## Farming and Urbanising Environments: Hawkesbury Harvest and the Cultural Landscape of Western Sydney

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Hawkesbury Harvest formed in 2000 in response to the pressures of urbanisation and globalisation on the farming and health constituencies of the Hawkesbury. Its initial response to these pressures was a Farm Gate Trail to support small-holding farmers, and a growers directory to enhance local access to fresh food and "reorient the food system" to increase food quality, safety and security. In the six years since its creation, Hawkesbury Harvest has evolved into an organisation with wider community and land use interests. It is working to build a future for agriculture in the Sydney basin based on a resilience founded in economic diversity and interconnectedness with other industries in the basin, as a provider of ecological and cultural services for its host communities in the peri-urban fringe of Sydney, and as a catalyst for rethinking the role of agriculture in land use governance in an urbanising environment.

## Introduction

This paper draws on previous works to describe the history of Hawkesbury Harvest (Harvest). It then goes on to explore some of the systemic characteristics of the phenomenon, particularly the interaction between cultural landscape and urban development in the Sydney basin. While Harvest emerged out of the local context, it has evolved into a catalyst for innovation in small-holding farming in the basin and a contributor to potential features of resilience in agriculture in peri-urban Sydney.

Harvest's host community is the rural and farming community on the urban periphery of Sydney, Australia. The area is defined by the catchment of the Hawkesbury River and three Local Government Areas (LGAs) (Hawkesbury City, Hornsby and Baulkham Hills Shires) and is about 54% of the landmass of Greater Western Sydney. It is home to approximately 17% of the population of Western Sydney and is colloquially known as the 'food bowl' of Sydney. (WSROC, 2000)

The conceptual framework for this paper is that landscape is a human construct, that we have land and that land-scapes are what we see and understand as humans about land (Robertson and Richards 2003). Thus we can conceive of the idea of wilderness because it is land devoid of human interference. Heritage landscapes are attached values that make them heritage. City landscapes are attached values. Rural landscapes are attached values. These values and the aesthetics that go with them are founded on cultural constructs. Landscapes are a cultural phenomenon created when humans attach their values to what they see and experience in land. The concept of landscape is an ideological thing. The dominant ideologies of the time 'write' our landscapes.

Using this framework, we see that landscapes are meaningful because they are about land and people. Indigenous Australians have been articulating this concept in order to demonstrate their connection with country and the same applies to the efforts of our post-colonial farming families on their holdings in Greater Western Sydney. Out of this connection comes social capital, histories, heritage, economy, culture, recreation and other social and environmental goods. The assault on agri-culture needs to be seen as a systematic erasing of the cultural landscape that has defined Sydney in the past and will define Sydney in the future. What kind of place will we leave for our children's children?

The richness of the asset includes what has been in the past and what is in the present. It's about stewardship and a renewable and culturally relevant use of land for food and other primary products, in close proximity to Sydney that provides other benefits for the communities of the Basin. It's about the physical attributes AND the associated values we attach to them as human beings in the place we call home. It's about farming and heritage, the landscape as a cultural asset and people and their food.

An integrated, systemic view of land-use planning in the Sydney basin that reflects these values does not exist in any other form than rhetorical references in the long line of planning documents for Sydney since settlement. This absence produced creative tension and is a good example of the paradox that rural communities face in the global context – the pressures of urbanisation create both threat and opportunity for farming. Within the region a range of forces created the conditions and interest in a tourism solution for three local constituencies (agriculture, health, and tourism) each with its own issues (Knowd 2005). Figure 1 summarizes these forces or pressures and the states they generated. The Farm Gate Trail (FGT) was a solution driven by the farming and community health agendas, and one that dovetailed into the needs of the tourism sector in addressing fundamental, long-term problems with destination identity. Despite the prominence of the Farm Gate Trail in tourism promotion for the area, it remains the domain of the farming and community health constituency of the region.

