Homegrown Innovation Challenge
Media Backgrounder

Problem

In a climate-changing world, Canada's high dependence on imported fresh fruits and vegetables makes it vulnerable to food-systems disruptions.

- Up to 80% of fresh fruits and vegetables consumed in Canada are supplied through imports due to a short growing season in Canada, high costs of production, and limited varieties, among other factors.
- Dependence on imported food makes us vulnerable to the effects of climate change, trade barriers, and unforeseen supply chain disruptions. The COVID-19 pandemic has been a wake-up call for thinking about supply chains – from processing factory closures to freight delays to lost harvests.
- Making off-season fruit and vegetable production efficient in Canada will require interconnected solutions involving technology, cost-effective energy sources, and agriculture. And all of this needs to be accomplished in an environmentally and economically sustainable way.

Canadians want fresh, local produce

More than half of Canadians believe that having a high dependency on imported fresh fruits and vegetables makes Canada vulnerable. (Source: Leger Online Survey of Canadians, December 2021)

- Almost three-in-four Canadians believe it is important for Canada to have produce self-sufficiency to guard against future border closings/pandemics/droughts/flooding in other countries.
- A large majority of Canadians (79%) believe it is important for Canada to have affordable, sustainable ways of growing food year-round.
- Almost five-in-six Canadians believe it is important to access fresh, affordable fruits and vegetables year-round for the betterment of the average Canadian's health.

How the Homegrown Innovation Challenge will help
The $33-million Homegrown Innovation Challenge, created and funded by the Weston Family Foundation and delivered over six years, will identify eligible teams and support the development of tools and technologies that enable Canadian farmers and producers to sustainably and competitively grow berries out of season.

By solving the interconnected barriers that currently prevent out-of-season production at scale, the Homegrown Innovation Challenge will catalyze a range of systems relevant to a broad array of fruit and vegetable crops in Canada and around the world.

How the Homegrown Innovation Challenge will work
The $33-million Homegrown Innovation Challenge will spark innovation that enables Canadian farmers and producers to sustainably grow fruit and vegetables out of season, potentially resulting in new on-farm jobs and further development of the national food technology sector.

- The Challenge offers philanthropic funding from the Weston Family Foundation to qualified donees who can most effectively solve the challenge: **To create and deliver a market-ready system to reliably, sustainably and competitively produce berries out of season and at scale in Canada.**
- The challenge prize process brings together diverse collaborators, galvanizes strategic partnerships, and inspires an ecosystem of food-system sustainability, security and availability, for Canada and beyond.
- Challenge prizes are a tried and tested method of attracting new innovators to change the status quo. At the same time, they also challenge incumbents to redirect their efforts or think about a problem in a new way.
- The Homegrown Innovation Challenge creates a forum to connect innovators and entrepreneurs from disparate backgrounds.
- Sparking innovation will build resilience into the heart of Canada's food system, tackling the country's high dependency on imported fresh fruits and vegetables in a world threatened by climate change.

Why berries?
- Berries represent an excellent test case: if innovators can achieve the objectives set out in the Challenge statement for berries, they will be well on their way to achieving them for other crops important to Canadians.
- According to Agriculture and Agri-Food Canada, in 2019 Canada imported nearly 270,000 metric tonnes of strawberries, blueberries and raspberries – with imports of these three berries representing nearly 10% of all the fruit we import.

The impact will be felt across a wide range of fruit and vegetable crops - and beyond
Innovation in certain fruit and vegetable crops will be transferable to others. For instance, berries have similar requirements for pollination as tree crops but do not take as long to grow. By understanding how to extend berry pollination, there's much that can be applied to other flowering plants, such as potatoes or melons.

- For both open-field and controlled environment agriculture, extending the fruit and vegetable growing season in Canada requires solving a series of interconnected problems. The range of these problems goes from the genetics of the plants to the analysis of pests and diseases, to finding the right levels of temperature and light required, to the need for efficient energy systems, and more.
- By focusing on extending the growing season of fruits and vegetables, the Challenge will catalyze new solutions and have a positive multiplier effect across other crops, sectors and geographies, building innovator, producer and business capabilities and capacities.

FAQs for the Homegrown Innovation Challenge can be found at
http://homegrownchallenge.ca/faqs