

A vibrant display of fresh produce, including several ears of yellow corn, a bunch of red chard, and various green leafy vegetables, arranged in a market-style display.

Gastronomic planning policy

planning for food in Sydney

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Thesis abstract

Food plays a vital role in the functioning of cities. Food allows people to express themselves socially and religiously, whilst also enriching cities with vibrant food cultures and convivial urban spaces. The built environment has a significant impact upon people's interaction with food. Planners should also be aware of their influence on food systems and the need to proactively work towards improving them. Although planning has historically overlooked food and nutrition matters, the present climate is perfect for bringing these issues into the spotlight. A focus on gastronomic planning policy is highly pertinent because of the growing prevalence of diet-related conditions affecting Australian urban residents such as obesity and type II diabetes, as well as increasing consumer awareness of issues such as how and where food is produced. This thesis examines the extent to which the NSW State Government and local councils are planning for food and healthy eating environments in the Sydney region. The Hawkesbury Harvest and Penrith Food Project are specific foci as two strategies which recognise the need to plan for food in Sydney. The thesis concludes by identifying improvements within the NSW planning system that are required to better support healthy eating environments.

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Chapter 1

The importance of food in creating healthy cities



Fruit shop, Marrickville, NSW

Introduction

There has never been a better time to discuss the importance of planning for urban food and nutrition systems. Instances of serious chronic diseases are becoming more prevalent within cities of developed nations, and urban planning has an important role to play in addressing these health problems. Heightened consumer awareness of issues such as provenance (how and where foods are produced) and food miles (the distance that a certain product has travelled from the point of production to consumption), as well as a government that is becoming more involved with food system issues, has also contributed to this climate.

This chapter sets the scene for the discussion of planning for food systems. It highlights the need to focus on food and nutrition as part of efforts to achieve healthy cities, and outlines the specific aims that this thesis seeks to achieve. The research methodology used for this thesis is also described.

Health epidemics in cities

The study of relationships between food systems and urban planning is increasingly relevant as a result of the growing prevalence of diet related illnesses affecting cities around the world. A growing body of epidemiological research indicates that serious diet related conditions such as obesity, type II diabetes, hypertension, heart disease, cancers, and depression are becoming increasingly common within urban populations. These human health conditions are so widespread that the life expectancy of the world's population is expected to decline for the first time in one thousand years (Maley and Todd 2005). The fact that more people are now living in cities than in rural areas than ever before (United Nations Estimates in Capon 2007a, 658), further complicates the issue. This has also contributed to the growing interest into factors that influence the health of city residents.

Australia's city residents, who make up approximately 90% of the country's population (Capon 2007b, 1), are greatly affected by these modern diseases and conditions. It was recently claimed that Australia is now the world's 'fattest' nation (AAP 2008), as more than half of adults are either overweight

or obese. Roughly a quarter of all school age children also fit into this category (Gebel et al. 2005). Being obese has implications for both physical and mental health; it can “destroy self-esteem, lead to social discrimination and contribute towards mental illness” (Australia 2003, 2). High obesity rates are troubling as this is frequently a precursor to serious chronic conditions such as high blood pressure, some forms of cancers and type II diabetes. Diabetes is now so common that in some Sydney local government areas such as Pittwater and Waverley, almost one in every three residents has the condition (Hall 2008, 30). Diabetes Australia-NSW estimates that the number of people being diagnosed with diabetes has climbed by 120% since 2000 (Hall 2008). In light of these startling statistics, it is not surprising that Australian medical institutions are acting to mitigate these serious conditions. In August of this year the Westmead Children’s Hospital in Sydney became “possibly the first [hospital] in the world to appoint a doctor dedicated to treating overweight children” (Benson 2008, 1) in an attempt to counter the obesity epidemic.

These serious and chronic conditions are strongly linked to physical inactivity and poor nutrition, which are both increasingly common in Australian lifestyles. People who live sedentary lifestyles characterised by physical inactivity and unhealthy food choices are more likely to be overweight, experience a stroke, and develop heart disease or cancer. In Australia, physical inactivity contributes to the deaths of approximately 8000 people per year and is the second most preventable cause of illness and premature death, second only to tobacco smoking (PCAL 2007, 4). If these trends continue it is expected that obesity will actually surpass smoking as the leading cause of chronic disease in Australia (Gebel et al. 2005).

The economic costs of physical inactivity and associated diseases are enormous. It has been estimated that the direct health care costs attributable to chronic conditions such as heart disease, stroke and cancer in Australia are in excess of \$15 billion per year (PCAL 2007, 2). One source has observed a 44% rise in expensive pathology tests being conducted due to an increase of suspected cases of type II diabetes (BicycleNSW 2008). However, the indirect

costs are far more difficult to gauge. For instance, measuring losses in employee productivity or time spent away from work that occurs as a result of these types of conditions is a very difficult task.

Urban life and the ‘nutrition transition’

It is fair to say that the way we live in cities today has contributed to these concerning health trends. Modern urban life characterised by “sedentariness, excess food intake, reliance on cars for transport, a high level of exposure to media and marketing messages, and a consumer culture” (Capon 2007b, 658). City environments are “hymns to hyper-consumption” (Robotham and Nixon 2006, 2) that encourage residents to live unhealthy lifestyles and make poor nutritional decisions. Urban sprawl has contributed to this decline in public health, as it encourages an over-reliance on the automobile for travel, as opposed to more physically active forms of transport such as walking or cycling (Frumkin 2002). The development of regional shopping centres that are characterised by sites located outside of established town centres and large car parking facilities also serve to perpetuate this problem. Many fast food chains are also designed to cater for the automobile by means of drive-thru facilities and prompt service. This specific catering to drivers has been dubbed ‘car cuisine’, because it “allows the stomach to be ‘filled up’ in the same way as the car” (Parham 1992, 27).

Since the 1970s there has been a gradual change in the global diet towards unhealthy foods and over-nutrition (Dixon and Capon 2007, Dixon et al. 2007). This ‘nutrition transition’ is typified by a shift towards ‘western-style diets’ that are energy dense, high in saturated fat, sugar, salt, refined carbohydrates, large servings of meat, dairy products and alcohol whilst also lacking in vegetables, legumes, dietary fibre and complex carbohydrates (Capon and Dixon 2007, Dixon et al. 2007, Story et al. 2008). Diets of this nature are major contributors to the development of the chronic diseases that are affecting the cities of developed countries around the world.

In Australia, less than half the population eats the recommended daily intake of fruit and vegetable, which is at least four serves for children and seven

serves for adults (NSWHealth 2004, 14). In NSW, almost half of the adult population (aged 12 years of age or older) consume less than the recommended amount of fruit, and more than half consume less than the recommended amount of vegetables. Alarming, a third of all vegetable consumption is made up of just potato, including hot chips (NSWHealth 2004, 14). It is estimated that dietary factors are responsible for between 7-20% of the total cost of chronic disease in Australia (Australian Chronic Disease Prevention Alliance quoted in VicHealth 2005). Approximately 3% of the total burden of disease and disability is directly attributable to the population's inadequate consumption of fruit and vegetables. On the other hand, increasing consumption of healthy and nutritious foods can help to prevent chronic diseases such as type II diabetes, some forms of cancer and heart disease (NSWHealth 2004, 14).

It is important to remember that the prevalence of chronic diseases and diet related conditions has not always been so extensive, and is therefore attributable to the nature of modern life and urban living. For instance, fewer than 50 years ago in Australia "large numbers of suburban residents produced vegetables, fruit and eggs in their backyards: the most accessible and affordable food source we know" (Dixon and Capon 2007, 210). Sydney was once host to a number of large gardens (both decorative and functional) that provided city residents with opportunities for recreation and growing fruit and vegetables, such as the gardens of Sydney's first Government House and Annandale Estate (Morris 2008). Unfortunately, many of these gardens were lost to the expansion of Sydney many years ago.

Interestingly, there has been a rebellion of sorts in recent times against processed foods, heat-and-serve meals and imported produce that are typical of modern 'westernised diets'. The 'slow food movement', which attempts to counter the fast pace and unhealthy nature of conventional food systems, is gaining momentum around the world. The movement, which initially began in Italy, "favours the gourmet over the glutton, enticing eaters to slow down, enjoy the company, taste their food" (Paxson 2005, 14). Consumers in general are also becoming increasingly mindful of food system issues such as

food provenance, food miles, seasonality, food labelling and the nutritional value of the foods they are consuming. A demonstration of this alternative food movement in Sydney is 'Food for the Future', a community initiative that was established to improve the supply of fresh fruit and vegetables to Chippendale residents and to improve linkages with agricultural suppliers in the Hawkesbury region. The initiative has established community gardens, host a Hawkesbury growers fair, encourage local food production, and sends trucks of local food wastes away to be composted rather than sent to the rubbish tips. These examples illustrate that consumers are increasingly aware of their own consumption and are eager to strengthen and enhance food systems both locally and globally. As Elizabeth Farrelly notes, "people, it seems, are way ahead of the government on this" (Farrelly 2008, 11).

Planning responses to health epidemics

There is an "umbilical link between environmental conditions and human health" (Barton 2005, 281), and as shapers and sculptors of the built environment, planners have a substantial influence upon the physical and mental wellbeing of city residents. It has even been said that health and urban planning are so intertwined that they are "long term bed-fellows" (Barton 2005, 281), and in fact the origins of the planning profession are rooted in public health and concern for the well being of residents of urban environments. Land use planning principles were initially employed in industrial cities in the late nineteenth century in order to divide dirty, odorous and unhealthy industrial land uses from residential localities by employing codes for building form and street layout (Barton 2003, Thompson and Gallico 2005). This relationship between urban planning and the human condition was confirmed in hallmark research conducted by Barton and Tsourou which found that the environment (e.g. the built environment and urban form) is a major determinant of health (Barton and Tsourou 2000). The planning profession's ability to influence the health and well being of urban residents is being called upon once again to reduce the effect of serious health epidemics affecting cities.

The 'healthy planning movement' has emerged in response to these health challenges, along with a growing realisation that health policy is not solely a matter for health professionals (Barton and Tsourou 2000). The World Health Organisation laid the foundations of the healthy planning movement with the *Ottawa Charter for Health Promotion*. This put forward a series of comprehensive principles aimed at addressing the problems facing modern urban environments and working towards healthier populations (WHO 2006). Inter-governmental collaboration, social equity and public health are at the centre of these principles, as is the notion that the built environment has a complex and multifaceted effect on the health of the people who inhabit it. Healthy planning encourages planners to be conscious of the ways that their everyday practices, such as land use planning and dealing with development applications, affect people's health both physically and mentally. Interactions between people and food are very closely linked with health, and it is therefore crucial that planners understand the ways in which their profession influences dietary behaviour.

Anthony Capon, a strong contributor to the field of healthy planning, stresses the importance of planning for healthy food choices and sustainable food production as part of comprehensive strategies to achieve healthy cities (Capon 2007b). Capon calls for governments to stop building on fertile agricultural lands, to dismantle the dominance of centralised shopping centres, and to encourage a vibrant food culture throughout the city. Most notably, he considers that there is a need for local food policies to be co-ordinated and implemented by all levels of government in order to improve people's access to food (Capon 2007b). It is these types of local food policies that are the focus of this thesis.

Another strategy that promotes the importance of supporting healthy eating is Thompson and McCue's 'CHESS principles for healthy environments'. These encompass connected environments, healthy eating, safe and sustainable environments for health. The paper, which was presented to the National Planning Institute of Australia conference in Sydney, highlights the need for planners to support what is referred to as 'healthy eating environments',

whereby individuals have access to a variety of fresh foods that are culturally appropriate, nutritional, tasty, sustainable and affordable (Thompson and McCue 2008). The term 'healthy eating environments' encapsulates a variety of concepts that are at the heart of the 'planning for food' discussion, such as food access, equity, quality, and sustainability. Consequently, this term is employed throughout this thesis in the discussion of planning, food systems and local food strategies.

Government intervention and strategies for healthy cities

Australia's Federal, state and local governments have also recognised that chronic illnesses, such as obesity and type II diabetes, are placing a significant health and financial burden upon our populations, and have begun to seriously invest in addressing these modern challenges. Conventional governmental approaches are typically focussed on promoting active lifestyles and increasing the public's participation in physical activity, such as the establishment of the NSW Premier's Council for Active Living. However in recent times there has been a sharpened focus on investigating the influence that food and diet have on obesity rates. For example, a \$4.76 million advertising campaign titled 'Go for 2&5' was launched by the Australian Government in 2005 to address the country's overweight and obesity problems by encouraging an increase in the population's consumption of fruit and vegetables (see www.gofor2and5.com.au). This strategy follows the notion that there are substantial health benefits to be gained from increasing the population's consumption of fruit and vegetables, even by only a small amount.

In January of this year a public enquiry was held by the Australian Competition and Consumer Commission into the competitiveness of retail prices for standard groceries as the request of the Assistant Treasurer and Minister for Competition Policy & Consumer Affairs. The purpose of the inquiry was to establish whether increasing grocery prices are a result of a lack of competition between small retailers and the major supermarket chains such as Coles and Woolworths (Australian Competition and Consumer Commission 2008). Although the ACCC did not identify any fundamental problems with the

grocery supply chain, the enquiry demonstrates the topical nature of food issues at this point in time. The recent establishment of the Australian Government's GROCERYchoice website (www.grocerychoice.gov.au), which publishes the price of a typical grocery basket purchased from major supermarkets across the country on a monthly basis, also demonstrates that food and nutrition matters are on the minds of politicians and the Australian community (Commonwealth of Australia 2008b).

Urban planners have recently been invited to inform the Federal Government appointed taskforce charged with developing a National Preventative Health Strategy. The Preventative Health Taskforce will provide advice to the Federal Government on strategies for reducing the rates of obesity, tobacco smoking and excessive alcohol consumption (Commonwealth of Australia 2008c). It is encouraging to see that the health epidemics affecting urban populations are a national priority, and that urban planners have been recognised as having a pivotal role to play in addressing them. The multi-disciplinary approach taken by the Preventative Health Taskforce reflects the thinking of Barton and Tsourou (2000, 7) that health is no longer a matter for health professionals alone; it should be a consideration for a wide variety of vocations, including urban planning.

Thesis aims

Literature on the relationship between urban planning and food systems indicates that urban planning has overlooked the importance of urban food and nutrition systems. This thesis uses this theoretical perspective to consider the way food is planned for in the Sydney metropolitan area. It focuses on the way local councils and the State Government can become more involved in food system issues in Sydney, through the examination of international and Sydney-based gastronomic policies. The following chapters compare and contrast two local food strategies, the Hawkesbury Harvest and the Penrith Food Project, in order to study the issues they raise in light of scholarly research on the matter. The thesis critically assesses the quality and scope of these local food strategies, and comments on the existence of similar strategies across the Sydney metropolitan area.

The specific aims of this thesis are to:

- Explore the planning profession's interaction with urban food and nutrition systems;
- Examine the way that the NSW State and local governments have been involved in planning for healthy eating environments in the Sydney region;
- Establish the prevalence of 'local food strategies' in the Sydney metropolitan region; and
- Identify improvements that are required to better support healthy eating environments within the NSW planning system.

