity constraints in management
- Lack of sharing knowledge
- Viable enterprise across value chain
- Natural resources
- Climate change
- Global inequality
- Neo-liberal paradigm
- Resilience
- Power concentration
- Farmer-research/ farmer -$ disconnect
- Consumer knowledge

From this list, 3 working groups formed:

1. **DISCONNECT GROUP** - Disconnects right along the food system (e.g. consumer and producer/consumer disengagement/ disconnect farmers and researchers/farmers and financial institutions)
2. **CONNECT GROUP** – Building the Victorian food movement, looking at how that is progressed and how we connect the various groups working in that movement.
3. **VIABLE ENTERPRISE GROUP** - Viable enterprises right across the value chain and alternative value chains

Morning Tea
Leverage Points | Plenary - Reporting back on the small group work

**DISCONNECT GROUP** - Disconnect between farmers, researchers and investors. Disconnects right along the food system (e.g. consumer and producer/consumer disengagement/ disconnect farmers and researchers/farmers and financial

**TOPIC:** Meaningful information flowing between all sectors of the food system

**IDEA 1:** Consumer and producer connecting directly – by going to the source (e.g. farm boxes, farmers markets, - maybe a digital interface that can provide a more overall network)

**IDEA 2:** Connection to the researchers and farmers by a more incentivised network so people find each other. A concierge service.

**IDEA 3:** Connections between investors and farmers through internships or mentoring programs that could be invested in and peer to peer lending.

**CONNECT GROUP** – building the Victorian food movement, looking at how that is progressed and how we connect the various groups working in that movement.

**TOPIC:** Building a transformative and democratic food movement that is broad based, powerful

**IDEA 1:** A food plan for Victoria, grassroots, kitchen table talks, regional cities – could include specifically designed campaigns

**IDEA 2:** A broad network of networks to increase the breadth of the movement, recognise existing networks – could include a directory of groups

**IDEA 3:** To make visible the many existing parts of the food movement that are already out there to allow people to connect better and amplify the movement.

**Viable Enterprise Group** - Viable enterprises right across the value chain and alternative value chains

**TOPIC:** The creation of viable enterprises for social and environmental good

**IDEA 1:** Tailored support depending on business life stage:

- Start-ups – capacity, business knowledge, access to funding, clear definition of social good trying to achieve
- In operation - but are struggling – need planning, capacity, investment
- In conversion – we could look at investment to convert them.

**IDEA 2:** Farmers – new ways of R&D, peer to peer learning and sharing

**IDEA 3:** Where ongoing support required – argument for ongoing support from government and philanthropy as it will always be required

Participants were asked to comment on one thing they really liked that didn’t come from their own group. Comments included:

- Support for viable entries recognising that different stages need different types of support and have different capacities
- Social enterprises and accessing financing from different options at the appropriate time in the journey.
- Recognition that some types of enterprises will always need ongoing support and never be for-profit.
- Internships
- Peer-to-peer connections
- Peer-to-peer finance
- Peer-to-peer learning
- Connections and concierge service for researchers and farmers
- Network of networks and amplifying what is already there, using technology to keep up to date and create digital connections
- Promoting what is happening already as a way of educating people to a different sort of consumption.
- Start-ups fostering innovation
- Mapping the network

Prioritising opportunities/solutions and identifying key themes (action priority matrix)
Group 1 VIABLE ENTERPRISE GROUP

TOPIC: The creation of viable enterprises right across the value chain for social and environmental good

MAJOR PROJECT - IDEA 1: A bottom up model supporting supply chain enterprises other than farmers for the doers. Huge scoping involved.
- Start-ups – capacity, business knowledge, access to funding, clear definition of social good trying to achieve
- In operation but are struggling – need planning, capacity, investment
- Conversion – we could look at investment to convert them.
- Where ongoing support required – argument for ongoing support from government and philanthropy as it will always be required

MAJOR PROJECT - IDEA 2: Farmers – supporting transition to sustainable production systems. Includes new ways of R&D, peer to peer learning and sharing. High impact because farmers are the ones that produce our food. Because of the paucity of investment by government into research into sustainable production systems and extension.

QUICK WIN - IDEA 3: Identifying underutilised infrastructure and making that available. Piggyback on Local food Launchpad, social traders crunch program.

Group 2. CONNECT GROUP - building a transformative democratic Victorian food movement, looking at how that is progressed and how we connect the various groups working in that movement.

TOPIC: Building a transformative and democratic food movement that is broad based, powerful

MAJOR PROJECT - IDEA 1: Build a broad network of networks (including a broader base of other related movements) to increase the breadth of the movement, recognise existing networks – could include a directory of groups.

MAJOR PROJECT - IDEA 2: A people’s food plan for Victoria, grassroots, kitchen table talks, regional cities – could include specifically designed campaigns (with mapping of the regulatory pathways/barriers as a sub-component of the food plan).

MAJOR PROJECT - IDEA 3: Make visible the many existing parts of the food movement that already out there to allow people to connect better and amplify the movement. Telling stories, projecting out. Showing it is powerful.

