



Integrating Land Use Planning and Community Food Security

**A New Agenda for Government to Deliver on Sustainability,
Economic Growth and Social Justice**

Prepared for the Victorian Local Governance Association

By the **Community Planning and Development Program**
La Trobe University, Bendigo Campus



**Supported by
VicHealth
October 2009**

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Foreword



As urgent action on climate change, peak oil, and sustainable development becomes increasingly necessary at both the local and global levels, community food security requires similar attention. Terms, such as 'community food security' and 'food miles,' need to be heard more frequently in Australian policy debates.

Little is known in Victoria of the long-term impacts of localised land-use decisions on food security. It is estimated that up to 25% of our fresh food is being grown in and around our urban areas, but this is not being prioritised as a land use planning issue.

Having identified this gap, the VLGA scoped the *Land-Use and Community Food Security in Victoria: Implications and Responses for the Future*. The project was funded by VicHealth and the research conducted by the Community Planning and Development Program at La Trobe University Bendigo campus, headed up by Trevor Budge.

The central purpose of this project is to build the capacity of Local Governments across Victoria to integrate community food security into land-use planning objectives. Economic analysis has also been integral to the project. In 2007-08 the food sector represented \$36.2billion, and in Melbourne, \$21.2billion, of Victoria's economy. The food industry employed 366,000 people in Victoria of which 210,000 were employed in Melbourne. This cutting edge economic analysis undertaken as part of the project by SGS Economics provides an economic context for governments to consider in policy development.

This report is subtitled *A New Agenda for Government to Deliver on Sustainability, Economic Growth and Social Justice* and provides local government with a roadmap to inform Council policy. It illustrates the importance of integrating areas of land use planning health, economics, environment and social objectives to achieve a holistic food security system. The responsibility should not lie within separate policy areas or individual disciplines within Governments.

One of the first steps for state governments in addressing community food security is to establish a clear accord with local governments, which will identify and establish the respective roles and responsibilities and funding initiatives between the two levels. This is one of the critical recommendations contained within this report.

I would like to take the opportunity to thank the Project Implementation Team for giving their time to guide this project, the many local government professionals who attended workshops around the State, VicHealth for funding this project, particularly Lee choon Siau for her active participation in the project, Trevor Budge, Christine Slade and the La Trobe University team and the overall project manager and Liana Thompson from the VLGA.

A handwritten signature in cursive script that reads "Rosie Iser".

**Cr Rose Iser
President, VLGA**

Contents

Foreword	3
Contents	4
Executive summary	6
Outcomes	7
Recommendations	7
Introduction	9
Overview of the project	11
Background	11
Purpose	11
Project scope	11
Aims and objectives	13
Literature review	
Food security	14
Where do you find food insecurity?	14
Land use planning	15
Food systems in historical context	15
Rural producers, urban consumers	18
Pressures on the food system	18
The Victorian context	21
Taking ownership of food security	21
Sustainable local food systems	22
Layers of the foods security debate	23
Policy implications of the food security debate	24
The role of the land use planner	24
Ways to improve food security	27
Conclusion	31
Resources	31
Findings of consultations with local governments	32
Food and food security	32
The wider dimensions of food	33
Attitudes and perceptions of growers	33
Land use planning	33
Direction and policy	34
The role of state government	34
The role of local government	34

The efficacy of the Victorian land use system and food security	35
The Victorian Planning and Environment Act 1987	36
Possible amendments to the Act to improve food security	38
The State Planning Policy Framework	38
The protection of agricultural land in local government planning schemes	43
Water security and food	45
Global best practice in food security and land use planning: five case studies	46
Brisbane City Council	46
City of Vancouver	48
Hawkesbury Harvest (Sydney)	50
London Sustainable Food Hub	52
Bacchus Marsh Horticultural Area (Melbourne)	54
How does Victoria compare to global best practice in food security?	56
The roles of state and local government	57
The need for ownership and direction	57
Food security leadership overseas	58
Food security leadership in Australia	58
An evaluation of departmental roles and functions in Victoria	59
The role of food in the economy	66
Understanding the economic significance of food	66
The role of the food industry in Victoria's economy	66
Conclusion & Recommendations	68
The integration of food security and land use planning in local government policy	68
The need for new approaches	68
Outcomes and recommendations	69
References	71
Appendix: Economic Significance of the Food Sector (separate document)	

Executive summary

The overall finding of the Project is that there is a growing understanding of the link between land use planning and food security. This connection is being made in a number of local governments – but the advocates are few. They are much more likely to be persons with responsibilities, roles and advocacy around food security than persons involved in land use planning. Any link, let alone an integrated relationship, between the two, is generally seen as too tenuous. Particularly those with responsibilities and roles in land use planning find that there is no legal or statutory base or requirement to address food security.

In contrast at an international level there is a growing awareness. The American Planning Association's monthly magazine (August/September 2009) *Planning* was a special edition devoted to 'The Food Factor'. The 2008 publication by the American Planning Association (Raja et. al), *A Planners Guide to Community and Regional Food Planning: Transforming Food Environments, Facilitating Healthy Eating*, has been a sought after publication. In Victoria, the actions and initiatives of VicHealth, the Victorian Local Governance Association, a number of local governments, and a select group of academics and community activists, have sought to raise the profile of food security and its links to land use planning.

But generally the links between land use planning and food security are poorly understood, inadequately articulated, and not readily apparent to most people, let alone to many persons who operate in the separate fields of land use planning and food security. Food security and the specific links to land use planning is not recognised by any structure or defined roles and responsibilities in government generally or local government specifically. Nor is it explicitly recognised by any legislative or policy mechanism.

For many people and organisations the link between food security and land use planning is still either too long a bow to draw or their field of perception is too narrow in terms of root cause and effect. At a broader more conceptual level there is an increasing recognition and awareness of the links and relationship between food and land use planning. But the links are relatively poorly expressed and usually confined to narrow agendas such as attempts to retain highly productive agricultural land in agricultural production through the land use planning system.

The Project has identified that while there are broad or general links between land use planning and food generally and food security specifically there are three major links.

1. Loss of productive agricultural land or pressures on such land, which limits its productive capacity particularly where it supports local food systems.
2. Framing of large scale land use strategy and policy at the metropolitan and regional scale and its capacity to consider food production, access and consumption.
3. Detailed responses at the urban scale in addressing the location and siting of land uses that relate to food production, access to food and the consumption of food. Attention is growing to the idea that the design and layout of housing, residential areas and the location of retail centres can all impact on the growing of food and access to food at the local level.

In commissioning this project the VLGA sought to 'understand the extent to which Victorian Local Governments are integrating land-use and community food security objectives.' The project therefore sought to take the issue of food security into areas where little prior attention had been given. The project sought to explore the issues so as to provide a better understanding of the capacity of the land use planning system to integrate with an emerging food security agenda.

Specifically in land use planning terms and in the context of the Victorian planning system the project sought to “understand the implications of a range of Policies and Practices and their consistency with the State Planning Policy Framework (SPPF) and the Victoria Planning Provisions (VPP)”.

The project has found that the level of confusion and misrepresentation about the term food security is so extensive that the project title and focus have been more specifically targeted. This has been done to ensure that the issues and the ideas put forward in this Report reach a wider audience than would be the case if the original title, ‘Integrating Land Use Planning and Community Food Security Objectives’ were used.

A review of the relevant sections of the Planning and Environment Act, the SPPF, the VPP, zone provisions and three planning schemes that address the issue of highly productive agricultural land in their municipality has found that there are some references in the Act and many in the SPPF that could be interpreted to embrace concepts regarding food security but that they are generally obtuse and would be difficult to apply in a specific sense. There are some quite specific references to the retention of agricultural production usually linked to what is identified as highly productive land. There are no specific references to agriculture in a fully urban setting, nor are there any references that link food security to land use planning and equitable access to goods and services.

Despite these apparent shortcomings, from the perspective of community food security it must be recognised that the land use planning system cannot require agricultural land to be farmed, it can only prevent it from being used for non-agricultural purposes if those purposes require a planning approval. The land use planning system is primarily designed to provide a systematic process to plan for and manage changes of land use and new developments. There are competing demands in regards to the matters to be considered.

Outcomes

1. A heightened awareness and understanding of the links between land use planning and community food security and the potential for a more integrated approach is needed.
2. A heightened awareness and understanding in the community at all levels and sectors that food in all its dimensions, health, land use planning and jobs are linked and that a continuing failure to make that link is a recurring cost to government, communities, families and individuals is needed.
3. A greater realisation is needed at the state level that concerted action is required to address and own a suite of issues around community food security that can also be linked to the continuing action of local governments.

Recommendations

1. A state government department needs to be assigned responsibility for community food security. A unit needs to be established within that department to provide a focus for research, policy and a suite of programs to address community food security and to liaise with other relevant departments, agencies and local governments to document the relationships between food, health, land use planning and jobs.
2. That failing a government department being assigned specific responsibility as in (1) above that the task be given to a body or organisation that can embrace a range of interlinked perspectives around community food security.

3. That one of the first steps for state government in addressing community food security is to establish a clear accord with local government which will identify, establish and agree on the respective roles and responsibilities and funding initiatives between the two levels.
4. That with the support of state government groups of local governments be encouraged to undertake regional audits of food, health, land use planning and jobs.
5. That the State's land use planning system be amended to include:
 - Increased focus on health and community food security, primarily through amendments to the Planning and Environment Act so as to specifically include health outcomes in the objectives. This would be facilitated if the reference to objectives Response Paper prepared by the Department of Planning and Community Development is taken through to legislative changes. There is concern in some quarters that 'food security' is not explicitly referred to and that the reference to health is ambiguous.
 - Additions in the State Planning Policy Framework (SPPF) so as to link the retention of productive agricultural land to community food security.
 - Requirements that the SPPF the design of urban areas require the retention of productive agricultural land, and specifically support the provision of local food systems and supplies.
 - A new zone be introduced in the Victoria Planning Provisions that specifically provides for urban agriculture.
6. That the VLGA further develop and facilitate a network of practitioners in local government, research bodies, departments and agencies who link land use planning and community food security.
7. Specifically in relation to this report that the VLGA assist in facilitating meetings with key Ministers, departments and agencies to raise the profile of the links between food, health, land use planning and jobs and that a workshop be held to discuss the findings of this project and its proposed actions and initiatives.
8. The findings and recommendations in this project report be suitably disseminated and publicised.

In summary this Report supports and advocates a fundamental shift in the way in which community food security and its links to land use planning are addressed.

Introduction

Food: how it is produced, secured, transported, processed, marketed, accessed, distributed, regulated, consumed, and wasted; the contribution of food to jobs; what food does to our bodies and the planet – these are all major issues for countries, cities, regions and communities alike.

Food security is no longer a developing country issue. Securing food supplies, and land for growing food, encompasses a gamut of issues, including means of production, cost and affordability, access, socio-economic circumstances, the impacts of climate change, the price of energy, bio-security, and water availability. These are increasingly cross-cutting agenda items in developed countries. Their importance will grow. With the dependence of food production on increasingly scarcer and costlier water supplies and depleting fossil fuel resources, and with productive agricultural land in and around cities being paved over, food is central to our lives and vital to addressing climate change and sustainability. To this situation must be added the growing evidence that the choice and over-consumption of the wrong foods are now adding substantially to individual and community health costs. Food is now one of the core agenda items of our time.

It is increasingly evident that the assumptions underpinning our metropolitan land development strategies and detailed land use plans have not considered the multi-dimensional role and impact of food production and consumption. We have little grasp of the importance of food in the economy of our cities. Food, health, land use planning, jobs, and how they relate to the functioning of cities and regions are intertwined in a complex relationship that has only recently been identified and is being progressively documented. The following excerpt from *Food Policy: integrating health, environment and society* (Lang et al. 2009), effectively sums up the context of contemporary work on food security:

For over half a century, food policy has mapped a path for progress based upon a belief that the right mix of investment, scientific input, and human skills could unleash a surge in productive capacity which would resolve humanity's food-related health and welfare problems. It assumed that more food would yield greater health and happiness by driving down prices, increasing availability, and feeding more mouths. In the 21st century, this policy mix is quietly becoming unstuck. In a world marred by obesity alongside malnutrition, climate change alongside fuel and energy crises, water stress alongside more mouths to feed, and social inequalities alongside unprecedented accumulation of wealth, the old rubric of food policy needs re-evaluation . . . food policy must be inextricably linked with public health, environmental damage, and social inequalities to be effective.

Throughout the history of human existence, food and water have held centre stage in the construction of human societies and the evolution of human activity. Food is vital to our understanding of who we are as nations and communities, and the healthy production of food beyond subsistence levels is responsible for what we now understand as 'leisure' time. Most importantly, the production of, and equitable access to, quality fresh food is indispensable to our health, vitality, and wellbeing. Despite this, there remains a lack of understanding and widespread appreciation of how food relates to, and is integrated with, every aspect of society, as well as government policy and action. In Australia and other wealthy countries food has ceased to be a core issue for many people, precisely because it is apparently so readily available. The overwhelming majority of the population is totally divorced from the production of food. Food has become something you buy when you need it. The vast majority of the Australian population would appear to have little interest or concern in how food gets from the 'paddock to the plate'.

It is a disturbing fact that many elements in the food chain are in a fragile state. In addition, and perhaps understandably, the level of awareness of this reality in Australian society is generally very low. For instance, Victoria's recent heat wave destroyed large quantities of the state's horticultural product in the ground, and the rising cost of water and oil raises the prospect of massive hikes in the price of much of the food that we currently take for granted. In addition, many of the process of food production are major contributors of greenhouse gas production.

It is against this background that VicHealth funded the Victorian Local Governance Association (VLGA) to undertake this project to examine the links between food security and land use planning.

Overview of the project

Background

The project was commissioned against a range of initiatives by organisations, such as the VLGA and VicHealth, attempting to raise the issue of food security. For example the VLGA has been advocating that food security is a critical issue impacting local communities and that local government is required to address this issue – whether they are funded to do this or not. The ‘Food for All’ initiative by VicHealth has had a considerable impact in raising awareness in many local governments and communities across the state.

Purpose

In commissioning this project the VLGA sought to ‘understand the extent to which Victorian Local Governments are integrating land-use and community food security objectives.’ The project therefore sought to take the issue of food security into areas where little prior attention had been given. The project brief sought a process and methodology that would explore the issues so as to provide a better understanding of the capacity of the land use planning system to integrate with an emerging food security agenda. Specifically in land use planning terms and in the context of the Victorian planning system the project sought to “understand the implications of a range of Policies and Practices and their consistency with the State Planning Policy Framework and the Victoria Planning Provisions”. In undertaking the project it was considered that the process in itself would assist to “build the capacity of key individual and groupings of Local Governments to understand and plan for community food security, particularly through land-use and development policies and practices”. In part this would occur through the trial and share of learning from the project.

Project scope

While the project seeks to deliver on these core requirements and outcomes it has, with the approval of the Steering Committee that guided the project, considerably widened its scope. This has partly arisen because the findings from the first stage consultation indicated that the topic and the issues were part of a much wider agenda that local government indicated the project needed to explore. Also the agenda around food security itself has widened considerably even in the course of the project. But also it has become obvious that the factors and forces that prompted the project are in reality symptomatic of a wider agenda of issues that is not being systematically tackled in Victoria. The preliminary evaluation of the ‘Food for All’ project in terms of the take up of food issues and food security specifically in relation to land use planning found similar barriers and issues.

During the course of the project there have been three fundamental shifts that have impacted on the issues being addressed in the project.

1. The global financial crisis has highlighted the widening issue of food security for many people – not just in developing countries. The volatility of food prices and concerns about the overall supply of food across the world and its long term sustainability have been considerably heightened.
2. There has been substantially increased focus in the media, in the release of government and research reports that have referred to food, food production, food security and the impacts of climate change on food production.
3. There have been increasing calls for governments to address issues relating to food, food security and food production. In the course of the project there have been notable

examples of governments undertaking significant initiatives to address food security by linking it with land use policy.

Using the term 'food security'

The original brief and title for this project included the term 'food security' and the Paper still makes extensive reference to this term and to this as a specific issue. However the term food security covers a wide range of concepts and agendas. It has different interpretations and levels of understanding. This situation arose in the first round of consultation that was undertaken as part of this project. Some farmers involved in the consultations were dismissive that Australia has a food security issue. The Australian resource base can produce virtually any commodity it wants to. Australia produces enough food to feed about 80 million people. Some people in the consultation were shocked to find that there are Australians who go without food on a regular basis. In contrast other people who participated in the consultations are confronted virtually every day with these issues in the roles that they perform.

For consumers, food security is the availability of nutritious and safe food that is accessible to all, for a reasonable price, on a regular basis (WHO 2007). A recent study by VicHealth (2008:1) defined food security 'as the ability to consume quality, affordable, culturally appropriate nutritious food from non-emergency sources'. On the other end of the food system spectrum, food security for producers means reliable long-term markets, sustainable practices and an equitable return.

The concepts and agendas around food security range from concerns about disease, contamination and bio security at one end to an agenda that embraces issues such as ensuring that everyone is able to afford and conveniently access, purchase and consume fresh locally and sustainably produced fruit and vegetables. This report has found that while the term food security is understood and agreed in professional circles associated with the environmental and social justice perspectives around food, the term is often widely misunderstood in the broader community. Food security often has a social or welfare agenda attached to it, and while this can be the case, it can considerably narrow the wider aspects that are encompassed by the term food security.

Food, health, land use planning, and jobs

We have found the level of confusion and misrepresentation about the term food security is so extensive that the project title and focus have been more specifically targeted. This has been done to ensure that the issues and the ideas put forward in this Report reach a wider audience than would be the case if the original title, 'Integrating Land Use Planning and Community Food Security Objectives' were used. We have used the simpler term 'food' to potentially embrace that wider agenda. The term 'land use planning' was always in the title of the project and it has been retained. We have added the elements, 'health' and 'jobs'. Health issues are intertwined with food. There is growing concern with the health levels of Australians and the potential costs in the future. Food cannot be examined unless the links with health are made and exposed. We have added jobs because research undertaken specifically for this project has identified that food is a major if often understated and poorly understood component of the economy. As the report shows food in the totality of all its elements is one of the major employers and drivers of the economy.

The audience that needs to engage in a discussion leading to a shift in policy and practice about an agenda embracing food and land use planning is far reaching. Using the term food security has the potential to derail the discussion and has the danger of potentially confining debate to a relatively narrow but very important set of issues. The new agenda advocated in this Report is for the various levels of government and the relevant departments and agencies with roles and responsibilities around food and land use planning to deliver on a shared program that embraces health and jobs with their obvious links to sustainability and social justice.

