Additional Materials:
Envisioning a food system based on truly integrative agricultural practices for 2050

1. Please share a visual that communicates the structure and operation of your food system in 2050. Describe the visual.

This might be a: system map, rough sketch or illustration; network map; video (simple, low-fidelity) or several of these in a series. Your visualization needs to communicate:

We provide two linked visuals. First is a video in which we present our Vision for Southwestern Ontario in 2050 from a broad point of view: What is the big picture and what are the goals that drive our Vision for the sustainable production of, and universal access to, nourishing foods in Southwestern Ontario in 2050? The video is self-explanatory and we hope you enjoy it.

Second, we offer a network diagram in which we present the many stakeholders and relationships that must be in place for the successful realization of our Vision by 2050. A transformed agrosystem, symbolically placed at the center of the network, lies at the heart of our Vision and in all aspects of the Vision. The greater whole that represents the transformed agrosystem is a reflection of the sum of the diverse components and the relationships connecting them. These are most often relationships rooted in reciprocity (indicated by the duality of the arrows); for example, each interconnected component necessarily contributes to a healthy and sustainable whole (the agrosystem) and a healthy agrosystem feeds back to each contributing component through improved economic security across all economic scales of agriculture, more nourishing and diverse diets, a vibrant agricultural community inclusive of Indigenous knowledge, policies that are progressive and motivate farmers to adopt technologies and practices that promote more biodiverse and resilient landscapes in an effort to improve life.

1. Who are the Stakeholders? How are they connected and what functions are they performing in 2050 in your food system?

Our Vision is founded on the collaborative and integrative cooperation of peoples and groups representing a diversity of agencies, institutions, cultures and heritages. The farmer, or producer, is the most important stakeholder, whether through production of food, stewarding the land, or forming the human center of the agricultural community. In 2050, the relationship between producers and consumers is founded on the public’s desire for sustainably and locally produced, nourishing, and affordable food products. Circular economies and farmer-led cooperatives contribute significantly to the food economy. Grassroots organizations (NGOs such as ALUS, EFAO, GBCA, OSCIA) are fundamental in this effort through their awareness campaigns, education, and training workshops. Such efforts are supported by consumers who desire change and recognize the important role that NGOs can play in achieving that change. Government stakeholders (OMAFRA, City of Guelph, Agriculture and Agri-Food Canada) oversee progressive policies (tax credits, financial incentive programs, and “green”
certification) that promote farmers to adopt conservation programs without economic sacrifice. Southwestern Ontario research institutions (University of Guelph, University of Windsor, Arrell Food Institute) lead the province in research, education, and training each new generation of students who now populate positions in the agriculture industry, among NGOs, in government at all jurisdictional levels, and who lead in the development of innovative agricultural technologies. Adoption of regenerative agriculture by small-and-large-scale farms has reinvigorated the culture around food production. Indigenous rights-holders participate freely in our system bringing traditional knowledge about growing native food varieties, and human migration—mostly to urban centers—has created demand for culturally appropriate food varieties. Tourists (cultural landscapes, viewscapes) bring additional revenue to Southwestern Ontario agricultural communities whose transformed landscapes and enhanced ecosystems services are now considered desirable destinations.

2. What forces are at work? What are the influences/processes, and what are the relationships between them in your 2050 food system?

As with any system—food production systems included—many forces, external and internal, can affect their functionality. A key force in our system is the political climate at any given time. It is often the case, for example, that the political party in power in the province of Ontario is opposite to that at the federal level. This can make it difficult to achieve harmony in purpose and consistency in policy development. In our food production system, locally produced foods linked to circular economies and cooperatives are a key driver of economic prosperity but if costs are not competitive with food produced from other countries, maintaining competitive advantage and prosperity will be difficult for some farmers. Having said this, at the heart of our agricultural region is the University of Guelph, Canada’s Food University and a world-leading research institution for soil sciences. For well over a century, the University has trained and will continue to train students to become highly qualified personnel in the fields of agriculture, animal science, biodiversity genomics, business and economics, engineering, environmental sciences, equine, food science, food security, horticulture, Indigenous studies, landscape architecture, plant science, rural communities and planning, turfgrass, and veterinary sciences. Access to farm labor is dependent on political influence and is susceptible to unpredicted events as we discovered with COVID-19. Technology will play a key role and, in some cases, the cost of that technology may make it inaccessible to smaller-scale farmers (e.g., autonomous tractors). However, in other cases, such as sensor technology, drones, and satellite remote sensing, costs will not prohibit access and may be of substantial benefit to farmers. Technology may also replace humans, especially low-tech labor (e.g., automated pickers). This may reduce pressure to secure migrant labor but also reduces employment opportunities.