QUICK WINS – Events and media with a food theme

Group 3. DISCONNECT GROUP - Disconnect between farmers, researchers and investors. Disconnects right along the food system (e.g. consumer and producer/consumer disengagement/ disconnect farmers and researchers/farmers and financial

TOPIC: Meaningful information flowing between all sectors of the food system

MAJOR PROJECT - IDEA 1: Consumers connecting directly to the sources (eg. farm boxes, farmers markets, - maybe a digital interface that can provide a more overall network). Need to engage a full time outreach person to go out to the various players and build on the Open Food Network work.

MAJOR PROJECT - IDEA 2: Connection to the researchers and farmers- need a more incentivised network so people find each other. Information flows between farmers and researchers and universities. A concierge service.

QUICK WIN - IDEA 3: Looking at connection between investors and farmers – peer to peer lending. Esp. for young farmers who want to get in. For older farmers wanting to get out. Perhaps lending to the new farmer. Need contracting and a bit of research.

Lunch

Next Steps | Facilitated Large Group Discussion

COMMITMENTS FROM AEGN
- Will capture and communicate findings (by Australian Futures Project and Republic of Everyone)
- Participant feedback (will send an evaluation survey)
- Testing with funders and investors
- Consolidation and communication of new findings
- Update session (approx. 2 hours, in Melbourne, tbc in May or June)

PARTICIPANT’S IDEAS ON CONSOLIDATING THE LEVERAGE POINTS

Option 1

1. The Network. Projects = food policy, the food plan, peer to peer funding, social enterprise work
2. R&D. Projects = proving the benefits of sustainable food system, putting a value on the health of the system through financial work,
3. Communication. Projects = education, talking to the consumer, making the food system cool and interesting. Bringing along business and industry. Labelling

Option 2

1. Goal
   - A transformed food system
2. Enabling strategies
   - Participation
   - Democracy
   - Government/Regulations/Policy
   - Citizens/community
   - Networks
   - Research
   - Knowledge
   - Resources
3. Outcomes/Projects

   a) Ecosystem services/healthy natural systems
      - Advocate measures to price externalities
      - Research the value of ecosystem services
      - Monitor and project climate change impacts
      - Protect natural resources land/water
      - Research incentivise and network ‘concierge’

   b) Viable Enterprises
      - Consumer: connect directly to the source (farmers, boxes, markets, workshops)
      - Intermediaries/markets around regional food
      - Coops and shared investment farms
      - Finance – peer to peer lending via concierge rather than institution
         - Start-ups – capacity, business knowledge, access to funding, clear definition of social good trying to achieve
         - In operation but are struggling – need planning, capacity, investment
         - Conversion we could look at investment to convert them.
         - Where ongoing support required – argument for ongoing support from government and philanthropy as it will always be required
      - Farmers – supporting transition to sustainable production systems. Includes new ways of R&D, peer to peer learning and sharing. High impact because farmers are the ones that produce our food. Because of the paucity of investment by government into research into sustainable production systems and extension.

   c) Health Equity Access
      - Identifying underutilised infrastructure and making that available. Piggy backing off Local food Launchpad, social traders crunch program etc
      - Community food centre in every community
      - Health system reform where treatment includes cooking skills and community gardens

   d) Engaged and galvanised movements
      - Make visible the many existing parts of the food movement (to amplify)
      - Build a broad network of networks
      - Work towards a peoples food plan for Victoria
      - Map out regulatory pathways/barriers
Changing the dominant policy narrative

Participants were then asked to indicate via ticking post-it notes on the whiteboard the following:

**QUICK WINS:**
- Making visible the many existing players in the food system (most ticks)
- Peer to peer lending (second most ticks)
- Research (1 tick)
- Connecting consumer directly to the source (1 tick)
- Converting current operating businesses to be more sustainable (1 tick)
- Identifying underutilised infrastructure (1 tick)

**WHAT NEEDS TO HAPPEN FIRST? WHICH WOULD MAKE OTHER THINGS EASIER?**:
- Making visible the many existing players in the food system? (most ticks)
- Map out the regulatory pathways and barriers? (second most ticks)
- Monitor and project climate change impacts (1 tick)

**General discussion:**
- Mapping could include regulatory barriers plus
- Also need to map opportunities for financing – where are the other resources outside philanthropy? Federal funding and other untapped funding. Where are the buckets of money?

**REFLECTIONS & CLOSE**

Participants were asked to share any last pieces of information with everyone:
- Agree and articulate priorities and strategies before map out funding buckets. Seek to find people who want to support the work you are doing.
- Reference: MyCapacityBuilding funding for food system mapping
- Reference: Urban and Regional Food Declaration
- Upcoming event: Inaugural National Food Hubs Conference
- Upcoming event: Urban Agriculture Conference
- Still feeling the need for best defined principles – to underpin key themes and enabling strategies.
- Community can be trusted to know how best to invest funds
- Mapping the philanthropic sector is currently funding in this field.
- Mapping the existing activities in the area is mapping the existing projects
- What are all of the big scale challenges that are going to impact on the existing food system in the future? Need a good sense of the local and the global changes that will impact the food system anyway.

