University of Saskatchewan - Crop Development Centre (CDC)

Economic Footprint Study

Ernst and Young LLP (EY) was engaged by the University of Saskatchewan to conduct an economic footprint study of the CDC in Western Canada* including an economic contribution assessment, return on investment analysis, and a review of socioeconomic benefits.

ECONOMIC CONTRIBUTIONS

The CDC is a renowned research institute focused on the development of high quality and high yielding crop seeds. Plant breeding activity is estimated to generate sizeable economic contributions in Western Canada.

$17.78 B
gross farm output from 1991-2022

500+
CDC varieties released since 1971

85%
of harvestable pulse** acres seeded with CDC varieties

49%
of harvestable barley acres seeded with CDC varieties

As of 2022, CDC plant breeding supported:

$1.2 B in GDP

$254 M in Wages and Salaries

6,938 FTE jobs

RETURN ON INVESTMENT FOR FARMERS

CDC expenditures on plant breeding generates economic returns for key stakeholders. Below is an overview of estimated benefits up to 2022.

Estimated return on investment for Canadian farmers through plant breeding research at the CDC since 1971:

Internal Rate of Return	Benefit-Cost Ratio	Net Benefits
14.9%	10.8	$10.2 B

Spotlight: Benefits to Lentil Farmers

Lentil farmers have realized the largest benefit due to CDC plant breeding:

Internal Rate of Return	Benefit-Cost Ratio	Net Benefits
20%	37	$4.2 B

SOCIOECONOMIC BENEFITS

Research and Innovation

CDC's research and innovation in crop development aligns with farmers' needs.

531 peer-reviewed publications since 2016

Human Capital Development

Positioned in the University of Saskatchewan, CDC supports theoretical and practical learning.

428+ students, alumni, or faculty trained since 1971

Market Competitiveness

CDC varieties improve the profitability of Canadian farmers and seed distributors.

30+ industry partners

Collaboration and Sustainability

CDC collaborates with producers and industry stakeholders to share knowledge.

820+ extension and outreach events

*Western Canada is defined as the provinces of Saskatchewan, Manitoba and Alberta. **For the purposes of this analysis, pulse crops include dry beans, lentils, chickpeas and field peas.

Notes: Net Benefits showcase the present value of benefits minus the present value of CDC expenditures. The Internal Rate of Return represents the annual discount rate at which an investment breaks even, reflecting its profitability. The Benefit-Cost Ratio showcases total benefits as a ratio of total costs (in present value terms). Please note that this Benefit-Cost ratio is a summary-level estimate of benefits to farmers as a result of CDC's activities and may not reflect the full spectrum of costs and benefits that may be considered in a comprehensive Cost-Benefit Assessment.