Aims and objectives

The revised project process has centered on delivering on key elements of the original brief but where relevant widening that brief to include seven specific elements:

1. The preparation of a literature review. A literature review was released in the initial stages of the project and an update has been provided in the Final Report to reflect the growing research agenda.
2. The preparation of a first stage issues paper. Both the literature review and the issues paper were used as a basis of a first round consultation exercise with representatives of local governments and other persons and organisations with an interest in food and land use planning. All up seven meetings were held across the state involving in excess of 130 persons. While most persons were directly associated with local governments the meetings attracted a wider range of persons representing growers, community based organisations and health professionals.
3. The preparation of an analysis of the value of food to the economy. SGS Economics and Planning prepared an analysis *The Economic Significance of the Food Sector* - this was not originally part of the brief for the project and was generously funded by the VLGA. The decision to undertake this analysis arose from a strong identification in the first consultation round that the scale of the economic impact of the food sector has not been documented and is poorly understood. Many persons are aware of the decline in the number of people growing food but have little awareness of all the jobs associated with food production, transport, processing, preparation and consumption. As a result of the lack of awareness there has often been little advocacy about food outside of a social and environmental context. The results of the SGS study are discussed in this Report and the full document is an Appendix.
4. The preparation of a series of case studies of actions that are being taken to demonstrate leadership in food, food security and land use planning. These case studies are designed to represent leadership and innovation and as examples that governments at different levels could use to promote and support a wider agenda.
5. An assessment of the role and capacity of the Victorian planning system to deliver on food security. An evaluation has been undertaken of the Planning and Environment Act, the State Planning Policy Framework, the Victoria Planning Provisions including standard zones, overlays and definitions and selected approaches in three planning schemes to managing land use planning in respect to food production.
6. An evaluation in tabular form of the range of roles and responsibilities and of the initiatives taken by government departments and the Parliament in Victoria that relate to food and land use planning. The evaluation table is designed to provide a comparison between departments and to assist in identifying which departments are taking a lead on these agendas.
7. Development of this Final Report, which includes a list of recommendations, to drive the agenda on food and land use planning. Specifically these recommendations are framed against the broader agenda that this Report has identified that integrates food, health, land use planning and the economy. The Report advocates a range of measures designed to integrate land use planning and food as a new agenda for government so as to deliver on health and jobs within a wider agenda of sustainability and social justice.

Literature review

This literature review aims to provide an overview of community food security predominantly within the context of local government land use planning. However, the complexity of this issue also dictates involvement at other levels of land use planning and policies. The review briefly examines the pertinent, yet far reaching issues that are interwoven into the complexity of food systems. Then, it outlines some of the main policy, regulatory and planning strategies and tools that have been proposed and/or implemented, here and overseas, in recent years. Many significant issues such as; climate change, the global financial crisis, peak oil, food miles, increasing food prices, the 'healthiness' of the built environment, unequal healthy food access, competing uses for productive agricultural land, water scarcity and wastage in land fill, are currently on the public agenda, within governments, non-government organisations, as well as in a variety of community advocacy groups.

The recent re-evaluation of our water supplies and consumption across Australia has jolted our perception of a never ending availability of basic resources. The supply of food and land for food has also been treated as an inexhaustible resource. It is evident that sustainable food systems are not in place. Planning systems are slow to incorporate holistic food policies into documents and regulations. Yet, this literature review and other recent work illustrate the increasing momentum of concern and resulting diversity of programs being implemented in Australia, and particularly overseas. These programs are being initiated within government and other interested organisations in respect to food security, its links to the land use planning system and the important role that land use planning can play in assisting in food access and security.

Food security

For consumers, food security is the availability of nutritious and safe food that is accessible to all, for a reasonable price, on a regular basis (Region of Waterloo 2005, WHO 2007). A recent study by VicHealth (2008:1) defined food security 'as the ability to consume quality, affordable, culturally appropriate nutritious food from non-emergency sources'. Food insecurity occurs when these criteria are not met. On the other end of the food system continuum, food security for producers would mean reliable long-term markets, sustainable practices and an equitable return. Food insecurity has often been characterised as a developing world issue - it is no longer a developing country issue, it can impact on every country and every societal group.

Where do you find food *insecurity*?

Traditionally, food insecurity has been an issue in the developing and transitional nations of the world, with 843 million people suffering from chronic hunger (AusAID 2006). However food supply insecurity also occurs in developed nations, among the socially and economically disadvantaged and those who have difficulty accessing nutritious food through their local supply channels. In 2001, the *NSW Child Health Survey* asked several questions related to food security, resulting in 6.2% of respondents reporting that they had run out of food in the last year, due to insufficient finances (NSW Centre Public Health Nutrition 2003). Groups most apparently at risk included the homeless, working poor, the unemployed, people with disabilities, youth, older people, one people households, Indigenous Australians, those who live in remote areas and some immigrants (NSW Health n.d.). In Victoria in response to the question asked in 2007 '*In the last 12 months, were there any times that you ran out of food and you couldn't afford to buy more?*', 6.1% of the population reported that they had. This statistic is considered to understate the problem because the question was limited to household income. Further analysis of responses indicates that 5.8% of children were from households that answered 'YES'. The comparative figure for the whole of Australia was 5% that equated to 709,320 adults (Wood et al, 2000). Other data analysis indicates that 7.7% of 18-24 year olds (State of Victoria, 2008), 21% of indigenous Victorians 15 years and over, compared to

5% of non-indigenous Victorians (AIHW, 2008) and 51% of 63 parents and carers of indigenous children (Adams, 2006) ran out of food.

Several major public health research projects have been completed, including the NSW Public Health Nutrition (2003) *Food Security Options Paper* and The Cancer Council of New South Wales' (2007) *NSW Healthy Food Basket Survey*. Also, the Australian Competition & Consumer Commission (ACCC) has investigated the soaring price of fresh food. In February 2009 the Moreland Community Health Service released its *Food Security in Moreland Report* which conducted a needs assessment based on the fact that 7.8% of residents in the area (which equates to 10,500 people) were food insecure in the previous twelve months (Moreland Community Health Services Inc.: 2009) Community development policies and programs are being implemented to assist vulnerable groups, particularly in the context of immediate and short-term solutions.

Land use planning

Land use planning provides for a strategic process and a regulatory system to manage the use and development of land to achieve net community benefit. As such it has the potential to have a considerable impact on the growing, distribution and access to food. Land use planning shapes the urban form and the location and distribution of uses. It can be used to prevent productive land being used for non agricultural uses, provide for land to be set aside for agriculture, for the location of retail premises including food outlets and for the location of where people live and therefore the type and form of access to goods and services and specifically the capacity for people to easily access food. Conversely, poor planning or no planning at all can severely limit the prospects of food being grown, land being utilised and the provision of convenient access to food.

Structural urban design and governance issues contribute to unequal access to food for some community members. Lack of access to healthy food impacts peoples' food choices and is linked to health problems, including obesity (The Cancer Council of NSW 2007). Local food supplies need to be available within walking distance or access to public transport. Low socio-economic areas tend to have less healthy food outlets and an excess of fast food, petrol stations and expensive convenience stores within easy accessibility. Unfortunately, most large retail and supermarket centres are predominately car dependant. (Capon n.d., Parham n.d.) According to Parham (n.d.) creating and maintaining local food spaces and access requires partnerships between 'local leaders, community-based organisations, local and regional governments, food retailers, wholesalers, celebrities, and promoters, and those with urban design and architectural expertise'.

Food systems in historical context

Food systems in the developed world undergo periodic change. Atkins and Bowler (2001) offer a helpful general framework. The history of the food system is defined in three distinct periods of accumulation that explains developments in time sequences with corresponding production, income distribution and consumption patterns. These periods are marked by individual characteristics (some of which have remained until today) and are separated by economic crises as seen in Table 1 below. Such a framework gives context to the current transitional period and provides insightful perspectives into the implications of some of the difficult decisions that need to be made now.

The second food period, from 1947-1970s, was critical in understanding our current situation. It saw the introduction of food production for the masses, produce travelling long food miles and the establishment of a global economic system, with an emphasis on efficiency rather than diversity in the marketplace. The production of commodities became pre-eminent. This food revolution, supported by public policy, changed what food was grown, how it was processed, distributed, retailed and consumed. Policy needed to address a complex food system involving multiple levels

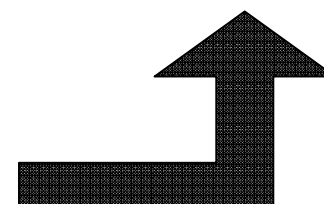
of governance, private regulation systems (Lang 2004, Tansey 2008), multinational companies, a gap between a virtual world and the real world (Low et al. 2005) and an increasing need and desire for people to live in cities (Pederson & Robertson 2001). The third period post 1980s saw growing global food trading with the consumer increasingly being able to access food from around the world with a consequent pressure on production to rely on biotechnology. At the same time environmental concerns around many areas of food production grew and as human activity was linked to sustainable processes and systems and then to impacts on climate change.

Table 1: General history of food systems since the 1880s

First Period Mid 1880s to WW		Second Period End WWII to Early 1970s		Transition to Third Period Beginning 1980s
<ul style="list-style-type: none"> ▪ Foundations in colonization ▪ Introduction of refrigerated ships in 1880s expanded markets ▪ Mutual product exchange became competitively based. ▪ International Import/export regime. ▪ Settler frontiers became new sector of commercial agricultural producers-cost efficient labour. ▪ National organized economies. 	THE GREAT DEPRESSION 1930s	<ul style="list-style-type: none"> ▪ 'Productivist' period/Food Revolution ▪ Restructuring of sectors to supply mass markets ▪ Industrialization of farming ▪ Forming of agribusinesses ▪ Public policy supported strong corporate involvement in production & retail ▪ Private regulation systems 	GLOBAL RECESSION & OIL CRISIS	<ul style="list-style-type: none"> ▪ Increased global food trading ▪ Capital is basis of food manufacturing ▪ Biotechnology ▪ Consumer fragmentation ▪ Change in dietary preferences ▪ Declining farm subsidies ▪ Increasing environmental awareness



Characteristics That Have Remained	
Trade of dairy produce, meats & cereals from Americas and Australasia	Power of the agribusiness corporations
Intensive, large scale, quasi plantation production systems with hired labour, expatriate supervision.	Protection and subsidies for national agriculture US hegemony



Adapted from: Atkins and Bowler (2001)

Rural producers, urban consumers

In recent years the food security debate has witnessed a distinct separation between 'rural producers' and 'urban consumers' (Deelstra et al. 2001, and Low et al. 2005), resulting in an abdication of responsibility for environmental, economic and social problems (Pothukuchi & Kaufman 1999). Cities are content to be consumers and waste makers, disconnected from their productive rural surroundings. Cities have become accustomed to consuming a far greater amount of food than they can supply from within their own boundaries. Food gathered from a global food system promotes disregard for the heavy ecological footprint created through its use, including the creation of massive amounts of waste (Larsen et al. 2008), much going to landfill through this open system of consumption. The establishment of large conglomerate shopping centres consolidates the dislocation between all the links in the food chain. Growers see their products bypass the local markets, going to wholesalers in cities and then appearing again, after traveling many 'food miles', back in their local store.

Knowd et al. (2003) comments that 'in the contemporary context of urban development, the possibilities of looking anew at agriculture relates more to implementing sustainability and addressing the structural changes brought about by globalization to communities, their food systems and quality of life for urbanites'. Unlike policy of the past, based on a 'silo' mentality, this approach involves comprehensive, multi-tier, interdisciplinary cooperation (Lang 2004), and the fostering of partnerships between rural and urban communities that can work together to create beneficial outcomes (CAST 2002).

Pressures on the food system

In every part of the food chain, 'from paddock to plate', and at all levels of society, pressure is being applied by external forces on the food system, creating tensions for all concerned.

Global pressures

Global forces are impacting on and complicating food security issues. Today, over 50 per cent of the world's population lives in cities. Increasingly, good food producing land is being used to grow bio fuels, and there is a global grossly disproportionate distribution of food. Such endemic food insecurity issues are increasing in complexity with the pressures of climate change, resulting in a rise in the severity and frequency of natural disasters and phenomena, and the scramble for adaptive strategies. Also, the world is facing premium oil prices as peak oil approaches, affecting the costs of agricultural production and transportation and in turn multiplying down the food chain to the end consumers resulting in higher food costs. Global economic markets are experiencing a strong downturn, leaving the banking sector in a precarious position and placing pressure on prices around the world.

Limited natural resources

Cribb, J (2008) explains that by 2050 there will be 9.3 billion people in the world but they will eat as much as 13 billion people, due to being able to afford increased protein rich diets, especially in China and India. On that basis global food output would have to increase by 110 per cent. However, Cribb's (2008:2) discussion paper points to the fact that this growth is affected by the following:

- Surface water availability to agriculture is declining.
- Groundwater is in decline everywhere.
- Arable land area is shrinking.
- Soil loss is increasing.
- Applied nutrients are outweighed by losses.

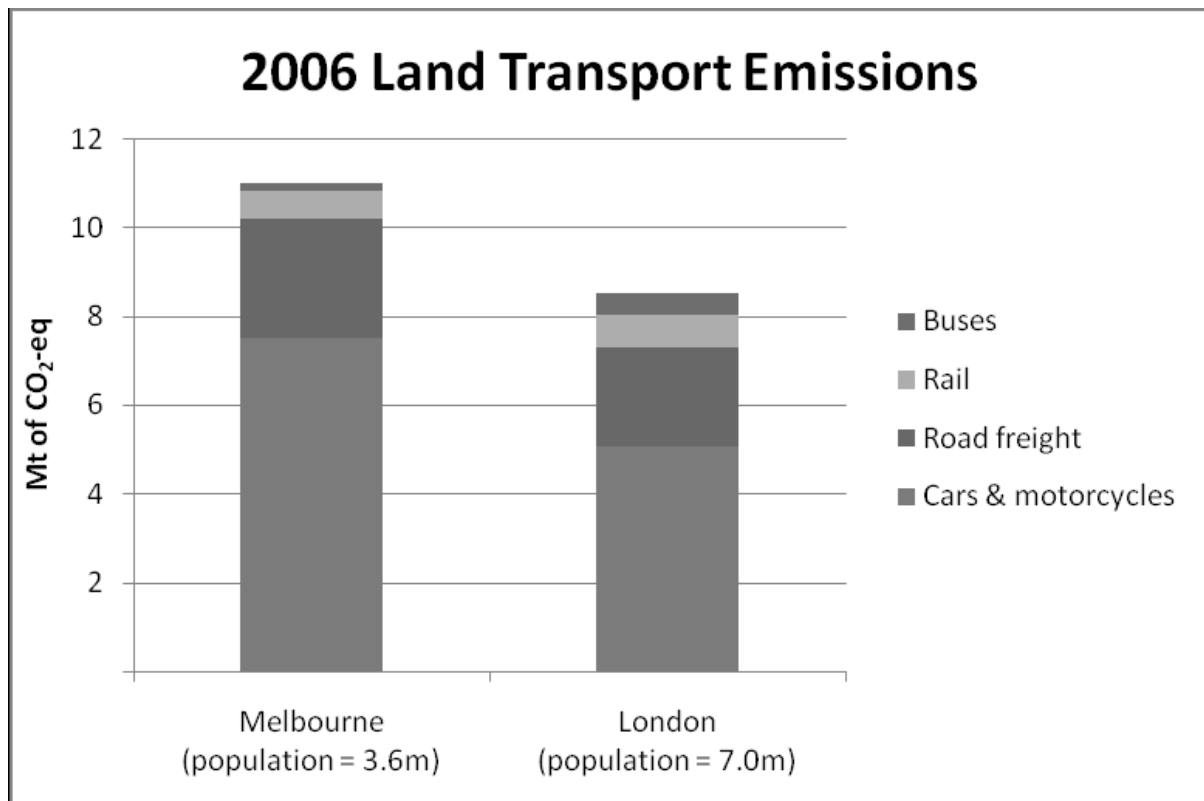
- Agricultural research is in decline.
- Marine harvests are dwindling.
- Biofuels are replacing food crops.
- Half the world may face regular drought by 2050.

There is a need for a globally sustainable and holistic approach to resources (Chatham House 2008). Locally, this can mean integrated policies that include food, closed food systems and innovative farming practices that are intrinsically suited to Australian conditions (Campbell 2008), particularly dry climate and water scarcity adaptation and the need to embrace prolific urban agricultural production.

Food miles

Measuring the distance that a food travels from production, all the way through the food chain to consumers, has been labeled 'food miles'. This concept has brought understanding to the often unnecessary distribution systems that are used, taking food from producers, bringing them to a centralized place for either processing and/or distribution, and then redistributing them out to supermarkets and other food outlets. The concept of 'food miles' has been used to support localization, in order to save on greenhouse emissions. However, as Larsen et al. (2008) points out, 'food miles' is only one aspect of measuring total environmental impact and in the UK recently 'car miles' from consumers traveling to retail outlets can contribute more to emissions than 'food miles'. A recent comparison of land transport emissions between Melbourne and London seen in Table 2 shows the high proportion of car usage (especially in Melbourne) compared to road freight.

Table 2: Comparison of Land Transport Emissions, Melbourne/London



Source: BusVic (2008: 2)

Drought

Australian farmers have periodically faced low rainfall. Variability in rainfall has been a characteristic of Australian farming. Large areas of food producing areas have become dependent on irrigation. With a long term shift in rainfall patterns over large areas of Australia access to irrigation water to compensate for extended periods of lower than average rainfall has not been possible for many farmers. In a pre-release statement (published in the Courier Mail, Brisbane) to the public release of the Australia Government's report on the social impacts of drought, Chairman, Mr. Peter Kenny said, 'No matter where we went, there was a whole thread of depression and, in some cases, hopelessness' (Passmore 2008). Presently, farmers are doing it tough, the younger generation of future farmers is looking elsewhere for employment and the government is spending huge amounts of money in drought relief. The existing farming system needs radical change to make it sustainable (Campbell 2008). The Commonwealth's *It's About People Report* (2008) emphasises that drought and the longing for 'the good years' is a mindset that needs to change in order to cope with the future.

Peri-urban areas

Peri-urban areas can be defined as:

...neither urban nor rural but a dynamic interface and transitional zone. They can be characterized by a diverse range of land uses, communities and environments. They vary in terms of how distinct the boundary is between urban and rural. In some cases it is difficult to identify the outer-boundary of a peri-urban area. They occur at the fringes of high growth, large population centres located primarily in coastal areas but also in some inland, regional locations. The intrusion of urban land uses and subdivisions on previously rural land uses results in progressive fragmentation and pressures from competing land uses. (Land & Water Australia: 2007)

RMIT University's study, *Change and Continuity in Peri-Urban Australia, Peri-Urban Case Study: Bendigo Corridor* (2007: 68) distinguishes different peri-urban settings in Victoria, including:

- Adjacent to a metropolitan centre.
- Adjacent to a regional centre.
- Adjacent to an urban centre in a non-urban commuter hinterland of a larger urban centre.
- Along growth corridors, transit routes or amenity landscape settings.