The farming and health communities were interested in exploring solutions for the impacts of neo-liberal policies on the global scale and urbanization on the local scale. Their response created something that the tourism industry in the region had also been seeking for some time. A detailed exposition can be found elsewhere (Knowd 2003, 2005 and 2006a). Farming and community health agendas began to converge after the Rio Conference of 1992. Agenda 21 and the Healthy Cities program that grew out of sustainable development created a structural framework within which the issues of local food and food production could be addressed. The convergence occurred at a time (1998) when NSW Agriculture (now the Dept. of Primary Industry) was actively implementing a Strategic Plan for Sustainable Agriculture in the Sydney Basin. A public meeting was held in May 2000 and Hawkesbury Harvest (later Inc.) was formed. With financial support from Hawkesbury City Council and then Regional Partnerships Program funding from the Department of Transport and Regional Services (DOTARS), a Farm Gate Trail (FGT) was established as one of two principal goals, the other being a growers directory. Hawkesbury Harvest's mission is:

Contexta constituency	Pressure facing a problem	State feeling the strain	Response a tourism initiative
Farming	Urban Development Market Structures	Financial Distress Generational Crisis	
Community Health	Food Health	Food Supply, Security, Safety, Quality, Access Sustainability	Farm Gate Trail
Tourism	Destination Identity Destination/Transit Route Building Community Sup-Planning Constraints Port for Tourism Attitudes to Rural Liv	Lack of Major Attractions/ Icons Planning Constraints Attitudes to Rural Living	
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Figure 1 Community pressures set the scene for a tourism solution

"Hawkesbury Harvest is a community-based Association committed to improving the economic viability and sustainability of local agriculture." (Hawkesbury Harvest, 2002)

An evaluation of the project after its first year concluded that it was a success in terms of raising the region's profile as a tourism destination (Groth as cited in Orton, 2002), increasing the viability of participating farms, and generating employment. (Orton, 2002) By mid-2002 local newspapers were making naïve claims about role of tourism in the 'salvation' of farms in the region (Gibson, 2002).

In 2003, after gaining further funding from DOTARS and the Hawkesbury City Council, and additional funds from NSW State and Regional Development through Greater Western Sydney Economic Development Board, a Business Development Manager was contracted for Hawkesbury Harvest as part of the Paddock-to-Plate project. This Stage II initiative identified regional branding, growers markets, local retailing, developing specialty (small acreage, boutique) agriculture, provedoring and open farm events as possible agri-industry development and potential avenues for Hawkesbury Harvest's financial independence. Paddock-to-Plate saw the implementation of brand building, the growers market and open farm events. A key learning outcome for Harvest with this project was the impossibility of achieving all the industry development identified within a single-year time frame. This became one of the justifications used for a third round of funding applications in late 2004.

The third and most recent project commenced in March 2006 when Harvest received funding for a Food and Wine Coordinator project. This project focuses on the opportunities that Harvest did not have the time or resources to implement under the Paddock-to-Plate project with additional network-building and market development in the region. Again the Department of Transport and Regional services is a partner, with the Greater Western Sydney Economic Development Board, and a new corporate partner, Lend Lease/GPT at the Rouse Hill Regional Centre.

As the focus shifted from creating the Farm Gate Trail to developing a wider range of business opportunities, the role of Hawkesbury Harvest also evolved into a broader regional development role. A move into broader land-use advocacy, particularly for the role of agriculture in retaining and maintaining landscape (the commons) and the interdependence of tourism and agriculture in diversifying an economy within such a retained landscape, forced Harvest to engage in political processes and to take policy positions it had not previously had to articulate.

