

How can land-use planning influence food security?

A multi-dimensional agenda

Trevor Budge - Community Planning and Development – Bendigo Campus

- Food security and the use of land for growing food has *always* been an issue for the human race

- Relatively recently a small group of countries have apparently managed to break free from that burden – the food-land nexus is broken ... and it doesn't really matter ***Or does it?***

- Unfortunately much of the land use planning that is being undertaken is making food security worse

- Are the planning system and planners doing this deliberately – **NO**

- Is there recognition that they are making it worse – **Barely**

- Is it on the agenda of government and the DPCD to address it – **Not Really** - but there are some encouraging signs

- Will we have to wait a long time to see substantial change – **probably** - unless we have a tipping point

- The concept that food/food security be addressed by the planning system is not DPCD policy
- “The protection of high quality and productive agricultural land from alternative land uses and developments does not align with government policy.” *Policy Officer, Strategic Policy Unit
Department of Primary Industries*
- Australian metropolitan planning strategies do not address food – they barely address health – Melbourne 2030 has nine principles - advocacy to have health as the 10th principle has been rejected

Land Use Planning – what is it?

- It is a legal system and a process by which government and society exercise control on how cities are developed
- It sets both broad directions and considerable detail about how and where development is located and designed
- It is about managing land use change to deliver community benefits – how do we establish what those community benefits area?
- Does it always work? - No ... but it's better than the alternative

Land Use Planning – does it generally or specifically address food security? - *NO*

Could it address and assist in specifically assisting in delivering improved food security – YES - but there are limitations in its capacity

Why is it limited in its capacity?

- 1 The legal controls that give land use planning its capacity and strength - are also its weakness***
- 2 The planners are not geared up to deliver***
- 3 It's not a priority issue for the planning system or for the planners or for many in local government***

Land Use Planning and Food Security

One good initiative are the changes to the Objectives of the Planning and Environment Act in Victoria

“The **objectives of planning** in Victoria are—

- (b) to secure a pleasant, efficient, **healthy** and safe working, living and recreational environment for all people in Victoria;
- (c) to **balance environmental, social and economic** considerations, and respond to population and demographic changes, in decisions about the use and development of land;
- (e) to achieve high quality and **sustainable design** in public and private places in Victoria;
- (f) to **integrate land use, transport and infrastructure** to enable the co-ordinated provision of sustainable transport for the benefit of the community;”

Land Use Planning and Food Security

Three contrasting views

1. The world grows enough food for all its people – the market can respond to future demand (it always has), issues of hunger are really about transport, distribution, storage, protection policies, subsidies and trade relations

There are 1 billion people in need of more food and 1 billion overweight

Land Use Planning and Food Security

2. The current system of food production is unsustainable
 - it is dependent on three finite resources that are running out - water, soil and oil.

Importing bottled water by air cargo from France

– doesn't make a lot of sense

Land Use Planning and Food Security

3. The current system of food production could be made sustainable and could feed the world into the future, but it will require a massive change in current practices and behaviours.

The amount of water embedded in the food that Australians wastes each year is about the same as the amount of water consumed in Melbourne and Sydney each year

Some sobering facts

- We are going to have to produce the same amount of food over the next 50 years that has been produced in the whole of human history
- Perth has 4 days supply of fresh fruit and vegetables and is importing milk from the eastern seaboard for about two months a year
- What the supermarkets have done. Much of the production that is on the shelves is the result of contracts to produce a commodity to a specification – its not about growing nutritious food .

Land Use Planning and Food Security

The term food security conveys a whole series of messages

- We are running out of food and land to grow it
- Some people - even in first world countries do not have enough to eat
- People overeating the 'wrong' food has massive implications for our health systems and future economy
- The price of food will increase sharply
- Food supplies have been taken over by multi-nationals
- Food is susceptible to bio-security issues and threats
- A Volcano in Iceland makes even Europe's food insecure

Two parallel universes

- Universe 1 - Governments, corporations, capitalism and people proceeding 'lemming like' to an abyss
- Universe 2 - An extraordinary ground swell of community, household and individual action – with action also by some local governments, businesses and corporates and some governments

The Story So Far

- Historically cities were small– many foods couldn't be stored and transported long distances – so a lot of food was grown and produced in and around cities – much the way it still occurs in and around many cities in the developing world

- Cities in the west increased their population dramatically – fresh food production (market gardens and livestock) expanded rapidly on the edge of cities to cope with this demand

The Story So Far

- In Australia, 'once upon a time', *every* second home on a quarter acre block had a veggie patch, fruit trees and some chooks

