THE FUTURE OF AGRICULTURE AND FOOD PRODUCTION IN SYDNEY
A Discussion Paper

Sydney Agriculture Strategic Approaches (SASA) Working Group

March 2017
This discussion paper represents the views of the SASA Working Group\(^1\). It does not represent the views, ideas or opinions of the government departments involved in the Working Group.

**EXECUTIVE SUMMARY**

This discussion paper addresses the future of agriculture and food production in the Sydney basin. The intended target audience is peri-urban councils, the NSW Department of Planning and Environment and the Greater Sydney Commission.

It is the SASA Working Group’s view that the broader values and roles of Sydney’s peri-urban agriculture are currently under-recognised.

Sydney’s urban development continues to encroach on its peri-urban food production landscapes. The resulting land use conflicts - and indeed the adverse impacts on Sydney’s broader food system - are becoming a pressing challenge for planning and decision-making at strategic, council and farm scales. The premise of this discussion paper is that the root cause of land use conflict resides in the lack of recognition of the values and roles of Sydney’s peri-urban agriculture and the food that it produces.

Current and potential policy measures, reflecting a mix of regulation, incentives and communication/education, could jointly be implemented to meet both precautionary and restorative policy objectives, including: 1) prevention and resolution of land use conflicts; 2) promotion and ‘branding’ of agriculture in, and food from, Sydney’s peri-urban areas; and 3) empowering current and future farm enterprises.

The impacts of urban growth on future food production are discussed in Section 1 (Background). Section 2 briefly reviews existing policy instruments aimed at peri-urban farmland. Section 3 discusses additional policy instruments that reflect a mix of regulation, incentives and communication/education that could jointly be implemented to secure food system diversity, efficiency and opportunity, using production to drive economic growth in sectors that have great multiplier effects and securing a sustainable future for Sydney’s peri-urban farmers and indeed ‘brand’ Sydney as a world-leading food-secure metropolitan area. Impacts of climate change and energy will make production in the basin more strategic, while a second airport will secure access to markets.

With the twenty-three recommendations below the SASA Working Group targets the current fragmented governance and lack of long-term strategic planning. It is our hope that this discussion paper will stimulate action to provide certainty for agriculture investment and renew debate as regards the potential for stronger land use planning governance to protect and promote Sydney’s peri-urban agriculture and biodiversity.

We welcome your feedback on the scope of and recommendations made in this document.

**I Avoid and resolve land use conflicts**

Policy instruments targeted at avoiding land use conflict include protection, separation, and lease and release of farmland.

The SASA Working Group recommends that:

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\(^1\) For further information about the SASA Working Group, please refer to the last page of this document.
1. Peri-urban agriculture becomes **an integral part** of urban planning and agricultural policy and that it be **prioritised as a multifunctional land use** in the Greater Sydney Commission’s *Draft District Plans* and the *Plan for Growing Sydney*.

2. The Rural Lands State Environment Planning Policy (SEPP) **applies to metropolitan areas** – councils with rural use zones as well as regional areas. That SEPP be used to identify and retain significant peri-urban agricultural land.

3. **A more stringent evaluation process** be created to guide the conversion of agricultural land for urban development purposes by both local and state governments.

4. Planners, developers and environmental regulators consider the **compatibility** of a proposal with the present and likely future land uses early in the planning process, and assess the **potential risk for conflicts** created by land use changes in the future.

5. Incompatible and potentially conflicting land uses be **separated**, and farm multi-functionality be emphasised

6. Farming areas be **retained** to prevent being converted to other uses.

7. **Urban growth boundaries and urban containment policies** be developed and implemented within well-defined limits.

8. **Conditions be placed on development approvals** for effective buffer areas between incompatible uses. There is scope for ensuring the blue, green and agriculture ‘grids’ that the Greater Sydney Commission (GSC) is using to map out land uses ‘talk’ to each other more explicitly. This is currently being done with blue and green, but agriculture is treated separately.

Policy instruments targeted at *resolving* land use conflict include mediation, negotiation, communication, education, transitioning, place-making and community-building

The SASA Working Group recommends that:

9. Peri-urban councils develop **a communication strategy and an awareness-raising campaign about rural living**, that adequate communication tools are developed to highlight potential issues when living near agricultural land.

10. A **consistent approach be developed for development controls** and regulations of agriculture across all LGAs.

11. **Effective processes and protocols** be put in place by peri-urban councils for resolving land use conflicts.

12. A **mediation and mutual gains approach** is used in conflict resolution, or when conflict arises and when litigation has started.

13. **Community justice centres** be involved early in the conflict

14. All parties involved are **made aware** by peri-urban councils about the implications of rezoning

15. **Best practice management** be promoted among peri-urban farmers to reduce nuisance complaints so as to limit the potential for environmental problems.

16. A **planned transition** of current incompatible agricultural activities to other agreed locations be created and monitored by government. That government, councils and developers assist farmers to transition to other fertile areas or into another type of agricultural production.
II Promote agriculture in peri-urban areas
Policy instruments targeted at recognition, valuation, promotion and encouraging diversified and multifunctional farm enterprises.