Strong population growth and an increase in dwellings in these areas, place pressure on the environment and natural resources of these areas, and require new integrated planning levels (RMIT 2007). Parker (2007) suggests that peri-urban areas are a mixture of urban 'lifestyle' dwellers and local food producers, giving a regional context to urban centres and often producing a conflict of land uses. Peri-urban areas are sometimes seen as 'farming land awaiting residential subdivision, and this assumption is having significant consequences, to the extent that subdivision is beginning to be regarded as a 'right' (Willis n.d.:3).

In times of increasing agricultural insecurity, land use policy needs to acknowledge the importance of the local farm areas and the role they play in providing food for the cities. The failure to address the need for these farms is attributed first to the widespread belief and response that we can obtain our food from anywhere with modern transportation and post harvest storage technology, and from the cheapest source. Parker (2007:10) observed that 'there has, however, been a shift, with an increasing emphasis on the effect of climate change, and an increasing desire for locally procured fresh food.'

Public perceptions

Currently, there is a lack of understanding of the food chain, with consumers being remote from the production process (Low et al. 2005). The food distribution system is increasingly centralized with the consumer disconnected from all but at the point of purchase. Food production is seen as a rural industry, separated from urban issues and therefore dealt with by separate policies (CAST 2002). Cassidy & Patterson (2008) include policymakers, as well as urban residents, as having a false sense of security about the food system process, with little urban/rural interaction in food production and processing. In the media, although some sympathy is expressed for the plight of farmers, rural people are stereotyped and their issues are seen as remote, with the real consequences for urban consumers hidden. Generally, there is a lack of responsiveness and ownership of agricultural production by end consumers who are used to buying a multitude of products off the supermarket shelves.

The Victorian context

Large areas of Victoria possess resources such as high quality soil and land, access to reliable rainfall and excellent climatic growing conditions which provide the basis for a food industry. Victoria is very largely the foodbowl of the nation. Certainly given the comparatively small geographic area of the state Victoria's role in food production for the nation, the economy of the state, and the sustainability of many communities including Melbourne is critical.

According to Business Victoria (2008), the food industry in Victoria:

- Represents 21.4 per cent of the total manufacturing industry.
- Is worth over \$6 billion in exports (making it Victoria's largest).
- Consists of over 2,000 processing plants, employing 55,000 people.
- Includes 32,000 farms with a value of \$8.7 billion.
- Has experienced strong growth which has also led to international success and exports.
- Is spread across 86,000 businesses.

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The Victorian Competition and Efficiency Commission's report *Simplifying the Menu: Food Regulation in Victoria* (2007:26) emphasises the significance of the Victorian food industry to the State economy. The report compiled the following supporting statistics:

- Food manufacturing sales and service income for the 2004-05 year was \$20.1 billion (excluding tobacco).
- The retail trade turnover of food in 2005-06 was \$20.9 billion.
- The retail trade turnover of cafes, bars, and restaurants in 2005-06 was \$6.1 billion.
- In 2005-06, food imports totaled \$2.6 billion.
- The food manufacturing sector employs approximately 370,000 people, with an emphasis on activity in provincial areas.

Taking ownership of food security

Recently Australians in widespread areas have felt a sustained fear and insecurity experienced in the fragility and finite capacity of our water resources. This phenomenon has occurred not just for rural farming communities but also in larger regional and metropolitan cities, and has led to serious consideration and implementation of mitigating and adaptive strategies. The mindset of the ordinary Australian has changed. It is not unreasonable to consider that similar forces could impact in regards to food and food security. Potentially we are all vulnerable to increased food

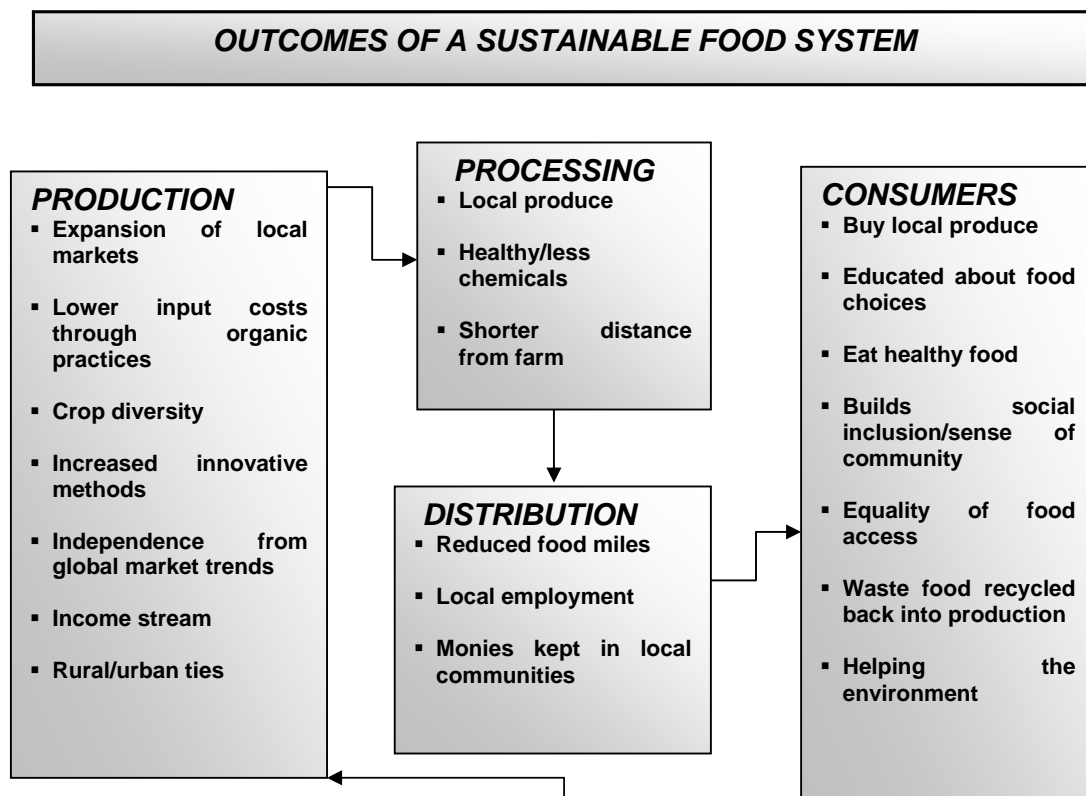
insecurity, particularly if the present trajectory continues in respect to key aspects of the food system.

At present, interested individuals and community groups are advocating for increased local food supply and production in and around cities, and for the preservation of land capable of supporting productive food production, even if it is not currently used for such purposes. There is a need for various aspects of food security to come together in government policy and to be embraced by community members. This will require an enormous change from a consumerist mindset to one of urban and rural food production and restoration of relationship with local farmers. To move ahead there is a need for data that brings a comprehensive understanding of the issues as a whole. The imbalance in the relationship between global and local also requires urgent attention, particularly working towards shortening the food chain. Globalizing the food chain has produced a homogenous blurring of the concept of 'place', as well as a displacement of food production from consumption, a 'loss of rural agricultural resilience and diversity, degradation of the environment, dislocation of community, loss of identity and place' (Feagan 2007:16).

Sustainable local food systems

A sustainable food system means that food production, processing, distribution, consumption and waste recycling work on a cyclic pattern. Waste is put back into the production part of the cycle. All sections of the system are governed by sound sustainability principles as shown in Table 4 below, such as organic production, local markets, short 'food miles', local employment, healthy food available to all and recycling of food waste.

Table 3: A sustainable food system



Current research is seeking to provide empirical evidence for the sustainability of local food systems in supplying food security for communities. Fick (2007) has used the concepts of a 'foodshed' i.e. the geographical space required for an urban area to acquire its food supply and a 'foodprint' as the area needed to feed an individual in a study of New York State. Results, based on a balanced diet with reduced meat and egg consumption (a third of current trends), revealed that most cities can be fed from a local food system, with most foods coming from within about a 50 kilometre radius, except the larger centre of New York City. Similarly, at the University of North Carolina researchers have started a two year study into understanding the health, environmental and economic impacts of facilitating a local, sustainable food system (UNC 2008).

Layers of the food security debate

Food security issues are complex and interwoven into many other societal systems and policies. Different perspectives can be layered over the food system, either singularly or in multiples, in order to draw out implications for policy changes and the appropriateness of implementation strategies. The main food security layers are discussed briefly below.

The social justice layer

Social justice principles include the protection of vulnerable groups, reduction in poverty, equal access to healthy food and fair trade. Food security by definition states that everyone has the right to healthy food. Pederson & Robertson (2001) point out that global food markets and large retailers can dictate food prices and seriously affect the equitable access to food. Urban food policies need to address; food safety, nutrition and food availability, and access (Pederson & Robertson 2001) to bring about equity in retail access in urban 'food deserts' (Lang et al. 2004).

The public health layer

This layer is rooted in social justice principles and is concerned about the provision of healthy food to all, particularly those who are vulnerable. The level of income is connected to healthy eating, with cheaper foods often containing high fat and sugar level. It incorporates emergency, short-term, medium-term and long-term solutions. Food insecurity is connected to the increase of obesity in Australia, as well as disease (Wood et al. 2003). The World Health Organisation (WHO) recognises four pillars of food and nutrition policy; food safety, sustainable food supply, nutrition and healthy lifestyles (Lang et. al. 2004).

The economic layer

A well functioning food system should provide reasonable economic benefits for all parts of the food chain including producers, and maintain a healthy balance between global, national and local food production and consumption through diversity in the marketplace, including increased regulation of the multi-national food corporations, a sustainable farming system and encouragement of local producers (Lang et al. 2004; Robins & Roberts 2006).

The environmental layer

The food system is intricately and intrinsically tied to major issues, such as climate change, greenhouse gas emissions, the prospect of carbon emission taxes, the maintenance of quality agricultural land, biodiversity, and the management, sustainable use and protection of natural resources. Chatham House's report (2008b:2) observes that 'competing global demands on land-and the energy, water and skills needed to farm it, create potentially tough challenges'. The EPA (2005) report on the ecological footprint of Victoria (cited in Larsen et al. 2008) states that food production and consumption accounts for 37% of the State's footprint.

The preservation layer

Cribb (2008:9) comments that ‘sustainable food production is the global scientific challenge of our era, more urgent even than global warming’. Everyone has the potential to be food insecure in light of the global problems that face us today and potentially in the future.

Policy implications of the food security debate

Government legislation fails to fully recognise the relevance of food security to policy debates, let alone its links with land use planning, and the role of local government in relation to these issues. The four separate policy areas of health, economics, environment and social, need to be integrated into food system policy (Enns et al. 2008). Lang et al. (2004) suggests that as the food system is made up of complex relationships new policies need to be holistic in nature, not compartmentalized within separate policy areas or individual disciplines. Tansey (2008) suggests that replacing the current production-based policy with an ecological public health model (see Table 5 below) that embraces social and environmental factors.

Table 5: The productivist and ecological Health Models’ Influence on Food Policy

Key Policy Feature by Area	‘Old’ Productivist Model	‘New’ Ecological Health Model
Economic Policy	Increase production and supply by application of science and capital. Consumers have right to choose	Reducing inequality by state action provides health safety net. Citizenship requires both skills and protection
Health Policy	Health stems from prosperity, availability and some equity of distribution; rising prosperity makes health services affordable.	Population approach; ill health stems from entire supply chain; degenerative diseases suggest how food is grown and delivered is important.
Environment Policy	Should not dislocate market forces; long supply chain; global reach for affluent consumers.	Has to be built into food practices; short supply chains where possible; bioregionalism for all?
Social Policy	Family responsibility; plus welfare safety net.	Population approach; the state applies correctives to imbalances between individual and social forces
Morality	Individuals should be responsible for food within market rules.	Societal responsibility should be based on citizenship.
Price Policy	Cheapness of food may externalize costs	It is false accounting if costs are externalized to other budget headings; costs should be internalized where possible.
Policy Coordination	Primacy of economics; fragmented specialist decision making.	Social goals as significant as other policy goals; new mechanisms for integration.

Source: Lang et al. (2004: 73)

The role of the land use planner

Land use planning and the planners’ expertise generally covers ‘land use, housing, transportation, the environment and the economy. . (and) more recently, the health, education, and energy systems have also garnered attention from planners . . the food system, however, is notable by its absence . . . (Pothukuchi & Kaufman 2000: 113). This is despite the fact that food choices and policies affect the wellbeing of all communities (Cassidy & Patterson 2008). Clancy (2004) points

out that a sustainable food system encompasses production, processing, distribution and marketing of food in all contexts, urban and rural, with the possibility of achieving sustainable consumption a new field of research interest (Jackson 2006, Seyfang 2006). Land use planning, planners and local government planning can impact all these parts of the food chain.

Barriers to involvement

Pothukuchi & Kaufman's (1997) survey of planning departments in twenty-two US communities together with later research (Pothukuchi & Kaufman 2000: 116-117) revealed that limited attention was being given to food system issues for the following reasons:

- The food system was not directly linked to the management of the built environment.
- Food is seen as a rural issue.
- The food system is dominated by the private sector.
- Planners are not aware of any funding programs.
- There is a perception that the food system is working well as it is.
- There are limited opportunities for collaboration between food and land use planning.
- There is insufficient understanding of the issues among planners to make a significant contribution.

Cassidy & Patterson (2008) suggest in similar findings that the limited uptake of food security issues by planners may be caused by the following perceptions of planners:

- The belief that private markets control the food system.
- Food choices are a private matter.
- The built environment is not connected to food system.
- This area is not part of their expertise.
- There is nothing they can do.

In 2007, VicHealth commissioned the University of Wollongong to undertake the National Survey of Food and Nutrition Activities, a postal survey of all local governments in Australia, containing questions related to different parts of the food system. A previous survey had been sent out in 1997. The results indicate that local government involvement in these activities varies significantly nationally. However, there has been an increase in food related work since 1997 but most commonly in the food hygiene related areas (VicHealth n.d.). This preliminary research indicates that there are many more opportunities available to be taken up by local government planning in regards to establishing increased community food security.

How can land use planners be more involved in food security?

Land use planning and planners have a unique opportunity to support, facilitate and lead food security initiatives at a local and community level through the obvious decisions about the use of land. For instance once productive agricultural land is converted to other uses it is lost to our productive resource base. Pothukuchi & Kaufman (2000: 113 and 119-121) suggest that planners could be involved in the following ways:

- Collect data on community food system.
- Analyze connections between food and other planning interests.
- Assess the impact of current planning on the local food system.
- Integrate food security into community goals.
- Educate future planners about food system issues.

Campbell (2004: 349-350) adds:

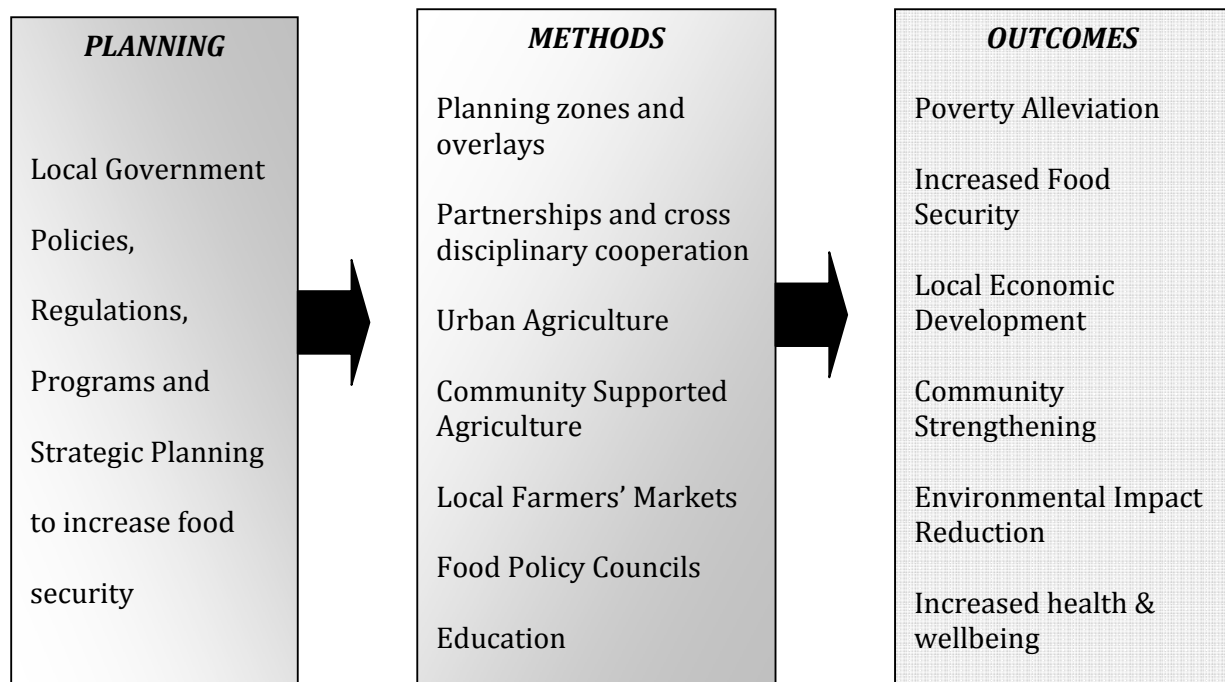
- Participate in specific community food projects.
- Revise local land-use plans and regulations to promote the local food system by:
 - Removing barriers to community gardens and entrepreneurial urban agriculture by: establishing them as permitted uses in zoning codes.
 - Adding community food security to planning goals.
- Facilitate the establishment of local food policy councils to:
 - Draft food policy.
 - Encourage community participation.
 - Collaborate with other agencies and organisations.

Hohenschau (2005: 5) includes:

- Transport planning and land use decisions that are designed to improve access to food.
- Public lands management to include community gardens and kitchens.
- Food safety.
- Nutrition education.
- Institutional purchasing of local foods.

Local planning that incorporates food strategies and policy can be extremely influential in improving community food security by supporting, facilitating and leading initiatives, through a wide variety of methods, which in turn, will produce positive and far reaching outcomes. This process and outcome is summarised in Table 6 below.

Table 6: Increased community food security through local planning



Christine Slade 2008

Ways to improve food security

Implementation of measures to improve food security as part of addressing weaknesses in the overall food system and its links to land use planning go to the core of government responsibilities. Food security can no longer be assumed. The market cannot be relied upon to secure critical elements of food and land use planning. Achieving systems that will ensure food security for all requires interdepartmental approaches and integrated approaches between all levels of government. In this sort of approach the UK's policy and strategy (Thinking About the Future of Food: The Chatham House Food Supply Scenarios May 2008a) is exemplary in identifying such approaches but in also highlighting the considerable distance to be traveled in Australia and Victoria. Pederson & Robertson (2001) state that local government food policies need to link public health, community development and urban planning initiatives to produce a holistic, sustainable approach to food security, with the result of providing availability, access, local economic profitability, local jobs and increased social interaction. That cannot be done at the local; government level without the State government setting clear policy, direction and agency responsibilities. There is a range of specific options available to governments within the parameters of land use planning, these include:

Urban agriculture

Mougeot (cited in Zeeuw et al. 2007:6) defines urban agriculture (UA) as:

An industry located within (intra-urban) or on the fringe (peri-urban) of a town, a city or a metropolis, which grows and raises, processes and distributes a diversity of food and non-food products, (re-) using largely human and material resources, products and services found in and around that urban area, and in turn supplying human and material resources, products and services largely to that urban area.