Harvest projects generally have fallen into the category of short-term fixes driven by the neo-liberal processes that they used to undertake them. The economic determinism reflected in contemporary government approaches to community development means that each project must stand alone and be executed in a one year time frame. Outcomes are couched in economic terms (incomes, jobs) and this encourages groups like Harvest to look for panaceaic solutions. (Knowd 2006b)

The pitfalls of panaceas arise from a failure to appreciate that panaceaic approaches 'fix on a destination and calculate what a group must do to get to get there, with no concern for member's preferences' (Mintzberg cited in de Wit and Meyer 1998, 217) In Harvest's case, member's preferences, particularly the farmers, in terms of capacity and willingness to adapt to tourism, to adopt new skills, knowl-



Figure 2 Changing focii in the development of the Farm Gate Trail Initiative

edge and attitudes, to deliver on the tourism promise, created serious challenges and an analysis of these can be found elsewhere (Knowd 2003). Despite this, Harvest initiatives are innovative when considered in the context of mainstream farming models in the Sydney basin. They do add to system resilience by diversifying the economic system through which farmers survive.

Harvest is an example of the 'virtuous circles' of sustainable development wherein economic activity reinforces social and cultural practices, which reinforce environmental systems integrity and capacities for regeneration over time (Selman and Knight 2006). Hawkesbury Harvest and the Farm Gate Trail have successfully addressed many of the issues for those farmers who invested sufficient resources, and due to the linkages with tourism and allied industries, the phenomenon has revealed some important potentials for sustainable development and sustainable tourism in the region. These potentials were formally accepted by representative bodies for agriculture through Hawkesbury Harvest Inc. and tourism through Tourism Hawkesbury Inc. in May 2004 and Figure 3 articulates the mutual interest that tourism and agriculture have in the landscape of the Hawkesbury region (Knowd, 2004)

Tourism and agriculture constituencies identified their explicit interest in each other's industry, articulated the interdependency and accepted the role of both industries in the future development of the region and the importance of the natural and agri-cultural asset base upon which both industries depend in the face of the limited opportunities that mining and urban development might deliver for future generations of residents. It clearly describes the nexus between agriculture, tourism and development in the region. This nexus defines a set of relationships between the industries that have important cultural landscape, community identity and sys-

tem stability potentials for both tourism and agriculture. Figure 3 shows a theoretical orientation of sustainable development based on a nested view of sustainability, with ecology as the foundation, society as the human system within which economy is a sub-system. Suitable and sustainable economies are a function of the social system, its values and priorities, and the underlying capacity of the ecology to support it. A land economy based on agriculture and tourism supports the regional society by conserving and enhancing regional amenity and health assets, while conserving and encouraging better stewardship of the natural and agriculture ecosystem of the Hawkesbury River catchment.

Despite Harvest initiatives establishing a range of innovative strategies for supporting agriculture, the situation of farmers in the basin exhibits features of 'over-connection' to their system variables – farmer age (older farmers resistant to change and attitudes, skills and knowledge), land-use the suburbs-in-waiting syndrome, the central food marketing system, (Alison and Hobbs 2004 citing Holling et al 2002). It also exhibits characteristics of 'lock-in' (Alison and Hobbs 2004, 15) whereby farmers continue to liquidate their land asset in preference to changing their response to the external environment.

In this sense the existing situation in the basin implies that current modes of behaviour exhibit considerable resilience (the ability to resist external disturbances), particularly the entreaties of organizations like Harvest and the Hawkesbury Sustainable Farmers Network to consider alternative 'post-productivist' (Halfacree 1997, Hadjimichalis 2003) market orientations and micro-climate production technologies. The sub-optimal performance of these organisations relates to the lack of willingness to engage with the issues in the farming community, to build