6 FINAL SYSTEMS MAP

The following map was revised based on participant feedback at the systems mapping workshop. Additional actors, relationships and drivers have been included and the colour scheme simplified. The food journey is shown with darker arrows. Not all suggested enhancements were able to be incorporated (for example, to show relative power relations) as the data to build this type of map is not available.
This map is a simplified representation. It isn’t a reflection of the relative size or scale of different supply chain actors or the power relations between them. This system sits within the context of broader environmental, cultural and socio-economic systems and influences.
ANNEX 1 – INTERVIEW PARTICIPANTS

1. Jennifer Alden, Growing Change, Bendigo
2. Seona Candy, Victorian Eco-Innovation Lab
3. Rachel Carey, School of Exercise and Nutrition Sciences, Deakin University
5. Peta Christensen, Food Systems Projects and Partnerships Team Leader, Cultivating Community
6. Cassie Duncan, Sustainable Table
7. Aaron Gosling, Geoffrey Gardiner Dairy Foundation
8. Ben Faragher, General Manager, AgHorizons, Cargill
9. Katie Finlay, Mt Alexander Fruit Gardens
10. Alexandra Gartmann, MD & CEO, Rural Bank
11. Cullen Gunn, Chief Executive Officer, Kilter Rural
12. Serenity Hill, Victorian Eco-Innovation Lab
13. Tammi Jonas, Jonai Farms & Meatsmiths
14. Alison Lansley, Secretary of the Australian Specialist Cheesemakers Association
15. Kirsten Larsen, Victorian Eco-Innovation Lab
16. Rowan Little, General Manager, Montague
17. Matt Lloyd Smith, Associate Principal, Arup
18. Carla Meurs & Ann-Marie Monda, Holy Goat Cheese, Sutton Grange
19. Sue Olgivie, Centre for Policy Development report author
21. Geoff Rollinson, Landcare Coordinator, Heytesbury District Landcare Network
22. Nick Rose, Principal Founder and National Coordinator of the Australian Food Sovereignty Alliance, 2010-2015
23. Miranda Sharp, Melbourne Farmers Markets
24. Jennifer Sheridan, Victorian Eco-Innovation Lab
25. Matt Wilkinson, Chef, Pope Joan Restaurant, Brunswick East
26. Mark Wootten, Principal/Manager, Jigsaw Farms; Chair, The Climate Institute
ANNEX 2 – WORKSHOP PARTICIPANTS

1. Esther Abram, AEGN
2. Dr Jennifer Alden, Growing Change
3. Prof. Snow Barlow, University of Melbourne
4. Dr Rachel Carey, University of Melbourne
5. Peta Christensen, Cultivating Community
6. Annabel Dulhunty, Vincent Fairfax Family Foundation, Foundation for Rural and Regional Renewal
7. Natalie Elliot, Equity Trustees
8. Katie Finlay, Mt Alexander Fruit Gardens
9. Dr Jane Gilmour, William Buckland Foundation
10. Serenity Hill, Open Food Network
11. Pip Hodson, The Garry White Foundation
12. Anita Hopkins, Lord Mayors Charitable Foundation
13. Lucy Jackson, Republic of Everyone
14. Winsome McCaughey AO, Helen MacPherson Smith Trust
15. Anika Molesworth, Climate Wise Agriculture
16. Hayley Morris, Morris Family Foundation
17. Helen Murdoch, Goulburn Broken Catchment Management Authority
18. Dr Nick Rose, Sustain
19. Prof. Chris Ryan, Victorian Ecoinnovation Lab
20. Adam Schreurs, Schreurs and Sons
21. Donna Schreurs, Schreurs and Sons
22. John Spierings, Reichstein Foundation
23. Alison Teese OAM, AEGN member

Facilitators:
- Ralph Ashton, Australian Futures Project
- Fiona McKenzie, Australian Futures Project
ANNEX 3 – BRIEF BACKGROUND ON VICTORIAN AGRICULTURE

LAND USE

Nearly two-thirds of Victoria is privately owned and is predominantly used for agricultural production. Agriculture accounts for 56% of Victoria’s total area, making it the dominant land-use type in the state (CfES, 2013).

Dryland cropping and grazing (rain-fed or unirrigated) accounts for the vast majority of Victoria’s agricultural area, covering 90% of all agricultural land. Irrigated agriculture and horticulture accounts for approximately 8% of agricultural land (CfES, 2013).

In 2012-13, this translated to a total land area of 10.6 million hectares, with about 6.1 million hectares mainly for grazing, and 4.5 million hectares mainly for cropping.