Governments at all levels need to take a wider view of what UA can deliver economically and socially. Local government should ask the question, what UA can do for their city or town rather than what can the city/town do for UA (Mougeot 2006). UA can be undertaken involving a variety of farming systems from household usage, to community participation through to commercial enterprises. It can be undertaken within a wide range of climatic conditions and to meet the objectives of numerous policy areas, such as poverty alleviation, economic growth, improved health outcomes, environmental management, social interaction and community strengthening (Dresher 2001; Zeeuw 2007).

Embracing UA requires a mindset change, to recognise the values of agriculture as a 'rural' activity that can have a part to play in urban areas in real terms (Knowd et al. 2003). UA is gradually increasing as a community issue and in terms of production but it is often considered to have low economic impact, due to its perceived temporary and informal nature, and therefore is seen to not require regulation (Drescher 2001). UA on its own is not the answer, however attention is being given to the benefits of UA and the realization that UA is a major part of increasing community food security, and therefore does require appropriate governance.

Urban agriculture can be included in existing land use strategies through supporting the retention of productive agricultural land, in structure planning, in open space strategies, in the choice of zoning and subdivision requirements, and in developing design guidelines. Local government initiatives need to be supported by State and Federal government policy, funding and legislation.

Community gardens

A study by Ferris et al. (2004: 93) in the San Francisco Bay area identified four different categories of community food gardens, which are described below:

- Leisure gardens, usually a larger piece of land divided up into plots to be used by local residents who do not have an opportunity to have a garden at home. The garden consists of 20 to 50 small plots, growing vegetables and flowers.
- Child and school gardens.
- Entrepreneurial gardens are established to reduce poverty and social exclusion, and sometimes provide employment opportunities.
- Crime diversion/work and training gardens used to provide alternatives for disadvantaged and troubled young people.

Community gardens provide opportunities for people who do not have the space or resources to have their own garden to access healthy food, be physically active, build self-reliance and connect with nature (Enns 2008). Kingsley & Townsend's study (2006: 534-535) of the 'Dig In' Community Garden, Port Melbourne, showed that the community garden can be 'a place where social networks could be developed, and that the garden offered a space to communicate, cooperate, socialize and gain support from others in the area'. Wheeler (2004) comments from a planning point of view, that these gardens should be considered as a vital part of a strategy to make livable neighbourhoods, through identification of existing vacant city land, the acquisition of strategic land parcels and/or requiring developers to include garden space in their projects.

Rooftop gardens

Rooftop gardens have been an established part of European cities for 20 years and more recently in North America. They are used in cities to reduce the city's temperature, particularly the heat island effect, greenhouse gas emissions, noise levels, catch rainwater run off, provide visual ambience and can be used for food production (Passmore 2007, Adelaide City Council n.d.)

Backyard gardens

Backyard gardening has undergone changes over time. At present, private open space is diminishing in size for city dwellers and therefore home food production could be reduced (Gaynor 2006). On the other hand, there has been resurgence in backyard production as part of the current trend to eat healthy, organic food, grown with short food miles. Davison (2006) makes the observation that most people still live in suburbs and there has been a good response to sustainable gardens, such as permaculture and other environmental social movements. Current water policies that do not support backyard food production need to be changed.

Farmers' markets

Coster & Kennon (2005) define a farmers' market as:

A predominantly fresh food market that operates regularly within a community, at a focal public location that provides a suitable environment for farmers and food producers to sell farm-origin and associated value-added processed food products directly to consumers. These are also known as producer-only markets and new-generation Farmers' markets.

Farmers' markets create community vibrancy, shorten 'food miles', provide sustainable, local fresh food (Enns et al. 2008), provide a new market for producers, and develop relationships between urban residents and agriculture, including education about food production. Many developed countries such as USA, Canada and Australia have seen an exponential growth in the number and interest in farmers' markets.

Community-supported agriculture

These schemes involve farmers situated near urban centres who want to sell their produce to local consumers. The consumers become shareholders in the production with the farmer, spreading the risks between both parties. Consumers can be kept informed via newsletters, field days and visits to the farm/s (Francis 2007). Community Supported Agriculture (CSA) has grown significantly in the US and now represents a substantial component towards addressing the needs of local food systems.

Cooperatives

Gamble (2003) explains that there are four main types of co-operatives:

- Cooperative farms – where a community cooperative buys and manages a farm together.
- Producer cooperatives – local farmers form their own cooperative.
- Consumer cooperatives – members take turns to collect produce for all the members from bulk buying sources and then other members come to a collection point for distribution.
- Cooperative shops – owned and operated by the local community to make fresh food available for residents. There can be discounts for members. These shops build social interaction.

Land trusts

Charitable organisations can hold in trust local agricultural land, managed by the local community for sustainable production, undertaken by a variety of lessees. A proportion of the profit is returned to the trust.

Food policy alliances

Food policy alliances or councils or coalitions can be at local, regional, state or national levels and consist of members of the community who are usually involved in the food system in some capacity. Local government officers can be involved on these councils. One of the objectives of Food Policy Alliances is to advocate to other tiers of government and various authorities to tackle broad food issues, to develop policies, release funds and assist in achieving greater food security. The Community Food Security Coalition (2008) confirms that Food Policy Alliances 'have been successful at education officials, and the public, shaping public policy, improving coordination between existing programs and starting new programs'.

Community food assessments

Pothukuchi et al. (2002) defines the process of undertaking a community food assessment as integrative. It uses a systems approach where a diverse group of stakeholders undertake a solution-orientated process of examining community food assets and resources, as well as problems and barriers. The assessment promotes long-term planning, based on a solid foundation of knowledge and local context on which to build food charters and policies for local food systems. Pothukuchi (2004) identifies that planners can particularly contribute to community food assessments in five ways:

1. A more systematic incorporation of the health impacts of community-food linkages. Planners can use their skills in land-use and neighbourhood planning to incorporate improvements in food access and health-motivated activities.
2. Re-localising food systems as an approach to community planning as a way of reducing the social and environment costs that are normally externalized e.g. urban sprawl's takeover of agricultural land and food miles.

3. Building community skills in participatory action research methods.
4. Community visioning as a means to develop shared understanding related to community food security.
5. Linking local planning concerns with state and federal policy.

The Provincial Health Services Authority report *A Seat at the Table* (2008) concludes that food assessments have strong community benefits such as:

- Background information for local government on the current state of their food systems.
- Helping to identify partners, community resources and opportunities for increasing food security.
- They can be a springboard to other measures.
- They can motivate people to make change.
- Data collected is vital to monitor the effectiveness of food policies and charters.

In recent years, the Victorian Local Governance Association has progressed the methodology for community food assessments in the context of *'the Environments for Health'* framework for Municipal Public Health Plans (Victorian Department of Human Services 2002). A rapid method for *'Municipal food security surveys'* has been trialed (VLGA 2008; Social Planning Unit 2009) and is currently being incorporated into a training program for rollout to other local government areas. The results of the initial trial in the City of Wyndham has identified that food security is an essential component of whole of population support for physical and mental health and wellbeing, and for the economic progress of the community. Local government authorities are well placed to develop relevant, integrated and long-lasting strategies and solutions (Social Planning Unit 2009:3).

Food charters

A Food Charter helps communities declare their values, intentions and priorities for creating a just and sustainable local food system (Provincial Health Services Authority 2008). These documents are commonly created by Food Policy Councils. The process engages people and groups from all parts of the food system in finding creative solutions, therefore bringing, not only triple bottom line benefits but also cultural, health and educational benefits as well (City of Vancouver 2007a). Food charters promote food safety, healthy food choices and practices and build community self-reliance and collaboration. Charters can also encourage community economic development and serve as a primer for other food-related initiatives (Provincial Health Services Authority 2008).

Food policies

The City of Vancouver (2007b:1) defines food policies as:

...any decision, program or project that is endorsed by a government agency, business, or organisation which effects how food is produced, processed, distributed, purchased, protected and disposed. Food policy operates at the global, national, provincial, regional, local and institutional levels.

Food policies often carry forward the envisaging of food charters, formalizing vision into action, and integrating food issues into government decision-making, resulting in broad community benefits (Provincial Health Services Authority 2008). Food Policy Councils who work in partnership with local government can initiate food policies. According to the Sydney Food Fairness Alliance & Food Fairness Illawarra (n.d.:2) potential areas where food policies could be developed include land-use policies that sustain urban agriculture, and access to locally-grown, fresh foods.

Conclusion

Increasingly food security must be seen in a wider context involving structural changes in the production of food, in the economy, in land use policies and in economic development strategies. These long-term solutions are the most sustainable (Miewald et al. 2007). The concept of re-establishing local food systems is gathering pace. Local government in its land use planning is involved at the grass roots community level and can provide support, facilitation and leadership to provide greater food security. Such self-reliance heavily depends upon a partnership of local action and government policies.

Resources

A Seat at The Table: Resource Guide for Local Governments to Promote Food Secure Communities (June 2008) by Jan Enns, Aura Rose, Joanne de Vries & Juliana Hayes for the Provincial Health Services Authority, Vancouver B.C. Canada (<http://www.phsa.ca/NR/rdonlyres/76D687CF-6596-46FE-AA9A-A536D61FB038/29298/PHSAreportaseatthetable4.pdf>)

Community Food Assessment Guide (2008) by Sue Ross and Zena Simces for the Provincial Health Services Authority, Vancouver B.C. Canada (<http://www.phsa.ca/NR/rdonlyres/76D687CF-6596-46FE-AA9A-A536D61FB038/28451/PHSAreportCFAlcommunityfoodassessmentguide.pdf>)

Community Food System Assessment Guide for British Columbia (May 2007) by Christiana Miewald, Herb Barbolet, Vijay Cuddeford, Susan Kurbis, Janine de la Salle & Dave Whiting. (<http://www.sfu.ca/cscd/pdf/Community%20Food%20Assessment%20Guide%20for%20BC.pdf>)

Food for All, How Local Government is Improving Access to Nutritious Food (2008) by VicHealth (http://www.vichealth.vic.gov.au/assets/contentFiles/food_for_all_web_singlepages.pdf)

The Planner's Guide to the Urban Food System (January 2008) by Arly Cassidy & Bowen Patterson (<http://postcarboncities.net/files/PlannersGuidetotheFoodSystem.pdf>)

Thinking About the Future of Food: The Chatham House Food Supply Scenarios (<http://www.chathamhouse.org.uk/publications/papers/view/-/id/624/>)

The Victorian Local Governance Association Food Security (<http://www.foodsecurity.vlga.org.au>)

Findings of consultations with local government

Food is increasingly being highlighted in the media. One of the aspects of this project has been to monitor the level of media attention to food in Australia. Whether it is issues with food additives in China, the amount of water used to produce commonly consumed food items, the near monopoly of two supermarket chains, the impact of food waste on greenhouse gas, the effect of extreme weather events on the price of certain commodities or Michelle Obama digging a vegetable garden at the White House, there is a heightened awareness of food and the fragility of the systems that support it.

The production and supply of food, the availability of land for growing food and access to safe, nutritious and cheap food have all been largely taken for granted in Australia. Food price increases, the impact of drought and climate change on food production and the realisation that water supplies for growing food are not an inexhaustible resource, have all hit home to Australians in recent years. There is a growing understanding that policy and practice that appeared to serve us well in the past is no longer sustainable and that new directions will be needed. It is increasingly evident that sustainable food systems that can deliver safe, low cost convenient and sufficient high quality food are not in place. As a result of these changes there is a rapidly growing volume of research, books, newspaper stories and community interest in food, food security and food production. The rate of growth has meant that it is increasingly difficult to get across the issues.

It is a parody that in a country like Australia, where there is access to a growing variety of nutritional food at any time of the year from local and overseas sources, that there are significant groups in the population who do not have convenient access to low-cost, quality fresh food. Moreover large sections of the population have such inadequate diets that if they continue to follow such poor eating habits they will have reduced life spans and the personal and community costs for their future health care will be an enormous personal and public burden.

The initial consultation program across Victoria as part of the research for this project identified widespread interest and support for linking food security and land use planning. Although it was clearly a relationship that was not being extensively made, even by those directly involved in food security or land use planning. Seven workshops were conducted in geographically dispersed local government locations: Bendigo, Benalla, Brimbank, Casey, Wellington (Sale), Geelong and Swan Hill. Total attendance was about 130 persons comprising Council representatives (planners, environment officers, community service workers, food security workers, Councillors), growers – including commercial scale producers, interested members of the public, university researchers, food security advocates, and representatives of relevant government departments and agencies. More than fifty per cent of attendees were from local governments.

Food and food security

- Food security is a diverse topic with many dimensions.
- Food is a topical subject - a lot of people want to talk about it and it is generating growing community interest and concern.
- In a Victorian context at least any discussion of food, food security and land use planning relates to access to water, water use, water reuse and priorities for allocation of water.
- There is a widespread perception that food security is an issue but the term means different things to different people.
- The term food security/community food security is not that helpful as it diverts attention so that food security is seen by some as purely a welfare issue.
- There are four general perspectives around the term; some people can see all four and how they are related and integrated, but some people are coming at the issues from a single perspective are unaware of other perspectives, or are simply not interested in them. These four perspectives are:

- There is a widespread understanding that running out of conveniently located productive soil with water access is a problem, but even that is not fully appreciated or the consequences in terms of costs understood.
- The concept of 'urban agriculture' in all its forms is not well understood and some growers are hostile to it, because it is not a solution - it is seen as pipedream.
- Food security as a community, social and health issue is not fully understood and some people are ignorant of it, some people were incredulous that some people go without food.
- The concept that there is a link between community food security, land use planning (as food growing land, as the location of food outlets and as an urban form that isolates people) is not widely known and appreciated and the role (responsibility) of local government in all that is unclear.

The wider dimensions of food

- That the bio-security of food supply is a 'sleeper' issue that could suddenly break out and that we are ill prepared for it.
- There is a 'split' between those who want to tackle preserving productive land and land that can utilise water, with those who are concerned about the social community and health dimensions. There is a need to discuss whether it is worthwhile to keep linking these two issues or to recognise that they are two separate parts of a broader topic, linking them with land use planning is partly productive but in some senses only further confuses the agenda.
- There is widespread resentment about the two supermarket chain monopoly but people are not of the view that fixing that will fix the wider range of problems raised.

Attitudes and perceptions of growers

- 'We don't have a food security problem in Australia' – 'If we did we'll just grow more'.
- There is some resentment by growers that we are even discussing this, 'this is an agricultural issue', others were pleased that someone is at least raising it.
- Commercial growers consider that governments at all levels have little interest in protecting them from complaints and urban intrusion.
- Some growers see this as a production volume issue, that is; put up tariffs, get regulations 'off our back' and the problem will go away.
- Some people have a 'romanticised' view of food and the potential for urban agriculture in all its forms; there are some important realities and information about issues around regulations and health standards.

Land use planning

- Forward strategic planning can provide a better urban form and reduce people's isolation from places where they can access food but this will require a paradigm shift in current urban form planning approaches.
- Agriculture has become an increasingly important component of metropolitan planning strategies in Victoria and in other states. However despite that agricultural production is under pressure from other land uses and from the rising value of land with potential for urban development. Ultimately such land is seen as expendable because agricultural production could be shifted to another location.
- Forward strategic land use planning can keep land in production but not with the current set of policies and attitudes in relation to individual landowner decisions. It's a dubious basis to frame an agenda. A whole policy shift is needed across government.

- The significance of parts of the Melbourne metropolitan area itself, the metro fringe and the peri-urban area as a basis for agriculture as a land use, for its economic value and as a component of the urban landscape is being increasingly recognised.
- More recently the wider value of agriculture from such areas has come to the fore. Urban, metropolitan fringe and peri-urban agriculture has been valued because of its food security role, for the employment it supports, for its capacity to reduce ‘food miles’, for its social and community role and because of its health and environmental significance. There is increasing recognition of the multi-level widespread benefits of valuing and retaining such land.

Direction and policy

- There was a widespread level of agreement that overall direction in respect to food, food security and land use planning is needed because the topic is too broad, the range of actions too large, and the agendas too complex. There was general consensus that the project needed to establish outcomes, such as;
 1. Under the heading of food and land use planning, separate the three issues of:
 - Keeping land in production.
 - Increasing community and urban agriculture.
 - The impact of the car based sprawl urban form on community food security and access.
 2. Increasingly link all aspects of the topic to the water agenda.
 3. Define the actual and potential role of local government with a clear assessment of what local councils and their communities can do on the basis that state and national governments must be part of the compact and that their role is clearly stated.

The role of state government

- There is a general consensus that state government is giving insufficient recognition to food, food security and land use planning and needs to take a lead.
- That the whole topic of food, food security and land use planning is crucial to policy relating to, agriculture and land use, transport and energy, health and climate change, and that no one in government appears to want to own such a complex intertwined agenda, but that dealing with these issues in silos is no longer a viable option.

The role of local government

- While it is recognised that local government can make an important contribution in respect to food, food security and land use planning, it is not a local government ‘problem’.
- Much of our future focus must be on awareness raising in the media and across government and in defining the part that local government can play in partnership, this cannot be another ‘handball’ to local government, local government planning or community health.

Responses to the range of issues raised in the consultation reinforced the need to examine a range of issues as an integrated set of problems. There was widespread support to strengthen advocacy on the basis that such approaches are part of comprehensive government strategies and policies that are addressing food security in a holistic way. The wider goals of access to food, food security and the consideration of how to deliver it, together with tackling climate change and environmental sustainability embrace the simple concept of maintaining food production as close as possible to processing, distribution and consumption. When the value of lower cost, sustainable and secure supplies of fresh, high quality fruit and vegetables is also considered in terms of its nutritional and health values, it is a ‘no brainer’ that converting productive agricultural land in and around our major urban areas into housing does not make a lot of sense.

The efficacy of the Victorian land use planning system and food security

One of the major tasks of the project was to assess the capacity of the Victorian land use planning system to support community food security. There are a number of elements that the land use planning system can potentially manage and control that could impact on food security, they include:

- Retaining highly productive agricultural land in food production by limiting or preventing its conversion to other uses.
- Ensuring that land use strategy and detailed plans provide access to food supplies in local communities and neighbourhoods.
- Ensuring that within urban and peri-urban areas there are areas made available to grow and source locally produced food.