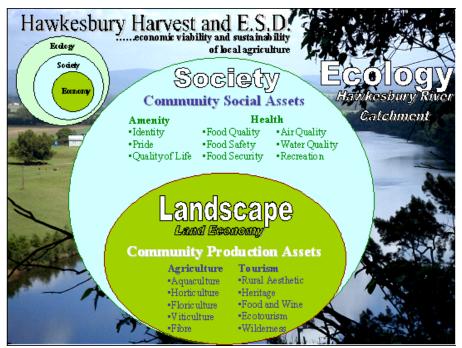


Figure 3 Tourism and agriculture's common interest in landscape

the social capital that this social-environmental system requires. This resilience is a function of the extent to which the environment is degraded and is characterised by industry shifting from farming to land-banking, where the bankable asset can only be realized if the current trends in urbanization and development in the Sydney basin continue un-addressed. The debate in the Hawkesbury region regarding land use, particularly the continued zoning of land for farming, is raging with great pressure from developers and sub-dividers to convince the outer-urban councils to allow suburban lot sizes and restrict farming activity. (See Letters to the Editor in the Hawkesbury Gazette, Hawkesbury Independent and other regional newspapers 2005 and 2006). The situation in the Hawkesbury warrants the kind of resilience analysis that have been performed elsewhere (Alison and Hobbs 2004, Walker et al. 2002) if for no other reason than to settle the debate, as the system may be beyond the threshold for sustainable agriculture in the region already.

Similarly, the issues of the capacity of the landscape to absorb shock events such as flooding is irreparably modified because of urban development in the catchment and the loss of land surface to housing and tarmac. The hydrological system was permanently changed with the building of the Warragamba Dam, and the Hawkesbury Nepean is now a constant flow watercourse with little additional capacity to absorb urban runoff, let alone major flooding of the reservoir that might result in flood surges with overflow events. It is likely that the Sydney basin has exceeded its ecological buffering capacity on this and many other fronts and we are thus left with the conclusion that Alison and Hobbs have drawn about the WA agricultural zone, that is, only 'regional economic, demographic, or social' (2004, 16) mechanisms are left in our arsenal for combating the potential collapse of the system in the basin. As in the WA case, the likelihood that the production system will change shape and potentially collapse in the face of urbanisation and market forces is very high, and the only mechanisms currently in place to inject 'novelty' into the system are the initiatives developed through Hawkesbury Harvest. Existing land use planning mechanisms, specifically zoning controls applied at Local Government Area level, have not been effective in delivering resilience to the system, and could well be one of the primary mechanisms to have created the land-banking phenomenon. The system even exhibits features of 'policy resistance' (Sterman 2001 as cited in Alison and Hobbs 2004, 17) as the issues facing agriculture have been known since the County of Cumberland Plan attempted to address the 'promiscuous urbanisation' (1948, 129) threatening to degrade Sydney's quality of life.

The lack of recognition of agricultural assets, and specifically the significance of food supply for the greater Sydney region, is symptomatic of a 'boiling frog syndrome'. Sydney still sources the majority of its perishable fruit and vegetables from its own backyard (Knowd et al 2005) and there is an apparent complacency about food supply and food security in Sydney. It is noteworthy that jurisdictions in other regions of Australia and throughout the developed world have codified their responses to managing urbanisation and agricultural protection and reform with formal planning and other instruments (Mitchell 2005, Keating and Stevenson, 2006). However, in Sydney, these issues and the threat to rural lands are largely left to local governments and their planning controls, particularly zoning. (Sinclair 2003, Mitchell 2005). This lack of policy and planning for agriculture in the Syd-

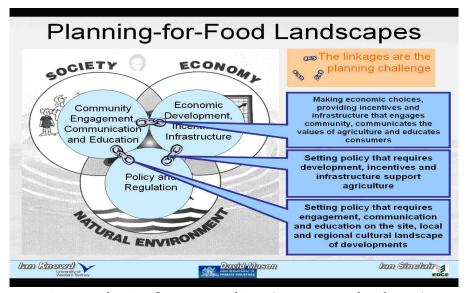
ney basin has created the conditions for community activism and at the same time deprived interest groups of a forum and policy framework within which to conduct the debates.