Irrigated agriculture represents about 38 per cent of Victoria’s agricultural output, produced on less than three per cent of the State’s land area, and using 1646 gigalitres in 2011-12 (DELWP, 2015)

ENVIRONMENTAL CONDITION

- Agriculture accounts for 11% of the total (GHG) emissions in Victoria.
- Direct energy use in Australian agriculture (on-farm, not including manufacture of inputs) has been estimated to represent only 25-30% of the energy consumed in the whole food supply chain (Larsen et al., 2008).
- 75% of the surface water harvested in Victoria is typically used for agriculture (CfES, 2013).
- Results for riparian vegetation show that 21 of 29 river basins had less than 50% of their assessed river length with riparian vegetation in good condition. Fourteen basins, almost half the basins in Victoria, have less than 10% of major rivers and tributaries in good or excellent condition.
- Basins in the east of the state were generally in better condition than those in the west due to extensive clearing for agriculture (CfES, 2013).
- No statewide data on soil structure and condition have been collected since 1991 and the last assessment of soil acidity was made in 1994. At that time approximately 30% of the state’s agricultural land was considered to be severely degraded due to soil structure decline (CfES, 2013).
- Erosion ranks as a significant concern on agricultural land in Victoria, with 37% of farm businesses reporting erosion as a land management problem in 2006–07 (CfES, 2013).

INDUSTRY PROFILES

Food is big business. The gross value of agricultural commodities produced was $11.6 billion (Agriculture Victoria, 2016). Australia is a net exporter of a range of foods, including wheat, sugar and barley. In 2014–15, Victoria’s food exports accounted for 25 per cent of Australia’s total, with a value of $8.7 billion (DEDJTR, 2015). The most valuable exports were meat ($3.1 billion) and dairy ($2 billion) and grains ($1.4 billion) (DEDJTR, 2015).

Different food and agricultural products have different profiles in terms of domestic and export markets. For example, the dairy industry is highly export focused while the vegetable industry is largely driven by the domestic market, with rising imports (CfES, 2013). And while many Australian farmers are highly export focused, overall they still supply 93 per cent of Australia’s domestic food needs (Hajkowicz & Eady, 2015).