The SASA Working Group recommends that:

17. The use of flood-prone land not currently used for agriculture or recreational purposes be promoted for suitable agricultural investment.
18. The NSW Government facilitates the availability of unutilised crown land that is not ecological significant for agriculture or farm precincts.
19. Transfer of development rights or similar process be promoted to protect farmland and other natural resources.

III Empower current and future agricultural enterprises
Policy instruments targeted at best practice, diversification and multi-functionality of farm enterprises.

The SASA Working Group recommends that:

20. Local government promotes and facilitates land leasing arrangements.
22. Policies be developed that encourage multi-functional land use at the regional level example through consolidation of farming activities and creating economies of scale, so as to create jobs and provide a catalyst to regional economic development.
23. Community development approaches be encouraged to re-establish a sense of community, bringing the community together through community activities.
24. Food produced in Sydney is labelled marketed as ‘Sydney Grown’.
1 Background
The purpose of this discussion paper is to raise awareness about the future of agriculture and food production in the Sydney basin. The paper is presented as a ‘think piece’ that could guide policy leadership and could inform the development of a GSC Policy Leadership paper. It canvases planning instruments for promoting local food agriculture, resourcing farm enterprises and preventing future land use conflict. The intended target audience is peri-urban councils, the Department of Planning and Environment and the Greater Sydney Commission.

The Sydney Agriculture Strategic Approaches (SASA) Working Group acknowledges that Sydney’s urban development is encroaching on its peri-urban food production landscapes. Articulating a policy vision for Sydney’s locally sourced food and peri-urban agriculture is a pressing challenge for planning and decision-making at strategic, council and farm scales.

Under significant development pressure Sydney’s peri-urban areas are undergoing rapid social and economic transformations, with intensive and at times chaotic urban development. At the same time, agricultural producers are seeing land prices increase and farmland being subdivided for housing development. This is being done in the absence of a comprehensive framework, plan or vision that establishes what Sydney’s broader regional or longer-term food and farming needs are. Without effective strategies and policies to transition current land uses conflict is likely to emerge at the nexus of the urban and the rural.

If this trend continues unchallenged agriculture will continue disappearing from the Sydney basin and the significant opportunity for Sydney to develop a world-leading local food system will be lost. With increasing interest in healthy food from consumers and policy makers alike the SASA Working Group recognises that it is timely to put Sydney’s food future on the agenda. The draft District Plans as released by the Greater Sydney Commission (GSC) in late 2016 adding a sense of urgency to this agenda. The District Plans bridge metropolitan and local planning for the Greater Sydney Region. The GSC adopts the term Metropolitan Rural Area (MRA) to describe, recognising a range of generic environmental, social and economic values associated with the MRA - including productive agriculture. For example, the draft District Plans South West states that common tensions within the MRA are likely to emerge, for example public-good ecosystem services generated on private land; the value of agricultural production versus the value of other land uses; farming impacts on adjoining properties; and the effects of global and national restructuring of agricultural production.

The more fertile land is lost to housing, the more difficult it will become to meet local demand for healthy food from Sydney’s growing population. Moreover, with the loss of farmland significant landscape and heritage values will decline. Over the last decades much agricultural land has already been lost within

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2 For further information about the SASA Working Group, please refer to the last page of this document.
Sydney’s former green belts. If we continue as we are, Sydney stands to lose over 90 percent of its current fresh vegetable products. It has been estimated that the total food production could shrink by 60 percent by 2031 and the capacity of the Sydney food bowl to feed its residents could drop from meeting 20 percent of its demand down to a mere 6 percent.

While peri-urban agriculture is often regarded as a transitional land use, agriculture has intrinsic economic, employment, environmental and social values. In the Sydney basin the contribution of peri-urban agriculture to the NSW economy is estimated at upwards of $4.5 billion. A study conducted by the UTS Institute of Sustainable Futures, in 2011 the Sydney basin produced half a million tonnes of food – enough food to potentially feed 20 percent of its population, including 40 percent of its demand for eggs, 20 percent of vegetables, 38 percent of dairy, 55 percent poultry meat and 2 percent of fruit.

It has been argued that the long-term regional strategic planning has not given adequate attention to agriculture and peri-urban landscapes (Deelstra and Girarde 2005), the rapid development of housing in the designated Growth Centres and the lack of a targeted and coherent policy vision for the transition of existing agricultural industries out of the locations prioritised for housing development, have further exacerbated social tensions (James & O’Neill, 2016; Kennedy et al., 2016).

Conflict arises when new residents move in to peri-urban areas with untested expectations about rural living. Residents seeking a clean, pristine, peaceful, rural environment are often intolerant of agricultural activities that might generate noise, odour, dust, smoke, chemical spray drift, etc. Often residents are too close to farming operations, so they are inevitably impacted. Their complaints may lead to local councils - despite their intention to promote ‘rural living’ - imposing restrictions on agricultural practices that may in turn cause a loss of efficiency and profitability for the farm. In cases of entrenched disputes, it may even force the farmer to abandon the farming operation altogether and dissuade other farmers from investing in the area.

