Agricultural Systems Planning in Ontario
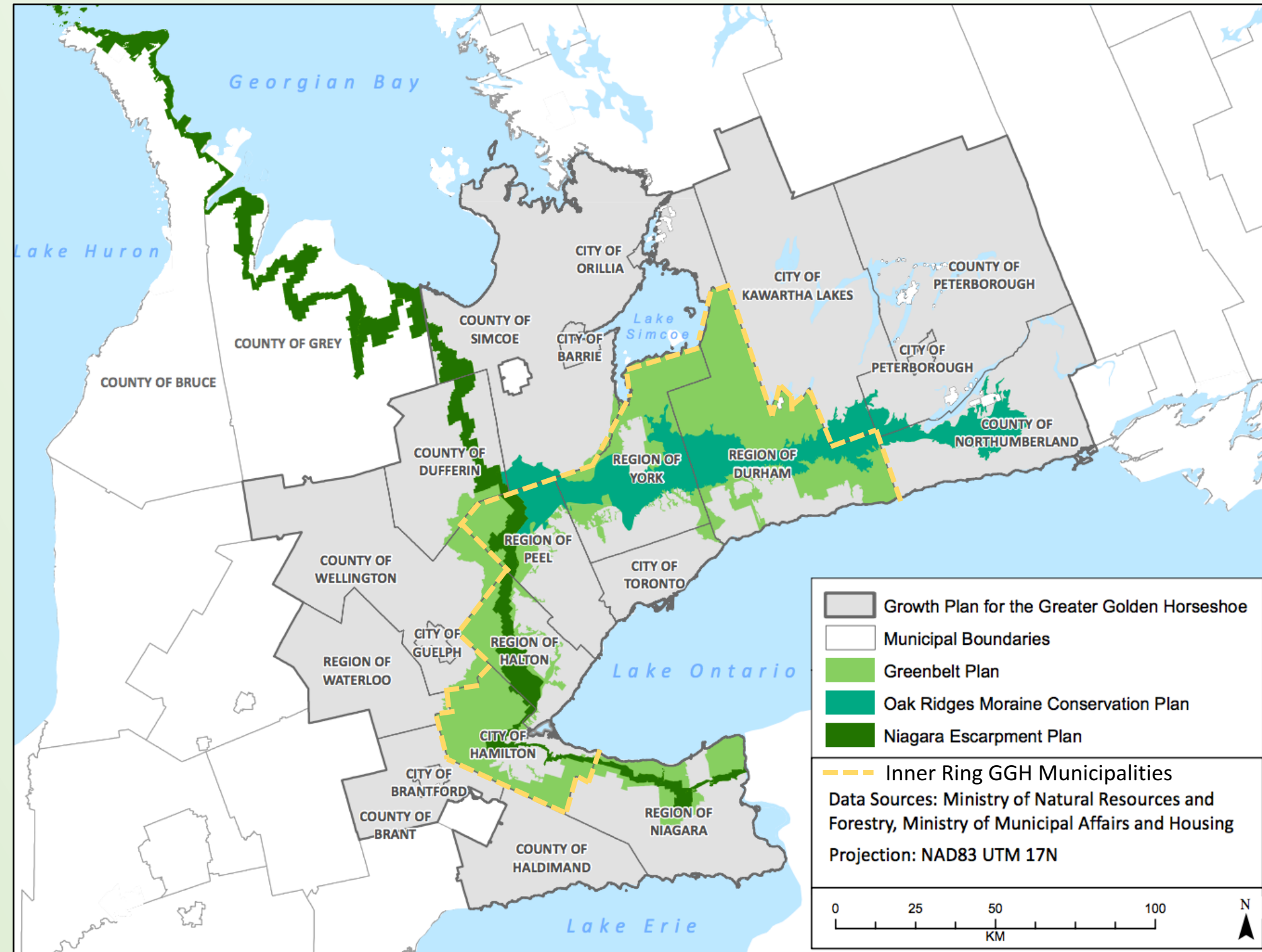
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Map of southern Ontario showing the Greater Golden Horseshoe and the relevant areas of four provincial plans. (Source: MMAH (2015))

Introduction

Historically, planning for agriculture in Ontario has primarily consisted of identifying and protecting the soils and lands best suited for agriculture. There is an emerging consensus, however, that this land-based approach alone is not sufficient to support a thriving agricultural industry and communities, particularly in the face of strong urban growth pressure. The Ontario government is moving towards planning for "agricultural systems": a more holistic approach that considers both the land base and the interaction between the land, agricultural operations, infrastructure, and agricultural value chains.