In respect to retaining highly productive agricultural land in food production by limiting or preventing its conversion to other uses, large numbers of people during the consultation have questioned how this could be achieved, as though the inevitability of market forces will see the agricultural land use converted to residential and other urban uses. The Victorian land use planning system requires local government support and Ministerial approval for the rezoning of land – that is there has to be a deliberate action to convert or allow the land to be used for residential purposes. However recent initiatives in respect to the urban growth boundary around Melbourne have raised the prospect that the imperative of accommodating a growing population means that agricultural production is expendable. The apparent unwillingness of the State government to limit the expansion of the metropolitan area into productive agricultural land has again raised the prospect that agriculture is just a transitional use.

One of the enduring problems is that the land valuation system often treats such land as though its conversion to a higher land value use is basically inevitable. The consequences are that rates are paid on a land valuation that is inflated and there are frequent cries that rates are driving food producers out. As well many farmers claim that their superannuation is the eventual sale of their land. Land speculation never has been a guaranteed source of retirement benefits. The land was acquired at agricultural production prices not with a residential zoning. For many people land is not a resource it is merely a commodity to be bought and sold to the highest bidder.

The land use planning system provides a number of 'tools' that can be effectively used to assist in retaining land and production or to assist in food security goals by using urban planning and design techniques. These tools can include explicit statements in the objectives of the Planning and Environment Act and the inclusion of provisions in the State Planning Policy Framework (SPPF), which forms part of every planning scheme in the state. The use of these two mechanisms to address resource use would lead to specific provisions in the Local Planning Policy Framework including the Municipal Strategic Statement and Local Policies in each local planning scheme. Further the choice of zones that are available for local governments to use in their planning scheme could be widened to recognise the importance of retaining agriculture as an important land use in the metropolitan area and its immediate surrounds and in other parts of the State.

While the legislative base is very important to tackle in many respects the single most significant contribution that the land use planning system can make is often to recognise the significance of agricultural production areas through State, regional and local strategies and policies and zone the areas accordingly. That means to not include such areas in growth strategies or to zone them for urban development. The metropolitan strategy *Melbourne 2030* contains specific reference to agricultural production as being an important element in framing and implementing the strategy. However, the update of the report, *Melbourne @5million*, is far less forthcoming on the issue.

The Oregon USA land use planning model which establishes that protecting productive agricultural land is one of 19 principles which underpin the planning of the state is exemplary and is widely seen in planning circles as world's best practice. The imposition of urban growth boundaries in the late 1970s in Oregon and around such places as Portland has established a line that protects the state's agricultural resources. With a boundary with a secure twenty year horizon the result was a reinvestment in agriculture. It is important to note that accompanying these measures was a metro wide major reinvestment in public transport, walking, cycling, transit oriented development and medium density housing. A whole raft of policies, actions and support for farmers' markets has accompanied these initiatives, community supported agriculture, urban agriculture and the establishment of food councils and policy.

In Victoria responsibility for securing agricultural in the metropolitan fringe has to be assigned as the responsibility of a specified government department. The general attitude of the Department of Primary Industry is that agricultural production and the use of agricultural land, even highly productive agricultural land, is purely a function of the market. Land should be used for its highest and best use. That approach will ultimately see all highly productive land on the urban fringe ultimately turned over to the 'last crop' – housing. The Department of Planning and Community Development through the State Planning Policy Framework, which is in all planning schemes, identifies the need to give strong consideration to retaining this land for its conversion to any other uses. But generally the policy base and its implementation are weak. Such land can be turned over to urban use at relatively frequent periods as population pressure is accommodated with relatively low density residential development. The harder strategy of ramping up the density of residential development in new residential areas and supporting the densification of selected existing residential areas appears to be avoided.

A major role of this report is to provide an analysis of the Victorian Land Use Planning System in respect to its capacity to address food security. The analysis in part seeks to determine the extent to which the planning system accommodates and provides a basis for securing food supplies.

It is important to note that the Victorian land use planning system was devised at a time when issues such as climate change, water shortages, peak oil, and food security were not on the policy agenda. In May 2008 the Premier announced that a review would be undertaken of the Planning and Environment Act 1987 and in March the Minister for Planning released a Discussion Paper which sought to establish an agenda for that review and the parameters within which it would be undertaken. In part the current review of the Planning and Environment Act is a recognition that agendas that now impact on and influence land use planning need to be updated. At a finer grained level the links between urban design and the urban form and the rising levels of obesity for example are not made in the policy framework that underpins planning in Victoria.

The Victorian Planning and Environment Act 1987

The Victorian Planning and Environment Act does not provide an explicit frame of reference for policy work on food, and food security, and their links to land use planning. While sections of the Act can be interpreted as referring in an oblique way to food security, the links remain too tenuous to provide an effective basis for action. Past attempts to use the Planning and Environment Act to bolster policy proposals in the food security debate have been unsuccessful.

Nevertheless, certain sections of the Act, and their more liberal interpretation, may at the very least provide grounds for possible future amendments to the Act to make it more specific on food security matters. Below are excerpts from the Act that can be interpreted and understood as relating to and encompassing food security and land use planning. For clarity, commentary is provided following each key section of the Act.

Section 1. Purpose

The purpose of this Act is to establish a framework for planning the use, development and protection of land in Victoria in the present and long-term interests of all Victorians.

Comment: 'The protection of land in Victoria' can be interpreted and understood as including *agricultural* land. The 'present and long-term interests of all Victorians' can be interpreted and understood as encompassing food and food security.

Section 4. Objectives

(1) The objectives of planning in Victoria are –

(a) to provide for the fair, orderly, economic and sustainable use, and development of land;

Comment: This can be interpreted and understood as encompassing the sustainable use and development of *agricultural* land.

(b) to provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity;

Comment: This can be interpreted and understood as encompassing the protection and maintenance of *agricultural* land, and the integrity and diversity of food production.

(e) to protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;

Comment: 'Public utilities and other assets...for the benefit of the community' can be interpreted and understood as including aspects of food systems, for example, urban agriculture, community gardens, and farmers' markets.

(f) to facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e);

Comment. This can be interpreted and understood as encompassing the development of sustainable food systems.

(g) to balance the present and future interests of all Victorians.

Comment: The difficult task of balancing the 'future and present interests of all Victorians' can be understood and interpreted as encompassing food security, and the development and maintenance of more sustainable food systems.

*(2) The objectives of the planning framework established by this Act include –
(c) to enable land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels;*

Comment: Food security is about ensuring equitable access to low-cost, quality fresh food. Environmental, social, and economic equity is thus central to the debate. Conservation, and resource management lack meaning unless they are interpreted and understood as encompassing *agricultural* systems and effective land use planning.

(d) to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land;

Comment: This can be interpreted and understood as comprising considerations on the consumption and over-consumption of the natural environment, food resources. The social and economic effects of the use and development of land also relate directly to the equitable allocation, use, and mis-use of land for food production.

Possible amendments to the Act to improve food security

The objectives of planning in Victoria in section 4 of the Planning and Environment Act are not specific. There has been growing concern that their narrow scope has limited the capacity of Councils to tackle a wide agenda in their planning schemes and to consider broader matters such as food and food security in determining permit applications. A current State Government review of the Act has suggested that some changes could be made to the objectives of planning and that they could be reworked to provide a widened scope in relation to a range of matters and some more specific items. A recent Response Paper released by the Department of Planning and Community Development (DCPD 2009) stated;

Health, design for sustainability and high quality urban design, however, are contemporary matters that can be included to broaden the current objectives. The introduction of these new high level planning objectives will support Victoria's liveability through the recognition that planning can impact and enhance the provision of healthy environments, and the recognition that good quality and sustainable urban design is an essential contributor to a range of environmental, social and economic benefits for Victorian communities.

The proposed changes would mean that if enacted through an amendment to the Planning and Environment Act, the objectives for planning would include:

- (a) to provide for the fair, orderly, and sustainable use, and development of land.
- (b) to secure a pleasant, efficient, healthy and safe working, living and recreational environment for all people in Victoria.
- (c) to balance environmental, social and economic considerations in decisions about the use and development of land.
- (d) to balance the present and future interests of all Victorians.
- (e) to promote high quality and sustainable design for urban and built form in both the public and private realms.

While not explicitly referencing food, food security and productive agricultural land (as sought by some in submissions to the review of the Act), if these changes such as the reference to 'healthy', the 'balancing of environmental, social and economic considerations', and 'the promotion of sustainable urban and built forms' were implemented, they would broaden the scope of matters that could be addressed, and in turn, influence the outcomes. However, the proposed changes lack any *specific* reference to food security.

The State Planning Policy Framework

Another element of the Victorian land use planning system that could be referenced and applied to provide an explicit framework within which food, food security and land use planning can be addressed and linked is the State Planning Policy Framework (SPPF). The SPPF is incorporated in all planning schemes, such that when local governments administer current planning schemes or prepare new schemes, they are required to implement the SPPF.

Below are excerpts from the State Planning Policy Framework that can be interpreted and understood as relating to and encompassing food security and land use planning, particularly in terms of food production.

11 INTRODUCTION, GOAL AND PRINCIPLES

11.01 Introduction

It is the State Government's expectation that planning and responsible authorities will endeavour to integrate the range of policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development.

Planning policies are directed to land use and development, as circumscribed by the Planning and Environment Act 1987, a primary objective of which is to provide for the fair, orderly, economic and sustainable use and development of land.

Planning, under the Planning and Environment Act 1987, is to encompass and integrate relevant environmental, social and economic factors. It is directed towards the interests of sustainable development for the benefit of present and future generations, on the basis of relevant policy and legislation.

Planning authorities and responsible authorities are responsible for the effective planning and management of land use and development in their districts for the broad interests of the community, through the preparation of strategic plans, statutory plans, development and conservation plans, development contribution plans, and other relevant plans to achieve the objectives of the Act.

11.02 Goal

The State Planning Policy Framework seeks to ensure that the objectives of planning in Victoria (as set out in Section 4 of the Planning and Environment Act 1987) are fostered through appropriate land use and development planning policies and practices which integrate relevant environmental, social and economic factors in the interests of net community benefit and sustainable development.

11.03-1 Settlement

Planning is to anticipate and respond to the needs of existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure. Planning is to recognise the need for, and as far as practicable contribute towards:

- *Health and safety.*
- *Diversity of choice.*
- *Adaptation in response to changing technology.*
- *Economic viability.*
- *A high standard of urban design and amenity.*
- *Energy efficiency.*
- *Prevention of pollution to land, water and air.*
- *Protection of environmentally sensitive areas and natural resources.*
- *Accessibility.*
- *Land use and transport integration.*

12.02 Better management of metropolitan growth

12.02-1 Objective

To locate metropolitan growth close to transport corridors and services and provide efficient and effective infrastructure to create benefits for sustainability while protecting primary production, major sources of raw materials and valued environmental areas.

*12.02-2 Strategies
Urban growth boundary*

Establish an urban growth boundary to set clear limits to Metropolitan Melbourne's urban development by:

- Defining the urban area of Metropolitan Melbourne with an urban growth boundary to manage outward expansion, to facilitate achievement of a compact city, to protect nonurban areas and to ensure ready access to infrastructure in the key transport corridors.*
- Defining the non-urban area of Melbourne to be retained for rural and agricultural uses, natural resources, landscape, heritage, open space and conservation values.*

Green wedges

Protect the green wedges of Metropolitan Melbourne from inappropriate development by:

- Ensuring strategic planning and land management of each green wedge area to promote and encourage its key features and related values.*
- Supporting development in the green wedge that provides for environmental, economic and social benefits.*
- Protecting important productive agricultural areas such as Werribee South, the Maribyrnong River flats, the Yarra Valley, Westernport and the Mornington Peninsula.*

12.03 Networks with the regional cities

12.03-1 Objective

To develop Metropolitan Melbourne and the surrounding regional cities as a network of cities to provide a choice of places to live, set up business and find a job.

12.03-2 Strategies

Rural residential development

To control development in rural areas to protect agriculture and avoid inappropriate rural residential development by:

- Ensuring planning for rural living avoids or significantly reduces adverse economic, social and environmental impacts by:*
- Maintaining the long-term sustainable use and management of existing natural resource attributes in activities such as agricultural production.*

12.04 A more prosperous city

12.04-1 Objective

To create a strong and innovative economy.

12.04-2 Strategies

Resource management

Maintain access to productive natural resources and an adequate supply of well-located land for energy generation, infrastructure and industry by:

- Protecting areas with potential to recycle water for forestry, agriculture or other uses that can use treated effluent of an appropriate quality.*

17.05 Agriculture

17.05-1 Objective

To ensure that the State's agricultural base is protected from the unplanned loss of productive agricultural land due to permanent changes of land use and to enable protection of productive farmland which is of strategic significance in the local or regional context.

17.05-2 General implementation

Land capability is a fundamental factor for consideration in rural land use planning.

- *Planning authorities should consult with the Department of Primary Industries and utilize available information to identify areas of productive agricultural land.*
- *Regional and State, as well as local, issues and characteristics should be taken into account in the assessment of agricultural quality and productivity.*
- *Permanent removal of productive agricultural land from the State's agricultural base must not be undertaken without consideration of its economic importance for the agricultural production and processing sectors.*
- *Planning should support effective agricultural production and processing infrastructure, rural industry and farm-related retailing and assist genuine farming enterprises to adjust flexibly to market changes.*
- *Planning and responsible authorities should encourage sustainable land use.*
- *Planning should provide encouragement for sustainable agriculture and support and assist the development of innovative approaches to sustainable practices.*
- *Subdivision of productive agricultural land should not detract from the long-term productive capacity of the land.*

In assessing rural development proposals, planning and responsible authorities must balance the potential off-site effects of rural land use proposals (such as degradation of soil or water quality and land salinisation) which might affect productive agricultural land against the benefits of the proposals.

In considering a proposal to subdivide or develop agricultural land, the following factors must be considered:

- *The desirability and impacts of removing the land from primary production, given its agricultural productivity.*
- *The impacts of the proposed subdivision or development on the continuation of primary production on adjacent land, with particular regard to land values and to the viability of infrastructure for such production.*
- *The compatibility between the proposed or likely development and the existing uses of the surrounding land.*
- *Assessment of the land capability.*
- *Where inappropriate subdivisions exist on productive agricultural land, priority should be given by planning authorities to their re-structure.*

There are clearly a number of explicit references to recognising and planning for the protection of productive agricultural land from adverse uses. The issue is addressed from a number of perspectives. It could be argued that there is sufficient to provide a strong robust policy framework. However the fact that productive agricultural land is being lost to other uses and that only modest consideration is being given to the policy framework in many decisions that are made in regards to the use and development of land being used for agriculture and the rezoning of such land implies that the policy lacks strength and commitment.

Another source for the retention of productive agricultural land is the controls explicit to zones. The Farming Zone (FZ) is the most relevant. Below are excerpts from the Victoria Planning Provisions (VPP) that specifically refer to key elements of the Farming Zone. These sections can be interpreted and understood as relating to land use planning and in food production but linking it to food security is not explicit.

35.07 FARMING ZONE

Shown on the planning scheme map as FZ with a number.

Purpose

- *To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.*

- *To provide for the use of land for agriculture.*
- *To encourage the retention of productive agricultural land.*
- *To ensure that non-agricultural uses, particularly dwellings, do not adversely affect the use of land for agriculture.*
- *To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.*

35.07-6 Decision guidelines

Before deciding on an application to use or subdivide land, construct a building or construct or carry out works, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

General issues

- *The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.*
- *Any Regional Catchment Strategy and associated plan applying to the land.*
- *The capability of the land to accommodate the proposed use or development, including the disposal of effluent.*
- *How the use or development relates to sustainable land management.*
- *Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses.*

Agricultural issues

- *Whether the use or development will support and enhance agricultural production.*
- *Whether the use or development will permanently remove land from agricultural production.*
- *The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses.*
- *The capacity of the site to sustain the agricultural use.*
- *The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.*
- *Any integrated land management plan prepared for the site.*

The zone provisions certainly address the issue of the protection of productive agricultural land. However similar to the SPPF there are no absolutes and the performance based approach that is used for the consideration of proposals reveals its limitations when there are no explicit absolutes in regards to land use planning issues.

The VPP defines the term 'high quality productive agricultural land' as:

Land which is used for animal husbandry or crop raising, and is capable of continuing to sustain agricultural production, and:

- a) is of prime, or very good, agricultural quality, having regard to soil type, growing season, and availability of infrastructure, and is of sufficient extent to support agricultural activities on an economically viable scale; or*
- b) has been identified through a regional, sub-regional, or local study as being of particularly good quality and strategic significance for agriculture in the regional or local context.*

This definition implies a process by which land in Victoria could be assessed and classed as high quality productive agricultural land. Presumably if that was applied on a state, regional or local scale it would carry considerable weight in determining the outcome of applications that would seek to remove land from production. There has been no systematic attempt to classify land in this way. VCAT in reviewing decisions made by local governments on planning permit applications has on occasions determined against developments on the basis that they contravened state or local policies that sought to protect high quality productive agricultural land.

The protection of agricultural land in local government planning schemes

Generally, land use planning schemes in Victoria fail to address food security with the kind of systemic measures necessary to effectively treat the issue. Whilst some local government planning schemes include specific measures to on protect agricultural land, the same land is compromised when *ad hoc* development takes place, constraining agricultural production. This occurs frequently, and indicates the prevailing, if implicit, view that fertile land is a wholly expendable resource.

Nevertheless, it is instructive to explore the role of land use planning in improving food security by examining the planning schemes of Councils that do have some specific provisions on protecting and maintaining agricultural land. The planning schemes examined in this project were those of Moorabool City Council, Casey City Council, and Wyndham City Council. The local strategies and policies adopted by these Councils exhibit recognition of the vital role of horticultural and food producing areas in economic stability and food security. The text boxes below provide relevant excerpts from the planning schemes.

Moorabool City Council Municipal Strategic Statement

21.04 ECONOMIC DEVELOPMENT AND EMPLOYMENT

21.04-1 Key Issues and Influences

Agriculture and horticulture

The diversity in agricultural production and potential across the Shire is an economically valuable resource. Where irrigation water or higher rainfall combines with highly productive soil types, the Shire supports intensive horticultural pursuits. The protection of agricultural and horticultural production is an important planning outcome. The Shire's agricultural base and attractive rural setting are important drivers in attracting people to live in Moorabool. Council supports rural living development where it does not compromise the long term productive use of rural land for agriculture and horticulture, maintains the Shire's environmental qualities, and provides services and infrastructure to support such development. Farm businesses need to be able to retain the capacity to operate as agricultural enterprises. The Shire's horticultural land resources are important economically in supporting tourism and the lifestyle appeal of the area. The highly productive irrigated horticultural areas adjoining Bacchus Marsh are a major asset for the Shire and the township and are to be protected from the encroachment of residential development.