Rural lifestyle development in rural zones and the identification of large new growth precincts has increased the interface between residential and agricultural production and the number of neighbours farmers need to communicate with. This is impacting on agricultural enterprises that have existed undisrupted in peri-urban areas, in some cases for decades and resulting in land use conflicts that so far have not been adequately addressed or resolved. This is because to date planning approaches have often been fragmented when it comes to recognising and capturing the broader values and strategic importance of peri-urban agriculture, and planning the transition in land uses.

This discussion paper canvases a suite of policy and planning approaches that could help secure a future for Sydney’s peri-urban farmers and indeed ‘brand’ Greater Sydney as a world-leading food-secure metropolitan area.

4 [http://www.sydneyfoodfutures.net/](http://www.sydneyfoodfutures.net/)
2 Current policy instruments

The NSW Right to Farm policy protects the property rights of farmers to use the land as specified by the zoning of that land without fear of nuisance. It does not prevent land being converted from agriculture to other uses or deal with current conflicts, but - if implemented adequately - could improve the current situation of farmers. The NSW Department of Primary Industries (DPI) is currently analysing the conflict issues faced by farmers to identify what mechanisms should be adopted to enable farmers to operate without invoking nuisance complaints from neighbours.

The Rural Lands State Environment Planning Policy (Rural Lands SEPP) – despite its existence in the Environmental Planning and Assessment Act, it would appear that it remains underutilised. This policy enables government to identify and protect significant agricultural land. It is however unfortunate that this policy targets rural NSW and excludes peri-urban agricultural land within metropolitan councils. The Working Group believes that the Rural Lands SEPP should also apply to metropolitan councils with rural use zones. The Rural Lands SEPP could be used to prohibit urban development and mining within a defined geographic area on the grounds that the land has particularly high or unique agricultural value.

Local Environment Plans (LEP) are often used by councils in combination with Development Control Plans, however their ability to address existing land use conflict issues is limited.

Councils’ Community Strategic Plans for the Future highlights the communities’ visions for the LGA. These plans are developed in consultation with residents.

Another policy instrument that is currently in place, but is arguably under-used, is the Section 149 Planning Certificate, also known as zoning certificates. These certificates are legal documents issued by Council under the provisions of the Environmental Planning and Assessment Act 1979. They contain information about how a property may be used, restrictions on development that may apply. To avoid future land use conflicts, peri-urban Councils can apply this instrument as a ‘caveat’ that goes into any property. Upon the sale of a property the owner must be notified that his or her property is in a rural area and that there will likely be noise and rural activities. The new owner must then accept these conditions up-front. There are two types. A certificate issued under Section 149(2) contains general information. But one issued under Sections 149(2) and 149(5) provides additional information such as if the land is identified as being environmentally significant or whether it is subject to airport noise etc. Unless a request is made for a certificate under section 149(5) most applicants will only get a 149(2) as this is the minimum enquired at the time of conveyancing. These certificates could become a legal requirement under a planning instrument such as SEPP.

3 Additional policy and planning instruments for securing Sydney’s food future

The premise of this discussion paper is that the root cause of land use conflict resides in the under-recognised values and roles of peri-urban agriculture. These can be addressed by a mix of strategic and operational policy instruments. We canvas these in three broad categories: regulation (‘sticks’); incentives (‘carrots’) and communication (‘sermons’). These instruments may be applicable at the metropolitan scale (Greater Sydney Commission; DPE, DPI), the local government scale (councils), and local scales (farms/neighbourhoods). Policy instruments aimed at better recognising the broader values and roles of peri-urban agriculture can range from ‘bottom-up’ (operational) to ‘top-down’ (strategic): Section 3.1
discusses measures that can be used to prevent and resolve land use conflict; Section 3.2 discusses policy options to promote farming in peri-urban Sydney, while Section 3.3 focuses on resourcing and empowering farming enterprises.

3.1 Avoiding and resolving land use conflict

I. Avoiding land use conflicts

Land use conflict can be avoided by considering one or more of the following approaches.

Protection

Completely preventing land use conflict would be challenging in Sydney as much land has already been lost of what used to be Sydney’s Green Belt. There are also wide-ranging legacy issues. However, identifying and retaining the remaining important agricultural land is the best way to avoid further land use conflicts. Once the meaning of “important” has been agreed upon in the local context, this could be achieved through an explicit legislative/strategic planning statutory approach that states: “this land is for agriculture.” Identifying and retaining strategically important agricultural land is an urgent priority because it is impossible to reclaim land for agriculture once it has been developed for residential use.

Clear urban growth boundaries and residential containment policies that focus on urban development within well-defined limits, are also needed to retain peri-urban agriculture. If established adequately, they will lead to certainty for decision makers and landholders.

Land use conflict risk assessment

Mandatory Land Use Conflict Risk Assessments as an integral part of the rezoning proposals would be a significant step towards land use conflict prevention. The NSW DPI’s LUCRA Guide recommends that planners, developers and environmental regulators should consider the compatibility of a proposal with the present and likely future land uses, and they should assess this early in the planning process, as well as the potential risk of conflicts created by changes in land uses in the future. The LUCRA Guide seems under-utilised at present, and more emphasis could be placed on using it pro-actively.