This shift is most apparent in the province's ongoing coordinated review of the four land use plans relevant to the Greater Golden Horseshoe (GGH). The GGH includes some of the best farmland in Canada – including 42% of Ontario's Class 1 land – and is known for producing over 200 different foods, from vegetables to livestock to wine (OFA and ED, 2015). It also, however, contains some of the largest cities in the country, including the Greater Toronto Area, and faces some of the greatest urban growth pressure in the country.

Despite the province's stated intentions to move towards an agricultural systems approach to planning in the GGH, there is not yet consensus on the definition of an "agricultural system". This project explores various definitions, their relevance in the Ontario planning context, and the practical implications of implementing them.

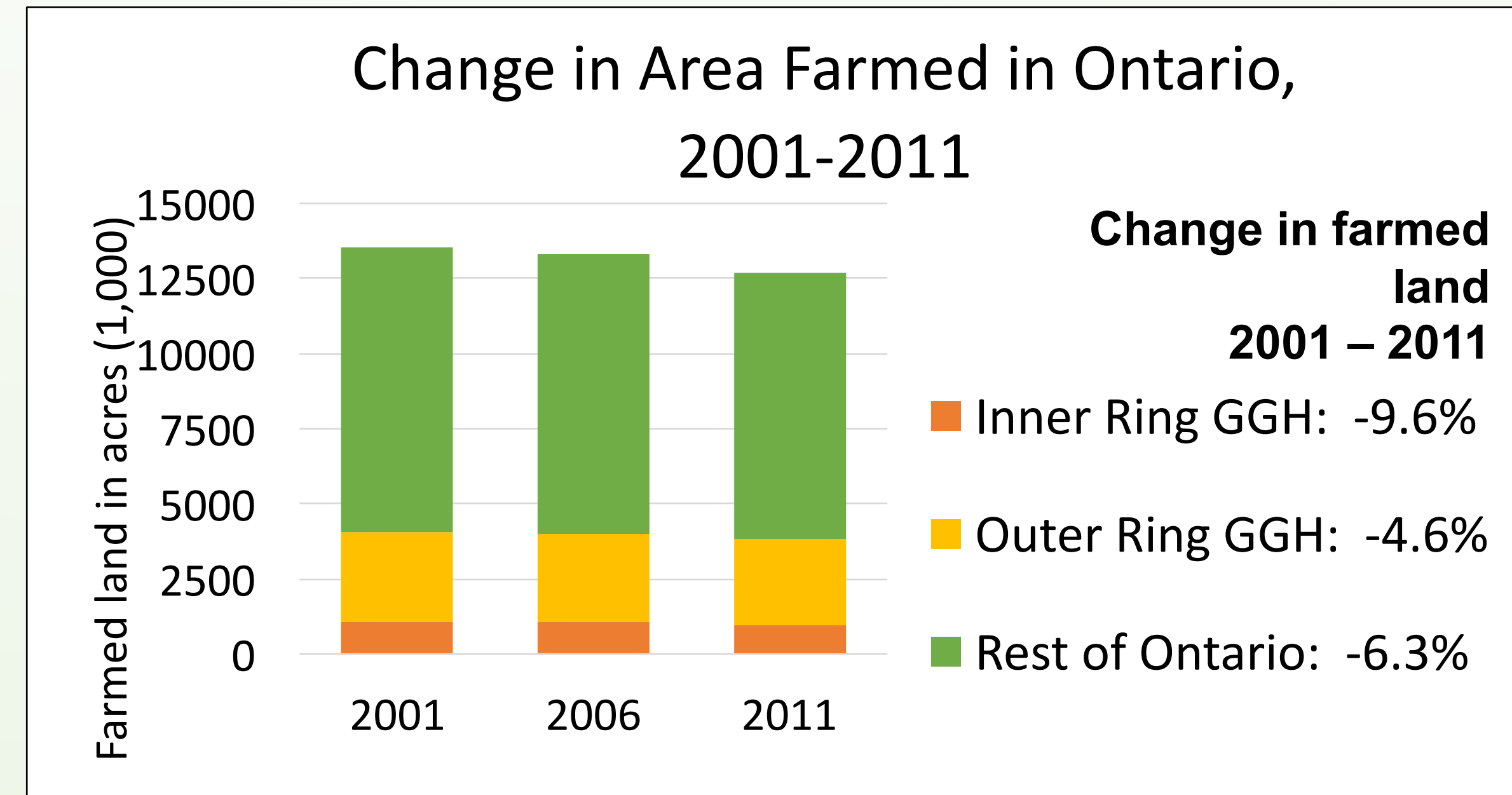*Stacking hay in the Greater Golden Horseshoe. (photo by author)*