These problems with system governance are not unique and the debates about how to plan for the rural in urbanising environments is one that continues wherever cities are expanding and farmlands are being seen as the next 'greenfield' for urban development (Hadjimichalis 2003, Healey 2002 and 2004, Scott 2006). There are a range of imperatives that the recent versions of the Sydney Metropolitan Strategy are recognizing, recognition that has also come out of the land use conflict and Hawkesbury Harvest phenomenon. Imperatives exist for the future of agriculture in sustainable forms that will deliver benefits to future generations. Imperatives exist in choosing what character of place the Sydney basin will offer residents and visitors. Imperatives exist for designing-in economic, social and environmental resilience in the Basin. This requires integrated local management and the multiple knowledges that that process demands.

Using a sustainability framework we can overlay some essential planning outcomes that are required if agriculture and urban development are to be successfully integrated. In a social sense, planning frameworks and instruments need to deliver community engagement, communication and education. Economically, development, incentive schemes and infrastructure are required, and for the natural environment, the policy and regulatory settings need to be right.

In a practical sense this means that integrating social and economic planning outcomes means that economic development is a matter of choice, one that is determined by the environmental and social contexts, that economic incentives and infrastructure supports are used to engage the community with agriculture, to communicate the values of agriculture and educate consumers about the food and other primary production that makes it possible for them to have quality-of-life. Examples are found in the Hawkesbury Harvest model, where farmers choose to use alternative channels (Farm gate sales and Farmers Markets) to market their produce and consumers choose to seek out the benefits that this makes available to them by sourcing their food directly from the farmer. It's also implemented by broadening out the planning terms of reference for developments by extending EIS and SIA processes to include landscape assets and engagement with the wider regional community, rather than the site specific approach that currently exists. There are many other ways that activate these linkages that could be explored.

The linkages between economic and environmental spheres can be practically activated by explicitly setting policy that requires developers to consider and propose the economic development strategies that are implied in place-making that includes relationships with agriculture and particularly food supply. This is starting to be done but planning frameworks do not require developers make their master plans regionally engaged and economically integrated. Examples of this can be found in the Hawkesbury which has amended LEPs and developed DCPs for farm gate sales, but problems still exist in terms of internal inconsistencies between aims of these instruments, and inconsistencies with regional and state level planning instruments. This leads to ambiguity and potential conflict.



**Figure 4** Planning for system resilience (Source: Knowd et al 2006)

The linkages between social and environmental spheres is activated through policy that requires engagement, communication and education as part of the proposal and development process. The practical implementation is again a matter of re-engineering the requirements of the planning process to make developers deliver these kinds of outcomes, rather than leaving it to individual developers to interpret such things as they see fit. An example of an area where this idea can be seen to have failed the community is in the Hawkesbury where, despite having an appropriate community consultation process, the recently adopted cultural plan fails to formally recognize agriculture as a cultural asset and process – it only recognizes the artifacts of agri-culture, the dead and usually heritage objects in a living landscape. If the one industry that has defined the character of the place and continues to deliver the principal quality-of-life benefits that residents enjoy is not recognized for its role in the cultural life of the Hawkesbury, how can policy and regulation that would adequately protect agriculture be identified and implemented?

This paper has sought to explore the implications of trying to integrate agriculture with urban development. The situation in the Sydney basin is somewhat unique because of the geo-physical characteristics and the consequent pressures placed on agriculture by the "rolling wave" of development. What has emerged is a potential way of re-thinking the planning priorities and processes for future urban expansion in the Basin that would integrate agriculture as a cultural asset in to the fabric of Sydney's urban landscape. This re-thinking requires that agriculture be seen as an essential element in the cultural imperative to create sustainable, liveable, and culturally rich places to live in Sydney. It's an imperative because agriculture isn't being pushed back, it's being squeezed out and we risk losing it forever. This is an issue for us because we owe it to our children's children to pass on something that reflects our values and the values of agricultural heritage in the food bowl of Sydney. It means we need to see that we write the landscape with our planning laws

and development processes in ways that leave enduring legacies of resilience and innovation. We have a choice to make about the legacy we want to leave, but we're running out of the time and space to do it in.

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