Research methods

A number of research methods were employed to meet the aims of this thesis. These methods have been illustrated in Figure 1 (overleaf). Firstly, the relevant literature was reviewed to provide a background of scholarly writing on planning for food systems. Government publications and statistical information were also reviewed, including *Australian Food Statistics 2007* (Australian Government Department of Agriculture Fisheries and Forestry 2008) and *Public Health in NSW Local Government* (Local Government and Shires Associations of NSW 2005). This review highlights the need for planners to be involved in community food systems and the importance of local food strategies.

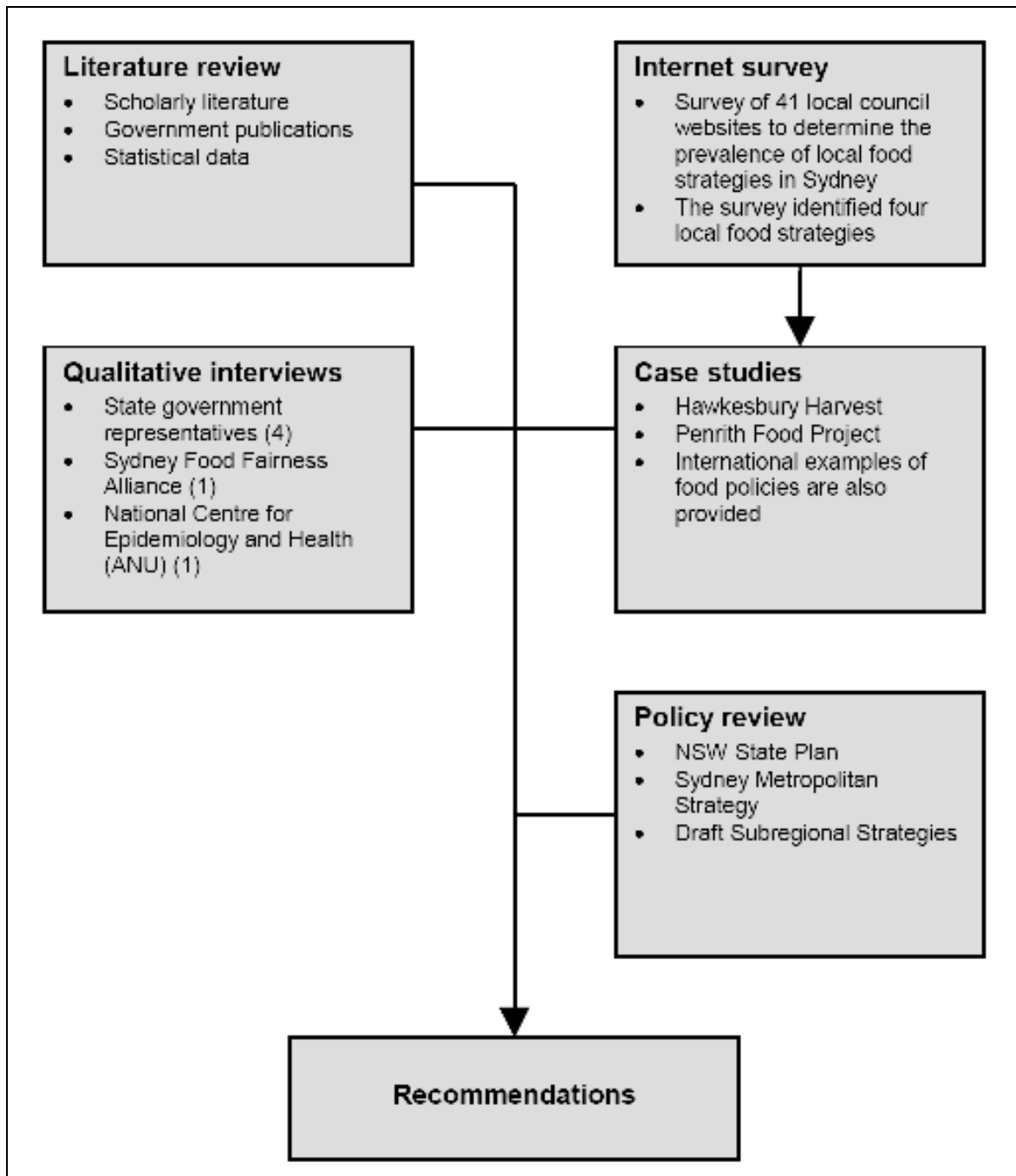


Figure 1: Methodology concept map (Author 2008)

Secondly, an internet survey was undertaken on 41 local council websites to establish the prevalence of local food strategies across the Sydney Region. The survey was conducted using the premise that most local councils in NSW, and particularly in Sydney, now make their key policy documents available

online for easy public access. The survey identified a total of four local food strategies in the Sydney region, indicating that efforts to plan for food in Sydney have been patchy and uncoordinated. A copy of the survey template and results has been included in the appendices of this document.

Thirdly, two local food strategies were selected for further analysis from the four strategies identified by the internet survey, namely the Hawkesbury Harvest and the Penrith Food Project. These local food strategies were selected as case studies because they are innovative strategies that demonstrate a range of approaches to planning for food systems in Sydney.

Fourthly, a total of six qualitative interviews were conducted in order to gain a deeper understanding of the way food is planned for in Sydney. The interviewees were selected for either their involvement in the creation of a Sydney based local food strategy, their knowledge of food system issues in Sydney, or their role as coordinators of State planning policies. The majority of interviewees were manager level representatives of State Government agencies such as the Department of Planning and the Department of Primary Industries, who had an adequate understanding of the NSW planning system. The variety of disciplines interviewed for this thesis reflects the multi-disciplinary nature of health and nutritional issues. Further information regarding the interviewees, including the reasons they were interviewed, has been provided at Table 1.

Ethics approval was granted for this research by the University of New South Wales Human Research Ethics Advisory Panel (approval number 85029). The interviews were audio taped using a digital recording device, and transcribed at a later date. An interviewee from the NSW Department of Planning who was interviewed for this thesis chose to remain anonymous, and has been referred to throughout this thesis as 'Department of Planning representative'. An interview was requested with a representative of the NSW Department of Health, however the Department preferred to respond in writing due to the absence of a staff member who could to respond to each of the interview questions. The major themes and key quotations that were recorded during

the interviews have been integrated into the following chapters to add depth to the analysis of the Hawkesbury Harvest and Penrith Food Project and inform the recommendations of this thesis.

Finally, a policy review was undertaken to establish whether or not the NSW planning system is providing adequate support for the creation of local food strategies in Sydney. The key documents assessed were the *NSW State Plan*, the *Sydney Metropolitan Strategy: City of Cities: A Plan for Sydney's Future*, and the Department of Planning's draft subregional strategies. These policies have been selected because they are the key strategic planning instruments that influence planning for food in Sydney.

This thesis concludes by bringing together the findings of the literature review, internet survey, qualitative interviews, case study analysis and policy review to establish a series of policy recommendations. These recommendations emphasise the need to plan for food and nutrition systems, and implement local food strategies such as the Hawkesbury Harvest and Penrith Food Project throughout Sydney.

Name	Position	Organisation	Research method	Reasons for requesting interview
Department of Planning representative (anonymous)	(Anonymous)	NSW Department of Planning	Qualitative interview (45 minutes)	<ul style="list-style-type: none"> • Knowledge of State planning policies • Proactive involvement in food system issues
David Mason	Leader, Urban Agriculture	NSW Department of Primary Industries	Qualitative interview (1 hour, 15 minutes)	<ul style="list-style-type: none"> • Involvement in the Hawkesbury Harvest • Expertise in urban agriculture and food related issues
Peter McCue	Manager	NSW Premier's Council for Active Living (PCAL)	Qualitative interview (1 hour, 5 minutes)	<ul style="list-style-type: none"> • Experience with collaborating with a range of government agencies through PCAL
Elizabeth Millen	Program Manger, Social Determinants of Health Program, Health Promotion	Sydney South West Area Health Service (and the Sydney Food Fairness Alliance)	Qualitative interview (1 hour)	<ul style="list-style-type: none"> • Promoting food security and food fairness in Sydney • Knowledge of health issues
Anthony Capon	National Centre for Epidemiology and Health	Australian National University	Qualitative interview (2 hours, 50 minutes)	<ul style="list-style-type: none"> • Scholarly involvement in and food system issues • Involvement in the Penrith Food Project
Liz Develin (co-ordinated response)	Director, Centre for Health Advancement	NSW Department of Health	Written communication (letter)	<ul style="list-style-type: none"> • Expertise in health and nutritional issues

Table 1: Description of interviewees and reasons they were interviewed

Chapter 2

Literature Review: Placing food systems on the planning agenda



Introduction

Food is a fundamental part of our existence. It sustains human life, and allows people to express themselves socially, culturally and religiously. Food and nutrition are also significant determinants of physical and mental health (NSWHealth 2004). With the prominence of the obesity epidemic and other serious health conditions continuing to rise, nutrition has come to the fore as a major modifiable determinant of chronic diseases (WHO 2003, 2). Yet of the four basic essentials required to sustain human life (i.e. air, water, shelter and food), food and nutrition have historically been ignored by urban planners (Kaufman et al. 2007, 1). Planners have instead tended to focus on environmental systems, transport and housing (Pothukuchi and Kaufman 2000, 113).

This chapter reviews the scholarly literature on planning for urban food systems and highlights its role as an important component of a functioning city (Pothukuchi and Kaufman 2000). The term 'food system' encompasses a broad spectrum of activities that connect food production, distribution, preparation, consumption and disposal. It includes the growing of produce, the marketing of foodstuffs, the cooking and eating of meals, and the disposal of food scraps (Parham 2007, Pothukuchi and Kaufman 2000). This chapter also exposes the lack of attention food systems have received from planners in the past. The chapter argues that food issues should be placed high upon planning and political agendas. It concludes by identifying local food strategies as important tools for planners to increase their involvement in food issues to assist in overcoming the modern day epidemics affecting cities around the world.

A comment on food systems literature

Scholarly interest in the interaction between urban planning and food systems is relatively new and consequently the literature on this topic is less than comprehensive. The literature cited here varies in scope from the analysis of the small-scale, such as the relationship between the location of shopping centers and resident's diets (Morland et al. 2002), to broad scale policy

documents such as the American Planning Association's Community and Regional Food Planning Policy Guide (Kaufman et al. 2007). In this sense, bringing together such varied literary sources to form an understanding of the way the built environment interacts with food is challenging.

Yet new and interesting research on planning for food is still being produced. As Hammer (2004, 426) notes, "a rich national and international community food system research agenda is emerging" that is allowing planners to gain a better understanding of the ways in which the urban environment affects food and nutrition. This serves to highlight the topical nature of this thesis, and the contribution it makes to the growing field of food systems research.

The literature selected for this review is multi-disciplinary, with articles being sourced from planning journals and medical journals. These include the *Urban Futures Journal*, the *NSW Public Health Bulletin* and the *American Journal of Preventative Medicine*. Special issues published on the topic of planning for food systems, for example *Progressive Planning* (Winter 2004) and the *Journal of Planning Education and Research* (Summer 2004), also have a strong presence in this chapter.

To order the range of literature available on this topic, a conceptual model was formed (see Figure 2). The literature was sorted under three main subheadings according to their subject: social, environmental and economic. This is similar to the 'triple bottom line' reporting system that is used by planning organisations such as Landcom to evaluate large-scale development projects (see <http://www.landcom.com.au/tblprogramme.aspx> for further detail) (Landcom 2002).

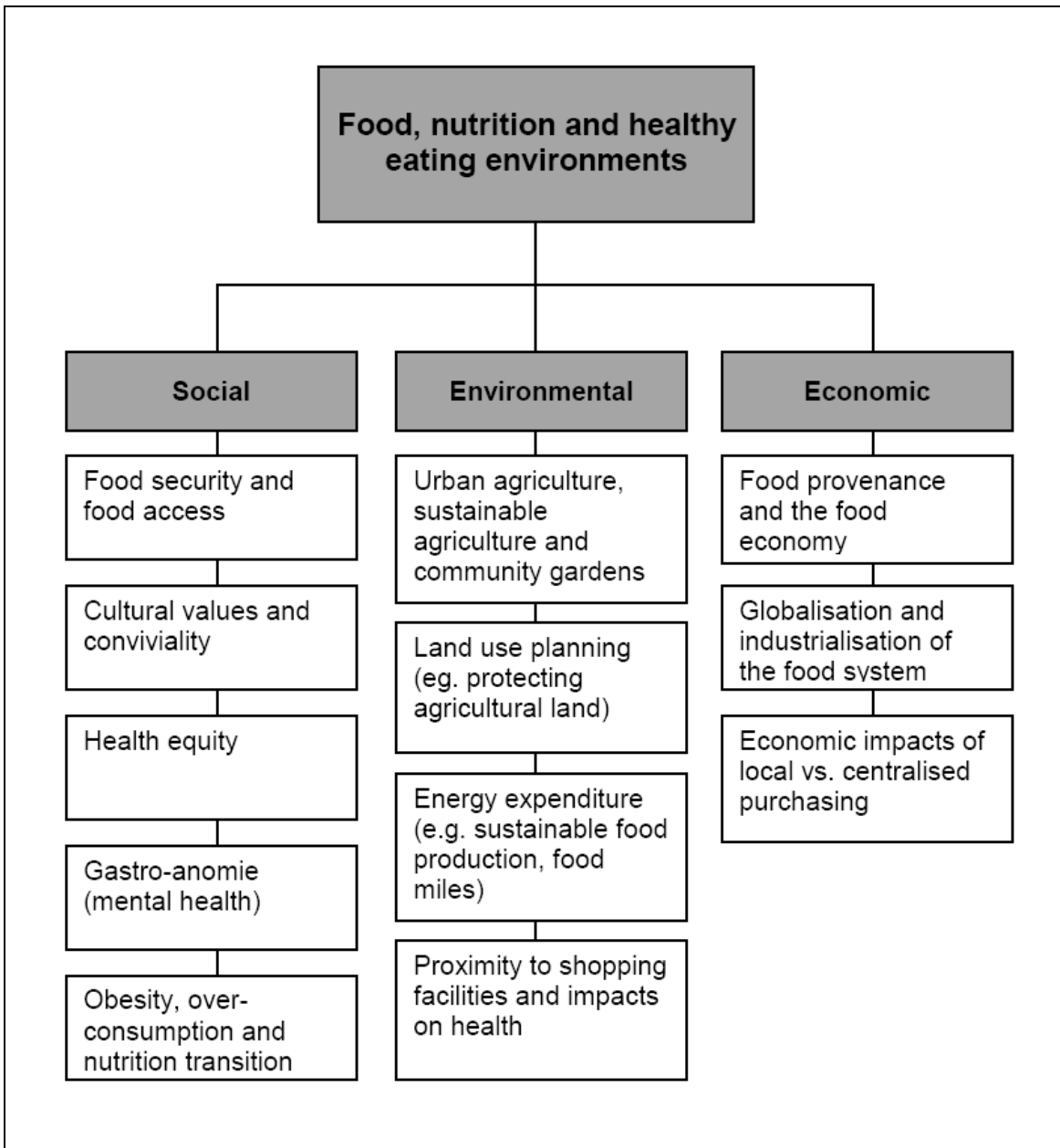


Figure 2: Literature map (Author 2008)

It should be noted that two authors are particularly significant contributors to food systems planning. Kameshwari Pothukuchi and Jerome Kaufman have undertaken substantial research to demonstrate planning's under-recognition of food issues. Pothukuchi and Kaufman's discussion of food systems and how they specifically relate to urban planning are highly significant, and the literary significance of these texts has been reflected in this chapter accordingly.