The Ontario Context: Agriculture Facing Challenges

Planning for agriculture happens primarily at the provincial level through a variety of policies and guidelines. Despite provincial policies purported to protect agricultural land, especially more recent measures such as the Greenbelt Plan (2005), agriculture continues to decline in regions of Ontario, particularly in areas of strong urban grown pressure like the GGH. This decline can be seen in the 9.6% decrease of farmed land in the Inner Ring GGH between 2001 and 2011, despite the implementation of the Greenbelt Plan during that time.

Other indicators of agricultural decline which can be found in the GGH include:
- Loss of agricultural businesses and services (abattoirs, grain mills, equipment repair, fruit processing)
- Increase in farmland rented by farmers rather than owned; increase in absentee landlords (often speculators)
- Lack of investment in infrastructure (dilapidated barns and fences)

These indicators are common in areas where the future of agriculture is uncertain and landowners and farmers cannot comfortably invest (Walton, 2015; Caldwell, 2015).


Change in Area Farmed in Ontario, 2001-2011

Change in farmed land 2001 – 2011
- Inner Ring GGH: -9.6%
- Outer Ring GGH: -4.6%
- Rest of Ontario: -6.3%

Data source: Agricultural Census, Statistics Canada, cited in OFA and ED (2015).

Definitions of "Agricultural System"

