

THE ECONOMIC IMPACT OF CROP DEVELOPMENT



The Crop Development Centre (CDC) at the University of Saskatchewan develops new crop varieties that bring value to the agriculture sector, through the development and application of scientific knowledge and technologies, in partnership with stakeholders across the agriculture value chain. It generates a return on investment to its major stakeholder groups – producers, industry and government.

The CDC is a world-class crop improvement centre that delivers crop genetics for the benefit of society. A combination of crop improvement expertise, state-of-the-art technologies, facilities and land—all in one place.

A 2024 economic footprint assessment of the CDC by EY Canada has revealed substantial economic returns from research, and significant local, regional and international impact through research, innovation, and market share of CDC varieties in western Canada.

ECONOMIC IMPACT



500+
CROP VARIETIES
RELEASED
SINCE 1971



\$17.8
BILLION
OF GROSS FARM OUTPUT ATTRIBUTED TO PLANT
BREEDING AT THE CDC FROM 1991 TO 2022

APPLIED RESEARCH IMPACT



531
PEER REVIEWED
PUBLICATIONS
SINCE 2016



\$21+
MILLION
IN RESEARCH
FUNDING EACH YEAR



10
DIFFERENT CROP KINDS
GLOBAL SCIENCE
BREAKTHROUGHS CRACKING
THE WHEAT GENETIC CODE

ALUMNI IMPACT



6,938
JOBS
SUPPORTED FROM
CDC'S IMPACT

The connection of the CDC to the College of Agriculture and Bioresources supports strong undergraduate and graduate training programs in crop improvement. In addition to training undergraduate students, CDC faculty have trained over **380** graduate students, many of whom have worked or continue to work as leaders in the agriculture industry. Training the next generation of plant breeders is essential to meet the demands of a hungry and growing world.



85%
OF THE PULSE CROP
ACREAGE IS PLANTED
TO CDC VARIETIES

LENTIL



99.8%
OF THE PLANTED AREA IN
CANADA ARE CDC VARIETIES

BARLEY



49%
OF THE TOTAL BARLEY ACREAGE
IS OCCUPIED BY CDC VARIETIES

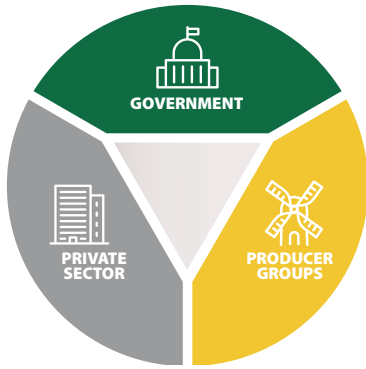


\$1.5
BILLION
INCREASE IN THE NET BENEFITS
TO FARMERS IN SPRING WHEAT
1991-2015

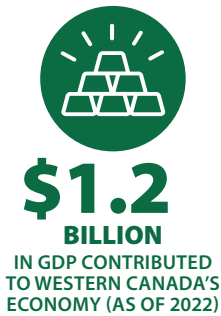


SCAN FOR FULL EY REPORT

INVESTMENT ANALYSIS



The CDC's research and crop development programs are supported by many stakeholders across the value chain, including Government, Producer Groups, and the Private Sector. This investment has resulted in significant returns to growers and the economy.



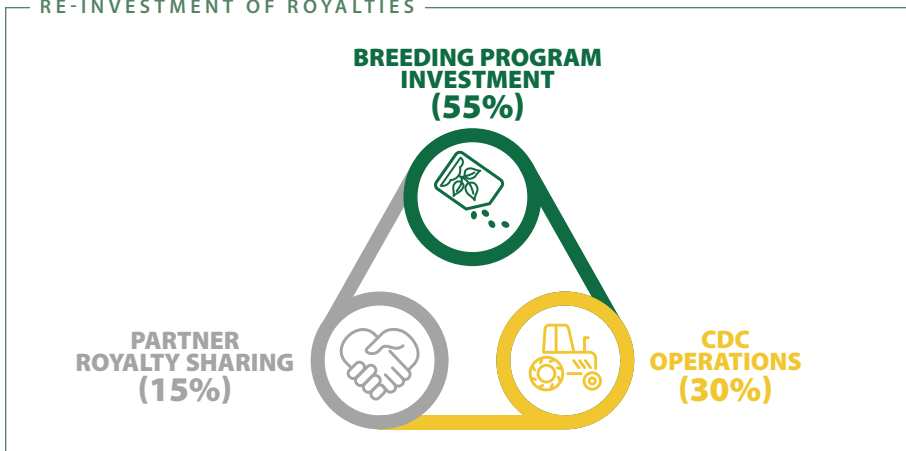
CDC'S INNOVATION PIPELINE



COMMERCIALIZATION

The CDC partners with seed companies to commercialize new varieties. In return, the Centre receives royalties that are invested directly back into its research and breeding activities.

RE-INVESTMENT OF ROYALTIES



PLANT PATHOLOGY

Resistance breeding at the CDC reduced ascochyta blight from a major to minor disease in lentil



SK LEADS THE WORLD IN EXPORTING PEA, LENTIL, AND CHICKPEA

Staple foods in fast-growing countries such as India, China, Bangladesh, and northern Africa



\$100 MILLION

IN EXPORTS OF CANARY SEED
Developed the first hairless canary seed which helped make SK the world's leading producer and exporter of canary seed



50-60% GLOBAL DURUM WHEAT EXPORTS

Canada is the world's largest single producer and export of durum wheat



GRAINS INNOVATION LABORATORY

A STATE-OF-THE-ART FACILITY THAT SUPPORTS TESTING OF END-USES, QUALITY AND NUTRITIONAL CONTENT

BE WHAT THE WORLD NEEDS