The importance of urban food systems to planning

In the discussion of planning for food, it is important to stress the role that food systems play in cities. The following facts have been provided to highlight this point. They have been divided into social, environmental and economic considerations in accordance with the triple bottom line approach that was utilised in the literature map.

Social

Food related health problems are the cause of many illnesses. Poor nutrition is “a well established risk factor for development of chronic and life-threatening diseases and conditions such as cardiovascular disease (including coronary heart disease and stroke), some cancers, obesity, high blood pressure and Type 2 diabetes” (NSW Department of Health 2004, 1).

Food security is a concern for many governments, even in developed countries such as Australia and the USA. Food security ensures that “all people at all times have the ability to access and prepare sufficient, safe, appropriate, nutritious and affordable food necessary to enjoy an active and healthy life” (Sydney Food Fairness Alliance 2007, 2). A 2001 survey of NSW households found that 6.2% of respondents had run out of food in the last 12 months, at least once, and could not afford to purchase any more (NSW Department of Health 2002, 27-28). The NSW Centre for Public Health and Nutrition (2003) developed a food security options paper that aims to promote the importance of food security and provide policy options to improve food security across the state.

People’s interaction with food affects their social wellbeing. Sharing culturally diverse foods through ethnic cafés, restaurants and food stores and can promote positive cultural interaction and allow people to gain an appreciation of cultural differences (Thompson 2003). Reliance upon on corporatist food systems and ‘town in a box’ style shopping centres, as opposed to alternative food systems that support social interaction and conviviality, can cause residents to feel anxious and disconnected from society (Fischler 1993). This

is referred to as 'gastro-anomie', and it is a subject that has been common in sociology for more than 20 years (Dixon and Capon 2007, Mennell et al. 1992).

In car-dominated cities, such as Sydney and Perth, there is a correlation between access to a vehicle and access to food. This is because the outlets that are more affordable and offer a wider range of products are typically located in regional shopping centers. In Melbourne the lack of a car can reduce food access by 50% (Burns and Inglis 2006, 123).

Environmental

Preservation of agricultural land is becoming an issue of high importance, with cities being asked to take responsibility for reducing urban sprawl. Sinclair et al. highlight the need for governments to protect rural lands in Sydney and Australia as a highly valuable source of food, fibers, biodiversity and employment. In Western Sydney, 78% of rural lands are used for residential purposes (i.e. rural-residential development), which places pressure on productive rural lands through rural-residential land use conflict (Sinclair 2002, Sinclair et al. 2003).

Food wastes make up a significant proportion of household, commercial and institutional rubbish. Some 47% of municipal waste that was generated in Australia from 2002 – 2003 was food and garden waste. In contrast, 13% of commercial and industrial waste, and 1% of construction and demolition waste was composed of food and garden waste (Australian Bureau of Statistics 2007, 209).

Household and individual trips to grocery stores, supermarkets and other food outlets contribute a significant amount to urban traffic volumes. For example, 23% of all trips made in San Francisco were to shops for food and non-food items. A large proportion (roughly 86%) of these trips were made in private vehicles (Purvis 1994, quoted in Pothukuchi and Kaufman 1999, 217).

Economic

Food is an important part of the Australian economy. The food and beverage sector is Australia's largest manufacturing industry, and is responsible for roughly 18% of employment in manufacturing as a whole. In the 2006 – 2007 financial year Australia exported \$23.2 billion worth of food, and Australian consumers spent a total of \$106.6 billion on food (Commonwealth of Australia 2008a, 1-6).

Sydney based agriculture is a significant part of the State's economy. "The value of agriculture as it leaves the farm in the Sydney Statistical Division is in the order of \$1 billion per annum. This represents 12% of NSW's agricultural production grown on approximately 1% of the State's agricultural land. Sydney agriculture employs more than 8,841 people representing 11% of the total employed in agricultural production in NSW" (Mason and Docking 2005, 1-2).

Households spend a considerable amount of money purchasing food. ABS statistics indicate that Australian households spent an average of \$153 per week on food and non-alcoholic beverages in 2003 – 2004. This represents 17% of the country's total average food and services expenditure (Australian Bureau of Statistics 2006, 157).

Clearly food systems are important metropolitan features that have profound and multifaceted impacts upon the economic, environmental and cultural wellbeing of cities (Hammer 2004, 424). Put simply, "the food system is too important for planners to avoid" (Pothukuchi and Kaufman 2000, 221). Yet to this day, there are very few planners who are working constructively with food systems in cities.

A "less visible" urban system

The planning profession has long been criticised for its "historical failure to integrate health, wellbeing and equity as core considerations" (Thompson and Gallico 2005, 2). An analysis of the profession's involvement in food and

nutrition issues supports this criticism. Urban planners have paid little attention to links between cities and their food networks in the past, and as a result food systems have frequently played the poorer cousin to other more visible urban functions. Transport, housing, land use, economics and environmental systems have tended to dominate the thinking of governments and planning practitioners, whilst the affect of these activities upon the food system as a whole has been overlooked (Pothukuchi and Kaufman 2000). This begs the question: why have planners failed to recognise food and nutrition issues as important features of cities?

Pothukuchi and Kaufman suggest that the reason planners have overlooked the importance of food systems in the past is because they are a “less visible urban system” (Pothukuchi and Kaufman 1999, 214). Yet despite their importance, food systems are discrete in nature, and as a result they are “there and yet not there” in the minds of both urban planners and city residents (Pothukuchi and Kaufman 2000, 121). The authors suggest that there are four main reasons that these issues have low visibility. Firstly, city residents take food for granted because they generally have good access to food that is affordable and in constant, year round supply. Secondly, a false perception exists that food is a rural issue, and not a matter for urban professionals. Thirdly, globalisation and technological changes in food transport, preservation and processing have meant that even when city suburbs have expanded over fertile soils and agricultural land, there has been minimal impact on supermarket shelves. Food was simply sourced from further afield, and the loss of farmland in cities did not equate to a reduction in fruit and vegetables in people’s fridges and pantries. Finally, a separation of public policy between ‘urban’ and ‘rural’ has encouraged people to view food systems as a solely rural affair (Pothukuchi and Kaufman 1999, 214-216).

Another factor contributing to this problem is that there are very few early texts on cities that contemplate urban food system issues. Consideration of the planning profession’s interactions with food systems is still notably absent from modern planning texts, planning instruments, and the curricula of university planning degrees (Hammer 2004, Pothukuchi and Kaufman 1999,

Pothukuchi and Kaufman 2000). This is also true for planning in Australia. For example, the first comprehensive Australian planning text to be written in over 30 years, *Planning Australia* (Thompson 2007), neglects to specifically mention urban food and nutrition systems as important considerations for urban and regional planners. In NSW, there are two undergraduate planning degrees that are accredited by the Planning Institute of Australia; the Bachelor of Planning at the University of New South Wales (UNSW) and the Bachelor of Urban and Regional Planning at the University of New England. A review of the respective course websites indicates that neither feature core classes that educate students about the important relationships between the city, food and nutrition. It should be acknowledged however that elective classes that were not listed on the websites may address planning for food systems.

Janet Hammer, a convincing advocate for introduction of community food systems units into university planning courses, argues that it is in the best interest of educational institutions to “advance community food system theory and to provide practitioners with the knowledge and skills necessary to work effectively in this domain [i.e. the food systems arena]” (Hammer 2004, 431) . Hammer details a comprehensive range of options for addressing food systems in planning curricula, including suggested teaching methods, course assessment, case studies and sample readings. However, despite these efforts, we are yet to see a compulsory core course of this nature adopted by a Planning Institute of Australia accredited planning course in NSW.

It is noted that the UNSW has an undergraduate healthy planning elective unit that teaches planning and medical students about the linkages between the built environment and physical and mental health. The course has been recognised by the Australian Local Government Association, the National Heart Foundation of Australia and the Planning Institute of Australia as a course that educates students about the important interrelations between environments and health (Australian Local Government Association et al. 2008, 42-43). Although the course does not focus specifically on food issues, the students are educated about concepts that are highly relevant to planning for urban food systems.

Lack of planning education on the topic of community food systems contributes to the poor awareness of these issues by planning professionals. A hallmark survey of 22 American city planning agencies' involvement in food system planning found that the agencies were "at best only lightly involved in the food system arena" and that "in most cases, when they do get involved, their role is reactive rather than proactive and piecemeal rather than comprehensive" (Pothukuchi and Kaufman 2000, 115). When asked why they only had limited involvement in food systems issues, the responses offered by the interviewees reflected general misunderstanding of food systems and how their work affects them. The researchers summarised the responses into the following categories:

- Food systems aren't 'our turf'
- Planning for food is not an urban issue; it's a rural issue
- The food system is driven primarily by the private market
- Planning agencies aren't funded to do food system planning
- What's the problem? If food systems aren't broken, then why fix them?

(Source: Pothukuchi and Kaufman 2000, 116)

From these results it is clear that a perception exists that food systems are not the domain of urban professionals, and that food system issues are not a priority for many planning agencies. It is interesting to note that the Local Government and Shires Associations of NSW achieved comparable results from a survey of 152 NSW local councils that was conducted in 2004. The survey aimed to identify the level of local council involvement in public health issues across the state, with an emphasis on health protection and promotion. It found that local council involvement in nutrition and food security matters was uncommon, with only 8% of respondents identifying food issues as high priority. As indicated in Table 2, a total of 64% of local councils in NSW identified food affordability and nutrition as low priority issues. In contrast, injury prevention/safety promotion and cancer prevention were of significantly

higher priority to local councils (Local Government and Shires Associations of NSW 2005).

Activity	Low Priority	Medium Priority	High Priority	Not Answ'd	Total
Mental health promotion	56%	25%	10%	8%	100%
Drug and alcohol harm minimisation	14%	53%	27%	6%	100%
Physical activity	13%	40%	21%	26%	100%
Food affordability and nutrition	64%	16%	8%	11%	100%
Injury prevention/safety promotion	13%	33%	48%	7%	100%
Cancer prevention	23%	34%	30%	13%	100%

Table 2: Priority given to health promotion issues by councils (Source: Local Government and Shires Associations of NSW 2005, 5)

Both survey results indicate that food system issues are not a priority for urban planners, and that a perception exists that planners should not be involved in food system issues at all. However, a closer analysis of the situation reveals that many of these responses are ill informed. The work of urban professionals does have a substantial effect on healthy eating environments, and as such it is imperative that planners become more involved in these matters.

How does planning affect urban food systems?

Interactions between the built environment and nutrition are both complex and under researched. However what is known about relationships between healthy eating and the urban form indicates that planning has a significant effect upon the eating behavior of city residents. For instance, a number of studies have been undertaken on the links between healthy eating and

grocery shopping. Morland et al. (2002) found that people's fruit and vegetable consumption is substantially improved when the number of supermarkets in their locality is increased. Research by Powell et al. (2007) suggests that adolescents who have better access to chain supermarkets are less likely to be overweight or obese. Inagami et al. (2006) found that people who own cars and travel further to do their grocery shopping are more likely to be overweight or obese.

However despite this research bias, the influence of the built environment on eating patterns is more extensive than simply the location of supermarkets and grocery stores. There are also a number of less quantifiable interactions, such as the impact upon what Parham (1992) describes as 'conviviality'. Convivial environments enhance gastronomic opportunities and offer food experiences that cannot be found in supermarkets such as growing tomatoes in the garden, meeting a friend for coffee at a café, or buying locally grown and seasonal produce at a bustling growers market. The author argues that good urban design can support conviviality, and this view is supported by Peattie (1998, 248):

Planning can enhance the possibility for conviviality. Conviviality can take place with few props: the corner out of the wind where friends drink coffee together, the vacant lot which will become a garden. But it must have some sort of material base – the right shaped corner, the piece of vacant land and a couple of rakes – and it must have the rules that permit it. Conviviality cannot be coerced, but it can be encouraged by the right rules, the right props, and the right places and spaces. These are in the domain of planning.

As Peattie implies, the tools that urban planners use to control land uses, zoning and development in cities can have a large impact upon conviviality and healthy eating environments generally. The report 'Creating Healthy Environments' sheds further light on this issue (Gebel et al. 2005). This report considers links between the physical environment, physical activity and

obesity, concluding that the following built environment characteristics are key influences on healthy eating:

- Location and preservation of agricultural lands
- Location and composition of retail land uses (e.g. grocery stores, supermarkets, convenience stores)
- Food transport systems (e.g. road and rail freight)
- Transport infrastructure to food retail locations (e.g. public transport and private vehicle access)
- Food service locations (including fast foods and vending machines)
- Food advertising exposure within public places
- Facilities (e.g. water bubblers, community gardens, breastfeeding places).

(Source: Gebel et al. 2005, 18)

These characteristics are typical considerations of environmental planning instruments, such as local environmental plans and development control plans. It highlights that urban planners are well placed to control determinants of healthy eating environments, provided that they have a sound understanding of the ways planners affect urban food systems (Pothukuchi and Kaufman 2000, 211). There are, therefore, a number of literary sources that draw attention to this issue and argue that food system considerations should be better integrated into planning processes.

Addressing urban food systems

Literature on planning for food presents a number of initiatives that can be employed to work more constructively with food systems. Dixon et al. (2007, 126) describes the situation as follows:

Feeding city populations equitably can not be left to market forces alone, but requires government and civil society-aided intersectoral

approaches involving agriculture, urban planning, small business, and health sectors. Such approaches must acknowledge complex webs of causation between global and national policies favoring industrialisation and private equity, the elimination of food-producing habitats, transformations in food in food retail, consumer poverty and anxiety.

Campbell (2004) and Pothukuchi and Kaufman (2000) urge built environment professionals and academics to conduct further research on community food systems and build upon existing theory. They argue that developing a comprehensive knowledge base will aid planners in building a sound understanding of community food systems. This can be achieved by gathering local and regional data on food production, processing, retail distribution and exploring how these mesh with planning functions (Pothukuchi and Kaufman 2000, 119). Campbell (2004, 349) suggests that this data gathering may be suitable for planning students to undertake through a university course on planning for community food systems.

Educating planners about food systems is also a key recommendation of food systems literature by authors such as Campbell (2004), Pothukuchi and Kaufman (2000) and Hammer (2004). Hammer comments that “embedding community food systems in existing courses can be valuable for surfacing this invisible yet vital issues and making links to other systems and issues” (2004, 431). It is therefore essential that education initiatives aimed at both planning students and professionals are employed to raise awareness of food issues in cities.

It has also been widely recognised that promoting the local food system through planning instruments and local food strategies is the most appropriate way to address food security, local food production, and conviviality. Campbell (2004, 349) advises that planners review local land use plans and regulations to support local food systems by removing statutory barriers to community gardens, urban agriculture, and food security. In contrast, Parham (1992, 34-35) argues that the development of a ‘gastro-urban’ vision that is supported by government strategies (e.g. the Metropolitan Strategy in the case of Sydney)

is needed to increase gastronomic possibilities and promote convivial design in Australian cities. Others recommend the development of coordinated local food policy (Capon 2007a) to address the issues which have been neglected by planners to date. These issues include “design considerations that support urban agriculture and edible landscapes, locally and regionally centered food distribution systems, ecologically sustainable supply chains for rural products, and enhanced opportunities for consumers to access enjoyable food experiences” (Dixon and Capon 2007, 211).