Various definitions have been proposed for agricultural systems. There is a general consensus that they consist of both the agricultural land base *plus other elements*, but these other elements may vary significantly. Caldwell (2015) proposes a very broad definition which includes intangible elements such as regulations, professional expertise, and research and education institutions (see image below). His paper highlights the complex web of relationships that makes agriculture happen (Caldwell, 2015). Walton (2015), on the other hand, proposes a much more limited definition of the agricultural system, in which the non-land elements fall into only four categories: input services, infrastructure support, primary production and first-level processing, and marketing and delivery. While this more restricted approach may not consider some very important influences on agriculture acknowledged by Caldwell, it has the advantage of that all of its elements are concrete and spatially located, so they could be much more easily defined, identified, and even located on a map in policy.
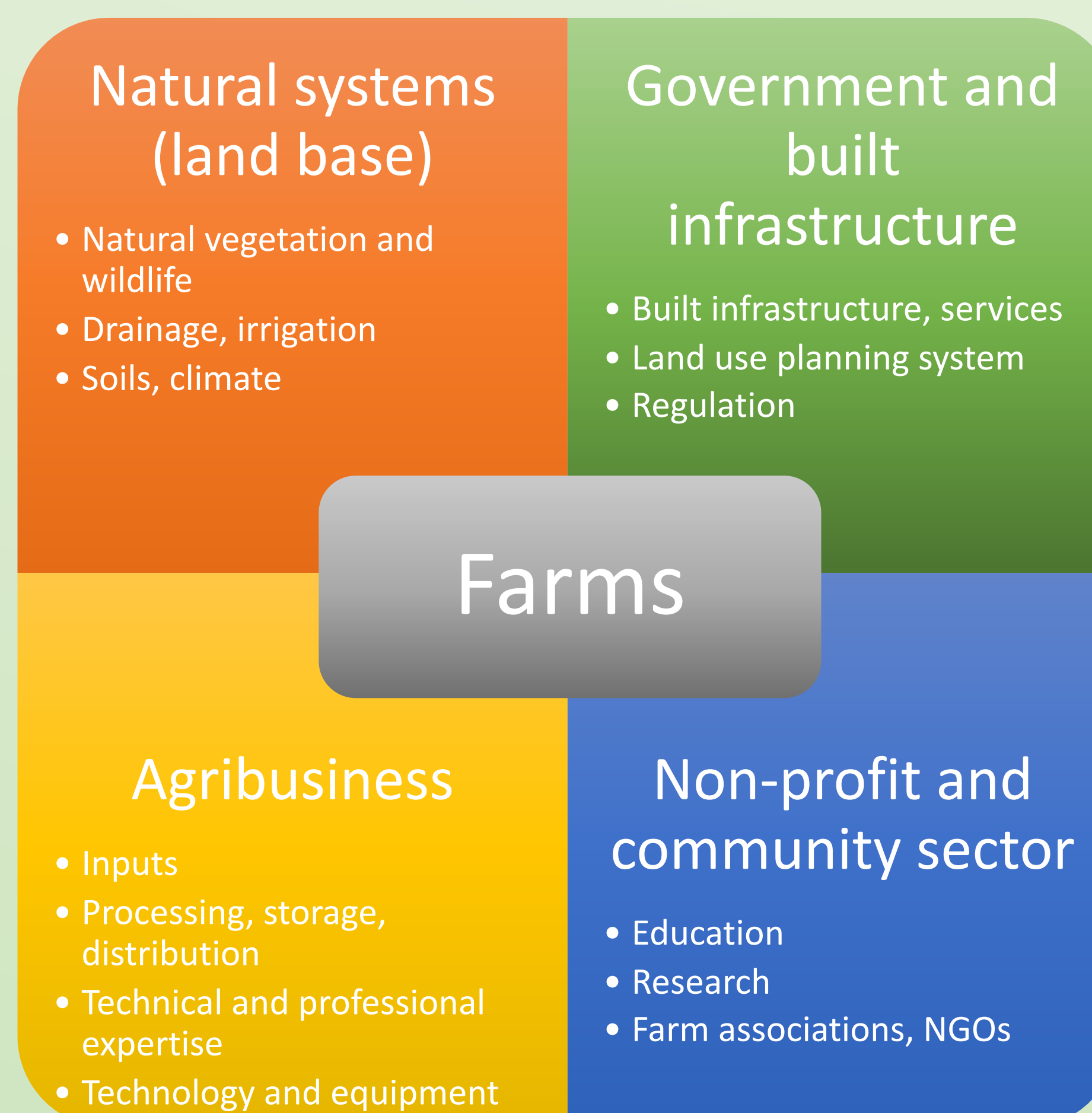
Schematic of agricultural systems as proposed by Caldwell (2015).
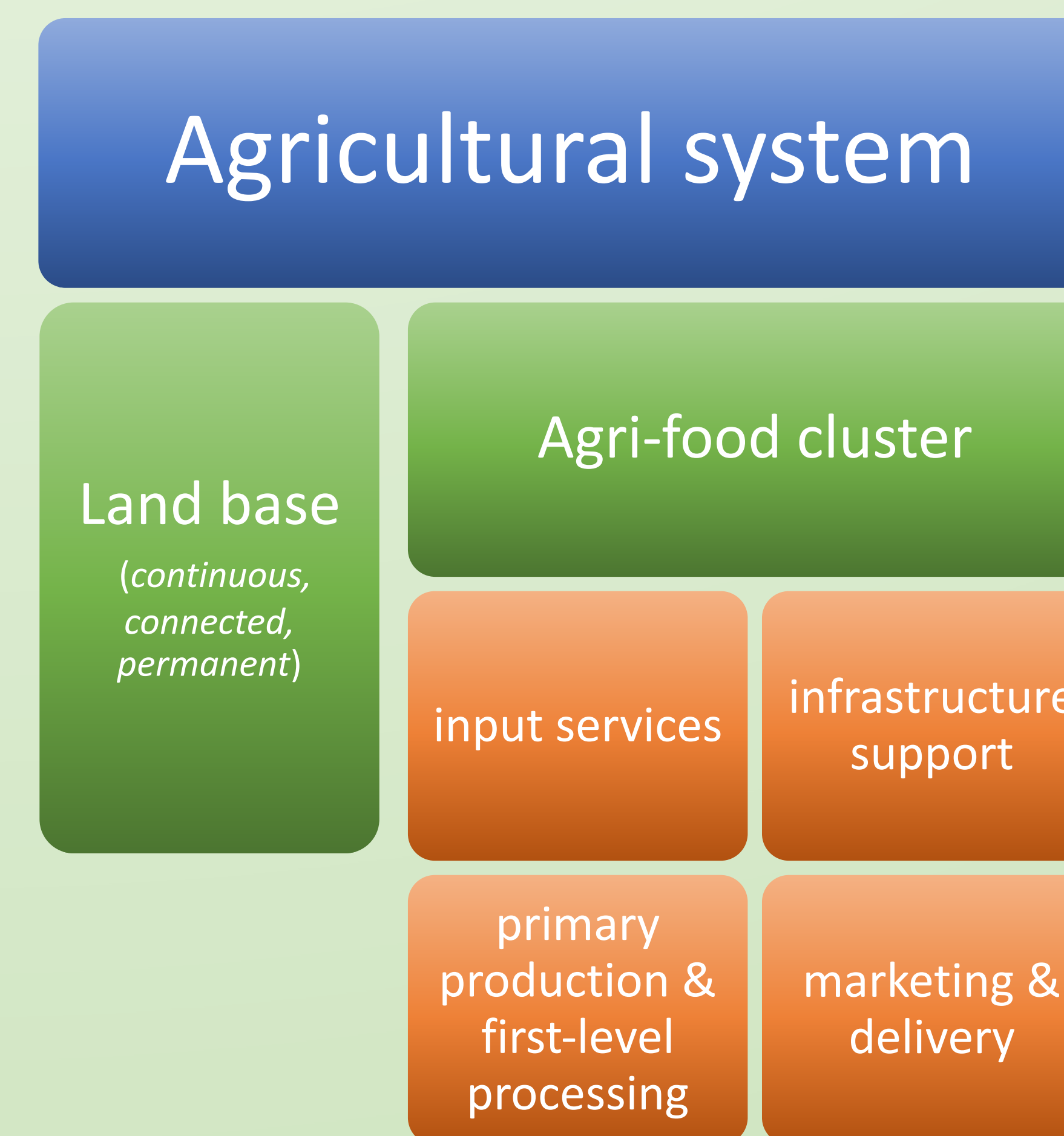
Schematic of agricultural systems based on Walton's (2015) definition.