Physical separation of incompatible land uses

Separating incompatible and potentially conflicting land uses is essential. The NSW DPI’s Land Use Conflict Risk Assessments (LUCRA) Guide\(^5\) can assist to identify activities that may cause land use conflict. Placing conditions on development approvals for adequate and effective buffer areas are important because agriculture needs land, water and space to operate and grow, and farmers need to work unencumbered, if their businesses are to survive and increase in productivity, either through expansion or on-farm efficiency gains and economies of scale.

Buffers can also assist in separating incompatible land uses, particularly landscaping that can screen and limit nuisances such as spray drift or dust. The key issue is: who provides and manages the buffer, the agricultural development or the incompatible use? NSW DPI’s Intensive Agriculture Consultative


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Committee, reformed in 2016 due to increasing land use conflicts - is investigating the use of buffers for managing land use conflict.

Consultation
When rezoning is being considered for an area, it is crucial to ensure that all parties are aware of the risks and implications. The environmental risk assessment should identify provisions for dealing with any potential conflict over land use. This is especially the case where farms emitting odour may need to improve their practices as a result of changing nearby land uses. Where this is difficult for farms, a negotiated agreement could be an appropriate mechanism for managing the issue.

The LUCRA Guidelines are useful in terms of gaining an understanding of the rules governing land use. The Guide helps in the identification and management of potential sources of conflict. More specific examples about the types of land use conflicts and approaches to avoid and manage conflict are set out in the Living and Working in Rural Aras Handbook.
While new residents about to move to the rural areas can access the LUCRA brochure and Rural Living Guides, there is likely to be benefit in providing more specific, local information about the real implications of living next to a farming operation, the different scenarios and real case studies of new residents who have encountered problems and how these have been resolved.

Shaping expectations is an important step before decisions are made and brochures alone may not be enough. Perhaps producing a video documenting the implications of farming operations might be more effective. It is also important to emphasize to new residents that farming practices and farming activities may change over time.

II. Resolving conflicts
Land use conflicts can result in a variety of undesirable social, economic and environmental outcomes ranging from minor to significant, resulting in negative effects on individuals and families and businesses, as a consequence of disruption, breakdown in communities, costs on rural industries and government services. According to a consultation with peri-urban councils, conflicts are becoming increasingly complex as new residents voice their interests and concerns, putting pressure on local councils. The following strategies could be used to prevent and resolve conflicts.

Mediation
Resolving land use disputes through mediation is an appropriate approach and can be used when a conflict arises or even when litigation has started. Successful mediation may result in settlement or even in developing recommendations that may include solutions, which are different from those that were proposed by either party. Mediation offers an opportunity to separate facts from emotion, leading to improved communication, legal cost savings and improved community relations.

Settlement statistics in the US indicated that 65 to 75 percent of land use conflicts are resolved when mediation is used, according to the Planning Commissioners Journal (April 2002). It would be important to have in place neutral mediators with intimate knowledge on the complexities of land use issues.
Negotiation
In addition to Community Justice Centres, land use disputes could also be resolved effectively through a Mutual Gains Negotiation (MGN) approach. According to the US Consensus Building Institute, MGN is a better way to manage the most challenging situations. This approach is guided by core principles, it follows a set of clear action steps and it is useful at different stages of land use decision making.

The Mutual Gains Negotiation approach is a process model that includes four steps for negotiating better outcomes while protecting relationships and reputation. A central tenet of this model is that the vast majority of negotiations involve parties who have more than one goal or concern in mind and more than one issue that can be addressed in the agreement they reach. The model allows parties to improve their chances of creating an agreement superior to existing alternatives. It emphasizes careful analysis and good process management.

The result is a more public collaborative process designed to tease out the range of interests and criteria, compare various alternatives and determine which alternatives meet the most interests.

Establishing protocols
The current protocols regulating agriculture can be confronting with reverting to legal orders to cease noise or odour nuisances when these are normal farming operations. Establishing protocols for dealing with land use conflicts and developing a communication strategy by councils is critical, so that affected parties are at all times aware, kept informed and consulted. For example, neighbours could be notified before irregular or unusual farming activities are carried out. This ensures that neighbours are aware of possible noise or odour nuisances. Pro-actively surveying neighbours about their preferences as to the best time to undertake activities that could cause a complaint might also be of help. Councils should apply legal options as a secondary response only.

Notification to nearby residents of planned farming activities that could cause a potential for noise or odour, may result in simple steps that the farmer can take to reduce these impacts. Affected residents may be more willing to accept these impacts if the farmer has demonstrated a genuine interest in mitigating these impacts.

Wollondilly Shire Council has developed a number of policies to accommodate the change in mix of landholders and land use. An example is the Good Neighbour Charter and Fact Sheet.

Transitioning
A planned transition of current incompatible agricultural activities to other agreed locations would be a significant step towards land use conflict resolution. With increasing demand for land it is likely to become feasible to transport high-value products (both the stock feeds and end products like meats and eggs) from regional rural areas, where the stock feeds are grown. Government, including councils and developers, needs to play a role in assisting farmers who are transitioning to other fertile areas away from urban encroachment, or in the case of poultry and pig farmers wanting to transform their businesses into another type of agricultural production. There is a need to inform the transitional process as well as a

6 http://www.cbuilding.org/cbis-mutual-gains-approach-negotiation
need for a consistent approach about farming regulations across all LGAs to provide the certainty for any farmers transitioning.