It is interesting to note that some academics disagree with the ‘local’ approach that these food strategies adopt. Born and Purcell challenge the assumption that “local equals desirable” (2008, 200), and offer a caution to planners to avoid falling into ‘the local trap’ when planning for community food systems. The authors argue that food strategies that promote local food production and local purchasing in the interests of sustainability may not necessarily equate to sustainable economic, ecological and social outcomes. Born and Purcell (2008, 200) use the hypothetical example of a buy local campaign in Arizona (Australians may prefer to visualise central Australia), where any efficiencies obtained from using less petrol for transporting food would certainly be outweighed by the need for a substantial amount of water to sustain food crops. Rather, “the most sustainable strategy is likely to vary from case to case” (Born and Purcell 2008, 204). While valid, this criticism is not relevant in the context of Sydney, where there are clear benefits of local food strategies due to the close proximity of fertile agricultural lands to the city.

Pothukuchi and Kaufman (1999) recommended that governments establish a department of food to deal specifically with the range of issues that relate to urban and regional food systems. It is proposed that the role of this department would be to revise the food system functions of local government, create a long term strategic plan for food security, and to administer specific food programs. Although as the authors note, it would be difficult to staff such a department considering the lack of professional involvement that presently exists in food systems. It would also be a difficult task convincing political leaders that this level of intervention is needed when perceptions exist that

food systems are solely a rural issue and a system dictated by the private market (Pothukuchi and Kaufman 1999, 218-219).

Conclusion

It is clear that food systems affect the cultural, economic and environmental health of cities (Hammer 2004, 424, Pothukuchi and Kaufman 1999). However these systems operate more discretely than other urban systems, which may explain why planners have been slow to recognise the significance of food systems to their profession.

The planning profession's historical disregard for food systems is surprising given that it is a profession which prides itself in being "comprehensive in scope, future orientated, and public interest driven" (Pothukuchi and Kaufman 2000, 113). However, the emerging field of literature on planning for food systems discussed in this chapter highlights the need for planners to become involved in food issues. It is important to note that "if planners are not conscious [of food issues], then their impact is negative, not just neutral" (Kami Pothukuchi quoted in Roberts 2001, 3).

This literature review has outlined a number of initiatives that can be employed by governments to plan for community food systems. It is important that planners undertake further research on food systems, educate planners and students about food issues, and promote local food strategies in order to place food systems on the planning menu. The following chapter analyses 'local food strategies' in more detail. It investigates a number of international food strategies, and outlines the creation of local food strategies to address food system issues in the Sydney region.



Chapter 3

Local food strategies

Introduction

This thesis focuses on strategies that specifically address food and nutrition matters through planning considerations. These policies are referred to as 'local food strategies' throughout the thesis due to the emphasis they place on food issues within a specific region or local government area. They aim to improve the quality of local food systems and the health of urban residents, whilst also encouraging urban planners to consider food and nutrition issues and the effect that planning has on the diet and the health of city residents.

This chapter has two main functions. Firstly, it describes the nature of local and regional food strategies by providing examples from both Australia and overseas. Secondly, it outlines the results of a survey that was conducted to establish the prevalence of local food strategies in Sydney. These results indicate that few local councils in Sydney have policies in place that meaningfully address food and nutrition issues.

Defining local food strategies

Local food strategies are instruments that plan for and nurture community food systems. They endeavour to achieve sustainable, equitable, reliable, and healthy food systems for a particular local government area. They seek to counterbalance industrialised and global food systems, which are considered to be unequitable and unhealthy (Capon and Dixon 2007, Dixon et al. 2007). Table 3 (overleaf) further outlines the characteristics of local food strategies, and compares them to the characteristics of the contemporary food systems.

Characteristics of contemporary food systems	Characteristics of local food strategies
Global and corporate in nature (Born and Purcell 2008, Phillips 2006)	Growth and development of the local economy (Born and Purcell 2008)
Imported produce and processed foods	Emphasis on providing fresh, locally grown foods to residents
Use of synthetic pesticides and fertilisers (Kaufman et al. 2007, 2)	Encourages organic and sustainable farming practices
Centralised retail facilities, displacement of local food retailers (Dixon et al. 2007)	Supports neighbourhood shopping centres, small grocery stores and specialty retailers
Poor food access and food security (Dixon et al. 2007)	Focus on achieving food security and access to fresh, healthy and culturally appropriate foods
Fast food, corporate chains	Supportive of slow food, organic produce, and healthful foods
Significant distribution networks and transportation of food	Minimised transportation of food (CERES 2006), food is grown close to where it is consumed.

Table 3: Comparing contemporary food systems and local food strategies (Author 2008).

Local food strategies address an extensive range of issues in order to achieve healthy and sustainable eating environments. These considerations include local economies, land use, food transportation, access to retail facilities, community gardens, and food wastes. The health of local residents is also a major consideration of local food strategies. As outlined by the World Health Organisation, and also in previous chapters, these considerations are an important part of efforts to reduce the prevalence of serious chronic diseases, such as obesity and type II diabetes. The WHO Global Strategy on Diet, Physical Activity and Health (2004, 5) states that:

Strategies to reduce noncommunicable diseases should be part of broader, comprehensive and coordinated public health efforts. All partners, especially governments, need to address simultaneously a

number of issues. In relation to diet, these include all aspects of nutrition (for example, both overnutrition and undernutrition, micronutrient deficiency and excess consumption of certain nutrients); food security (accessibility, availability and affordability of healthy food); food safety; and support for and promotion of six months of exclusive breastfeeding.

Local food strategies are policy instruments that address locally specific food system issues. They are typically administered and facilitated by local councils because they are the best-placed government organisation to identify and attend to issues that are specific to local communities. Local councils in NSW have a legislated involvement with food safety under the Food Act 2003, which involves food safety and the inspection of premises where food is prepared and sold. However, apart from this statutory obligation, the involvement of local councils in food systems to date throughout Sydney has been patchy.

There is evidence to suggest that local councils in the Sydney region are becoming more aware of the need to address nutritional health issues. For instance, Kogarah Council in Sydney's south has passed a motion to use its planning controls to ban the use of trans fatty acids in food outlets and childcare centres. The council plans to place conditions upon new development applications for food outlets to ensure that fatty oils are not used in deep or shallow frying (Labi 2008).

Other councils in the Sydney region have also been proactive in responding to nutritional health issues by means of local food strategies. However, before analysing these in more detail, it is appropriate to look at the way that other nations have planned for food systems within their cities.

Examples of regional food strategies

Citywide and regional food strategies currently exist in numerous cities around the world. The following are examples of international approaches to planning for urban food systems that provide important lessons for planning in Sydney.

The Mayor's London Food Strategy

The Mayor's London Food Strategy (London Development Agency) was created in 2006 to establish a long term plan for improving the condition of the London food system and the health and nutrition of the city's residents. The strategy aims to improve the health of residents, reduce health inequalities, reduce the environmental impacts of the city's food system, support a vibrant food economy, celebrate and promote London's food culture, and develop London's food security (London Development Agency 2006, 10). The strategy identifies the following six key areas for London authorities to act upon:

1. *Ensuring commercial vibrancy* by better supporting markets, smaller businesses, specialty food producers, food tourism and restaurant clusters within London.
2. *Securing consumer engagement* through advertising campaigns, engaging large retailers, and promoting small-scale local food production within the city.
3. *Levering the power of procurement* by increasing the amount of organic and local produce that is provided through public sector services and improving small producers' access to public and private sector food and catering contracts.
4. *Developing regional links* by encouraging cooperation between producers, establishing a secondary food hub for smaller farmers to access the food market, and promoting diversification of foods sold by producers to ensure there is a strong availability of culturally appropriate foods in the city.
5. *Delivering healthy schools* by increasing food education in schools, improving the nutritional quality of meals served at school canteens,

improving children's access to quality food through vending machines that distribute healthy food, and promoting farm excursions.

6. *Reducing food related waste and litter* by establishing kitchen waste collection schemes, encouraging recycling and composting, and working with major retailers to reduce the amount of packaging associated with food.

(Source: London Development Agency 2006, 14-19)

The Mayor's London Food Strategy addresses a broad spectrum of food and nutritional issues, whilst also emphasising the economic incentives for paying greater attention to food system issues in London. The strategy offers a robust and comprehensive approach to urban food systems planning. The techniques it employs to encourage a vibrant food culture, increase the health of city residents and promote the food economy of London are rational and innovative. While this strategy has been specifically formulated for London, it is able to be adapted to for use by similar cities, such as Sydney. Consequently, the Mayor's London Food Strategy should serve as a model for all global cities addressing food system issues.

Community and regional food planning: a policy guide for the APA

The Community and regional food planning: a policy guide for the American Planning Association (APA) establishes a policy position on food systems planning for America's national planning institution. It differs from the Mayor's London Food Strategy in scope because it is a national policy, rather than a city policy. The APA adopted this policy in April 2007. It encourages planners to assist in making food systems more sustainable and robust by contributing to research and commentary on food systems. It asks planners to "suggest ways the industrial food system may interact with communities and regions to enhance benefits such as economic vitality, public health, ecological sustainability, social equity, and culinary diversity" (Kaufman et al. 2007, 2).

The policy guide advocates seven general planning principles:

1. Support comprehensive food planning process at the community and regional levels.
2. Support strengthening the local and regional economy by promoting local and regional food systems.
3. Support food systems that improve the health of the region's residents.
4. Support food systems that are equitable and just.
5. Support food systems that preserve and sustain diverse traditional food cultures of indigenous and other ethnic minority communities.
6. Support the development of state and federal legislation to facilitate community and regional food planning.

(Source: Kaufman et al. 2007, 2)

These planning principles are incorporated into seven specific policies that specify how the APA can be more supportive of food systems. The policies recognise the importance of planning for food systems at both community and regional levels, and the impact that these systems have upon social, environmental and economic considerations. Although this strategy has been applied at a national level, the general principles listed above are highly relevant to local and community food systems planning.

Food security in Cuba

A focus on Cuba provides an interesting example of food security measures in action, and this was highlighted by three interviewees during qualitative interviews (Capon 2008, Mason 2008, Millen 2008). Cuba went through an economic crisis after the collapse of the socialist block in 1989, and was subject to a trade embargo from the United States in 1992. As a result, the country's imports of fuel, fertilisers, foods, agricultural products and machinery were drastically reduced. The average per capita daily energy intake of Cuban residents decreased from 2899 to 1863 kilocalories from 1988 – 1993 (Franco et al. 2007, 3). The country was forced to reassess the way that it produced and supplied its citizens with food in the absence of conventional farming equipment and external trade. In response to this predicament, agricultural

production was promoted within cities, residents were encouraged to grow their own fruit and vegetables, and planning controls restricting the sale of produce were relaxed. The equivalent of a Department of Urban Agriculture was also established to secure land for people to cultivate food (Miguel et al. 1999, 134).

The result of Cuba's approach was a successful system of urban agriculture that "eliminate[d] the use of synthetic chemical pesticides and fertilisers, emphasising diversification, recycling, and the use of local resources" (Miguel et al. 1999, 131). Not only did city residents begin to grow food in suburban farms, intensive gardens and hydroponic gardens, but they also cultivated food on their balconies, rooftops, and backyards. Cubans also became more physically active (on average) during this period, in part due to the scarcity of fuels to run agricultural machinery and motor vehicles. As a result, the country's rates of obesity and death from associated diseases and conditions, such as diabetes, coronary heart disease and stroke, decreased significantly (Franco et al. 2007). Cuba became virtually self-sufficient in terms of its food supply, and also became a healthier nation due to its response to the economic crisis it was experiencing.

It is important to recognise that food security in Cuba was not achieved through the development of a forward thinking plan to address food system issues. Rather, it was a reactionary response to critical supply shortages and economic turmoil. The key lessons that Sydney can learn from the Cuban approach are that there are significant food security and health benefits to be gained from increased local food production and urban agriculture in cities.

Application to local food strategies

The issues that these regional food strategies deal with are not only exclusive to London, America and Cuba, and neither are the techniques they employ to manage them. Australian cities, such as Sydney and Melbourne, need to view these strategies as examples of how they might address food systems issues in their own settings. Local councils in the Sydney area might also benefit

from an analysis of these strategies, as the way that these cities have planned for food can also be applied to local and community food systems.

The prevalence of local food strategies in Sydney

In the discussion of planning for food in Sydney, it is important to ascertain the extent to which food systems are a consideration of the city's planning practices. The following is a description of a survey that paints a picture of local food strategies in the Sydney metropolitan region, and sets the context for a closer analysis of two local food strategies.

The survey

An internet survey of local council websites was carried out with the aim of determining the presence of local food strategies in the Sydney region. The survey was performed on a total of 41 local council websites within the greater Sydney area (a copy of the survey results for individual councils has been provided in the appendices). This study area corresponds to the local government areas that are planned for under the Metropolitan Strategy *A City of Cities: A Plan for Sydney's Future*. The predominant land uses in these local government areas ranged from being mostly rural to solely urban.

A survey template was created to ensure that each council website was analysed consistently (the template has been provided in the appendices). The principal method of identifying local food strategies on the council websites was to conduct a keyword search using an internet search engine. The terms selected for the keyword search were: local food, food security, food policy and food strategy. These terms, as well as the name of the council were entered into a search engine, and the first ten results were viewed. The terms were chosen because they commonly appear in the titles of local food strategies (or variations of these terms), such as the Mayor's London Food Strategy, the American Planning Association's Community and Regional Food Planning Policy Guide, or the Penrith Food Project.

This research approach is relevant as most local councils in NSW, and particularly in Sydney, now publish significant policy documents on the

council's website, making them easily accessible for those with access to the internet. One point of criticism may be that local food strategies may not be supported or facilitated by a local council and that this approach would not detect such strategies. For example, Hawkesbury Harvest is a community run initiative that is only endorsed by the Council, and not actually a council run strategy. However, it is also fair to say that if local food strategies do exist in a local government area, but do not have a presence on the council website, then this indicates that the strategy has been given a low priority by the council. By this logic, if a local food strategy is identified on a council website then there is evidence that planning for food is a priority within the local government area. If local food strategies were not identified by the survey, this would indicate that planning to improve urban food and nutrition systems is not a major concern in that local government area.

Survey results

After searching a total of 41 local council websites, the survey revealed that only four local food strategies exist in the Sydney region. As indicated in Table 4 (overleaf), planning strategies that specifically address food issues were evident in the Blue Mountains, Fairfield, Hawkesbury, and Penrith local government areas. This figure represents just under 10% of all local government areas in Sydney. These results will be discussed in more detail later in this chapter.