21.07 BACCHUS MARSH

21.07-1 Key Issues and Influences

Its character is defined by the following elements:

- Township character with a strong range of commercial and business enterprises set within a rural landscape and highly productive agricultural areas;
- Werribee and Lerderberg Rivers and associated highly productive irrigated river flats;
- Strong industrial base providing local employment opportunities, particularly in the transport and value-adding agricultural industries; and
- The highly productive irrigated horticultural land provides a source of employment and fresh food that needs to be protected from the urban expansion of Bacchus Marsh.

**Casey City Council
Municipal Strategic Statement**

21.07 THE FARM

21.07-1 Context

The Farm is located to the south of the municipality and consists of the areas around Clyde. The areas generally to the north of Tooradin and around Clyde contain high quality, versatile agricultural soils. The high quality soils are an important economic resource because of their high productive capacity and their proximity to metropolitan markets. The soils should be protected because inappropriate subdivision will cause already small land holdings to be further fragmented, thereby undermining their long term viability. The Farm is mainly used for agricultural purposes such as beef cattle and vegetable and flower growing. Much of the produce is sold in metropolitan Melbourne. Other rural activities include poultry farming, horse racing and agistment, animal boarding and dog breeding. The agricultural output of these activities makes a significant contribution to the local and metropolitan economy. The Farm is being threatened by incremental subdivision, rural residential development and non-horticultural activities.

21.07-2 Objectives, strategies and implementation

Objectives

- To consolidate urban development within the boundaries of existing rural settlements and planned commercial nodes.
- To retain quality land for intensive agriculture and ensure the viability and prosperity of agricultural activities are not compromised.

**Wyndham City Council
Municipal Strategic Statement**

22.08 WERRIBEE SOUTH POLICY

This policy applies to intensive agricultural land at Werribee South. It is defined on Map 1 to this Policy.

22.08-1 Policy Basis

Werribee South is a market garden area of state significance. The area continues to be valued because of its intensive agricultural output. The Municipal Strategic Statement identifies Werribee South as a major agricultural resource and area of tourism potential.

22.08-2 Objectives

The objectives of this policy are to:

- Retain high quality agricultural land within Werribee South in accordance with state planning policy
- Encourage consolidation of allotments to assist agricultural viability and productivity
- Encourage tourism and recreation development of peripheral locations that is sensitive to nearby agricultural land use and activity.

22.08-3 Policy

It is policy that:

- Werribee South be retained as a primarily agricultural area as opposed to allowing for rural residential or hobby farm development.
- All use and development be compatible with agricultural pursuits.
- House lot excisions be related to the primary farming activity of the land.
- If a tenement has been excised in the past this will be taken into account in considering whether to issue any planning permit for a house lot excision.
- Loss of agricultural land be minimised when building construction activity occurs.

22.08-4 Decision Guidelines

In considering applications for use and development the responsible authority will take into account:

- The impact on the on-going use of the land for agriculture.
- The consolidation of land to ensure maintenance of future agricultural activity.
- The impact of house lot excisions on continuing farming activity in Werribee South.

Water security and food

The SPPF refers explicitly to maintaining and protecting water quality in respect to land use planning, however there is no reference to water quantity. Sustainable food production is closely linked to managed and secure water supplies, including the potential re-use of water. Cities need to radically rethink the way they value resources like agriculture, water and agriculturally productive land. To use one example, enormous amounts of water are used in vegetable production. The level of embedded water in many horticultural products is very high. Transporting such products hundreds of kilometers past land that once grew such products but doesn't do so because urban pressures have driven out farmers is actually just another subsidy for shifting water. The transport of fresh produce over vast distance is akin to transferring water at incredibly high cost. The sudden realisation that water must now be a valued and managed resource has brought home to the community that certain assumptions about the future are no longer sustainable. It has been a hard but necessary message. The production of safe, convenient, low cost nutritional food is another agenda that is increasingly under review. Partly because it is now understood that growing food is the largest consumer of Australia's water.

Global best-practice in food security and land use planning: five case studies

The project has sought to identify and document a range of initiatives through case studies. The purpose of this is to illustrate a selection of actions and ideas that are being trialed around the world and locally to address aspects of food security. In part they illustrate what can be achieved through local initiatives. The case studies include the cities of Brisbane and Vancouver, the Hawkesbury Harvest on the edges of Sydney, the London Food Hub, and the Bacchus Marsh in Victoria. They all add to the findings of the project and the development of ideas, initiatives and recommendations.

Brisbane City Council

- Brisbane City Council has defined environmental targets which drive policy and programs
- Urban gardening and roof top gardens are written into policy.
- Sustainable food practices are encouraged through publicity, programs and education.
- There is extensive use of marketing techniques to promote sustainability
- Generous rebates are allowed for backyard tanks, other services are available for an affordable price.

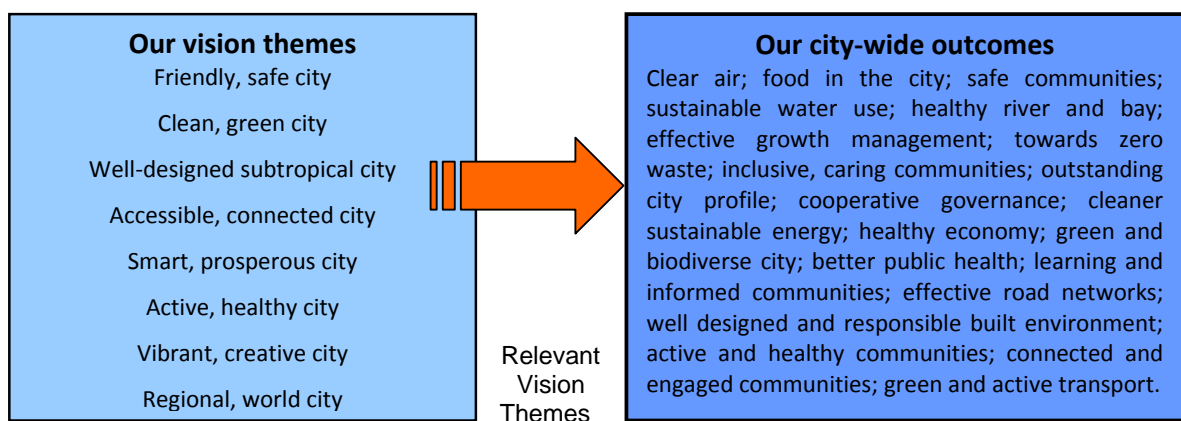
The regional plan (South East Queensland Regional Plan 2009-2031) provides the following context:

1. The Regional Landscape & Rural Production Area includes good quality agricultural land and other productive rural land as well as areas that form strategic ally significant inter-urban breaks.
2. The Urban Footprint.
3. The Rural Living Area.

Part D 6.3 Healthy and Safe Communities of the plan notes that: 'the protection of agricultural land, urban gardens and local markets will provide healthy, fresh, high quality produce that will improve community health'.

Source: <http://www.dip.qld.gov.au/regional-planning/regional-plan-3.html>

The Brisbane City Plan *Our Shared Vision - Living in Brisbane 2026* identifies a range of outcomes of which 'food in the city' is prominent. The following extracts indicate how the City of Brisbane has emerged as a leader in terms of embracing food as a core element of its City's plans and initiatives.



Well-designed Subtropical City



'In 2026 Brisbane will be designed in response to the elements of our landscape, lifestyle and climate, thereby improving the quality of our city life and strengthening our sense of 'place'. We will have succeeded at retrofitting Brisbane as an energy-efficient, water-smart city. Residents' eco-friendly efforts will include local initiatives such as neighbourhood food gardens, tree plantings, rain water tanks, grey water reuse and large-scale green technology projects, including roof gardens.'

Active, Healthy City



'Brisbane will have a network of community gardens and city farms in parks, schools and community facilities. Residents will have fun growing their own food, and sharing their access to fresh, healthy and affordable food. Experiences at community gardens and city farms will bring together people from different cultures and connect them to their local communities.'

City-wide outcome: Food in the city targets



- increase resident and community participation in food gardening
- increase economic value of food gardening and local processing
- reduce its food miles

Source: http://www.brisbane.qld.gov.au/BCC:BASE::pc=PC_215

GreenHeartCitySmart

Brisbane City Council is using this program to be Australia's most sustainable city, with the target of being a carbon neutral city by 2026. Brisbane residents have already met the target of using 140 litres of water per person per day. Now the target is to reduce household greenhouse gas emissions from 16 tonnes per household to 10 tonnes by 2012. One way the Council has encouraged residents to reduce their carbon footprint this is through initiatives such as:

- Planting food in the backyard or on a balcony
- Choose local and seasonal produce
- Visit local farmers markets
- Join a community garden
- Try to avoid wastage and compost food scraps
- Share a meal with friends.

Source : http://www.brisbane.qld.gov.au/BCC:CITY_SMART:1995806836:pc=PC_3058



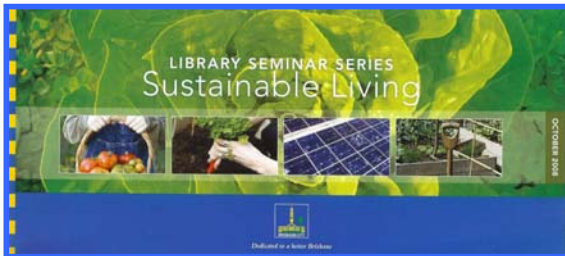
Green Choice Gardening



This initiative promotes ideas to help create and maintain sustainable gardens. Educational ideas include garden design, composting and green waste, water efficiency and choice of plants. Information is published on the Brisbane City Council website, a link from the I Love Brisbane site and is available in booklet form

Source: http://www.brisbane.qld.gov.au/BCC:BASE:483721124:pc=PC_2066

Brisbane City Council Libraries Initiative



The public libraries throughout Brisbane have held free sustainable living seminars. In October 2008 topics included Compact gardening, Container gardening for kids, Create a no dig, permaculture garden, Think globally: eat locally and Simple and economical ways to grow food in your backyard.

Source: Library Seminar Series Booklet October 2008.

City of Vancouver

Vancouver British Columbia Canada represents a city led approach to food through the development and implementation of policy.



History of food policy in Vancouver

1990	Nutritionists from Vancouver Health Dept internally discuss need for a food policy.
1993	Meetings were formalized from discussions and Vancouver Food Policy Coalition was created.
1995	Vancouver's Medical Health Officer reported community food policy discussions and plans and the existence of the Vancouver Food Policy Coalition with City Council.
1996 - 2003	Variety of community groups develop and deliver food-related programs. These groups included the Lower Mainland Food Coalition, who received funding from Health Canada, the Vancouver Agreement Food Task Team and Growing Green.
2003	Vancouver City Council approved a motion in support of the development of an equitable and sustainable food system in the City. The Food Policy Task Force was initiated to provide leadership to meeting this goal. At the same time, a consultation process was carried out that formulated a Food Action Plan which had three components: a recommendation to create a Vancouver Food Policy Council; a work plan incorporating five action items, namely, city-wide food system assessment, rooftop gardens, community gardens, farmers' markets and a coordinated food processing and distribution facility for low income residents; and thirdly the creation of two full-time City staff positions i.e. Food Policy Coordinator and Food System Planner.
Dec. 2003	Vancouver City Council approved the proposed Food Action Plan. City Council approved resources for Food Action Plan's initiatives.
Jul. 2004	Food Policy Task Force completed their responsibilities by electing members of Vancouver's first municipally-affiliated Food Policy Council.
Sept. 2004	Vancouver Food Policy Council met for the first time.
2005	Priority areas of the Food Policy Council were; the creation of a Food Charter; increased access to food for residents, creating an institutional Food Purchasing Policy and developing a coordinated effort to food recovery.
Feb. 2007	Council unanimously adopted the Vancouver Food Charter.

Source: <http://vancouver.ca/commsvcs/socialplanning/initiatives/foodpolicy/policy/history.htm>

Current food policy initiatives

Food policy initiatives are part of the responsibilities of the Social Planning Department of Vancouver City Council.



This Charter states the vision for the Vancouver food system and embraces five key principles:

1. Community Economic Development – valuing locally-based food systems
2. Ecological Health – protection of natural resources, reduction of food miles and waste
3. Social Justice – food is a basic human right
4. Collaboration and Participation – strengthen food security through citizen participation, government cooperation, business and NGO's
5. Celebration – Values the importance of food culturally and socially.

Source: <http://vancouver.ca/commsvcs/socialplanning/initiatives/foodpolicy/policy/charter.htm>

The Grow a Row, Share a Row program



This program invites local gardeners to grow an extra row of vegetables or plant an extra fruit tree and then donate the harvest to the Greater Vancouver Food Bank Society and Neighbourhood Houses in Vancouver. The grower needs to take them to a community drop-off site where the donated harvest is used in community facilities such as pre-schools or given to single parents, seniors programs and/or newcomers. The donation is recorded at the drop off site in order to measure the success of the program.

Source: <http://vancouver.ca/commsvcs/socialplanning/initiatives/foodpolicy/projects/GrowARow.htm>

2010 new community shared garden plots by 2010



In May 2006 the City issued a challenge to the community to establish more food-producing gardens in Vancouver. The goal is to create 2010 new garden plots in the city by January 1, 2010. There is currently unprecedented demand by the community for the creation of new gardens and a waiting list for being informed about land available in neighbourhoods. To qualify a garden plot can be on rooftops, balconies or on the ground, in private gardens or gardens that participate in the Grow a Row, Share a Row program. To start a new garden in a park, permission is needed from the Park Board as the public parks are different to city-owned land.

On March 4, 2009 the Vancouver Mayor announced that part of the City Hall lawn would be turned into a community garden as part of the 2010 New Community Shared Garden program and as an action to support producing local food. It is the first 'Quick Start' recommendation from the Greenest City Action Team (team members include Dr. David Suzuki). The City will work with a group called Society Promoting Environmental Conservation to design and develop the garden.

Sources: <http://vancouver.ca/commsvcs/socialplanning/initiatives/foodpolicy/policy/charter.htm>
<http://vancouver.ca/ctyclerk/newsreleases2009/NRcommunitygarden.htm>

Hawkesbury Harvest (Sydney)

The Hawkesbury Harvest initiative on the outskirts of metropolitan Sydney represents a substantial project at the local level where the economic role and value of food to the local economy has been recognised and underpins a whole series of actions and programs.



Hawkesbury Harvest Incorporated is a non-profit organisation with a vision of improving the future of peri-urban agriculture in the Hawkesbury region. The geographical context is part of the Hawkesbury River Catchment, which includes the northwest section of the Sydney Basin. This area is under pressure from increasing urban development. Up to 90% of all leafy vegetables consumed in Sydney are grown in the Hawkesbury area. The northwest agricultural sector of Sydney employs over 5,500 people full time. The organisation's focus from the beginning has been to secure the economic viability of metropolitan agriculture, including associated small businesses.

There are five main areas of innovation:

1. **Farm Gate Trail.** This was the first strategy developed and was based on agri-tourism. It increases relationship between farmer and consumer, and at the same time gives local business a new income market. Tourists and visitors can choose a suitable farm producer from the Farm Trail directory, and the website chart of seasonal availability. Interactive maps are also available from the Hawkesbury Harvest website. Products and services offered include farms offering 'Taste, Buy and Learn' aspects of their local products, wine, sake and specialty trails, artisan trails, cafes and restaurants serving local produce, cooking schools, farm stays, pick your own options, and accommodation, conference and exhibition venues.
2. **Open Farm Days.** Individual members of Hawkesbury Harvest organize their own events. However, the organisation's publicity opportunities are used to promote the events. For example, in April 2009, the Friends of Bella Vista Farm Park will be holding an Open Day as part of Heritage month, with appropriate activities and stalls.
3. **Special Events.** These have included the Farming Small Areas Expo, the Happy Dog Day and the Orange Blossom Festival.
4. **Farmers and Fine Food Markets.** Hawkesbury Harvest provides viable direct marketing opportunities for small local farmers through these markets. The first market was held in August 2002 at the Castle Hill Showground, with 35 stallholders and 6000 people attending. Attendance is now up to 10,000 and estimates it generates \$1.2M per year (2007). A second monthly market was established in March 2008, at Rouse Hill Town Centre, a GPT development site, of which Hawkesbury Harvest is a partner. A trial period for a third market in the centre of Sydney, at St. Mary's Cathedral Square has just been completed. Wollondilly Shire Council, (near Picton) runs a small monthly produce market.
5. **Industry Development.** Industry development (including regional branding) is used for produce, products and services that have come from the Hawkesbury River Catchment. In particular, a Food & Wine Coordinator was appointed in 2006, whose responsibilities include establishing provedore services for restaurants seeking local produce and value added products, finding outlets for produce available from the Farm Gate Trail, and to look into the export market, as well as niche market production through the Hawkesbury

Agricultural Retention through Diversification and Clustering Project, lead by Hawkesbury City Council. Potential crops include specialty vegetables, native foods and herbs.

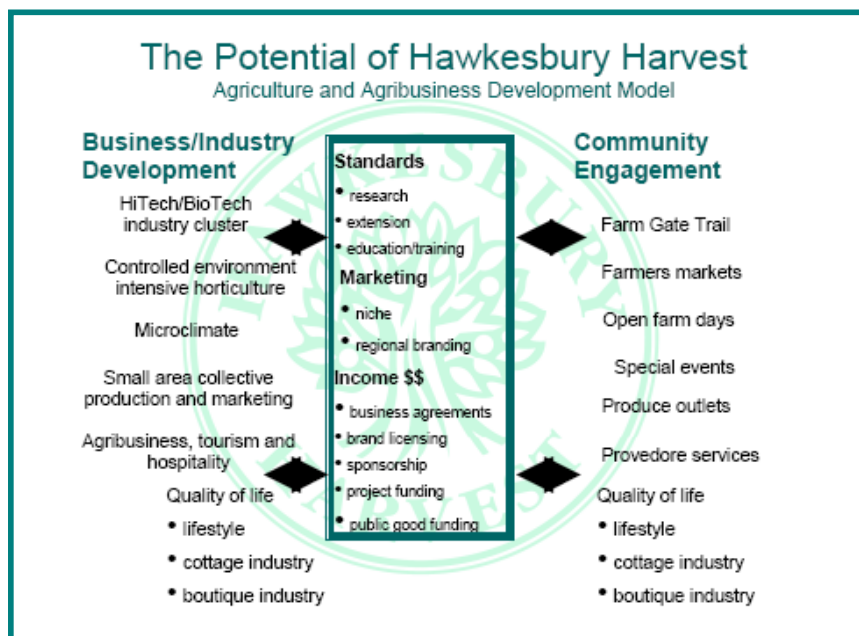
Project partners

Australian Government Department of Transport and Regional Services
 Baulkham Hills Shire Council
 Greater Western Sydney Economic Development Board
 GROW
 Hawkesbury Agricultural Retention through Diversification and Clustering
 Hawkesbury City Council
 Hawkesbury Regional Tourism Association
 Hornsby city Council
 NSW Department of Primary Industries
 NSW Department of State and Regional Development
 Penrith City Council
 The GPT Group
 University of Western Sydney

Benefits

- Creating a sustainable link between metropolitan agriculture and the wider Sydney community.
- Hawkesbury Harvest is a significant contributor to the region’s social capital.
- It transfers to urban consumers an appreciation for the heritage and cultural richness of the area.
- Developed strong partnerships with all levels of government, local universities and health organisations.
- Important role in improving the farm practices of local growers to be more sustainable and assisting them to have a viable income.
- An advocate for the retaining of high quality agricultural land in a city that is sprawling. Hawkesbury Harvest has provided input into the NSW Government’s Sub regional plans for the North West and the South West for Sydney.