The following table provides a brief overview of selected industries, sourced from Victorian Government materials. Note that while the focus below is on farm production, Victoria is also Australia’s major food processor, producing nearly 50 per cent of the country’s processed food. Around 70,000 people work in the industry to develop premium food and beverages (Invest Victoria, 2015a). Exports of prepared foods from Victoria were valued at $959 million in 2014–15, an increase of $52 million (6 per cent) from 2013–14. This accounted for 41 per cent of Australia’s prepared foods exports. Exports of cereal-based products were valued at $384 million and exports of food preparations were valued at $286 million (DEDJTR, 2015).
<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>DESCRIPTION</th>
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| **Beef (DEDJTR, 2014a)** | In 2012-13, there were 15,252 agricultural businesses carrying 2.4 million beef cattle, representing 9 per cent of the national beef herd (and third largest cattle population by state).  
In 2013-14, 71% per cent of Victorian beef and veal production was exported.  
In 2011-12, 8,178 farms were specialised beef cattle farms and 1,355 were mixed beef/sheep farms.  
The average Victorian beef farm area has increased from less than 300 hectares in the 1960s to around 340 hectares in 2011-12ii.  
While most of Victoria’s cattle are kept on managed pastures, around 6 per cent of the beef cattle herd is grown out in feedlots. This is a lower proportion than goes to feedlots in Queensland and New South Wales.  
Victorian feedlots predominantly produce beef for the domestic market, with shorter feeding regimes and higher turnover rates compared to feedlots in Queensland and New South Wales.  
The domestic market for beef in Australia is driven by consumer preferences, competition with other protein sources (e.g. poultry meat) and price. In 2010-11, it was the single largest market for Australian beef, accounting for 38per cent of beef and veal production.  
In 2012-13, beef and veal consumption comprised approximately 29 per cent of meat consumed in Australia with approximately 32.2 kg per capita consumed out of a total of 112.3 kilograms of meat consumed. |
| **Chicken (DEDJTR, 2014b)** | Victoria exports on average 3 per cent of its chicken meat production as a result of strong domestic consumption trends. The other 97 per cent of chicken meat production in Australia is consumed by the domestic market.  
In 2012-13, the gross value of production for Victoria’s poultry meat industry was $563 million.  
At any one time in Victoria, there are around 21 million broilers being raised for meat production and around 800,000 breeding stock.  
Consumption of poultry in Australia, of which chicken meat is around 96 per cent, has increased from around 4.4 kg per person per year in 1960 to around 44.0 kg in 2012-13. This makes Australia the second largest consumers of chicken meat per capita after Brazil.  
The chicken meat industry is vertically integrated with companies often owning facilities across the supply chain. Around 200 independent farmers are contracted to grow meat chickens (generally referred to as broilers) on behalf of processors.  
Over 95 per cent of the chicken meat grown and eaten in Australia is produced by seven privately owned Australian chicken meat processing companies.  
Processing facilities are located within 80 km proximity of metropolitan centres to minimise transport costs, improve access to infrastructure and labour and be near their customer bases. |
| **Dairy (DEDJTR, 2014c)** | Victoria’s dairy industry has a gross value of milk production of around $2.3 billion in 2012-13.  
In 2013-14, Victorian milk production was 6.12 billion litres, accounting for 66 per cent of Australia’s total milk production.  
Over recent years Australia exported around 40 to 45 per cent of its milk production. Victoria represents around 85 per cent of Australia’s dairy product exports worth around $2.3 billion in 2013-14 . |
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<th>INDUSTRY</th>
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<td>Victorian Dairy Farming</td>
<td>Returns to Victorian dairy farmers are strongly connected to world dairy commodity prices and exchange rates. There were around 4,268 licensed dairy farms in Victoria in 2013-14, spread relatively evenly between the three production regions.</td>
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<td>Eggs (DEDJTR, 2014d)</td>
<td>The majority of eggs produced in Victoria are consumed domestically, with the remainder processed into egg products for the domestic and export markets. In 2012-13, Victoria produced approximately 78 million dozen eggs from a flock of approximately 3.7 million birds (25 per cent of the national flock). The main market for eggs produced in Australia is the domestic shell egg market. This market accounts for around 80–85 per cent of all eggs consumed. Most shell eggs are sold through retail chains. Caged eggs make up around 54 per cent of sales in the supermarket sector, with barn-laid 8 per cent, free range 37 per cent and organic 1 per cent.</td>
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<td>Fruit and Nuts (DEDJTR, 2014e)</td>
<td>Victoria's fruit and nuts industries are diverse, with a wide geographical spread and a range of products. Victoria's main fruit groups are pome fruit (e.g. apples and pears), stone fruit (e.g. peaches, apricots, cherries and nectarines), berry fruit, citrus (e.g. oranges and mandarins) and nuts. Victoria's fruit industries are particularly important to the regional economies of the Mallee, Goulburn Broken, Port Phillip and Westernport and North Central regions. Most of Victoria's fruit production is consumed domestically. However, there is a strong export focus especially in the citrus, stone fruit and nut industries. In 2012-13, the gross value of Victorian fruit and nuts production (excluding grapes) was $1.1 billion. Victoria produced around 98,000 tonnes of pears with a gross value of $93.4 million. This represented 89 per cent and 81 per cent of Australia's total pear production (by volume), and total gross respectively. Between 2005-06 and 2012-13 almond production in Victoria increased by 852 per cent to almost 44,300 tonnes. Almonds were Victoria's highest value horticulture export in 2013-14. In 2012-13 Victoria produced 125,000 tonnes of apples with a gross value of almost $200 million.</td>
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<td>Grains (DEDJTR, 2014f; Invest Victoria, 2015b)</td>
<td>In 2012-13, Victoria was Australia's fourth largest grain producing state, accounting for approximately just over 10 per cent of Australia's production and producing A$2.31 billion in grain crops, most from cereals. This amounted to 7 million tonnes of grain from 3.6 million hectares (3.42 million tonnes of wheat; 1.95 million tonnes of barley; 866,000 tonnes of canola; and 384,000 tonnes of pulses). In 2013-14, Victoria's grain exports were valued at $1.96 billion, 10 per cent lower than in 2012-13. Victoria accounted for 16% of the national grain exports. Wheat exports were valued at $1 billion, representing 53% of Victoria's grain exports. Victoria's grain growing areas are mainly located in western and northern Victoria, predominantly in the Mallee and Wimmera regions. Grain growing in Victoria continues to expand into the high rainfall zones of southern Victoria and to a lesser extent Gippsland, on land once used exclusively for pasture production. Victoria has three grain export terminals in Melbourne, Geelong and Portland, each with access to...</td>
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<td>Pork (DEDJTR, 2014g)</td>
<td>Victoria's exports and domestic consumption of other meat</td>
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<td>At 30 June 2013 Australia had 2.1 million pigs, with the biggest herds in Victoria (529,903), Queensland (497,829), New South Wales (496,610) and South Australia (314,901).</td>
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<td>The gross value of pig slaughterings across Australia in 2012-13 was $933.7 million, with Victorian output being worth $185.4 million.</td>
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<td>Although Australians have increased their per capita consumption of pork over a number of years, imported processed pork products have taken an increasing share of the Australian pork market.</td>
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<td>Increased imports of processed pork from Europe and North America have imposed cost price pressures on farm gate returns in Victoria. Pork consumption per capita in Australia has more than doubled over the past 12 years, from 21 kilograms (carcass weight) in 2002-03 to 45 kilograms in 2013-14. In 2011-12, imported goods made up around half of apparent consumption.</td>
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<td>Victoria imports a significant amount of frozen pork legs from Canada and the USA and frozen pork middles from Denmark for processing and it is estimated that around 70 to 80 per cent of ham and bacon consumed in Australia is made from imported pig meat.</td>
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<td>According to the Australian pig industry, if the imported pig meat was produced domestically it would represent an increase in domestic pig production of more than 66 per cent</td>
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<td>Sheep (DEDJTR, 2014h)</td>
<td>The sheep meat and wool industry is Victoria’s third largest agricultural industry by value, with a gross value of agricultural production of around $1,497 million in 2012-13. The gross values of sheep meat and wool production were $923 million, and $574 million, respectively.</td>
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<td>Victorian wool production has been in long term decline since the early 1990s, falling from 190,600 tonnes in 1990-91 to 70,500 tonnes in 2013-14. In contrast, Victorian sheep meat (lamb and mutton) production has increased by approximately 60 per cent over the same period. Despite these recent increases, the current sheep population is one of the smallest since the 1940s.</td>
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<td>Victoria is currently Australia’s largest lamb and mutton producing state, producing 207,100 tonnes of lamb, or 44 per cent of Australian lamb production, in 2012-13.</td>
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<td>In 2013-14, Victoria exported around 184,000 tonnes of sheep meat, worth $898 million.</td>
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<td>Vegetables (DEDJTR, 2014i)</td>
<td>In 2012-13, there were 813 businesses in Victoria producing vegetables for human consumption. The gross value of vegetable production for human consumption in Victoria was $985 million.</td>
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<td>Port Phillip and Western Port region produced 42 per cent of the value of Victoria’s vegetable production.</td>
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<td>Victoria is the second largest vegetable producing state by value, after Queensland, with 26 per cent of total production value for Australia.</td>
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<td>The Victorian vegetable industry is driven primarily by domestic markets rather than exports.</td>
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<td>Victoria is also the largest vegetable exporting state, contributing 31 per cent of Australia’s vegetable exports value in 2013-14.</td>
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<td>In 2012-13, there were 813 businesses in Victoria producing vegetables for human consumption. This includes 208 potato growers, 60 onion growers, 51 lettuce growers, 53 capsicum growers, 34 carrot growers and 17 mushroom growers.</td>
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ANNEX 4 - EXAMPLES OF OTHER INITIATIVES CHANGING FOOD SYSTEMS