Location	Local council	Local food strategy identified?
Inner city	Botany Bay	No
	Hunters Hill	No
	Lane Cove	No
	Mosman	No
	North Sydney	No
	Randwick	No
	City of Sydney	No
	Waverley	No
	Willoughby	No
	Woollahra	No
Middle ring	Ashfield	No
	Auburn	No
	Bankstown	No
	Burwood	No
	Canada Bay	No
	Canterbury	No
	Holroyd	No
	Hurstville	No
	Kogarah	No
	Leichhardt	No
	Manly	No
	Marrickville	No
	Parramatta	No
	Rockdale	No
	Ryde	No
	Strathfield	No
Warringah	No	
Outer periphery	Baulkham Hills	No
	Blacktown	No
	Blue Mountains	Yes – <i>Sustainable Blue Mountains</i>
	Camden	No
	Campbelltown	No
	Fairfield	Yes – <i>Villawood Food Security Project</i>
	Hawkesbury	Yes – <i>Hawkesbury Harvest</i>
	Hornsby	No
	Ku-ring-gai	No
	Liverpool	No
	Penrith	Yes – <i>Penrith Food Project</i>
	Pittwater	No
	Sutherland	No
Wollondilly	No	

Table 4: Results of internet survey

The four local food strategies identified differ considerably in both scope and manner. For instance, the ‘Sustainable Blue Mountains’ strategy places a strong emphasis on environmental sustainability and community gardens. In contrast, the ‘Villawood Food Security Project’ was established in reaction to the suburb and its residents being classified as ‘food insecure’, and resulted in the establishment of a community café to overcome the problem. These variations have been analysed further in Table 5.

Local food strategy	Local government area	Description
Sustainable Blue Mountains	Blue Mountains	<ul style="list-style-type: none"> • This strategy is a 25-year vision for a more sustainable Blue Mountains. • It establishes a series of ‘Local Sustainability Actions’ that include support for food security and the slow food movement. • The strategy was facilitated and endorsed by Blue Mountains Council.
Villawood Food Security Project	Fairfield	<ul style="list-style-type: none"> • This strategy is designed to specifically address food insecurity in the suburb of Villawood. • A 2004 survey identified that food insecurity was prevalent in Villawood. • Responses included the establishment of a community café and community kitchen.
Hawkesbury Harvest	Hawkesbury	<ul style="list-style-type: none"> • Initially established to improve the health of local residents by strengthening local sustainable agriculture. • Markets and agri-tourism are strong features of this strategy. • It is a community-based organisation that is endorsed by Hawkesbury Council.
Penrith Food Project	Penrith	<ul style="list-style-type: none"> • A comprehensive food policy that was developed in 1994 by Penrith Council. • The strategy was developed in consultation with a range of stakeholders, and considers issues such as preservation of agricultural lands, local food production and breastfeeding. • The strategy aims to improve the nutritional health of local residents.

Table 5: Local food strategies identified by the survey (Author 2008)

It is noted that searches for 'food policy' and 'local food' would often identify councils' food safety policy. However, these results were not recorded as local food strategies as they are not forward thinking plans for securing a community's food supply or improving the health of the local population.

Market events, such as the weekly growers markets in Parramatta, were also identified regularly by the survey. These results were disregarded, as markets alone do not demonstrate that the local council or association supporting the markets are comprehensively planning for food in the local government area. Although markets may be a part of a broader healthy eating strategy and a positive step towards promoting the consumption of fresh fruit and vegetables in a particular locality, markets alone do not constitute a local food strategy.

Discussion

A review of scholarly literature on planning for food systems, which was analysed in chapter two, found that "community food system issues are low on the agenda of practicing planners, planning scholars, and planning educators" (Pothukuchi and Kaufman 2000, 121). Through the analysis of this survey, it is evident that this perspective is also applicable to Sydney. Just under 10% of all local councils in Sydney are actively planning for food and nutrition within their local government areas.

Furthermore, all four local government areas that were found to have a local food strategy in place were situated on Sydney's urban fringe. Most of these local government areas feature rural farmlands. This finding is consistent with the view that food systems are 'less visible' to planners where food issues are seen solely as a matter for rural policy, and not urban policy (Pothukuchi and Kaufman 1999, 2000).

Conclusion

Local food strategies are policy instruments that encourage healthy, sustainable, and food-secure communities and local government areas. They also encourage planners to be aware of community food systems, and work constructively with them. Survey results show that there are only four local food strategies within Sydney, indicating that there has been a piecemeal and

uncoordinated approach to planning for food in the Sydney region. The survey has also demonstrated that literary perspectives on planning for food systems are highly applicable to Sydney.

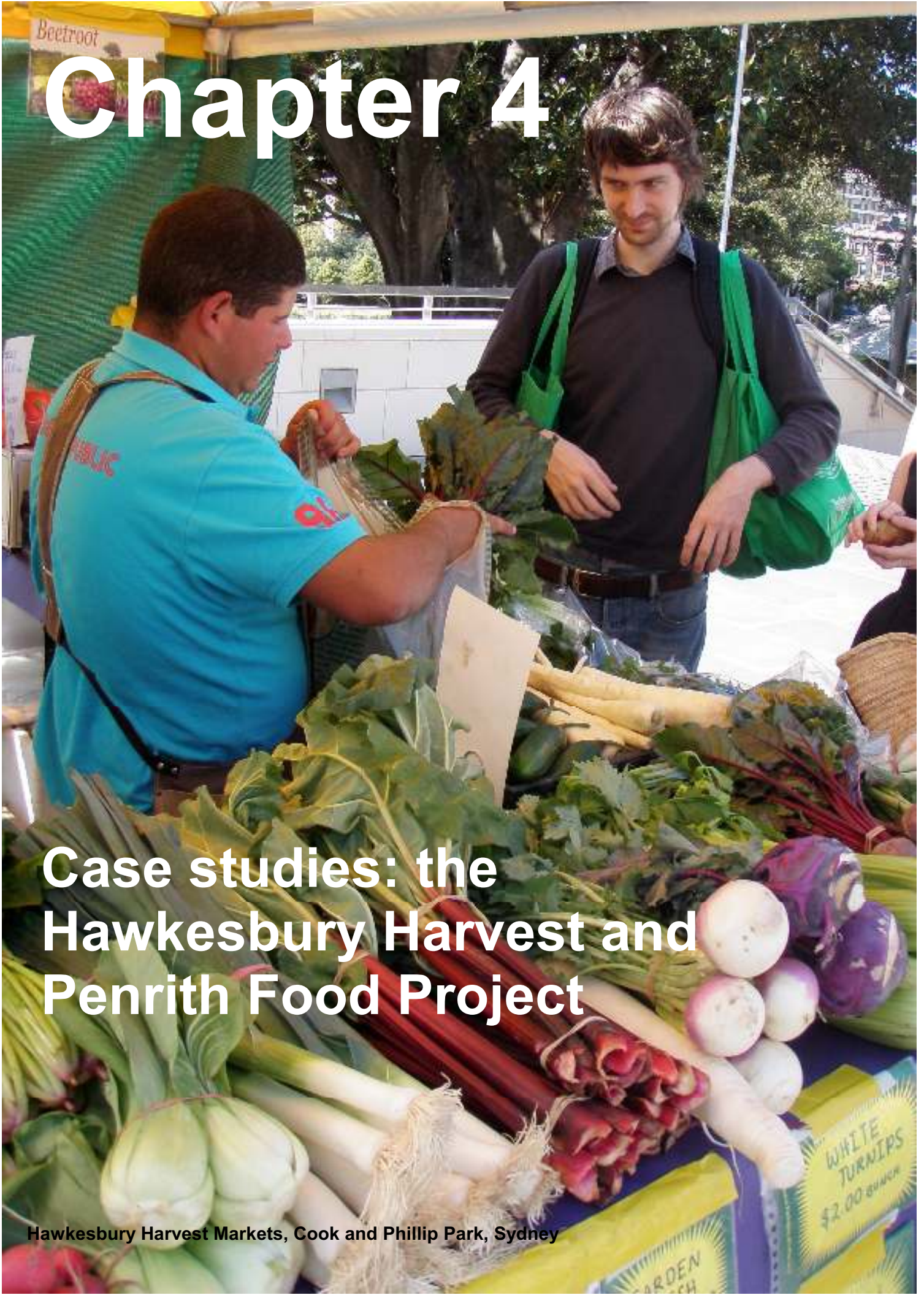
The international examples of regional and national food strategies provided in this chapter give Australian planners an opportunity to see how other cities have approached the issue of planning for food and nutrition, and adopt similar management approaches in our cities. A more comprehensive approach to addressing food and nutrition issues in Sydney needs to be adopted, and the creation of well-informed local food strategies offers this opportunity.

The survey of local food strategies outlined in this chapter identifies four food policies within the Sydney region. In order to highlight the use of local food strategies to address urban food and nutrition issues, two of the four identified strategies have been selected for closer analysis. These local food strategies were selected because they demonstrate a range of effective and innovative approaches to planning for food in Sydney. The following chapter examines the Penrith Food Project and the Hawkesbury Harvest, and compares and contrasts the techniques they employ to improve their respective community food systems.

Chapter 4

Case studies: the Hawkesbury Harvest and Penrith Food Project

Hawkesbury Harvest Markets, Cook and Phillip Park, Sydney



Introduction

This chapter looks closely at two local food strategies operating in the Sydney region, the Hawkesbury Harvest and Penrith Food Project. These are examples of policy tools used by planners to address broad nutritional health and food systems issues. They illustrate how some local councils in Sydney are actively planning for food, and provide a model for the development of future local food strategies.

The Hawkesbury Harvest and the Penrith Food Project were identified through my survey, which searched a total of 41 local council websites from the greater Sydney region. The survey revealed that only four local food strategies exist in Sydney. The Hawkesbury Harvest and the Penrith Food Project have been selected for closer analysis because they demonstrate a range of innovative and coordinated approaches to planning for food systems. This chapter outlines the food issues that are dealt with by both strategies, and concludes by comparing and evaluating their approaches. References are also made in this chapter to the interviews I conducted with State government and industry representatives to provide further insight into the case studies.

Before analysing the strategies in detail, it is appropriate to highlight the significance of agriculture in the Hawkesbury and Penrith local government areas. Both local food strategies are operating within Sydney's 'food bowl', which is an area located on the city's western fringe. This region is host to "some of the richest farming land in the nation" that allows Sydney to "supply itself with fresh fruit and vegetables from its own backyard" (Knowd et al. 2006, 5). The area also supplies a significant amount of fresh produce to the rest of the State. The Sydney basin accounts for 20% of the total vegetable production of NSW, and between 80-100% of the State's perishable vegetables (Sinclair et al. 2003).

Sydney based agriculture is an important part of the State's economy.

The value of agriculture as it leaves the farm in the Sydney Statistical Division is in the order of \$1 billion per annum. This represents 12% of NSW's agricultural production grown on approximately 1% of the State's agricultural land. Sydney agriculture employs more than 8,841 people representing 11% of the total employed in agricultural production in NSW. (Mason and Docking 2005, 1-2)

A significant proportion of Sydney's agriculture is situated within the Hawkesbury and Penrith local government areas. These areas feature many forms of agriculture, both intensive and extensive in nature (refer to Figure 3 and 4). Farms in these regions generate a wide variety of produce, including spinach, potatoes, corn, pumpkins, mushrooms, Asian greens, poultry meat, beef, duck, goat, poultry eggs, flowers, honey, wine and nuts (Knowd 2003).



Figure 3: Intensive agriculture (market gardens) in Marsden Park (Author 2008)

The significance of agricultural production in the Hawkesbury and Penrith local government areas highlights the need to have policies in place to plan for food systems in Sydney. If the food producing areas of Sydney are lost, the city will be forced to source its food from other areas of the State, which will have negative impact on the environment and the health of Sydney residents.



Figure 4: Extensive agriculture at Freemans Reach (Author 2008)

Hawkesbury Harvest

The Hawkesbury Harvest is a community-based organisation that was established in 2000 through a partnership between Hawkesbury Council and community stakeholders. It aims to “provide better community access to nutritious and safe foods grown in the local area while enabling opportunities for diversification of income through other mechanisms such as tourism and farmers markets” (Mason and Docking 2005, 6). The title ‘Hawkesbury Harvest’ refers to the Hawkesbury river catchment, which represents the entire Sydney metropolitan region, reflecting the strategy’s objective to

provide locally produced food to people throughout Sydney. The initiative comprises several key elements, and those of particular relevance to this thesis are outlined below.

- *The Farm Gate Trail and Wine Trail*

The Farm Gate Trail is made up of Sydney farms, producers, and businesses (members of the organisation) that sell their goods to the public from their farm. It seeks to link the consumer directly to the farmer through agricultural tourism (referred to as 'agri-tourism') (Hawkesbury Harvest 2004, 13). A map showing the Hawkesbury Harvest food, wine and accommodation attractions has been prepared so that tourists can take a self-guided tour through the farm gates, orchards, vineyards, cafés and restaurants of the Hawkesbury catchment. The maps are available through information centres and the Hawkesbury Harvest website (www.hawkesburyharvest.com.au). There are now over 50 destinations, spreading from Wollondilly, Penrith, Hawkesbury, Baulkham Hills and Hornsby local government areas (Mason 2008).

- *Farmers and Gourmet Food Markets*

The Hawkesbury Harvest Markets are a highly successful feature of this local food strategy. The Markets bring together a diverse range of stalls, ranging from those selling specialty foods such as saltbush lamb, smoked sausages, and goat's cheese, to gourmet breads, milk, fruit and vegetables. Regular food markets are now held in the Rouse Hill Town Centre and the Castle Hill Showground, and more recently in Cook and Phillip Square in the city (see Figures 5 and 6). The Hawkesbury Harvest Markets at Rouse Hill were recently awarded the title of Sydney's 'best market' in *The Foodies' Guide to Sydney 2009* (Greenwood and Newton 2008). The Markets have been embraced by the City of Sydney Council as they complement the Council's *Sustainable Sydney 2030* plan (2008), which envisages a series of 'vibrant activity hubs' throughout the city (see Chapter 6 of the plan – Vibrant Local Communities and Economies) (Mason 2008).

- *Open farm days, special events and provedore service*

The Hawkesbury Harvest also promotes open farm days, whereby farms (e.g. Penrith Valley Oranges) are open for inspection by the public and the farm's produce is sold to visitors. This puts people in touch with the growers of the Sydney region, educating them as to where their food is sourced. Produce from Hawkesbury Harvest farmers is also sold and promoted at special events such as the annual 'Farming Small Areas Expo' and 'The Good Food Affare'. A provedore service was also recently established to provide food from the farms directly to restaurants and cafés (Mason 2008).

The partnership formed between the Hawkesbury Harvest and the Rouse Hill Town Centre (RHTC) is a particularly important feature of this local food strategy. RHTC is a regional shopping centre located within the North West Growth Centre, an area earmarked for urban development to accommodate Sydney's growing population (NSW Department of Planning 2005a). RHTC contains a range of retail and shopping facilities to service the needs of the area's existing and future residents. The partnership was formed during the planning and tendering process for the RHTC and sought to facilitate regular farmer's markets within the centre, as well as connecting it to the Hawkesbury region in a meaningful way (Knowd et al. 2006, 9).

The Hawkesbury Harvest now provides the RHTC with lively gourmet food markets, and in turn, the RHTC promotes the Hawkesbury Harvest's Farm Gate Trail initiative. As Knowd et al. highlight, this relationship is important for both parties. The presence of the Hawkesbury Harvest at the RHTC "will act as a hub for a range of retail, social, cultural, tourism and recreational activities that raise awareness and educate the residents about the cultural assets in their own backyard. This activation of assets benefits both the farming community of the Hawkesbury region and the urban developers trying to place-make at Rouse Hill" (Knowd et al. 2006, 10). David Mason, a member of the Hawkesbury Harvest Board and a Leader of Urban Agriculture the NSW

Department of Primary Industries, also reflects positively on his involvement in fostering this relationship.