The Potential of Hawkesbury Harvest



Source: Submission to the Standing Committee on State Development (see below)

For more information on Hawkesbury Harvest, see:

Knowd, Ian (2008) *Submission to the Metropolitan Strategy Sub regional Plans for the North and South West*.

http://hawkesburyharvest.com.au/imagesDB/news/MetroStratSubRegionalPlan_HawkesburyHarvestsubmission.pdf

Hawkesbury Harvest (n.d.) *Farm Gate Trail*.

<http://hawkesburyharvest.com.au/farmgate.asp>

Hawkesbury Harvest (n.d.) *Project Partners*.

<http://hawkesburyharvest.com.au/partners.asp>

Hawkesbury Harvest (2004) *Hawkesbury Harvest Business Plan*.

<http://hawkesburyharvest.com.au/history.asp>

Hawkesbury Harvest (2007) *Submission to the Standing Committee on State Development's Inquiry into Aspects of Agriculture in NSW*.

<http://hawkesburyharvest.com.au/news.asp?ID=477>

London Sustainable Food Hub

The *Healthy and Sustainable Food for London The Mayor's Food Strategy Summary* (2006) provides a strategic framework and action plan to provide London with healthy food, equitable access, increased enjoyment of the city's culturally diverse foods, while providing sustainable returns for those in the food chain. Ecologically, connection of local and regional growers with London markets provides safe, secure food supply, reduced import levels and a lower environmental footprint.



One of the actions of this report suggests (see p.18) research is undertaken into:

The feasibility of developing a secondary food hub that operates in parallel to the mainstream distribution network and enables smaller farms to share resources in order to access the London market. This research should take account of London's existing wholesale markets at New Covent Garden Market, Billingsgate, Smithfield, Spitalfields and Western International.

A second document, *London Sustainable Food Hub Opportunities for a sustainable food logistics centre in London* by Professor John Whitelegg (2005) explores the potential of such a food hub to facilitate a more sustainable food supply in London. A brief outline of the report follows below.

Economic, Environmental, Health & Social Context

An economic analysis of the London food sector in 2002 by Best Foot Forward (cited in Whitelegg 2005) found that:

- 6.9 million tonnes of food are consumed annually by 7.4 million people.
- The food sector comprises approx 60,000 food businesses, which equals 25 per cent of all London's businesses.
- This sector employs 10 per cent of London's workforce.
 - Food requires 41 per cent of London's natural capital.



Environmental issues include the transporting of food unsustainably, particularly by road and air, with the need to reduce traffic and greenhouse gases. Whitelegg (2005:1) perceptively comments that as a carbon tax will force producers towards greener transport options, it would therefore be

prudent to build into the food sector a degree of resilience to shifts of this kind, and to encourage infrastructure and supply chains that would suit a future in which carbon fuels will become increasingly expensive. An element of 're-location' of food supplies could help to reduce food miles, reduce the reliance of London's food supply on high use of transport fuel, increased local employment and strip out costs from the supply chain.

Source: Sustainweb

The Hub will seek to provide healthy and affordable food access for those in deprived areas of London through improved food supply infrastructure. The flow-on effect is improved social inclusion for these people.

Whitelegg (2005) summarises the central premise for creating the London Sustainable Food Hub as:

- Reducing the food sector's ecological footprint by re-engineering food supply, logistics and marketing.
- Increasing the commitment to the sustainability of the food supply system by improving local food operations and efficiency.

Vision

To provide and/or promote:

- A warehousing system that can accept, store, on-sell and distribute produce to both wholesale and retail consumers, reducing some burden from producers.
- A more sustainable transport system.
- A secure base for the development of food-related business initiatives.
- Increase in employment.
- Partnership between all those involved in food chain.
- Increase in consumption of local, organic and sustainably produced food (Whitelegg 2005).

Objectives

The aim of the Sustainable Food Hub, according to Whitelegg (2005:10) is to 'provide the necessary coordination for sustainably and locally produced food to reach food providers in the capital'. The targeted food providers are:

- Independent neighbourhood retails.
- Public sector caterers. For example, schools and hospitals.
- Food access groups.
- Restaurant.

Business plan

Several recommendations are made by Whitelegg (2005), including:

- The establishment of the Hub would be on a social enterprise basis. It is estimated that such a facility would cost £600,000 per year. This figure does not include logistics which is estimated to be no more than 20 per cent of the above figure.
- Supporting measures around brand image, a database, marketing, publicity and producer assistance would cost £300,000 per year.
- Overall costing estimate is £1,129,700 annually.
- Site could possibly be a brownfield area that is linked to disadvantage, that is eligible for grants and loans. Would like to have river access for transport alternative.
- Work with schools, hospitals and similar public institutions for local food procurement.

Conclusions

A comparison is made between the United Kingdom and other European countries that already have high quality healthy and affordable local food systems in place. It is noted that food systems in these countries have the following:

- A strong preference for regional foods, including mechanisms that guarantee the integrity of such foods.
- A politically shared vision to support small food sector businesses and local initiatives.
- A smaller level of dominance by large supermarket chains.

Whitelegg (2005) points out lessons to be learnt include:

- Political support is vital.
- Unconstrained market forces, supported by planning systems produce large shopping malls, supermarkets and supporting car parks which in turn damages local markets.

Barriers to progress include:

- Poor logistic systems, uncoordinated supply and information chain.
- Lack of dedicated infrastructure.
- Potential higher costs to consumers.

For more information on the London Sustainable Food Hub, visit:

<http://www.london.gov.uk/mayor/health/food/docs/food-strategy-summary.pdf>

http://www.lda.gov.uk/upload/pdf/sustain_food_Booklet.pdf

Bacchus Marsh Horticultural Area (Melbourne)

A prime example on the edge of Melbourne of what can be achieved with strong consistent state and locally supported planning scheme provisions on the urban fringe is the retention of the highly productive horticultural river flats at Bacchus Marsh. For three decades the Werribee River flats have been under pressure for rezoning and subdivision. The former Bacchus Marsh Shire Council and the current Moorabool Council have simply said no. A local industry variously estimated to be worth in the order of \$15m annually and employing 2-300 people (personal communication) exists alongside an urban area of about 17,000 people. This juxtaposition has existed for many years. It is highly valued by the urban community of Bacchus Marsh and the Moorabool Shire Council. The fact that the area is not in the metropolitan area and subject to the expansion of the urban growth boundary may well have been significant in retaining the area in production. Council has consistently 'protected' the area by maintaining its agricultural zoning and resisting applications for land use change and new development inconsistent with that purpose. The strong consistent position of the Council is reflected in land prices which much more equate with their productive rather than a speculative value which exists in many other areas. The substantive current threat to the horticultural production in the area is now the dramatic decline in the supply of irrigation water.

Far too many areas of productive agricultural land on the metropolitan fringe are simply seen as being 'land in waiting'. Viewed in that way the land will inevitably be lost to speculation, escalating land prices, sale of land to or options by land development companies prepared to hold land in the expectation that government will shift the growth boundary, or that farmers will be forced out by complaints and limitations on how they undertake their agricultural and horticultural pursuits.

Overall it appears that productive agricultural land, its use, the farmers that occupy such areas and the industries that are dependent on it are generally not valued by governments or government policy. Lack of any clear recognition and policy about the value of these areas has led to increasing uncertainty about the future of such areas. What has emerged is a 'zone of impermanence', the idea that such areas are simply in waiting to be converted to some other land

use. Defined 'permanent' urban growth boundaries that are held for planning horizons of 20 - 30 years are needed.

The Panel reviewing submissions to the new Municipal Strategic Statement, (Amendment C 34) which forms a key part of the Moorabool Planning Scheme, had to address the retention of productive agricultural land use in the context of a number of submissions that sought to convert productive agricultural land to other uses. The Panel recommended that there be no change to the boundary.

In respect to the issue of conflicting land uses the Panel stated *unless there is strategic logic to the location of the new interface and or a more sophisticated approach is adopted to planning the interface treatment, it will typically simply shift the location of land use conflict.*

The Panel endorsed the strategic directions to protect the productivity of agricultural land in the MSS as sound and consistent with state policy. The following excerpt from Panel comments is worth quoting at length:

Agriculture and horticulture are identified in the exhibited MSS as a critical element of the local economy that also supports tourism and contributes to the character and lifestyle appeal of the area. The proposed MSS has reinforced and strengthened the existing strategies to protect highly productive agricultural land and supports expansion of the sector.

The MSS strategy is to accommodate demand for rural living properties through planned, focussed rural living development where it does not compromise the long term agricultural productivity. The proposed MSS does not support fragmentation of productive holdings or the encroachment of uses with a residential focus which can seek to constrain farm operations and add to land management challenges. The MSS makes it clear that rezoning for residential development will not be supported if it encroaches into Bacchus Marsh's fertile horticultural areas.

Submissions sought additional development potential for their rural land on the basis that agricultural uses are not viable, particularly given recent drought conditions. Several submissions relating to land at the urban rural interface in Bacchus Marsh also highlighted the difficulty in managing conflict between inherently incompatible residential and intensive horticulture uses. In addition to meeting demand for either conventional or lifestyle housing options, it was also argued that smaller land holdings would be likely to result in better land management outcomes, as the owners of smaller holdings can apply resources generated off farm to re-vegetation and the management of weeds and pests. The Panel does not doubt submissions and evidence that there are substantial pressures on farm viability. The recent extreme and prolonged drought conditions have added another major challenge in the operation of farm businesses which are often also dealing with static or declining terms of trade, high capital costs with increasing costs of debt and escalating fuel costs. While the Panel is sympathetic to the difficult business conditions being experienced by farmers, it considers that the MSS has adopted a sound policy position of protecting the more productive land for continued agricultural use and avoiding further constraints on farming operations due to residential encroachment.

It is now widely recognised that water is a scarce resource. Strategic planning is required to determine the most effective use of the limited supply of water but this is a complex task that requires a rigorous evaluation of the range of implications beyond the scope of this Panel.

Marginal agricultural viability is a consideration but does not establish a sound justification for endorsing an alternative land use as the suitability of the land for an alternative use, costs to the community in providing infrastructure and ongoing services and implications for other uses in a locality must be taken into account. A laissez faire approach to development planning for lifestyle housing promotes dispersed residential development, whereas compact urban forms support efficient more cost effective delivery of infrastructure and services. Inflated property value expectations associated with anticipating some form of residential or 'lifestyle' development also undermines farm

viability. Arguments that residential development should be supported to resolve existing interface issues are unconvincing.

How does Victoria compare to global best-practice on food security?

There is a growing awareness of a number of widely alleged and perceived benefits of local food supplies in terms of building and supporting social capital and strengthening local communities (Biehler et al n.d., Enns et al 2008, Moreland Community Health Service Inc 2009). Added to these widely held benefits are the emerging evidence and information that local food supplies are a very significant but often overlooked element of the local economy (SGS Economics and Planning 2009). The totality of this picture and the integration of apparently widely diverse elements are not being documented and given a statistical and qualitative base.

There are some examples of great initiatives in food security in and around Melbourne, such as the Bacchus Marsh Horticultural Area, the reality is that Victoria is a long way off global best practice in food security as seen in parts of Europe and North America. The United Kingdom is a standout in terms of seeing the totality of issues in a holistic approach and realizing that it needs a whole of government approach. It has been suggested that when the UK realised that it was importing about 90% of its food that food security became central to government policy agenda. With food security on the agenda in the UK there is now growing concern and awareness about the security of food supplies, equitable access to quality food and the concentration of food outlets both economically and geographically (Cabinet Office 2008, Larsen et al 2008). Issues relating to the security of local food supplies are increasingly being linked to health problems, the environmental costs of transporting food, the environmental implications and consequences of the loss of productive agricultural land to urban and other permanent uses, and the environmental resource impacts in terms of water and energy use (Larsen et al 2008).

There is a need to establish the wider multi-discipline nature of local food supplies so as to stimulate and engage a broader policy debate and response (Pothukichi et al 2002, Parham 1999.). Issues need to be examined across a number of different and comparative spatial circumstances to determine what are the actual impacts and benefits of localised food supplies (Lang, Barling and Caraher 2004).

The roles of state and local government

A fundamental finding of the consultation program with local governments is that although there is a widespread acceptance, and in many cases a strong enthusiasm for local governments tackling the issue of food security. There is a heightened concern by Councils that the whole agenda around food has no 'home' in state government. It was of considerable concern for local government that if it put its hand up to assume some level of responsibility in regards to food security that by default the state will give it that responsibility without any resources. This concern is in some cases holding back local governments from tackling the issues. Some Councils who see a clear role and responsibility in respect to food security are shying away from because they have not been resourced for these roles and they see it as an open ended task that will continue to consume resources. In that environment there is a concern that state government will step back from any role or resourcing.

The need for ownership and direction

There are many aspects about food, in all its dimensions, where the relatively free reign of the market has served society and the household well. But it is increasingly evident that there are many elements associated with various aspects of food that require deliberate policy intervention by government to deliver outcomes that the market cannot achieve. The market does not deliver food as a commodity so that it encompasses and meets community concerns about issues such as supply, quality, health and sustainability. How can this not be a major item for governments at all levels?

Some will respond that governments are addressing these issues, and to be fair these matters are much higher on the agenda than they were in the past. But there is very little sign that there is any collective resolve and action across governments to engage with the community in addressing these issues. The range of issues associated with food is largely tackled within the silos of the separate roles and responsibilities of various government departments and their program and policy initiatives. The reality is that food, in all its aspects, cuts across many policy areas and the diverse roles of governments. A major rethink on food and how it is positioned in government is needed. In part this Paper is designed to prompt a new approach on this increasingly important issue.

Around Australia there is increasing interest in the provision of the capacity of buildings to support agriculture through such innovation as rooftop and walled gardens. In a Victorian context Kirsten Larsen has promoted some of these concepts under the title of 'food sensitive urban design' as a counterpoint to the concept of water sensitive urban design. Essentially all the principles are transferable between the two. Victorian planner and urban designer Jenny Donovan in a series of articles and drawings in recent editions of *Planning News* a publication of the Victorian Division of the Planning Institute of Australia has shown how urban agriculture can be implemented in the context of the land use planning system.

It is evident from these examples, and from others such as initiatives in cities like Portland Oregon, Madison and Milwaukee in Wisconsin all in the US that land use planning policy, practice and implementation can and does play a critical role in food production and access to food in all its dimensions. Planning systems in Australia and in Victoria have proven themselves slow to incorporate holistic policies about food into their relevant documents and regulations. Despite this situation the literature review and other recent work illustrate the increasing momentum of concern about all aspects of food. There is an increasing diversity of programs being implemented in Australia, and particularly overseas, within government, in communities and other interested organisations, in respect to food security, its links to the planning system and the important role that land use planning can play in assisting in food access and security.

Despite some leading edge initiatives in Victoria such as

- 'Go for Your Life',
- the leadership of organisations such as VicHealth and the VLGA,
- innovation and community engagements at places like the CERES project in Collingwood,
- the growth of the Slow Food Movement and Farmers Markets,
- the work of people like Stephanie Alexander in schools, Parks Victoria and Cultivating communities and
- a growing number of local governments who are seriously addressing food security, and
- the initiation of a Parliamentary Inquiry into Sustainable Development of Agribusiness in Outer Suburban Melbourne.

The reality is that in an overall policy sense the state of Victoria is now well behind the pace in dealing with the growing range of issues associated with food.

The formation of an Inter Departmental Committee on Food by Regional Development Victoria is a potentially productive start. At this stage there is no public awareness of this initiative and little information on its role and intended outcome.

Food security leadership overseas

Various initiatives from cities around the world, in some cases led by politicians such as high profile Mayors have brought issues to the fore. There has been an exponential growth in activities such as farmers markets, community supported agriculture, urban agriculture initiatives, community gardens and metropolitan strategies that are incorporating food and food security as core elements.

Melbourne is often compared to Vancouver, given that both regularly score at the top of world league tables on liveability. Vancouver is currently incorporating a food strategy into its metropolitan planning strategy. Mr. Johnny Carline, the Chief Administrative Officer of Metro Vancouver, admits that the rate of growth of interest and pressure for a food strategy has taken him and his organisation by surprise. He states that it is the widespread realisation by the metropolitan community that food relates to the liveability of the city and a secure food supply links to climate change action, health and the overall sustainability of the metropolitan area that has given it a momentum that is now unstoppable.

The Vancouver example comprises a coalition of forces and interests that is not yet recognizable in Melbourne or any other city in Australia. In Vancouver that coalition and its expression in the metropolitan land use strategy has become mainstream activity.

Food security leadership in Australia

Brisbane

In Brisbane, where the City Council has jurisdiction over a large proportion of the metropolitan area, the links between the sustainability of the city, its metro scale land use planning and food production appears to be more easily understood. Particularly given that Brisbane Council's approach is now positioned within a wider southeast Queensland regional land use and development strategy. 'Food in the City' is an explicit program of the Brisbane City Council. An examination is now being undertaken within Council of the barriers within the planning scheme to localized food production and to removing existing statutory impediments in the planning ordinances to urban agriculture initiatives and developments. Other measures are examining the opportunities to promote urban agriculture through the intention of specific zones, and reducing the required level of assessment for proposals. High level statements from the work around 'Food in the City' are being drafted for inclusion into the City's new Strategic Plan, which should be publicly advertised early in 2010. This is all being undertaken

within the framework of the final Regional Plan 2009-2031 for southeast Queensland, which has increased attention on securing and supporting sustainable food supplies in the most rapidly growing area of Australia.

Sydney

In Sydney the Food Fairness Alliance, was formed in 2005 to coordinate the efforts of rural producers, health professionals, community workers and community-based advocates active in developing a socially, economically and environmentally sustainable food system in the Sydney region. It has become a significant political force that is influencing government policy on food. Sydney for example has since 1998 had a *Strategic Plan for Sustainable Agriculture in the Sydney Region*. Even though the Plan was prepared under the auspices of the Agriculture Ministry the government's foreword to the plan makes it clear that it encompasses a wider agenda than a single purpose authority. The Foreword states that this Plan 'is a result of a whole of government and community approach to dealing with the important issue of determining the role of with the sustainable agriculture in the Sydney region and realizing the potential outcomes of that role'.