3.2 Promoting agriculture in peri-urban areas

Recognition

A Plan for Growing Sydney and other planning instruments should explicitly recognise that peri-urban agriculture is a prioritised, multifunctional land use, and identify critical agricultural clusters/locations based on their specific multifunctional values (food production, heritage, employment, landscape, sense of place, etc). A Plan for Growing Sydney currently provides information on the north-west and south-west Growth Centres. However, it contains little information about how agriculture in peri-urban areas will be retained. In its presentation of the draft District plans on 21 November 2016 the Greater Sydney Commission briefly refers to agricultural land, but primarily to its aesthetic and heritage value – not its productive value or its role in food security. The decision to shift the planning scale down to District Plans also risks a segregated approach to peri-urban agriculture that does not match the regional needs and issues. There is an opportunity to consider and address the regional needs of peri-urban agriculture in the review of A Plan for Growing Sydney, and especially in the preparation of the next Greater Sydney Region Plan.

Prioritising peri-urban agriculture in priority locations in the Sydney basin will set a precedent that can influence the decision-making processes used by the Greater Sydney Commission when finalising and delivering on District Plans and by and local councils, and can indeed protect agricultural land from irreversible rezoning for other uses.

The SASA Working Group sees a pressing need to subject the ad-hoc, market-driven conversion of farm land for urban development purposes to a more stringent evaluation process grounded in triple-bottom-line valuation and with sustainable development as the underpinning goal. Currently, with increasing land prices as a primary incentive, it is too easy and too tempting to simply rezone and subdivide farms for residential use in line with the interests of the dominant development paradigm in Sydney. While individuals may profit from such change, effective transition plans and clear land use priorities and strategies are required to avoid short-term impacts and short-sighted planning outcomes on other farmers living in proximity to that land and the local employment and communities as well as regionally significant industries due to increased land use conflict and the piecemeal unplanned loss of critical agricultural resources and production opportunities. Conversion of farmland to residential areas may lead to short-term economic gains (profits for developers, jobs in construction, etc.) during the first three years. However, in the long run housing development does not equal job creation - rather it creates additional demand for jobs. High-value agriculture, on the other hand, especially when organised in multi-functional clusters that serve as catalysts for regional economic development, is likely to continue to yield economic, social and indeed environmental benefits in the long run.

While zoning is broadly perceived as a mechanism to retain agricultural land, it does not do so in practice. It is limited by the data it is founded upon and can only work where there is a clear strategic regional
framework that identified regional and local needs and priorities, and where this is based on a sound assessment of the issues and opportunities. Zoning only provides a development criterion and a set of property rights. Zone objectives are often too generic and not explicitly taking multi-functionality objectives into account. They still allow multiple (conflicting) uses as per land use tables, resulting in adverse cumulative outcomes across multiple council areas. So to be effective zoning needs clear, non-conflicting objectives with associated compatible permissible land uses, otherwise zoning does not act as protection, but rather promotes multi-land use functions which may not be compatible. This is despite the fact that there will be an expectation that zoning provides good land planning guidance.

The SASA Working Group strongly believes that a regional framework that explicitly recognises the importance of retaining peri-urban agriculture in priority locations is an important step in the right direction to guide planners. Retaining important peri-urban agricultural resources and development options means producing high-value perishable commodities in a location where there are specific local advantages. But it is also about retaining key agri-businesses/industries that provide local employment and economic development diversity by retaining the multiple values of agricultural lands.

**Valuation**

Strategic planning for peri-urban farmland should go beyond the narrow rationale of mainstream agronomic thinking and include broader values and roles of peri-urban agriculture and food production at a meta-systemic level (e.g. the Sydney metropolitan area).

Reconsidering the ways in which planners, decision makers, farmers and communities value, or undervalue agricultural land would be a game changer. The formula currently used in land use planning is based on “the highest and best use” a planning principle that states that any piece of land should be allocated to the use that will yield the highest economic value and the greatest net economic return over a given period in the foreseeable future, and it is most efficient for that use, without negatively impacting the users around it, or impinging on their property rights.

In an overinflated property market like Sydney’s, land use will inevitably gravitate towards land conversion for the highest direct economic value (residential and rural lifestyle purpose), without necessarily considering the resultant regional impacts on employment, communities and landscapes or the cumulative and longer term opportunity costs.

Although the primary role of agriculture is to produce food and fibre, many other functions are important such as land conservation, maintenance of landscape and sense of place and sustainable management of natural resources, biodiversity preservation and contribution to the socio economic viability of rural areas (OECD 2001). As such, agricultural land use is multi-functional and has multiple associated benefits.
The SASA Working Group believes that the biophysical, social and economic values of peri-urban agriculture, as represented by a range of (agri-)ecosystem services\(^7\) must be taken into consideration as well as the employment and value-added returns from agriculture and agribusiness enterprises, when valuing agricultural land for residential development and also in sustainability assessments and planning policy.