I recognised that it was important that you can't beat development. So if you can't beat them, join them... We weren't going to stop the loss of agricultural land in the North West Growth Centre but we could actually reclaim some ground around there in terms of farmers markets... And that's our philosophy with Hawkesbury Harvest. In that way, you can actually find common ground between development and agriculture.
(Mason 2008)



Figure 5: Hawkesbury Harvest markets at Cook and Phillip Square (Author 2008)

The Hawkesbury Harvest model uses rational and effective measures to protect Sydney's highly significant agricultural lands. By promoting the Hawkesbury Harvest farms as tourist attractions through The Farm Gate Trail, gourmet food markets and open farm days, it increases the economic viability of these businesses by providing the producers with income from tourism. As

Mason and Docking (2005, 6) note, “the protection of agricultural land and agricultural heritage is more likely to occur where farms are profitable”.

The success of the Hawkesbury Harvest model has been recognised by healthy planning and rural planning advocates for its effective approach to improving the nutritional health of urban populations, whilst also ensuring the sustainability of local agriculture. Capon and Dixon’s article on healthy, just and eco-sensitive cities notes that “Hawkesbury Harvest... is beginning to demonstrate how sustainable agriculture has the potential to contribute to long-term triple bottom line outcomes” (Capon and Dixon 2007, 211). Sinclair and Bunker (2007, 169-170) recognise the Hawkesbury Harvest as a powerful tool for preserving agricultural landscapes and raising awareness of local food production.



Figure 6: The Muscat brothers’ stall at the Hawkesbury Harvest markets in Cook and Phillip Square (Author 2008).

The Penrith Food Project

The Penrith Food Project was established by Penrith Council in 1994 in response to concerns for the health of local residents. A series of multi-disciplinary working groups were established to inform the research direction and development of the project. Participants included representatives from State and local government, community programs, local producers and the private sector (Moxon et al. 1999, 2). Anthony Capon, who was involved in the creation of the policy in his previous role as Director of Public Health for the Western Sydney Area Health Service (1991-2003), offered the following thoughts on why the strategy was prepared.

...It was born from concern amongst researchers and health workers that the food environment was not a healthy environment in places like Penrith, which is essentially a representation of Sydney's outer metropolitan area... there was a perception at least, and then subsequently evidence, that there was easier access often to unhealthy food choices than there was to healthy food choices.

(Capon 2008)

Reflections by some of the architects of this strategy at the 'Eating into the Future' conference (held in Adelaide, 1999) provide further insight into the rationale for the Penrith Food Project.

The nutritionists amongst us wanted to improve the nutrition and health of residents of the area and knew that improving the food supply and increasing consumer demand for healthy foods were two vital changes that needed to occur. It seemed ironic that so much produce was being grown 'at the back door', yet retail points were declining in western Sydney and for many, buying quality fruits and vegetables was cumbersome, expensive and unfamiliar. If people were more connected with the source of their fruit and vegetables, would they appreciate its value more and consume more of it? (Moxon et al. 1999, 1)

The Penrith Food Project aims to encourage residents of the area to eat locally produced food that is fresh, seasonal, and nutritious in order to improve their health. The Project also strives to raise awareness of the importance of the economic and health benefits of productive agriculture in the Hawkesbury-Nepean region (Moxon et al. 1999, 2). The specific objectives of the Penrith Food Project are outlined below.

Box 1: Objectives of the Penrith Food Project

1. Food Supply: to increase and improve the supply of affordable, acceptable, nutritious and safe food available to residents and workers in the Penrith local government area, with particular concern for disadvantaged groups.
 - 1.1. Improve access to places where affordable, acceptable, nutritious and safe food is available for purchase or consumption, particularly in new, underserved and disadvantaged areas.
 - 1.2. Increase the range, promotion, competitive pricing of acceptable nutritious foods and catering practices available where people buy and eat food regularly.
 - 1.3. Conserve high quality agricultural land as a valuable resource in food production for the Penrith local government area and greater Sydney.
 - 1.4. Increase local production of food in the Penrith local government area.
 - 1.5. Protect the safety of food produced, processed, prepared or sold in the Penrith local government area.
 - 1.6. Identify and reduce structural barriers which impact on the duration of breastfeeding.
2. Consumer demand: to increase and improve demand for, and consumption of, nutritious food in the Penrith local government area.
3. A durable system: to create an ongoing local system for improving the health impact of the food supply and monitoring population food habits.
 - 3.1. Maintain an effective Food Policy Committee which makes recommendations concerning food and nutrition policies.
 - 3.2. Increase the extent to which the health impact of the food supply is considered in the routine work of all directories of local government and in other organisations in Penrith.

- 3.3. Increase the extent to which organisations collaborate and co-operate in the development and implementation of food and nutrition policies.
- 3.4. Increase the community awareness of, support for and participation in the Penrith Food Project.
- 3.5. Ensure that the Penrith Food Project is effectively and efficiently managed.
- 3.6. Ensure that the Penrith Food Project is evaluated.

(Source: Penrith City Council 2001, 1-3)

These objectives indicate that the Council has prepared a comprehensive policy response to improve the health of both residents and community food systems in the Penrith local government area. To meet these objectives, the Council undertook research to assess the extent of the problem, and a number of methods were employed to address the issues identified. The following examples provide a cross section of the issues dealt with by the Penrith Food Project and the way they have been addressed through planning considerations.

Objective 1.1 of the strategy considers how access to healthy and nutritious foods can be improved for Penrith residents, particularly for those living in disadvantaged areas or new housing developments. A land use survey was conducted to determine the number, type and location of food retail facilities within the local government area, along with an assessment of the range of foods that were stocked in these facilities. This information was compared to the population distribution to enable the Council to map levels of food access throughout the local government area (Capon 2008, Penrith City Council 2001, 1). The outcomes of this research include: making changes to bus routes in the region to provide better access to shopping facilities, establishing home delivery services of fruit and vegetables through local retailers, and developing policy guidelines to ensure that food issues are considered when planning for new residential developments (Penrith City Council 2001, 1).

Children's interaction with food during their development and the impact this interaction has on their lifelong eating patterns was recognised as an important consideration of the Penrith Food Project.

Our new generations of children have less connection with where the food is grown, and so connecting children with food production was another opportunity. It can potentially influence food choices, improve understanding of food, health, the environment generally and our stewardship of the environment for future generations. (Capon 2008)

In response to this concern, the Penrith Food Project employed a number of techniques to educate children about the importance of healthy eating and the consumption of fruit and vegetables. For instance, the nutritional quality of meals that were being served to children in Council operated before and after school care centres was examined. This resulted in the formulation of a 'core nutrition policy' being established in these centres (Penrith City Council 2001, 1). A training workshop was held for canteen staff, parents, teachers and principals to encourage the provision of healthy food choices in school canteens. A breakfast program was also initiated at a local primary school, and a school garden was supported in a disadvantaged area to teach children about agriculture and growing and eating fruit and vegetables (Penrith City Council 2001, 2).

Breast-feeding was identified as a key component of this local food strategy, providing an interesting example of how planners can affect the nutritional health of urban populations. Research identified that a significant amount of mothers in the local government area were weaning their children before they were six months old, which is considered to be detrimental to the development of infants. The World Health Organisation recommends that "infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health" (World Health Organisation 2003, 7-8).

Further research into this issue by Penrith Council found that residents of the local government area's newer suburbs had poor access to local shopping

facilities. In many cases mothers were travelling a considerable distance to the regional shopping centre to shop for groceries. This travel, and the inconvenience and potential embarrassment of breastfeeding in a public place, was encouraging mothers to wean their children prematurely (Mason 2008). In response, a Parenting Facilities Policy for all public buildings was adopted by the Council, requiring all new or refurbished public buildings to include a parenting room so that mothers have access to a private space to breastfeed their children (Penrith City Council 2001, 2). Objective 1.1 of the strategy addressed the broader issue of access to local shopping facilities to satisfy day-to-day needs of local residents.

Evaluating the strategies

The issues addressed by the Hawkesbury Harvest and the Penrith Food Project are very similar. Nevertheless, the strategies employ distinctly different methods to achieve their aims. Table 1 (below) demonstrates that the only points of difference are in relation to breastfeeding and educating children about healthy foods.

The strength of the Hawkesbury Harvest model is its use of agri-tourism and partnerships with developers to ensure that agriculture in the Hawkesbury region is economically viable, and as a consequence more sheltered from development pressures. Another strong feature of the Hawkesbury strategy is that it promotes the development of a vibrant food and wine culture in Sydney through the Hawkesbury Harvest markets and events. The Hawkesbury Harvest model, however, lacks the thoroughly researched approach of the Penrith Food Project. The principal focus of the Hawkesbury Harvest is the strengthening of the local economy and agricultural industries in the Sydney region, rather than improving the health of the city's residents. This reflects the fact that it is a community driven initiative, not a government strategy.

Food issues considered	Hawkesbury Harvest	Penrith Food Project
Nutritional health of local residents	✓	✓
Localised food security	✓	✓
Markets and events to promote food culture	✓	✓
Agri-tourism	✓	✓
Breastfeeding	✗	✓
Protection of agricultural land	✓	✓
Producing food locally	✓	✓
Development of the local economy	✓	✓
Educating children about healthy foods	✗	✓

Table 6: Comparing the Hawkesbury Harvest and the Penrith Food Project (Author 2008).

In contrast, the Penrith Food Project has been developed specifically with the health and wellbeing of Penrith residents in mind. Although it lacks the encouragement of partnerships between developers and local growers, the strengths of this model lie in the comprehensive range of issues that it embraces, and its well-researched and targeted policy responses. Its response to nutritional health problems in the Penrith local government area, which was developed over ten years ago, has been described as “visionary” (McCue 2008).

It is important that any attempts to develop further local food strategies within the Sydney region view the Hawkesbury Harvest and the Penrith Food Project as complementary policy documents. They demonstrate two different ways of addressing food system issues within the Sydney region, both of which could be utilised within a single local food strategy.

Conclusion

This chapter has outlined the techniques used by two local food strategies to address food system issues in the Sydney region. The responses are intelligent, thorough, and complementary, and they should serve as models for local councils seeking to improve the health of residents and community food systems within their local government area.

It is noted that due to the lack of local food strategies existing in Sydney's inner city or middle ring areas, the case studies presented in this chapter are situated in predominantly rural and semi-rural settings. The introduction of a local food strategy from a solely urban area (had one existed) such as Bankstown or Mosman would make this analysis more comprehensive. In any case, many characteristics of the Hawkesbury Harvest and the Penrith Food Project are widely applicable. For instance, the promotion of gourmet food markets, improving transport access to food retail facilities, and providing facilities for breastfeeding are principles that are also highly relevant to urban settings.

Chapter 5

**Support for local
food strategies in
Sydney**



Introduction

This chapter reviews the *NSW State Plan, City of Cities: a plan for Sydney's future* (the *Sydney Metropolitan Strategy*) and draft subregional strategies, to ascertain the level of support the NSW planning system offers to local food strategies. A particular focus has been provided on the *draft North West Subregional Strategy* as three of the four local food strategies that were identified previously by this thesis are located within the North West subregion. Consequently, this strategy was reviewed to determine whether it supports the creation of local food strategies and food system issues in general. This chapter also questions whether these policies encourage planners to consider food and nutrition issues, and identifies opportunities for better supporting planning for food systems in Sydney.

Planning policies that influence planning for food in Sydney

There are a number of planning policies that affect the way planners interact with food systems in Sydney and NSW. The *NSW State Plan*, the *Sydney Metropolitan Strategy* and draft subregional strategies play a pivotal role in planning practice in Sydney. Consequently, they also have a significant influence on the interface between planning and food in the Sydney region. The relationship between these policies and a description of their function has been provided in Figure 7 below.

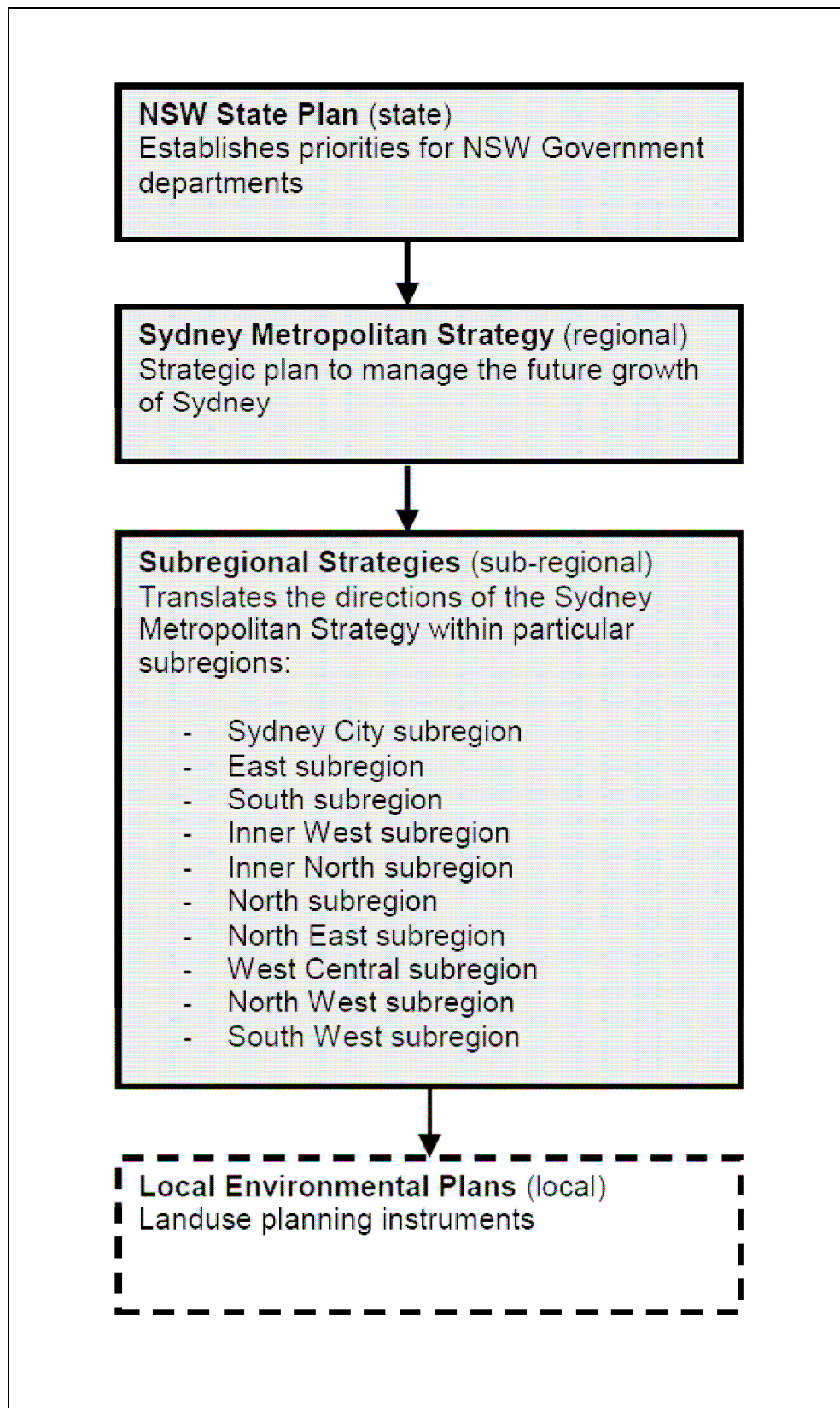


Figure 7: Conceptual map of key strategic planning policies for Sydney (Author 2008)

NSW State Plan

The *NSW State Plan* (NSW Premier's Department 2006) is a broad policy document that sets out priorities for State Government action over a 10 year period (i.e. 2006-2016). These priorities have an influence upon regional strategies such as the *Sydney Metropolitan Strategy*, the *Sydney-Canberra Corridor Regional Strategy* and the *South Coast Regional Strategy*. Of the 34 priorities, only one is relevant to planning for urban food and nutrition systems. The creation of local food strategies is consistent with priority S3 of the plan, which targets improved health through reduced obesity, smoking, illicit drug use and risk drinking. Local food strategies, such as the Penrith Food Project, are consistent with Priority S3 as they aim to increase the availability of healthy foods and encourage healthy eating, which can have a positive impact on obesity rates.