Relevance in Ontario

Agricultural systems planning is particularly relevant for regions facing strong growth pressure and such signs of decline. There is little good in well-protected agricultural land which farmers cannot viably farm. A systems-based approach is intended to support the entire agricultural sector by considering the many interconnected elements that make it viable, rather than just the land base.

The proposed language in the revised Greenbelt Plan gives a definition of Agricultural Systems that in many ways mirrors Walton's (2015), with two components: an agricultural land base and an "Agricultural Support Network", which includes "those elements important to the viability of the agri-food sector such as: regional agricultural infrastructure and transportation networks, on-farm buildings and infrastructure, agricultural services, farm markets, distributors and first-level processing, and vibrant, agriculture-supportive communities" (MMAH, 2016, p.65). The proposed revisions to the Greenbelt Plan make it clear that connections and relationships between many elements are critical to successful farming. However, it is not yet clear how to effectively implement these ideas.

While no jurisdiction has taken a completely systems-based approach to agricultural planning, some have taken steps in that direction and have a longer experience of it than Ontario. Examples include Oregon, with its Land Conservation and Development Commission and British Columbia, with its Agricultural Land Commission, both established in 1973.

Proposed Future Research

Further research is recommended along the following lines of questioning:
- What is an appropriate definition for "agricultural systems" in the Ontario context?
- Are other jurisdictions taking an agricultural systems approach to planning, based on this definition?
- What lessons can be learned from these other jurisdictions' experiences of implementing [elements of] an agricultural systems approach? What barriers may be encountered in Ontario, and how could they be mitigated?

The experience of another jurisdiction with elements of agricultural systems planning will be studied to analyze its policies, outcomes, challenges in implementation, and remedies pursued. This analysis should illuminate barriers Ontario may expect to face in implementing agricultural systems planning and tactics that could mitigate them.

References
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