The following case studies have been included to provide examples of initiatives that take a collaborative approach to creating change in national and global food systems. Content has been sourced from the website of each organisation. This information hasn’t been critically evaluated. It is intended as food for thought only.

SOLUTIONS FROM THE LAND

Website: http://www.sfldialogue.net/

What is SFL?

Farmers, ranchers, and foresters are managing an increasingly complex and interrelated set of challenges: a growing population to feed, a changing climate, and the loss of ecosystem integrity. Addressing these issues requires collaboration among the agriculture, forestry and conservation sectors. The Solutions from the Land (SFL) initiative brings together a broad range of stakeholders in the United States to explore the development of integrated solutions from the land for addressing food and energy production, economic development, biological diversity and climate change challenges.

History

The Solutions from the Land (SfL) initiative was conceived and led by a team of respected agriculture, forestry, conservation, academic and industry leaders who came together in 2009 as an outgrowth of clean energy discussions facilitated by the 25x'25 Alliance to explore integrated land management solutions across these sectors that can help meet food security, economic development, climate change and conservation of biodiversity goals. Its original co-sponsors included the United Nations Foundation (UNF) and Conservation International (CI). In 2011, The Nature Conservancy and the Farm Foundation NFP united with UNF and CI to become the founding partners and financial sponsors of the “SfL Dialogue.”

A key focus for the SfL Dialogue was on systems that create value and reward farmers for the full range of services they deliver from the land. The SfL was unique in that its participants undertook a comprehensive examination of how land, water and other natural resources can be managed in an integrated manner at the scale necessary to accomplish multiple societal objectives. The project participants also explored opportunities for leadership and action through the lens of highly respected and well networked agriculture, forestry and conservation leaders, focusing discussions around solutions rather than the problems. The SfL Dialogue provided a forum through which U.S. agriculture, forestry, and conservation leaders could affect change domestically and also begin to collaborate with international partners and stakeholders who were having similar conversations.

In 2013, in a further phase of work, the SfL Vision and The Pathways Report was formally released and a work plan was formulated to support, inform, engage and inspire key agriculture, forestry and conservation leaders for joint action in support of SfL.

Vision

By 2050, agricultural systems, forests and other land uses are managed to simultaneously satisfy domestic and global demand for safe, abundant and affordable food, feed and fiber; support economic security and sustainable development; reduce hunger and malnutrition; improve soil, water and air quality; enhance biodiversity and ensure ecosystem health and deliver mitigation and adaptation solutions to a changing climate.

Mission

To identify and facilitate the implementation of integrated policies, practices and projects at a landscape scale that will result in land being sustainably managed to produce food, feed, fiber and energy while enhancing biodiversity, protecting and improving critical environmental resources and delivering high value solutions to combat climate change.
**The Pathways Report**

The result of a three-year conversation among thought leaders across agriculture, forestry, business, conservation, think tanks and academia, The Pathways Report explores questions such as:

- How can we compensate land managers for incentivizing the delivery of multiple goods and services from the land?
- Are current land use policies creating conflicts or promoting constructive solutions?
- What innovative policies and practices are happening locally that can be replicated elsewhere and/or scaled up?