Although the reference to obesity in the *NSW State Plan* is encouraging, the lack of a specific reference to food security, food access, or any other food system issues indicates that planning for food has not been identified as a priority for NSW Government action.

Sydney Metropolitan Strategy

City of Cities: A Plan for Sydney's Future (the *Sydney Metropolitan Strategy*) (NSW Department of Planning 2005a) is a broad plan that was prepared by the Department of Planning in 2005 to manage the growth and development of Sydney over a 25-year period. The strategy is a major influence on strategic planning decisions in the Sydney region, and on the creation of environmental planning instruments such as State environmental planning policies, regional environmental plans, and local environmental plans. Accordingly, the Metropolitan Strategy has significant influence on the way planners deal with food and nutrition issues in Sydney.

The *Sydney Metropolitan Strategy* emphasises the need to contain Sydney's urban footprint and protect its valuable rural activities and resource lands. This emphasis has been provided through *Action E3: Achieve sustainable use of natural resources* and *Action E4: Protect valuable rural activities and resource*

lands. It does this by facilitating the development of maps to identify significant rural activities, and ensuring that new environmental planning instruments maintain all viable agricultural land uses and minimise land use conflict. It notes that Sydney's agricultural lands "provide fresh local produce, reducing the need to transport food long distances and complement Sydney as a sustainable food capital" (NSW Department of Planning 2005a, 205).

Another key feature of the Metropolitan Strategy is the identification of two 'growth centres' to accommodate the city's growing population. The North West Growth Centre is situated around Riverstone and Marsden Park, while the South West Growth Centre is located around Leppington and Bringelly. It is estimated that the North West and South West Growth Centres will provide 181,000 new homes, which accounts for 30 to 40 per cent of Sydney's long term housing growth (Growth Centres Commission 2008).

A statement from the then Premier, Bob Carr, when the first detailed plans for the growth centres were announced in June 2005, indicates that food access was a consideration in the preparation of the plans. He said that "in these new communities [i.e. the growth centres] we will make sure families won't have to use a litre of petrol to buy a litre of milk" (NSW Department of Planning 2005b). According to the plans, most residents will live within five minutes walking distance from a corner store or shopping centre (NSW Department of Planning 2005b). While this approach is positive, the broader issue of protecting Sydney's fertile agricultural lands appears to have been overlooked by the *Sydney Metropolitan Strategy*. Marsden Park and Bringelly currently host a range of agricultural land uses including market gardens, poultry farms, extensive crops and grazing paddocks. Many of these land uses will be lost to urban development under the plans, with little consideration of how this will affect the ability of Sydney to provide itself with food into the future.

The *Sydney Metropolitan Strategy* also concentrates Sydney's future growth in existing centres, where residents have adequate access to transport infrastructure, retail facilities and services. Higher density development is encouraged within 800m of railway stations, which is equivalent to 10 minutes

of walking, to encourage people to use public transport and to walk or cycle to their local centre to their buy groceries. In effect, this aspect of the *Sydney Metropolitan Strategy* is supportive of food issues. It encourages people to live in areas that are serviced by food retail facilities such as grocery stores, bakeries, restaurants and cafes, whilst also linking residents to additional food retail facilities by public transport. Although it does not appear that this was the intended outcome of concentrating growth in existing centres, it is considered to be a positive outcome for food access in Sydney.

Draft subregional strategies

The draft subregional strategies are strategic plans that translate the broad directions of the *Sydney Metropolitan Strategy* into more detailed and locally specific directions for particular subregions. There are a total of ten draft subregional strategies that plan for the subregions of Sydney. Of particular interest is the draft North West Subregional Strategy, which guides land use planning in the Baulkham Hills, Blacktown, Blue Mountains, Hawkesbury, and Penrith local government areas. This strategy was selected for closer analysis, as three of the four local food strategies that were identified previously by this thesis are located within the North West subregion.

Although the draft North West Subregional Strategy does not mention the Penrith Food Project, it does acknowledge the Hawkesbury Harvest Farm Gate Trail for its promotion of tourism and rural industries in the subregion (NSW Department of Planning 2007, 117). This positive description of the Hawkesbury Harvest suggests that the draft strategy supports the creation of local food strategies in Sydney. However, the draft North West Subregional Strategy does not refer to the positive attributes of the Hawkesbury Harvest, such as its impact on conviviality or the health of city residents. Therefore, reference to the Hawkesbury Harvest in the draft strategy cannot be considered an indication of the State Government's support of local food strategies.

Despite the need to protect Sydney's agricultural land, the draft North West Subregional Strategy lacks any meaningful consideration of the broader food

system issues such as food transport systems and access to food retail facilities. This can be attributed to the absence of food system considerations in the Metropolitan Strategy, which provides the framework for the draft subregional strategies to analyse in further detail. In this sense, it can be reasoned that this finding is applicable to the remaining nine draft subregional strategies.

Each of the ten subregional strategies are currently in draft form, providing some opportunity for amendments that better reflect the importance of planning for food in Sydney. However, it is recognised that this opportunity is limited whilst the parent policy, the *Sydney Metropolitan Strategy*, does not identify food issues as a priority.

Lack of support for local food strategies

It is evident that the *NSW State Plan*, the *Sydney Metropolitan Strategy* and the draft subregional strategies refer to food and nutrition issues, including the need to address the State's high obesity rates and protect Sydney's rural and resource lands. However, on the whole, the consideration of food system issues by these policies is poor, as there is no *direct* relevance to food systems. Table 7 demonstrates that the *Sydney Metropolitan Strategy* and draft subregional strategies consider only one of the many influences that the built environment has on health (as outlined in chapter two of this thesis by Gebel et al. (2000)). Although the strategy notes the importance of Sydney's agricultural lands, it also facilitates the redevelopment of fertile agricultural land in the North West and South West Growth Centres, which is expected to have a detrimental effect on food supply in Sydney.

Key environmental influences on food and nutrition (Gebel et al. 2005, 18)	Considered in Sydney Metropolitan Strategy or draft subregional strategies?
Location and preservation of agricultural lands	✓
The location and composition of retail land uses	✗
Food transport systems	✗
Transport infrastructure to food retail locations	✗
Food service locations	✗
Food advertising exposure within public places	✗
Facilities (e.g. water bubblers, breastfeeding places)	✗

Table 7: Consideration of food and nutrition in the *Sydney Metropolitan Strategy* (Author 2008)

Food and nutrition are not identified as priority issues by planning policy at the State level (i.e. *NSW State Plan*), which has contributed to these issues being overlooked at both the regional (e.g. the *Sydney Metropolitan Strategy*) and local levels (only 4 local food strategies were identified in the Sydney region). Consequently, this thesis finds that the Sydney's key planning policies do not adequately support the creation of local food strategies, or encourage planners to consider food system issues. This opinion was unanimous amongst the planning, health and agriculture professionals who were interviewed as part of this thesis (Capon 2008, Department of Planning representative 2008, Mason 2008, McCue 2008, Millen 2008). Elisabeth Millen of the Sydney South West Area Health Service and the Sydney Food Fairness Alliance commented that "the government doesn't have a coherent strategy for addressing food issues, either in terms of sustainable futures of food supply, or in terms of equitable access to healthy food" (Millen 2008).

Opportunities to better support food systems planning

Having identified the inadequacies of the NSW planning system in relation to food system issues, the following suggests ways to improve and better support planning for food in Sydney.

Planners must accept that they have an important role in planning for food

First and foremost, it is crucial that urban planners accept that they have an important role in planning for food systems in Sydney. Each of the six interviewees that were interviewed as part of this thesis considered that it was important for planners to be involved in food system issues, and strategically plan for food in Sydney (Capon 2008, Department of Planning representative 2008, Develin 2008, Mason 2008, McCue 2008, Millen 2008).

As illustrated in previous chapters, planners have a strong influence on interactions between the built environment and healthy eating. Consequently, it is essential that planners are cognisant of this relationship, and that policies are established to ensure the profession's interactions with food systems is supportive of healthy eating.

Generate discussion about the need to plan for food in Sydney

Since the release of the *Food Security Options Paper: A planning framework and menu of options for policy and practice interventions*, prepared by the NSW Centre for Public Health Nutrition in 2003, there has been little discussion about food system issues by the NSW Government. In contrast, the discussion of planning for food in Sydney is gaining momentum with non-government organisations. The Sydney Food Fairness Alliance has been raising awareness of food system issues since 2005. Its goal is to “coordinate the efforts of rural producers, health professionals, community workers and community-based advocates active in developing socially, economically and environmentally sustainable food system in the Sydney region” (Sydney Food Fairness Alliance 2007, 1).

The Alliance is planning a 'food summit' that will advocate for a coordinated food policy that looks at the future of food in NSW (Millen 2008). The forum, which is to be held in 2009, will provide an appropriate forum to discuss the opportunities and constraints to planning for food in Sydney. This is an important step in the formulation of food policy, and one which NSW Government agencies such as the Department of Planning and the Department of Health should be involved in.

Better consideration of food issues in environmental planning instruments

A greater recognition of food issues in the NSW planning system is required to better reflect the relationship between planning and food systems. State, regional and local planning policies need to support the consideration of food and nutrition issues including food security, food access, food transport, and the protection of agricultural lands. In particular, the *Sydney Metropolitan Strategy* needs to encourage councils to engage in food systems at a local level through the development of local food strategies, like the Hawkesbury Harvest and Penrith Food Project.

The Western Sydney Regional Organisation of Councils (WSROC) has recently established '*an agenda for sustainability and wellbeing for Western Sydney*', reinforcing the concept developed in this thesis that local councils in Sydney's West are conscious of food issues and have recognised the need to develop policy responses. The agenda aims to "develop strategies to make fresh, regionally produced food more affordable and better distributed throughout the region, particularly to disadvantaged areas, through partnerships between producers, local and state government agencies, community organisations and small business outlets" (WSROC 2008, 8). It is envisaged that an action similar to this needs to be incorporated into Sydney's Metropolitan Strategy and draft subregional strategies in order to effectively support the creation of local food strategies.

A representative of the NSW Department of Planning suggested that the Building and Sustainability Index (BASIX) could be used to encourage local food production in urban environments (Department of Planning

representative 2008). At present, a BASIX certificate is required for all new residential developments to ensure that they meet specific water and energy targets. The BASIX system could be modified to encourage opportunities for local food production, by rewarding developers for incorporating green roofs, vegetable gardens, planter boxes and fruit trees in their development proposals. These open minded and innovative solutions to planning for food in Sydney are greatly encouraged.

Locally specific policies such as local environmental plans can provide flexible planning controls that permit built environment features, which promote healthy eating, such as community gardens, breast-feeding facilities, green roofs, farm gate sales, markets, and fruit trees in streets. Particular attention needs to be paid to removing the 'barriers' to healthy eating and the supply of fresh produce to city residents. David Mason, of the NSW Department of Primary Industries, emphasised this point in an interview with the author:

Unless you remove the barriers to maximising the economic dynamics of the farming community then it's going to struggle... urban agriculture won't survive unless you can maximise that capacity. (Mason 2008)

This includes relaxing restrictions on the sale of produce in food retail facilities and food related advertising. This was undertaken by Hawkesbury Council, whereby the Hawkesbury Local Environmental Plan 1989 was amended to permit farm gate sales, and associated signage for the Hawkesbury Harvest, as exempt development in the Council's rural zones. These land uses were previously prohibited under the local environmental plan (Mason and Docking 2005, 6).

Develop local food strategies for the growth centres

Although the development of the North West and South West Growth Centres has been criticised in this chapter, it is important that the growth centres are recognised as an opportunity to create a model for food systems planning. This was highlighted in interviews with a representative of the Department of

Planning and Anthony Capon, who offered the following thoughts on planning for the growth centres.

I think those major developments provide us with a planning opportunity to do better than we have in the past... it's really important that we minimise the impact on food production in those areas and that we look at opportunities to grow food and have a healthy food environment within the development. (Capon 2008)

The creation of local food strategies is a vital measure to ensure that plan makers and developers take food considerations into account in the development of the growth centres. It is important that these strategies take advantage of opportunities to retain agricultural land uses where possible. For instance, market gardens could be located in flood-affected areas, and community gardens could be situated in open space corridors (Department of Planning representative 2008).

Follow the lead of proactive State governments in developing food policies
State Government Departments in other areas of the country are engaging in discussion about food systems. For instance, the Western Australian Department of Agriculture and Food (2007, 5) has published a discussion paper on the creation of a state-wide Food Strategy that would consider a number of food issues, ranging from health and food security to building on international trade relationships and encouraging global investment in Western Australian food businesses.

The Victorian Government has established a grants system, whereby VicHealth funds local councils to develop strategies to “improve access to nutritious food and to influence the cultural, social, economic and environmental barriers poor and disadvantaged communities face in eating healthily” (VicHealth 2008b). Examples include the City of Casey and the Cardinia Shire Council’s awards scheme, which encourages local eateries to serve nutritious meals, and a child nutrition project for the City of Greater Dandenong (VicHealth 2008a, 6-8). Interestingly, a survey of local

governments throughout the country found that Victorian Councils are “notably more involved in food and nutrition issues than elsewhere in Australia” (VicHealth 2007, 1).

Similar actions need to be taken in NSW to support the creation of local food strategies. NSW Government authorities could use the Western Australian and Victorian models to increase the involvement of planners in food and nutrition issues at the State and local levels.

Conclusion

This chapter has identified that the NSW planning system does not sufficiently support the creation of local food strategies or the consideration of nutritional issues. This is consistent with the findings of the literature review, which found that planners have historically overlooked food system issues (Pothukuchi and Kaufman 1999, 2000). However, qualitative interviews that were conducted as part of this thesis have highlighted a number of opportunities for better supporting planning for food in Sydney. These findings have stressed the need for NSW State and local governments to become more involved in food systems through policies such as the *Sydney Metropolitan Strategy* and the draft subregional strategies.

The following chapter will emphasise the importance of the planning profession’s involvement in food and nutrition matters and provide a list of recommendations that are required to better support food systems planning in Sydney.

Chapter 6

Conclusion



Green grocer,
Marrickville, NSW

Summing up

The built environment has a number of complex effects on urban food and nutrition systems. For example, healthy eating is affected by the location of food retail facilities, the preservation of agricultural lands, people's access to transport infrastructure, and exposure to advertising. However, despite these important linkages, planners have tended to overlook food systems in the past. This thesis has attempted to draw the attention of planners towards this issue.

