



## PACIFICE EDGE PAPERS

An occasional publication  
from [www.pacific-edge.info](http://www.pacific-edge.info)



PacificEdge Paper  
June 2008

### Urban farming for city food security —

Submission to Phillip Bay Land Assessment,  
NSW Department of Lands

On behalf of: Australian City Farms & Community Gardens Network

#### Keeping the city safe for farming

This is the submission written by Russ Grayson on behalf of the Australian City Farms & Community Gardens Network in favour of retaining the Chinese market gardens located on Bunnerrong Road, Phillip Bay — on the southern tip of Sydney's Eastern Suburbs — as operational market gardens.

The Australian City Farms & Community Gardens Network is a national organisation, the membership of which is engaged in community-based urban agriculture, education and training and a variety of community work in community gardens, city farms and sustainability education centres in Australia's towns and cities.

The Network advocates the retention for agricultural production of the approximately seven hectare Chinese market gardens site for reasons of:

- the benefits of food production close to where the food is consumed
- the role of urban agriculture as a necessary component of sustainable cities
- the scarcity value of urban farmland in Sydney's suburbs
- the heritage value of the market gardens as a traditional urban landuse.

The Australian City Farms & Community Gardens Network favours the retention of the Chinese market gardens, on Bunnerrong Road, Phillip Bay, in their present landuse as operational urban farms supplying fresh foods to the city's eaters.

#### Historic and rarity values

##### Scarcity value

The scarcity value of the Chinese market gardens at Phillip Bay provide a reason for their retention as operational examples of urban farmland.

With the handful of similar sites in Rockdale local government area (three sites that continue to operate as urban market gardens producing vegetable crops for the Sydney food market), the Phillip Bay gardens comprise all that remains of a once-extensive industry.

##### Historic and heritage value

The historic and heritage value of the Phillip Bay market gardens is derived from their status as remnant examples of productive, agricultural landuse in the suburbs. This link with Sydney's past makes the market gardens worthy of retention in their present landuse.

The gardens are one of the few sites remaining in Sydney suburbs of a once-extensive market gardening industry that fed the city. Over time, the gardens have been resumed for urban

development by industry and for residential development.

The market gardens' historic status is recognised in their listing on the State Heritage Register, where they were placed in 1999.

*The consumption of periurban agricultural land by urban development brings added value to that which remains, and brings increasing importance to its role in maintaining the metropolitan area's security of food supply.*

This attests to their scarcity as well as their historical, agricultural and social significance. Their value as an educational resource in this regard may be worthy of investigation in future.

### Agricultural values

The Phillip Bay market gardens have significance due to their role in Sydney's urban agriculture industry.

The city's urban agriculture contributes significant nutritional, economic and food security values to residents of the metropolitan area.

### Economic values

As a whole — and including the periurban market gardens on the city fringe — the value of the city's urban agriculture is signified by its:

- employment of approximately 12,000 workers through the local food value and supply chain
- financial worth of approximately \$1 billion to the city
- production of approximately 90 per cent of Sydney's perishable vegetables
- production of almost 100 per cent of the state's supply of Asian vegetables.

(Sources quoted in Sydney Food Fairness Alliance discussion sheet, *Sydney Basin Agriculture* [www.sydneyfoodfairness.org.au](http://www.sydneyfoodfairness.org.au)).

The consumption of periurban agricultural land by urban development brings added value to that which remains, and brings increasing importance to its role in maintaining the metropolitan area's security of food supply.

The Phillip Bay Chinese market gardens thus

contribute to the city's local food industry and to the city's food security, justifying their retention in their present landuse.

The UNDP has provided evidence of the value of urban agriculture worldwide and identified it as the fastest growing form of agriculture. Their research has been published as *Urban Agriculture — Food, Jobs and Sustainable Cities* (1995, UNDP).

### Nutritional values

Food that is eaten fresh — as soon as possible after harvest — is regarded by nutritionists as retaining most of its nutritional value.

This is a scientific argument in favour of retaining the Phillip Bay Chinese market gardens as a source of fresh food.

As a source of fresh vegetables for the Sydney food market, the time between harvest and consumption is minimal compared to foods imported into the city from more distant sources.