Based on the validation that was received of the SfL vision during the Dialogue phase of the initiative, SfL’s leaders and founding partners agreed that a focused and sustained effort would be required to “bring the SfL vision to life.” In support of this goal, Solutions from the Land, was incorporated on May 1, 2014 as a not-for-profit corporation focused on land based solutions to global challenges. Today SfL is led by a Board of Directors composed of thought leaders from the agriculture, forestry, conservation sectors and their related academic, industry and value chain partners.

**SUSTAINABLE FOOD LAB**

Website: [http://www.sustainablefoodlab.org/](http://www.sustainablefoodlab.org/)

**What is Sustainable Food Lab?**

The Sustainable Food Lab is a consortium of business, non-profit and public organizations working together to accelerate the shift toward sustainability.

The Sustainable Food Lab facilitates market-based solutions to the key issues—including climate, soil, poverty, and water—that are necessary for a healthy and sustainable food system to feed a growing world. The Sustainable Food Lab uses collaborative learning to incubate innovation at every stage along the supply chain from producing to distributing and selling food.

**Piloting Innovation**

Sustainable Food Lab members believe that the industry is facing critical issues that cannot be tackled by one organization. SFL works with members to identify areas of collective interest and create innovation projects in supply chains. SFL documents what works and what doesn’t. Current innovation efforts include:

- Addressing climate change through “low-carbon agriculture”;
- Overcoming poverty through new approaches connecting small-scale producers to formal markets;
- Working with lead buyers and producers to accelerate sustainable commodity production; and
- Piloting sustainability metrics.

**Leadership Development**

SFL provides opportunities for diverse stakeholders working on sustainability to meet, learn, and support each other in becoming better leaders for change in their organizations and in the larger system. SFL provides:

- A platform for strategic partnerships—safe space to explore collaboration among businesses of different scale and leaders from environmental and social NGOs.
- Leadership events—focused seminars, field visits, “Learning Journeys,” and working conferences bring to life new ideas, collaborations, strategies, and projects.

**Organizational Strategy**

SFL supports members with practical training and coaching from staff and consultants with relevant expertise.

- Organizations are most effective at integrating sustainability design into their products and processes when sustainability works for an organization’s culture, customer base, and market opportunities. SFL offers tools, training, and counsel to help members measure and implement sustainability within their organizations.
SFL staff and consultants provide strategic counsel, coaching, and peer-to-peer facilitation. SFL has led strategy sessions and team retreats for such leading institutions as SYSCO, Unilever Foodsolutions, Mars, Sam’s Club, Food Marketing Institute, Bolthouse Farms, the Nature Conservancy, and Sodexo.

**Insight and Analysis**

SFL provides real-time access to what is happening in the field—through newsletters, case studies, research papers, and webinars—about what works and doesn’t. The Sustainable Food Lab:

• Tracks the growth of sustainability practices, initiatives and metrics. SFL communicates important events and innovations to members;
• Collaborates with other important industry associations, including SAI Platform, to provide opportunities for members to engage in best-in-class projects; and
• Captures learning from pilot projects and publishes in-depth case studies and research papers.

The Sustainable Food Lab is led by an Advisory Board drawn from the Food Lab member organizations and provides oversight to the Lab, establishes budget priorities, assists with fundraising, and shares the Food Lab stories with a broader audience.

The Sustainable Food Lab is staffed by a team of dedicated professionals with offices in Vermont and California, USA.

**SUSTAINABLE AGRICULTURE INITIATIVE PLATFORM**

Website: [http://www.saiplatform.org/](http://www.saiplatform.org/)

**What is Sustainable Agriculture Initiative (SAI) Platform?**

The Sustainable Agriculture Initiative (SAI) Platform is the primary global food industry initiative for sustainable agriculture. Their 2020 Vision is: Implement secure and thriving agricultural supply chains and protect the earth's resources through widespread adoption of sustainable practices that deliver value to our members, farmers, farming communities, and consumers.

**History**

Food companies and retailers are the largest purchasers of agricultural raw materials. To ensure a constant, increasing and safe supply of agricultural raw materials, these must be grown in a sustainable manner. In 2002 Nestlé, Unilever and Danone created the Sustainable Agriculture Initiative (SAI) Platform, a non-profit organization to facilitate sharing, at precompetitive level, of knowledge and best practices to support the development and implementation of sustainable agriculture practices involving stakeholders throughout the food value chain.

**Membership**

SAI Platform today counts over 70 members, which actively share the same view on sustainable agriculture seen as "the efficient production of safe, high quality agricultural products, in a way that protects and improves the natural environment, the social and economic conditions of farmers, their employees and local communities, and safeguards the health and welfare of all farmed species". Members also jointly work on achieving SAI Platform’s 2020 Vision.

**Approach**

SAI Platform develops (or co-develops) tools and guidance to support global and local sustainable sourcing and agriculture practices. Examples of recently developed resources include: Practitioner’s Guide for Sustainable Sourcing; Recommendations for Sustainability Performance Assessment (SPA); and the Farm Sustainability Assessment (FSA) 2.0.