The climate is perfect for emphasising the importance of the planning profession's interaction with urban food systems. For instance, the increasing pervasiveness of serious diet related diseases and conditions in cities, such as obesity and type II diabetes, has resulted in growing interest in links between the built environment and health. Heightened consumer awareness of food issues, such as how and where food is produced, has also contributed to the pertinent nature of urban food issues.

This thesis has aimed to examine the involvement of NSW State and local governments in planning for community food systems in Sydney, and identify improvements that are required to better support local food strategies and food considerations. These aims were achieved mainly through an internet survey, which was carried out on 41 local councils in the Sydney region, and qualitative interviews that were conducted with planning, health and urban agriculture professionals.

Findings

A review of relevant international literature on food systems indicates that food and nutrition issues have traditionally been a 'blind spot' for planning scholars, educators and professionals. In order to test this notion for Sydney, an internet survey was conducted for all local council websites that are planned for under the *Sydney Metropolitan Strategy*. The findings of the survey have demonstrated that planning for food is not a priority for local councils in Sydney, with local food strategies being identified in only four councils out of

41. Using the results of this survey, the Hawkesbury Harvest and the Penrith Food Project were selected for more detailed analysis.

The Hawkesbury Harvest and the Penrith Food Project are Sydney-based local food strategies that aim to improve the nutritional health of local residents and achieve healthy and sustainable food systems. These strategies contemplate a broad spectrum of issues, ranging from the protection of Sydney's fertile agricultural lands to community gardens and breastfeeding. This thesis has found that the Hawkesbury Harvest and the Penrith Food Project exemplify ways in which planners can become more involved in community food systems.

A review of key NSW planning policies revealed that the planning system offers little support to the creation of local food strategies in the Sydney region. However, the findings of the qualitative interviews conducted for this thesis suggest that there are many opportunities to better support planning for food systems in Sydney. These include making amendments to strategic planning instruments such as the *Sydney Metropolitan Strategy* and the associated draft subregional strategies to ensure they reflect the importance of interactions between the built environment and food systems.

Recommendations

This thesis has found that there are several ways that urban planners can be encouraged to work constructively with food systems. The following is a list of recommendations that are required to better support the creation of local food strategies in Sydney and the consideration of food and nutrition issues.

- i. ***Planning educators, scholars, and professionals need to generate discussion about the need to plan for food in Sydney.***

This can be achieved by preparing discussion papers on food security, establishing a grants system for local food strategies, promoting conferences and forums on food systems planning, publishing papers on the issue, and incorporating core courses on community food

systems in urban planning university degrees. These efforts need to engage professionals from a number of disciplines to reflect the need for inter-disciplinary responses to food and nutrition issues.

ii. ***NSW Government agencies should follow the lead of international examples in developing a citywide food policy for Sydney.***

These examples include the Mayor's London Food Strategy and the American Planning Association's guide to community and regional food planning. This strategy should be developed through an intersectoral approach, featuring collaboration between the Department of Planning, the Department of Primary Industries and NSWHealth.

iii. ***The Sydney Metropolitan Strategy and draft subregional strategies should be amended to better recognise the importance of planning for food in Sydney.***

These strategies should reflect the importance of planning for food in Sydney and explicitly support the creation of local food strategies throughout all local government areas in Sydney. In particular, the draft subregional strategies should be amended to better reflect the need to consider food issues before they are finalised by the Department of Planning.

iv. ***The NSW Department of Planning should encourage local councils to consider food issues when preparing and reviewing environmental planning instruments.***

In particular, these instruments should reflect key food system considerations, such as food transport systems, access to food retail facilities, food advertising exposure, and the preservation of fertile agricultural lands.

- v. ***Local food strategies should be developed for all major growth centres, particularly in the North West and South West Growth Centres.***

The development of the North West and South West Growth Centres should be recognised as an opportunity to produce a planning model for sustainable and equitable community food systems.

- vi. ***Local councils should review their environmental planning instruments to remove the statutory barriers to healthy and equitable community food systems.***

A review of local planning instruments needs to be conducted by local councils to ensure that Councils' land use controls support local food systems. This can be achieved by removing statutory barriers to urban agriculture, community gardens, easy access to food retail facilities, farm gate sales, fresh food markets and the protection of viable farmlands.

Suggestions for further research

This thesis has presented original research on the ways that planners interact with food and nutrition systems in Sydney. However, there are a number of issues that require further research for food policies to be successful in Sydney. Future research should focus on building upon existing theory by exploring the complex interactions between planning and urban food systems. This can be achieved by gathering local and regional data on food production, processing, retail distribution and exploring how these relate to planning functions.

Another potential focus for future research is on how local food strategies and urban food system considerations can be integrated into environmental planning instruments. Although this thesis has touched on this issue, it has not outlined in detail how local planning legislation can effectively encourage and support the full spectrum of food considerations. These considerations include

how planners can successfully weave urban agriculture into urban settings, nurture convivial eating environments, and promote healthy eating through planning legislature.

Whilst this thesis has focused on the implications that planning for food systems can have on population health, the impact that climate change will have on food systems is also an important consideration. It is noted that the impact of rising global temperatures and reduced rainfall will undoubtedly have a significant effect on Sydney's food supply. It will effectively increase the state significance of Sydney's agricultural land and therefore the need to put in place forward-thinking strategies to plan for food. Accordingly, future research should aim to determine the effects of climate change on Sydney's food growing areas and food supply.

Conclusion

The findings of this thesis are highly important because they demonstrate that, despite their significance, food issues are not on the State Government agenda in Sydney. My research has found that only four local government areas in Sydney have a policy in place to address urban food system matters. It has also recognised that local food strategies such as the Hawkesbury Harvest and the Penrith Food Project demonstrate how planners can positively contribute to community food systems and improve the nutritional health of urban residents. It is important that these examples are highlighted as effective mechanisms for planning for food, and the creation of similar strategies is encouraged throughout Sydney.

There are a number of ways that planning profession can ensure that it has a positive affect on urban food systems. This thesis has provided six key recommendations to better support the creation of local food strategies in Sydney and the consideration of food and nutrition issues. These recommendations were informed by the analysis of literature on food systems, an internet survey, international and local case studies, and qualitative interviews.

Due to the increasing pervasiveness of chronic diet related conditions in cities, and heightened consumer awareness of food issues, there has never been a better time to place food system issues on the planning agenda. It is therefore crucial that NSW Government departments act now to plan for the future of food production and consumption in Sydney.

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Appendices

Internet Survey – Local Food Strategies

Councils in the Sydney metropolitan region (41 in total):

Ashfield
Auburn
Bankstown
Baulkham Hills
Blacktown
Blue Mountains
Botany Bay
Burwood
Camden
Campbelltown
Canada Bay
Canterbury
City of Sydney
Fairfield
Hawkesbury
Holroyd
Hornsby
Hunters Hill
Hurstville
Kogarah
Ku-ring-gai
Lane Cove
Leichhardt
Liverpool
Manly
Marrickville
Mosman
North Sydney
Parramatta
Penrith
Pittwater
Randwick
Rockdale
Ryde
Strathfield
Sutherland
Warringah
Waverley
Willoughby
Woollahra
Wollondilly

Internet Survey – Local Food Strategies	
Local Government Area	Ashfield
Website address	www.ashfield.nsw.gov.au
Date accessed	27 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person / number	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Auburn
Website address	www.auburn.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Bankstown
Website address	www.bankstown.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A
Comments	www.bankstownbites.com.au This website was established by Bankstown Council, and it provides information about upcoming food events (e.g. Bankstown Bites food festival), healthy eating, and local businesses. It is not a local food strategy as it more of an informative than a policy document.

Internet Survey – Local Council Food Strategies	
Local Government Area	Baulkham Hills
Website address	www.baulkhamhills.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Blacktown
Website address	www.blacktown.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Blue Mountains
Website address	www.bmcc.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	Yes
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	Sustainable Blue Mountains
Date created	July 2003
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	citymonitoringteam@bmcc.nsw.gov.au
Comments	http://www.sustainablebluemountains.net.au/ Sustainable Blue Mountains is a 25-year vision for the city of Blue Mountains. Focusing on sustainability, this vision specifically addresses food security within the local government area.

Internet Survey – Local Council Food Strategies	
Local Government Area	Botany Bay
Website address	www.botanybay.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Burwood
Website address	www.burwood.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Camden
Website address	www.camden.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Campbelltown
Website address	www.campbelltown.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Canada Bay
Website address	www.canadabay.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Canterbury
Website address	www.canterbury.nsw.gov.au
Date accessed	28 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	City of Sydney
Website address	www.cityofsydney.nsw.gov.au
Date accessed	29 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	Food access concepts are implicit within the Sustainable Sydney 2030 plan – specifically the notion of having community gardens and fresh food markets within each of the ten ‘activity hubs’. www.cityofsydney.nsw.gov.au/2030/

Internet Survey – Local Council Food Strategies	
Local Government Area	Fairfield
Website address	www.fairfieldcity.nsw.gov.au
Date accessed	29 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	Yes
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	Villawood Food Security Project
Date created	Unknown
Issues covered	Food security <input checked="" type="checkbox"/> Food access <input checked="" type="checkbox"/> Food affordability <input checked="" type="checkbox"/> Emphasis on local produce <input checked="" type="checkbox"/> Protection of agricultural land <input checked="" type="checkbox"/> Community gardens <input checked="" type="checkbox"/> Local markets <input checked="" type="checkbox"/> Breastfeeding <input checked="" type="checkbox"/> Other:
Contact person	Elisabeth Millen, Sydney South West Area Health Service (02) 9780 2841
Comments	<ul style="list-style-type: none"> • Focus on Villawood, which was classified as 'food insecure' in 2004 (i.e. reactive measure) • A community café was established in the area • Villawood Food Action Group (a community group) was formed to plan future food security projects • Appears to be Council endorsed, and run by the Sydney South West Area Health Service

Internet Survey – Local Council Food Strategies	
Local Government Area	Hawkesbury
Website address	www.hawkesbury.nsw.gov.au
Date accessed	30 August 2008
Predominant land uses	Rural <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input type="checkbox"/> Food security <input type="checkbox"/>
Did the search reveal a local food strategy?	Yes
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	Hawkesbury Harvest, Hawkesbury Food Program
Date created	2000
Issues covered	Food security <input checked="" type="checkbox"/> Food access <input checked="" type="checkbox"/> Food affordability <input checked="" type="checkbox"/> Emphasis on local produce <input checked="" type="checkbox"/> Protection of agricultural land <input checked="" type="checkbox"/> Community gardens <input checked="" type="checkbox"/> Local markets <input checked="" type="checkbox"/> Breastfeeding <input checked="" type="checkbox"/> Other:
Contact person	info@hawkesburyharvest.com.au
Comments	http://www.hawkesbury.net.au/community/178.html www.hawkesburyharvest.com.au

Internet Survey – Local Council Food Strategies	
Local Government Area	Holroyd
Website address	www.holroyd.nsw.gov.au
Date accessed	31 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Hornsby
Website address	www.hornsby.nsw.gov.au
Date accessed	31 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A
Comments	Hawkesbury Harvest operates within the Hornsby LGA

Internet Survey – Local Council Food Strategies	
Local Government Area	Hunters Hill
Website address	www.huntershill.nsw.gov.au
Date accessed	31 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Hurstville
Website address	www.hurstville.nsw.gov.au
Date accessed	31 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Kogarah
Website address	www.kogarah.nsw.gov.au
Date accessed	31 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A
Comments	Council has banned the use of synthetic trans fatty acids in deep- and shallow-fat frying in food outlets and council childcare centres via planning controls http://www.news.com.au/dailytelegraph/story/0,22049,23603860-5006009,00.html

Internet Survey – Local Council Food Strategies	
Local Government Area	Ku-ring-gai
Website address	www.kmc.nsw.gov.au
Date accessed	31 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A
Comments	Hawkesbury Harvest operates within the Hornsby LGA

Internet Survey – Local Council Food Strategies	
Local Government Area	Lane Cove
Website address	www.lanecove.nsw.gov.au
Date accessed	31 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Leichhardt
Website address	www.leichhardt.nsw.gov.au
Date accessed	31 August 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A
Comments	Council has produced a map to indicate the location of community gardens within the LGA.

Internet Survey – Local Council Food Strategies	
Local Government Area	Liverpool
Website address	www.liverpool.nsw.gov.au
Date accessed	1 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Manly
Website address	www.manly.nsw.gov.au
Date accessed	1 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A
Comments	Council has a zero waste strategy.

Internet Survey – Local Council Food Strategies	
Local Government Area	Marrickville
Website address	www.marrickville.nsw.gov.au
Date accessed	1 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Mosman
Website address	www.mosman.nsw.gov.au
Date accessed	1 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	North Sydney
Website address	www.northsydney.nsw.gov.au
Date accessed	1 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Parramatta
Website address	www.parracity.nsw.gov.au
Date accessed	1 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	
Comments	Supports local food markets

Internet Survey – Local Council Food Strategies	
Local Government Area	Penrith
Website address	www.penrithcity.nsw.gov.au
Date accessed	1 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	Yes
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	The Penrith Food Project
Date created	1994
Issues covered	Food security <input checked="" type="checkbox"/> Food access <input checked="" type="checkbox"/> Food affordability <input checked="" type="checkbox"/> Emphasis on local produce <input checked="" type="checkbox"/> Protection of agricultural land <input checked="" type="checkbox"/> Community gardens <input checked="" type="checkbox"/> Local markets <input checked="" type="checkbox"/> Breastfeeding <input checked="" type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Pittwater
Website address	www.pittwater.nsw.gov.au
Date accessed	1 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Randwick
Website address	www.randwick.nsw.gov.au
Date accessed	1 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Rockdale
Website address	www.kogarah.nsw.gov.au
Date accessed	3 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Ryde
Website address	www.ryde.nsw.gov.au
Date accessed	3 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Strathfield
Website address	www.strathfield.nsw.gov.au
Date accessed	3 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Sutherland
Website address	www.sutherland.nsw.gov.au
Date accessed	3 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Warringah
Website address	3 September 2008
Date accessed	www.warringah.nsw.gov.au
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Waverley
Website address	www.waverley.nsw.gov.au
Date accessed	3 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Willoughby
Website address	www.willoughby.nsw.gov.au
Date accessed	3 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Woollahra
Website address	www.woollahra.nsw.gov.au
Date accessed	3 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Mix <input type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A

Internet Survey – Local Council Food Strategies	
Local Government Area	Wollondilly
Website address	www.wollondilly.nsw.gov.au
Date accessed	3 September 2008
Predominant land uses	Rural <input type="checkbox"/> Urban <input type="checkbox"/> Mix <input checked="" type="checkbox"/>
Keyword search	Food strategy <input checked="" type="checkbox"/> Local food <input checked="" type="checkbox"/> Food policy <input checked="" type="checkbox"/> Food security <input checked="" type="checkbox"/>
Did the search reveal a local food strategy?	No
Council facilitated or endorsed?	Council facilitated <input checked="" type="checkbox"/> Council endorsed <input checked="" type="checkbox"/>
Name of strategy	N/A
Date created	N/A
Issues covered	Food security <input type="checkbox"/> Food access <input type="checkbox"/> Food affordability <input type="checkbox"/> Emphasis on local produce <input type="checkbox"/> Protection of agricultural land <input type="checkbox"/> Community gardens <input type="checkbox"/> Local markets <input type="checkbox"/> Breastfeeding <input type="checkbox"/> Other:
Contact person	N/A
Comments	This council hosts Hawkesbury Harvest events