Currently, it is valued based on the current annual production of that land and the income the farmer receives from farming land, rather than on the broader and longer-term benefits Sydney gains from rural employment, economic diversity, local food production, the productive re-use of organic waste, open spaces and other environmental services provided by agricultural lands, as well as food security. It is important to develop a systemic understanding of the interactions between Sydney as a city and its peri-urban environments. Without a rich food system providing paddock-to-plate opportunity, Sydney’s virtuous circle of attractiveness as a global city will be undermined as others around the globe gain ground in this obvious innovation space. Moreover, the present planning challenge that Sydney as a fast-growing city is facing presents a major opportunity to ‘brand’ Sydney as a world-leading food-secure metropolitan area.

**Re-allocating unutilised crown land**

Increasing the availability of unutilised crown land, that is, not ecologically significant, for agriculture or farm precincts could compensate for the agricultural land already lost. Moreover, the release of such crown land could create new agricultural development opportunities.

The Western Sydney Parklands are a good example. The Trust has committed to delivering 500 ha of urban farming within the Parklands area in Horsley Park. The Master Plan provides for glasshouses, poly/greenhouses, market gardens, orchards and grove farming enterprises as well as tourism destination through a farm gate trail, but progress in developing such lands has lagged and is far slower than the loss of agricultural opportunities in the region. Farmers requiring development consent are being asked for engineering drawings, providing sealed roadways and car parking which normally is irrelevant for a simple market garden. Agriculture development approval processes within farm precincts should be streamlined and could be less onerous where the proponents meet agreed sustainable agriculture development criteria.

The Western Sydney Parklands - Agriculture Precinct is available for leasing for the relocation of horticulture businesses. There are vast parkland areas in the South West District plan area that could be used for agriculture. One question that is likely to arise in this context is the willingness of farmers to separate the physical locations of their home and their work.

Also, the use of flood prone land not currently being utilised for agriculture or recreational purposes could be investigated to clarify what is restricting its agricultural use. For instance land around Penrith and throughout the Growth Centres that is unsuitable to be built on unless filled to above the 1:100 year flood level.

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\(^7\) Ecosystem services are the benefits that ecosystems provide to humans and human well-being. The concept of agro-ecosystems explicitly recognises the ecosystem benefits from multi-functional agriculture.
Land with noise restrictions (for example, land around the planned Western Sydney Airport) could also be investigated for its suitability for intensive agriculture.

**Purchasing and Transfer of Development Rights (TDR)**

The Transfer of Development Rights (TDR) is a zoning technique that can permanently protect farmland and other natural resources, by redirecting development that would otherwise occur on these resource lands to areas planned to accommodate growth and development. This is practised in many parts of the world but rarely in Australia. It is unfortunate that to date the NSW Government’s consideration of TDRs has identified significant constraints to their adoption in NSW.

As is known from applications elsewhere, a TDR program can enable landowners within valuable agricultural resource to be financially compensated for choosing not to subdivide and develop their lands for housing. The landowners are given the option under municipal zoning to legally sever the development right from their land and sell these rights to another landowner or developer for use in another location.

The land from which the development has been severed is permanently protected (as, for example, with the NSW BioBanking framework) through a conservation easement or other form of restrictive covenant. In exchange the development value of the land where the transferred development rights are applied is enhanced by allowing for new and special uses or other regulatory flexibility that zoning without the TDR option would not have permitted. A similar framework currently applies under the NSW BioBanking framework in relation to biodiversity offsets.

A farm land trust could also fund purchase of land to be covenanted for farming this could form part of existing Nature Conservation Trust Funds.

**Promoting farming as a viable livelihood to the next generation**

With the current renewed interest in metropolitan cities in local food an urban agriculture it can be said that Australia’s relationship with food is in transition: a shift away from a mining boom towards a ‘dining boom’. Where food comes from, and where food waste ends up, is becoming of increasing interest for consumers. There are also high-profile examples of urban professionals leaving their city lives behind them in order to take up small-scale, often organic, commercial farming and of increasing demand for locally grown and organic foods. Such societal trends point to an opportunity to promote farming as a viable livelihood for the next generation.

**Place making and community building**

Re-establishing a sense of community through community development activities is to be delivered by peri-urban councils, with farming and local produce at its core. Peri-urban transformation has the risk of disrupting existing social networks and community values through the introduction of new residents with different values, aspirations and belief systems.

Peri-urban councils could help build cohesion by bringing their communities together by setting up community partnerships, building community awareness and education about the value of living near agriculture and farming. This can be achieved by organising community activities for new residents and

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10 [http://wholelarderlove.com/](http://wholelarderlove.com/)
farmers to engage, establish communication and building rapport, for example through local fairs, support groups, cultural activities, open days at farms, community supported agriculture, farm markets, etc.

3.3 Empower current and future farming enterprises

Promoting/facilitating land leasing arrangements
While landowners (for example, retired farmers) may have suitable farmland available, farmers may find it challenging to productively use their land or change existing enterprises to remain competitive. Others can find it difficult to start a new farming business due to land prices or expand their existing farming operations due to planning restrictions or land use conflict risk. In some peri-urban areas (for example Wollondilly Shire Council) leasing/share farming arrangements between rural land owners and farmers can enable the productive use of underutilised land.