Unique Characteristics:

1. SAI Platform is the only global food industry initiative for sustainable agriculture.
2. It seeks involvement from all food chain stakeholders willing to play an active role in the development, recognition and implementation of sustainable practices for mainstream agriculture.

3. The initiative gathers and develops knowledge on sustainable agriculture, which it then shares with all interested parties to reach common understanding of the concept and of its long-term implications.

4. It has an inclusive approach, taking into account any valuable initiatives and concepts, for instance elements from both integrated and organic farming, as far as they contribute to sustainable agriculture.

5. It aims at developing sustainable agriculture for the mainstream agricultural produce through a continuous improvement process that allows for an easier and more flexible adoption by farmers, worldwide.

SAI Platform also has an Australian chapter (see http://www.saiplatformaust.org/about-us).

The Australian Sustainable Agriculture Initiative (SAI) Platform came together in 1997 from across food and beverage value-chain to provide practical and commercial perspectives on issues and policies that impact Australia’s agricultural sector. The SAI members account for more than half of the food and beverage production and retailing sales in Australia. And together they have promoted and implemented solutions, as well as collaborated across the supply chain to increase the impact of these solutions. SAI is unique not only in its size and scope of its cross value chain membership, but also in that it works in a non-lobbying, non-competitive environment.

The SAI aims to inform and advise on the key issues that impact sustainable food and beverage production in Australia. It undertakes activities and actions that could benefit the sector, including trialling approaches, implementing specific sustainability practices and encouraging R&D involving supply chain participants, and it partners with business, government and other networks to drive improved sustainability.

The SAI’s focus is connecting the farm-gate, manufacturers, buyers, policy makers, retailers, academics and investors to solve problems in the best interests of the industry, our farmers and productivity. SAI members are actively undertaking sustainability actions within their own businesses and organisations. Members also share knowledge and information in areas of common interest (at the pre-competitive stage). Members have developed and are committed to a suite of sustainability guidelines covering environmental, social and economic aspects.

LOCAL FOOD LAW, FRANCE
Website: http://foodtank.com/news/2016/01/new-law-could-change-frances-food-system-for-the-better

It was reported in January 2016 that the upper chamber of France’s parliament has passed a law requiring all of the nation’s “collective restaurants” (school cafeterias, hospital cafeterias, senior living communities, prisons and other state institutions) to source at least 40 percent of their food locally. The proposal will need to be approved by the French Senate before it becomes law.

In addition to being locally sourced, the food served must be in season, organically grown and certified ecologically sustainable. While the law does not have a set definition of “local”, different recommendations will be given depending on the product and the geographical area. Currently, those recommendations are estimated to be about a 30-kilometer radius (around 19 miles) for fruit and vegetables and a 100-kilometer radius (about 63 miles) for foods that need processing before consumption (i.e. meat, grains). Some cities, such as St. Etienne in central eastern France, are already serving 100 percent organic food in their institutions.

The ultimate goal of the law, according to the text, is to restructure the food system in France, stimulate local economies, and shorten the food supply chain to a minimum (meaning either the produce goes directly to the consumer from the farm or there are minimal intermediary processing steps before consumption). The law, if passed, will be implemented by regional agricultural ministers, who will help administrative staff in affected establishments adjust to the sourcing changes. The government has already begun sensitization campaigns to help institutions re-organize administratively and connect with local farmers and producers.

LOCAL FOOD ACT, ONTARIO
Website: http://www.omafra.gov.on.ca/english/about/localfood.htm

Through a number of ongoing activities, including the Local Food Act, 2013, the Ontario Government is aiming to:

• increase consumer awareness and education,
• improve access to local food, and
• ensure that there is sufficient supply to meet demand.

Vision: To have more Ontario consumers enjoying local food more often - and in more places.

Mission: To increase the consumption of local food in Ontario.
Goals:

- Ontario consumers are aware of, value and choose more local foods.
- Local food is identifiable and widely available through a range of distribution channels.
- Ontario's agri-food sector is competitive, productive and responsive to consumer demand.

In November 2013, Ontario passed Bill 36, the Local Food Act, 2013 to help foster successful and resilient local food economies and systems in Ontario, help increase awareness of local food in Ontario, including the diversity of local food, and develop new markets for local food.

This legislation, the first of its kind in Canada - is designed to help build Ontario's economy, create more jobs and expand the agri-food sector - by making more local food available in markets, schools, cafeterias, grocery stores and restaurants throughout the province.

The Act does this, in part, through the following initiatives:

- Helping increase access to local food, improves food literacy in respect of local food, and encourages increased use of local food by public sector organizations, by requiring the Minister to establish aspirational local food goals or targets in consultation with organizations that have an interest.
- Proclaiming the first week of June each year as Local Food Week.
- Amending the Taxation Act, 2007 to create a non-refundable tax credit of 25 per cent for farmers who donate their agricultural products to eligible community food programs such as food banks.
- Requiring the Minister to prepare an annual report that summarizes the government's activities in respect of local food.

REFERENCES