Western Australia

In Western Australia the government some years ago established the Department of Agriculture and Food. That government arrangement of portfolios and responsibilities promotes a new and expanded perspective on food. By comparison the tighter departmental perspectives in Victoria that separate food, health, agriculture and the economy do not support such an integrated view of the interrelationships between these elements. Despite the apparent decline in the impetus that this new departmental arrangement provided, a broader more expansive understanding of these issues is seen in the words of a recent speech given by Terry Redman the WA Minister of Agriculture:

I want to make it clear that when I talk about agriculture, I'm talking broadly about everyone involved in the agriculture and food industries –farm hands, fruit-pickers, chemical consultants, agronomists, stockmen, seed breeders, plant biologists, wine-makers, software developers, organic beef growers, butchers, bakers, goat cheese makers. In the developed world the relationship between food and health is leading to a growth in demand for healthy choices. Consumers are demanding more information about what they are eating and where it comes from. In many countries – and many regions within countries – food is more than just nutrition. It's a complete cultural experience. Issues like food-related diseases, food safety and integrity and environmental footprint are top of mind for these savvy consumers. At the other end of the scale, many organisations around the world are talking about the possibility of food shortages in coming years – particularly in our least developed countries. World population is projected to increase to 9 billion by the mid-21st century. Just to keep pace, food production must increase by over 50%. Chatham House researchers in the UK have warned that the global food system will come under increased pressure because of population growth, increased meat consumption, scarcity of energy, land, water and labour, as well as climate change.

An evaluation of departmental roles and functions in Victoria

In order to assist in the process of trying to identify which department in government could embrace responsibility for food security an initial evaluation was undertaken of the roles and functions of Victorian State Government Departments and Parliament. The table identifies key government departments and their roles and functions. It provides examples of initiatives by the departments related to food security and provides an initial evaluation of the relevance of the department to food security. The table evaluates the following departments; Education and Early Childhood

Development, Human Services, Innovation Industry and Regional Development, Planning and Community Development, Premier and Cabinet, Primary Industries, Sustainability and Environment, Transport, and the Parliament of Victoria primarily in respect to its Committees

The analysis identifies that a wide variety of government departments have a direct, active interest or a peripheral interest in food security issues in the full dimensions of the term but that no one single department has a direct and obvious close affinity with the range of issues. It depends whether food security is seen as a social justice issue, from a production or environmental perspective or from a land use planning and physical determinist perspective.

The table below identifies some key government departments and the Victorian Parliament and examples of their interest in food security and land use. It is designed to provide an initial evaluation of the apparent interest of these departments and Parliament. It is not meant to be comprehensive merely representational and it shows that the issues around food in relation to food security and the land for growing food touch a number of portfolios. It is also evident that the issues are multidimensional in terms of portfolio responsibilities but that there is no explicit obvious 'home' for the range of issues addressed in this report.

Government Department and Parliament	Roles/Functions	Examples of Initiatives Related to Food Security	<i>Initial Evaluation of Relevance of the Department to Food Security</i>
Education & Early Childhood Development	Education & Early Childhood Development	Partnerships with 'Go For Your Life' in: a) Healthy Start in Schools Grant Program b) Healthy Canteen Kit c) The Kitchen Garden Project d) Free Fruit Friday The Best Start Project: aims to improve the health, wellbeing, learning, development, and safety of all young Victorians School curriculum guidelines: Health & Physical Education	<i>Direct involvement in health aspects within one sector – children in the context of families and communities.</i>

Government Department and Parliament	Roles/Functions	Examples of Initiatives Related to Food Security	<i>Initial Evaluation of Relevance of the Department to Food Security</i>
Department of Human Services	<p>Children Youth & Families</p> <p>Disability Services</p> <p>Mental Health & Drugs</p> <p>Metropolitan Health & Aged Care Services</p> <p>Office of Housing</p> <p>Rural & Regional Health & Aged Care Services</p>	<p>The FoodSmart website: helps retailers and organisations develop their Food Safety Programs</p> <p>The Better Health Channel website: provides free health and medical information in easy to understand language</p> <p>The Best Start Project</p> <p>The Eat Well Victoria Partnership (2001)</p> <p>A National Food & Nutrition Monitoring and Surveillance System: a Framework and a Business Case (April 2006)</p> <p>Victorian Population Health Survey 2007</p> <p>Maternal and Child Health Services</p>	<p><i>The Health Department has an active interest in improving food security.</i></p> <p><i>Aged Care has an active interest in improving food security.</i></p> <p><i>Disability Services has a peripheral interest in improving food security.</i></p> <p><i>Mental Health Services has a peripheral interest in improving food security.</i></p>

Government Department and Parliament	Roles/Functions	Examples of Initiatives Related to Food Security	<i>Initial Evaluation of Relevance of the Department to Food Security</i>
Innovation Industry & Regional Development	<p>Industrial Relations Industry & Trade</p> <p>Information & Communication Technology Innovation</p> <p>Regional & Rural Development</p> <p>Skills & Workforce Participation</p> <p>Small Business</p> <p>Tourism & Major Events</p>	<p>BrandVictoria is an international marketing initiative to promote Victoria's export sectors, including tourism, arts and events. Melbourne is seen as a city for quality food experiences.</p> <p>Provides financial assistance, advice and networking opportunities in the agricultural and food (including food processing) industries.</p> <p>The Buy Locally Campaign in regional Victoria includes:</p> <ul style="list-style-type: none"> a) The Public sector procurement toolkit b) The Buy Locally charter c) Buy Locally local campaigns (subject to available funding). <p>The Farmers' Markets Program: funding for start up plans and costs as well as expansion of markets, based on sustainable economic benefits.</p> <p>The Smart Water Fund encourages water conservation and reduction and biosolids recycling projects for future urban, agricultural and environmental requirements.</p> <p>The Farm Business Improvement Program (FarmBis) provides funds to build management skills for farm businesses.</p>	<p><i>Direct interest in food markets from an economic basis. Sees markets pushing for cleaner products in the future.</i></p> <p><i>Tourism marketing relies extensively on Victoria's food production and Melbourne's marketing has a strong basis in food and restaurants.</i></p>

Government Department and Parliament	Roles/Functions	Examples of Initiatives Related to Food Security	<i>Initial Evaluation of Relevance of the Department to Food Security</i>
Department of Planning & Community Development	Aboriginal Affairs Assisting Multicultural Affairs Community Development Community Services Employment/Skills Local Government Multicultural Affairs Planning Senior Victorians Sport, Recreation & Youth Affairs Veterans' Affairs Women's Affairs	Seniors Speak Up 2008 Social Inclusion: the next step for a fairer Victoria (May 2007) The Western Region Integrated Health & Wellbeing Planning Project (October 2007) Green Wedge Management Plans Melbourne 2030 and Melbourne@5million Planning and Environment Act State Planning Policy Framework and Victoria Planning Provisions	<i>Active interest but peripheral given scope of portfolio</i>
Victorian State Premier & Cabinet	Arts Assisting the Premier on Veterans' Affairs Cabinet Secretary Premier Deputy Premier	Growing Victoria Together A Fairer Victoria Murray-Darling Basin Water Agreement	<i>Overall policies that can influence various aspects of food security, with a current emphasis on water security.</i> <i>Active interest but peripheral given scope of portfolio</i>
Department of Primary Industries	Agriculture, Food & Forestry Energy & Resources Fishing & Aquaculture Minerals & Petroleum Science, Research & Development Trade & Investment	The Food Victoria website Future Farming: Productive, Competitive, Sustainable (April 2008) The Animal Production Sciences Platform Land & Water Management	<i>Active interest</i>

Government Department and Parliament	Roles/Functions	Examples of Initiatives Related to Food Security	<i>Initial Evaluation of Relevance of the Department to Food Security</i>
Sustainability and Environment	Sustainable Development Fire Climate Change Forests & Ecosystems Public Land Water Resources	Victoria's Environmental Sustainability Framework (April 2005) Our Environment: Our Future and Environmental Sustainability Action Statement 2006 Learning to Live Sustainably Our Water: Our Future (2004)	<i>Active interest through the sustainability driver – healthy environment meets economic wellbeing.</i> <i>Natural resource management, particularly water.</i> <i>Active interest but peripheral given scope of portfolio</i>
<i>Parliament</i>	<i>Legislative Council Legislative Assembly Committees Manager of Government Business</i>	<i>Food Act 1984 Public Health & Wellbeing Act 2008 Environment & Natural Resources Committee's Inquiry into Sustainable Communities (June 2005) Family & Community Development Committee's Inquiry into Issues relating to the Development of Body Image among Young People & Associated Effects on their Health & Wellbeing (July 2005) Economic Development & Infrastructure Committee's report on the Inquiry into Mandatory Ethanol & Biofuel Targets in Victoria (7th Feb 2008) Outer Suburban/Interface Services &</i>	<i>Considerable number of recent and current inquiries relate to food security</i> Active Interest

		<p><i>Development Committee's Inquiry into Local Economic Development in Outer Suburban Melbourne (October 2008)</i></p> <p><i>Environment & Natural Resources Committee's Inquiry into Melbourne's Future Water Supply</i></p> <p><i>Outer Suburban/Interface Services & Development Committee's Inquiry into Sustainable Development of Agribusiness in Outer Melbourne</i></p>	
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The role of food in the economy

A major finding from the workshops and the literature review was that the economic significance of the production and consumption of food is little understood and documented. There is limited information and documentation about the relative economic importance of food and the role it plays in terms of employment and gross value added to the economy.

Understanding the economic significance of food

The weakest area of knowledge in this whole topic is the economic role and the jobs associated with localised food supplies specifically but also about food in general. The economic importance of food in all its aspects is not widely known and documented at the local, regional or wider level. This has prompted us, as part of the VLGA project, to commission some specific research from a well-credentialed economic consultancy to put some further data together on the economic significance of a localised food system for Melbourne. Research initiatives funded by VicHealth are further building on the economic role, and indeed on the local health, social and environmental impacts of localised food supplies through a number of small local case studies of areas where a localised food supply is available. Preliminary work undertaken as part of the VLGA project has strengthened the view that substantive localised case studies will be a productive source of information for building a picture about the importance and role of localized food supplies.

The role of the food industry in Victoria's economy

Detailed information on how the food industry relates to many sectors of the economy was found to be inadequate. Consequently the project directed resources to a analysis of the role the food industry plays in the Victoria economy. There is limited understanding of how the food industry is present in so many sectors of the economy; in production and processing of course, and as a major component of the retail sector. But the food industry is a core component in areas such as transport and distribution, tourism and hospitality, in health services, in marketing and so on. SGS Economics and Planning were commissioned to undertake a specific analysis of the economic role of the food industry for Victoria as a whole and for Melbourne. Their full report is an appendix to this Report. In summary they found that the food sector with 15% is the second highest sector of the Victorian economy in terms of gross value added. SGS identified that:

The activities related to the production of food cut across a wide range of different industries. The growing and cultivation of food is merely the start of the process. Next come the processing and packaging and distribution to retailers. All of which requires significant input in terms of transportation. Some retailers such as restaurants undertake significant processing of the food before it is served to the final consumer. As this cuts across a number of industries, extracting the economic contribution of food to the economy from published statistics is not a straightforward process. However within the National Accounts framework there is the flexibility to produce a set of economic accounts which cut across different industries, via the use of a Satellite Account. Satellite Account allow selected topics to be examined while maintaining the concepts and structures of the core National Accounts. Using this method a Food Satellite Account for Victoria and Melbourne has been developed by SGSEconomics & Planning. The data used to construct the Food Satellite Account is drawn from a wide range of Australian Bureau of Statistics data sources.

In 2007-08, the Food sector as measured by the Food Satellite Account represented 15.0% (\$36.2 billion) of Victoria's Gross value added. In Melbourne, the Food Satellite Account represented 12.3% (\$21.2 billion) of Melbourne's Gross value added. In 2007-08, the Food industry employed 366,000 people in Victoria, of which 210,000 were employed in Melbourne.

The result from the Food Satellite Account indicates that the Food sector is one of the largest sectors when compared to the traditional industries. The largest industries in terms of Gross value added are Property and Business services (15.5%) and Manufacturing (14.2%). While in terms of employment Retail (14.3%), Manufacturing (12.8%) and Property and Business services (12.5%) are the largest industries. In 2006-07 (which is the latest available year), Tourism contributed \$6.9 billion (3.0%) to Victoria's Gross value added and was directly responsible for generating 102,179 (4.0%) jobs in the Victorian economy.

Some caution should be made when comparing the Food Satellite Account estimates to traditional industries. For example, 20% of Manufacturing is Food Manufacturing which is included in the Food Satellite Account. Also there is overlap in both the Tourism and Food Satellite Accounts for the Accommodation, cafes and restaurants industry. Spending on food and beverage is a necessary activity for all travellers. However, for some visitors, the decision to travel to Victoria, and the choice of activities that the visitor pursues are determined by the availability of particular food and dining experiences. The role of destination marketing to raise the awareness of these food and dining experiences and thus leverage the potential visitor's interest in visiting Melbourne and Regional Victoria is well documented.

Food has an integral role in destination marketing for the reason that it is closely associated with national and regional identity. As such, while it is difficult to calculate the value of the effect, a sustainable high quality food production and food service industry generates visitation and increases in total tourism receipts.

It is clear that while exact figures would require significant further work, in a broad sense food is a major component of the economy and a considerable driver in terms of jobs and economic activity. Its role has been understated or not recognised because it appears in so many aspects of the workforce and various employment sectors. Loss of agricultural capacity has potential ramifications for the economy and particularly in a metropolitan area such as Melbourne. Conversely securing the future of agriculture has the capacity to generate further employment and economic investment.

Conclusion and recommendations

The integration of food security and land use planning in local government policy

In summary the overall finding in respect to the specific focus of the project - “understand the extent to which Victorian Local Governments are integrating land-use and community food security objectives” is that there is very little integration.

There is an increasing connection being made in a number of local governments. Some people in some local governments are advocating that there is a link but they are few. They are much more likely to be persons with responsibilities, roles and advocacy around food security than persons involved in land use planning. Any link, let alone an integrated relationship, between the two is generally seen as too tenuous. Particularly those with responsibilities and roles in land use planning find that there is no legal or statutory base or requirement to address food security. Suggestions that preserving productive agricultural land for food security or ensuring that the urban form and land use pattern provide for convenient access to fresh food retail outlets is seen as outside the realm of the land use planning system. Practitioners in land use planning refer to the fact that there is no basis in the State’ strategic and policy framework for such a link and that there are no specific statutory requirements within which planning has to operate in respect to such matters.

The need for new approaches

Turning to the wider agenda and question, is there a link and relationship between food, food security, health, land use planning, and jobs? There is increasing evidence that there is a vital association between these issues, and a growing recognition that the strategic and statutory planning system should take account of this link. Mooted changes to the objectives of planning in the Planning and Environment Act will further strengthen this link.

The concept that these elements are ‘integrated’ though is a different level and considerably more research is needed to establish the need for that, to explore the potential under the existing arrangements and particularly what is the actual role for local government. This is not just a question for local government and there is great concern that if local government explores the integration too far then local government will somehow be seen as accepting responsibility for it. When in reality local government needs wider acceptance by national and state government of the need for an integrated approach and policy response that clearly identifies the limits of local government’s role and capacity.

Increasingly food security needs to be seen in a wider context involving structural issues in the production of food, in the understanding of the food economy, in land use policies, in the links between health and land use and in local and regional economic development strategies. However it a finding of this project that such a context does not exist in any comprehensive sense generally or in relation to local government in Victoria. The concept of re-establishing local and regional food systems is gathering pace. There is increasing recognition that long-term solutions are the most sustainable (Miewald et al. 2007). Such self-reliance heavily depends upon a partnership of local action and government policies. In particular, local government with its close relationships with the community and through its role in land use planning is involved at the grass roots level and can provide a significant role in support, facilitation and leadership so as to support the provision of greater food security. Local government must though be able to undertake this role within the framework of clear state government policy and direction that accepts and embraces the role of the state government and its acceptance that it has a defined role that must be funded and supported.

The literature review and this report put forward that there is a need for a paradigm shift in the way in which policy is addressed in respect to food, food security, food production, health, land use planning and employment and jobs in the food sector. Essentially this involves an overwhelming need to shift from a 'productivist' model to an ecological – health model. This project strongly endorses such a shift.

Outcomes and recommendations

Outcomes

1. A heightened awareness and understanding of the links between land use planning and community food security and the potential for a more integrated approach.
2. A heightened awareness and understanding in the community at all levels and sectors that food in all its dimensions, health, land use planning and jobs are linked and that a continuing failure to make that link is a recurring cost to government, the community, families and individuals.
3. A greater realisation that concerted action is needed at the state level to address and own a suite of issues around community food security that can also be linked to the continuing action of local governments.

Recommendations

An effective action program on food security and land use planning that would begin to meet standards on global best practice necessitates the following measures:

1. A state government department needs to be assigned responsibility for community food security. A unit needs to be established within that department to provide a focus for research, policy and a suite of programs to address community food security and to liaise with other relevant departments, agencies and local governments to document the relationships between food, health, land use planning and jobs.
2. That failing a government department being assigned specific responsibility as in (1) above that the task be given to a body or organisation that can embrace a range of interlinked perspectives around community food security.
3. That one of the first steps for state government in addressing community food security is to establish a clear accord with local government which will identify, establish and agree on the respective roles and responsibilities and funding initiatives between the two levels. That with the support of state government groups of local governments be encouraged to undertake regional audits of food, health, land use planning and jobs
4. That the State's land use planning system be amended to include:
 - Increased focus on health and community food security, primarily through amendments to the Planning and Environment Act so as to specifically include health outcomes in the objectives. This would be facilitated if the reference to objectives Response Paper prepared by the Department of Planning and Community Development is taken through to legislative changes. There is concern in some quarters that 'food security' is not explicitly referred to and that the reference to health is ambiguous.

- Additions in the State Planning Policy Framework (SPPF) so as to link the retention of productive agricultural land to community food security.
 - Requirements that the SPPF the design of urban areas require the retention of productive agricultural land, and specifically support the provision of local food systems and supplies.
 - A new zone be introduced in the Victoria Planning Provisions that specifically provides for urban agriculture.
5. That the VLGA further develop and facilitate a network of practitioners in local government, research bodies, departments and agencies who link land use planning and community food security
 6. Specifically in relation to this report that the VLGA assist in facilitating meetings with key Ministers, departments and agencies to raise the profile of the links between food, health, land use planning and jobs and that a workshop be held to discuss the findings of this project and its proposed actions and initiatives.
 7. The findings and proposed actions and initiatives in this project report be suitably disseminated and publicised.

In summary this Project supports and advocates a fundamental shift in the way in which community food security and its links to land use planning are addressed.

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