Migrant groups experienced in agriculture who can neither afford nor have entry points into the current food system, could be a pool from which ‘new blood’ and different business models could emerge if provided incubator environment.

Leasing arrangements need to be tailored to match industry investment requirements and in particular must provide the security to reflect the high level of capital investment and relatively long return times of for horticulture.

If local government could further promote and facilitate suitable land leasing arrangements, this could be a significant step to help avoid land use conflict and retain and encourage local food production and rural employment in the longer term.

Promoting best management practices
The Majority of land use conflicts issues arise form intensive animal industries. NSW DPI Agriculture’s intensive animal industry development officers, intensive horticulture development officers, and resource management officers can help regulatory authorities and planning agencies to avoid and resolve land use conflicts by advising on best agricultural management practices and planning for agricultural development. Greater Sydney Local land Services additionally works with rural landholders and rural communities to support on sustainable farm management practices and biosecurity.

Promoting Best Management Practices (BMP) in peri-urban agriculture can reduce the environmental impact of agriculture, and also encourage diversification which may also increase economic returns. Farming activities should incorporate or plan for best management practices to manage pesticides, irrigation water runoff, dust, odour and noise, nuisance, etc., from the outset in order to limit the potential for raising community concerns. Providing farmers with expertise about best BMPs, including more biologically-based farming systems might be needed as well as incentives to take care of the environmental aspects of the land in their property.

Once best practice farming systems are in place, new residents should not be able to object to long-used farming management practices that are well managed, lawful and meet industry standards and are necessary for a successful operation consistent with the NSW DPI Right to Farm policy.
**Diversification, multi-functionality and new business models**

Increasing the profitability of existing peri-urban farms should not only be focussed on intensification, but also on diversification and multi-functionality, both of individual farms and of regional land use. *Increased profitability and sustainability would be the final outcome of a strategic reprioritisation of peri-urban agriculture.*

Increasing profitability is not just a matter of education resources and guidelines (‘sermons’). Agriculture is already struggling in peri-urban areas and subdivision of rural land is impacting negatively on viable agricultural production. According to Wollondilly Shire Council, peri-urban farmers also face economic difficulties associated with practices in the retail sector, income insecurity, climate factors and high start-up costs. Compliance with environmental protection legislation related costs, coupled with a planning system that can make the expansion of farms difficult, only add to underlying economic challenges.

The SASA Working Group believes that because farms need to be productive and competitive there is a need for *incentive-based* policies that encourage intensification, diversification, multi-functionality, and most importantly, innovation of peri-urban food production. In other words, policies that create opportunities to modernise farming practices so that they can diversify, value add, receive a higher return per acre and create jobs.

For example, the Greater Sydney Commission recognises the importance of Sydney’s peri-urban farmland in terms of its role in maintaining landscape aesthetic value (views of the ridges out west) and heritage value. If the maintenance of such public-good ‘services’ (externalities) could be included (internalised and monetised) in farmers’ business models (as the NSW BioBanking framework does with farmer-generated biodiversity outcomes), new business opportunities are likely to open up.

Policies that encourage *farm multi-functionality* would protect agriculture and add ‘layers of value’, enabling greater sustainable development in peri-urban areas. It would also protect farmers who would not be as inclined to subdivide land for urban development, and as a result, would decrease the potential for land use conflicts. But most importantly, they would attract investment, employment creation, nature and landscape conservation - and would indeed shape community perceptions of peri-urban agriculture.

Multi-functionality at the *regional scale* means that agriculture is recognised as a multi-output activity that creates significant employment opportunities and acts as a ‘catalyst’ or ‘multiplier’ for regional economic development, supporting a wide range of industries associated to it. Multifunctional land use accommodates a variety of agriculture which collectively produces food and fibre, employment, landscape amenity, educational value, tourism opportunities and ecological connectivity and services (riparian zone management, etc.). Policy initiatives that could foster multi-functional land use could focus on consolidation of farming activities, so as to generate (or make use of existing) economies of scale and offer employment opportunities for the local population. This in turn leads to promote local economic development. Flow-on effects would include profits and employment to associated industries, as well as human health and environmental benefits.
Engaging the agricultural sector’s multiplier in the local and regional economy is about transforming farms by:

- Creating additional businesses associated with the primary production, value adding and building their value proposition
- Value chain collaborations (sell direct)
- Providing ecosystem services
- Agri-tourism and recreation activities, (farm tours, dinners, stay ins, therapy farms)
- Preservation of cultural heritage, by providing incentives
- Farm gates and farmers’ markets
- On-site agricultural training, educational retreats.

### 3.4 Summary of policy instruments

A summary of the policy instruments discussed above is provided in the table below. For each instrument, classified under four broad policy objectives (prevention, protection, resolution, resourcing), a type indication is given (regulation, incentive, communication/education).