Land Use Planning and Food Security



**HARVEST
OF THE SUBURBS**



THE HARVEST OF THE SUBURBS
ANALYSING THE
GROWING OF
FOOD IN
THE MARGINAL ZONE

Andrew Sayer



The Story So Far

- Large scale, long haul transport, large scale refrigerated storage and combined (refrigerated transport) were invented and the necessity for a nexus between a city and its localised food supply were severed – it looked like forever

- Local farmers growing food and selling in a city economy were replaced by large scale farmers producing commodities sold by contracts to manufacturing companies, wholesalers and supermarket chains

- Vegetables and other food production became part of a supply chain

The Story So Far

- House sizes kept increasing and backyards kept getting smaller – backyards are converted to entertainment areas and swimming pools

- Productive market gardeners in and around cities sell up and move out as land developers buy them up and produce the last crop - housing

The Story So Far

- MMBW 1954 *'a line must be drawn somewhere, or the city will continue sprawling over a wider and wider area, increasing the disabilities inherent in this type of growth and putting out of production more and more food producing areas'*

The Story So Far

- Land producing food was increasingly seen as largely an aesthetic value in the eyes of policy makers
- In terms of policy makers –little practical necessity and argument for the retention of food production in and around our cities
- The loss of productive agricultural land is seen as *inevitable*



"We're waiting for the city to come to us..."

But the story wasn't finished – there is more!

**Increasing numbers of people, for a growing range
reasons, are **not happy** with how the story
unfolded and appears to have ended**

George W and Laura have definitely move out



Not Happy!

- Supermarket chains are evil
- Naming and blaming for obesity breaks out
- Fast food challenged by slow food
- Water supplies dry up and the inefficiency of water and food exposed
- The rise and rise of Jamie Oliver
- Farmers markets are trendy --- and good for you
- Consumers dare to question what is in their food – and they don't like the answer
- Agriculture & food miles are *discovered* to *cause* climate change
- Michelle Obama gives the White House lawn a makeover

Land Use Planning and Food Security

- The benefits of local food systems are proclaimed
- Guerrilla gardening* breaks out
- Edible landscapes sound and look funky
- We can grow vegetables on roof tops!
- We can even have vertical gardens!
- Discovery - Land Use Planning and Planners can impact on Food Security Positively and Negatively**
- Community gardens are demanded
- Community supported agriculture
- Urban agriculture* is not an oxymoron!
- Food sensitive urban design* invented (Kirsten Larson 2009)

What *could* land use planning do *now* - **if government wanted to and took the lead?**

- Incorporate food security as a key metro strategy element
- Stop high quality productive agricultural land being used for other uses
- Require all new development (housing and commercial) to include provision for food production

What *can't* land use planning do now ?

- Require high quality productive agricultural land to actually be used for food production – could use incentives
- Make shopping centres include fresh food outlets
- Act retrospectively – to fix up past mistakes

What *does* planning need to do?

- Be creative and proactive
- Incorporate a food security agenda into forward (strategic) planning and development control (statutory planning)
- ***Is it going to happen?***
- Perhaps gradually – but not in any meaningful way under the current arrangements and policies

Urban Agriculture is Rediscovered

What about the economy, land use and transport of food in our Australian cities?

- Food is about 12.3% of Melbourne's GVA (gross value added) and employs 210,000 persons
(SGS Economics and Planning 2009)
- Food is a major component of the economy of all cities eg tourism
- Transporting food and transport to buy food is not factored into transport planning and land use

Food is Rediscovered

- Cities, regions and whole countries are *discovered* to be food insecure and vulnerable
- Community agitation, some disturbing data (eg the identification of ‘food deserts’), and combining the need for climate change action with the discovery of the benefits of urban food production, produces a new coalition of forces
- Populist Mayors (overseas) establish food councils, city wide food policies and food is part of the strategic planning agenda
- Food is at last back *on the table* – an *essential ingredient* in the call for new strategies and policies
- Food is a local policy agenda



Food is Rediscovered

- Food and Water –a new policy agenda?
 - where it is grown,
 - how far and how many times it has to be transported,
 - where it is sold, bought and consumed
 - who has convenient and equitable access to it
 - how the wasted product is disposed of, and
 - the rules and systems that impact on and support food

