CWRC Wheat Breeding Innovation System Review – Frequently Asked Questions (FAQ)

What will the review conducted by Synthesis Agri-Food Network entail?
The CWRC has engaged Synthesis to review Canada's wheat breeding innovation system and analyze gaps and opportunities. Synthesis will engage key stakeholders, analyze past research and facilitate internal workshops through a robust process.

Why is the CWRC undertaking this project?
The CWRC is undertaking this project to ensure Canada has a stable wheat innovation system that will continue to generate elite varieties for farmers while supporting choice and competition in the marketplace. As major funders of wheat breeding and representatives of western Canadian farmers, it is our duty to direct investments where they will have the greatest impact for farmers and to maintain an innovation system that will meet farmers' needs.

Is the CWRC concerned about Canada's current wheat breeding landscape?
Public plant breeding in Canada has generated significant returns for both farmers and the public. The CWRC's role is to ensure the system continues to generate these returns in the long term. A review of the current landscape will support the CWRC in taking a proactive approach to identifying potential or current risks and opportunities moving forward, with the ultimate goal of a Canadian breeding system that is productive, sustainable and competitive in international markets.

Will the CWRC be releasing anything publicly following the completion of the review?
Results will be shared at the discretion of the CWRC board of directors. This project is meant to inform the internal strategy of the CWRC. However, we recognize that farmers are just one piece of Canada's wheat breeding system, and we will determine the best way to engage with all industry stakeholders moving forward.

What are core breeding agreements?
The CWRC currently has core breeding agreements (CBAs) in place with Agriculture and Agri-Food Canada, the University of Saskatchewan Crop Development Centre, the University of Manitoba and the University of Alberta.

CBAs are an integral piece of the Canadian wheat variety development system. CBAs provide stability and long-term assurance that major wheat breeding institutes across Canada will have the support needed to advance wheat genetics. The CWRC invests in CBAs to enable a cohesive network of institutions across Western Canada that have Prairie farmers' needs as their primary focus.

How much does the CWRC invest in core breeding agreements?
Current CWRC core breeding agreements include:

- Agriculture and Agri-Food Canada – $19.9 million (2025 – 2028)
- University of Saskatchewan Crop Development Centre – $11.8 million (2025 – 2030)
- University of Manitoba – $3.5 million (2021 – 2026)
- University of Alberta – $2 million (2021 – 2026)

How does plant breeding benefit Canadian wheat farmers?
Farmers received $33 in benefits for every dollar they invested in wheat breeding from 1995 to 2020, according to a recent study from the University of Saskatchewan. Additionally, farmer investment in public plant breeding via CWRC core breeding agreements has resulted in the registration of more than 40 new wheat varieties across several wheat classes. Canadian grain farmers receive significant, tangible benefits from public plant breeding research. Plant breeding produces new varieties with improved yield, agronomics and resource efficiency, resulting in higher profits for farmers and more sustainable crops. There is also a proven track record of strong returns on investment for farmers investing in publicly funded plant breeding research in Canada.

How was the 33 to 1 ROI calculated?
The University of Saskatchewan study used a benefit-cost analysis to compare the benefits generated by the investments in varietal research and development to the cost of farmer investments. Only yield improvements were considered when calculating the benefits to keep the estimate conservative. The full study, including methodology, is available at wheatresearch.ca.