### Environmental values

As a source of food produced close to where it is consumed, the continuity of the Phillip Bay Chinese market gardens as a productive agricultural unit contributes to a number of environmental values.

The 2008 report by the University of Melbourne's Victorian Eco-Innovation Lab, *A Secure and Sustainable Food System for Victoria*, reported that the biggest household and individual environmental impact is due to our food choices.

Environmental impact due to the food system was found to include:

- the emission of greenhouse gases (through food transport, processing and farming)
- the consumption of energy (embodied energy — an estimate of the energy used to grow, process and distribute food)
- the volume of water consumed in the growing and processing of food (embodied or virtual water).

The report identified food as the source of:

- 50 per cent of Australian urban household water use
- 28 per cent of greenhouse gas emissions
- with other ‘green waste’ — such as garden wastes — food waste comprises 47 per cent of household municipal waste going to landfill (which, as it decomposes, releases methane, a greenhouse gas with potentially greater impact than carbon dioxide).

The Victorian Eco-Innovation Lab report joins other sources in identifying the value of food produced within the region in which it is consumed as ameliorating these environmental impacts. Such food produces fewer greenhouse emissions as it is transported shorter distances than food produced interstate or overseas.

### Food security and resilient communities

The Philip Bay Chinese market gardens contribute to the security of the city’s food supply as part of the periurban agriculture industry. This provides a strategic rationale for the retention of the market gardens.

Two global trends are cited in relation to the security of our food supply.

#### Global warming

The first is the unknown impact of global warming on food production.

Scientific findings, reported by the Intergovernmental Panel on Climate Change and others, suggest that South Eastern Australia may experience drier conditions and increased periods of drought as the climate changes. This would adversely affect agriculture and would also affect the supply and the price of food in the cities.

#### Peaking of global oil extraction

Peak oil describes the likelihood that global oil extraction will peak within the next few years.

This offers another factor pertinent to our food security. After the extraction peak is achieved,

increasing global demand for oil and declining supply will force up the price of all goods and services reliant upon oil for production, processing and distribution, including agricultural products and food.

*Enhancement of the nature conservation capacity of the market gardens’ peripheral lands would increase their potential value as wildlife corridor*

A regional source of food is an obvious benefit in such scenarios. In this context, the retention of Sydney’s periurban agriculture and the remnant suburban market gardens, including the Philip Bay Chinese market gardens and those in Rockdale local government area, becomes a strategy in maintaining the security of the food supply and in increasing the resilience of the city in the face of change. That is, its capacity to absorb impacts and respond constructively to them.

### Compatibility of the farms and nature conservation

The Department of Lands Draft Assessment of Crown Land — Chinese Market Gardens Phillip Bay (Version 1 MNOOH 114) lists alternative uses of the land in the form of environmental protection and nature conservation.

The proposed retention — as an agricultural resource — of the land presently occupied by the market gardens, that is, as operational farmland, is compatible with these other uses.

Aerial photographs included in the Department of Lands document suggest that land on the periphery of the market gardens has potential for environmental protection, nature conservation and environmental education. Areas such as Hill 60, which borders the market gardens, may have potential for regeneration as natural systems supporting indigenous plant and wildlife species. Were educational and interpretive facilities to be constructed, such as paths and signage, the areas could assume a significant educational value and attract visitors.

Enhancement of the nature conservation capacity of the market gardens' peripheral lands would increase their potential value as wildlife corridor as identified by Randwick City Council (see map page 20 Department of Lands Draft Assessment of Crown Land - Chinese Market Gardens Phillip Bay).

## Rezoning

The rezoning by Randwick City Council of the land occupied by the market gardens in a form that would retain its agricultural values would ensure the survival of the market gardens.

So would the creation of an 'urban agriculture' zoning classification by the state government.

Advocacy of these ideas by the Department of Lands would make a meaningful and timely contribution to securing the city's fresh food supply.

## Conclusion

The Australian City Farms & Community Gardens Network proposes that the Chinese market gardens at Phillip Bay be retained in agricultural production in their present form.

Retention would fulfill food security, environmental and social criteria and constitute a broader and more inclusive potential than other proposed landuses.