Examples of Urban Sprawl



The Epitome of Leapfrog/Scattered design



Lack of quality Public Spaces - No central Hub

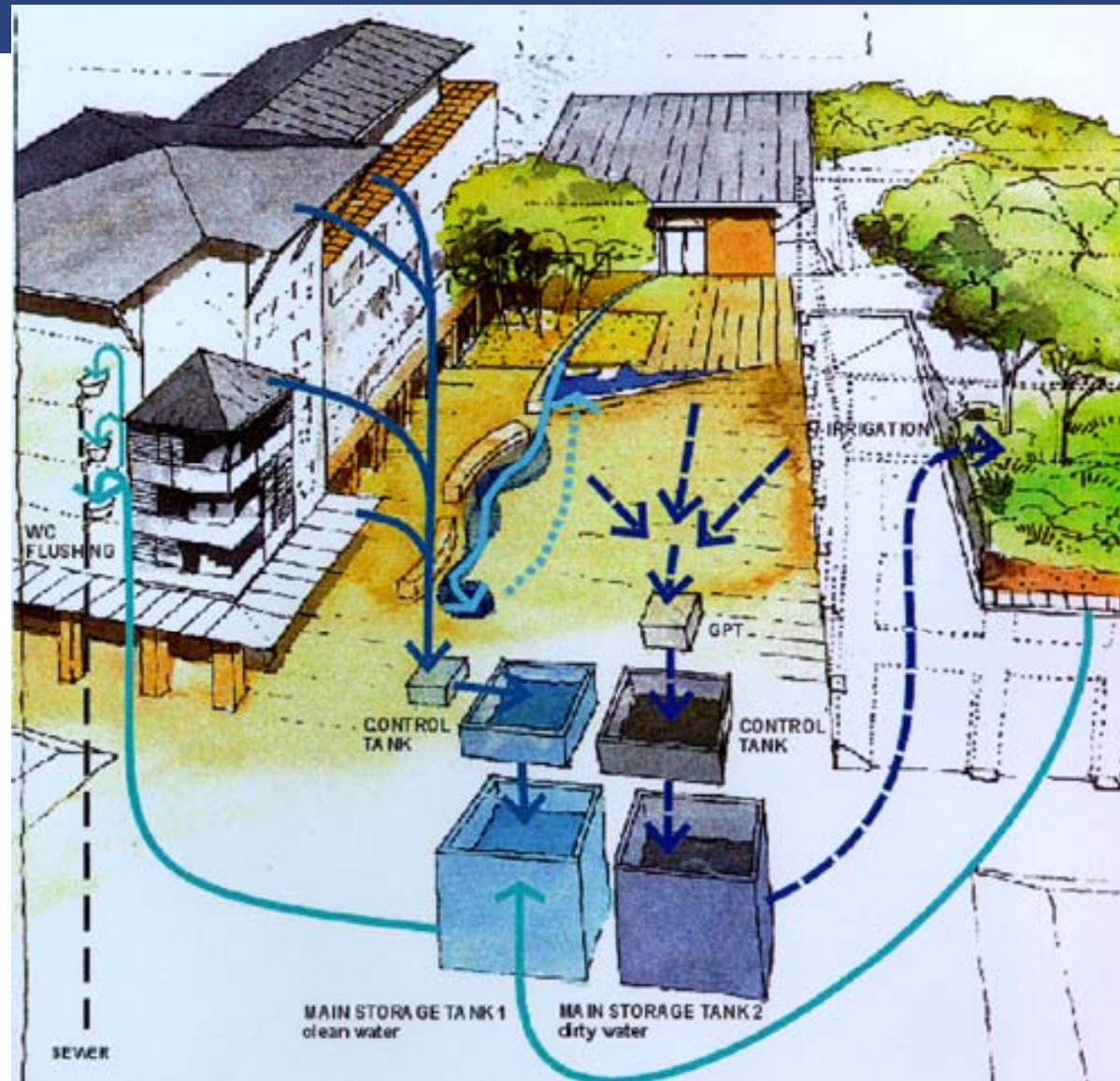


Single-Use Zoning – Low-Density Housing



Housing devouring valuable Farmland

'Food' Sensitive Design



Can we change our cities?

Yes We Can

⑤-1 Cheonggyecheon Area

<http://www.metro.seoul.kr/kor2000/chungaehome/en/seoul/2sub.html/>



⑥-1 Cheonggyecheon Area after Restoration

<http://www.metro.seoul.kr/kor2000/chungaehome/en/seoul/2sub.htm/>





How will it all end?

- The cynic in me suspects *we'll muddle through***
- Perhaps there will be a massive wake up call – which will lurch us into action (the Martin Bryant, BP Oil spill event)
- Perhaps the price of food will rise and rise and we'll adjust and the market will adjust
- Perhaps there will be massive technological 'solutions' – which will appear to solve the problems – but will probably only defer the real issues
- Perhaps urban agriculture, grow your own, farmers markets will really take off and there will be very substantial self-sufficiency in food production
- Perhaps Jamie Oliver and his band will move on and farmers markets will go the way of every-trendy fad