<table>
<thead>
<tr>
<th>Policy objective / instrument</th>
<th>Regulation (‘Stick’)</th>
<th>Incentive (‘Carrot’)</th>
<th>Coms (‘Sermon’)</th>
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<tbody>
<tr>
<td><strong>PREVENTING LAND USE CONFLICTS</strong></td>
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<td>Protection</td>
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<td>Separation</td>
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<td>Risk assessment</td>
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<td>Consultation</td>
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<td>Leasing</td>
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<td><strong>RESOLVING CONFLICT</strong></td>
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<td>Mediation</td>
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<td>Place making and community</td>
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<td>Valuation</td>
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<tr>
<td>Re-allocating crown land</td>
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<td>Purchase/Transfer of Development Right</td>
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<tr>
<td>Promoting farming as a viable livelihood</td>
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<td><strong>RESOURCING FARM ENTERPRISES</strong></td>
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<tr>
<td>Diversification &amp; multi-functionality</td>
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4 Summary and conclusions
The SASA Working Group believes that currently the broader values and roles of Sydney’s peri-urban agriculture are currently under-recognised.

To date peri-urban agriculture has been given only marginal consideration in Sydney’s urban planning policy and even in agricultural policy, particularly in terms of the long-term management of the land and resource base. The SASA Working Group believes that this oversight is the root cause of the increase in cases of land use conflict. Moreover, it represents missed opportunities for agricultural development in the Sydney basin and also it is the cause of land use conflicts.

Like water catchments, agricultural land needs to be protected because it performs vital functions to the economy, the environment and society as a whole. The SASA Working Group is concerned about the fact that much of the planning policy has been focused mostly on cities or regional NSW peri-urban areas being neglected. Also like water catchments (or ‘watersheds’), food production areas (or ‘foodsheads’) have a natural role and opportunity to deliver its produce to the nearest – that is, local, demand. This stimulates a more local food culture and general awareness of where people’s food comes from and how and when it is grown. Increasing food awareness amongst consumers is a global trend and presents an immediate opportunity for Sydney.

Fragmented governance and the lack of long-term integrated planning for Sydney’s peri-urban food and agricultures is progressively threatening the sustainability of peri-urban agriculture in Sydney at a time when the population is growing and when food security and the environmental and economic values of agriculture are becoming increasingly important for a resilient city.

We believe that a renewed debate is urgently needed over the potential for clearer regional planning frameworks, stronger regulatory land use planning instruments and greater support for agricultural development is required to protect Sydney’s peri-urban agriculture and biodiversity. If the current planning system continues it will result in long-term social, economic and environmental costs. We need to act while we can.

The SASA Working Group hopes to have provided a useful starting point for a renewed debate. We welcome your comments and suggestions.

Acknowledgements
This discussion paper has been informed by feedback from a number of experts and practitioners: Rose Wright (Knowledge Transfer Services); Vasikili Andrews (Elton Consultants); Joe lane (GHD); Ally Dench (Wollondilly Shire Council); Philip Pleffer (Hawkesbury City Council); David Thompson and Paul Wearne (NSW EPA); and Andrew Mooney (Fairfield Council).
Contacts

- RDA Sydney 02 9890 7804
- DPI Agriculture – landuse.ag@dpi.nsw.gov.au
- Greater Sydney LLS – 1300 795 299
- EPA - Environment Line 131 555
- Institute of Sustainable Futures (UTS) 02 9514 4949
References


Consensus Building Institute, Mutual Gains Negotiation Approach http://www.cbuilding.org/cbis-mutual-gains-approach-negotiation

The Sydney Agriculture Strategic Approaches (SASA) Working Group

The Sydney Agriculture Strategic Approaches (SASA) working group is a partnership of state and local governments and institutions, formed in 2014 to ensure agricultural development options in the Sydney basin are recognized and strategically planned.

OBJECTIVES:

- To provide multidisciplinary advice to the NSW government about agriculture in Sydney particularly in the context of implementing A Plan for Growing Sydney, developing district plans and supporting agribusiness development.
- To promote peri-urban agriculture as a significant contributor to the NSW economy, employment and growth of agribusiness manufacturing, to food security, a healthier society, a cleaner environment and to the amenity of Sydney.

These objectives align well with the NSW Premier’s Priorities (creating jobs, building infrastructure, tackling childhood obesity, keeping our environment clean). It is of particular interest to the SASA Working Group to help deliver on these priorities and other key policies.

Priority actions:

- Assist in the development of a whole-of-government agricultural strategy for Sydney
- Provide a platform for agencies and institutions to share knowledge and collaborate on project development
- Writing discussion papers
- Work closely with the Greater Sydney Commission
- Advise the NSW Government on implementation of the Right to Farm policy
- Identify opportunities for potential clustering and development of agricultural activities.

Key Policy documents

- NSW Premier’s Priorities
- A Plan for Growing Sydney
- NSW Right to Farm Policy
- District plans
- NSW Agriculture Industry Action Plan
- LLS Local Strategic Plans

Membership: Department of Primary Industries, Regional Development Australia, Sydney, Department of Planning and Environment, Department of Premier’s and Cabinet (DPC), Sydney Peri-Urban Network of Councils, UTS Institute of Sustainable Futures, Western Sydney University, Environment Protection Authority, Hawkesbury Harvest, and Local Land Services.