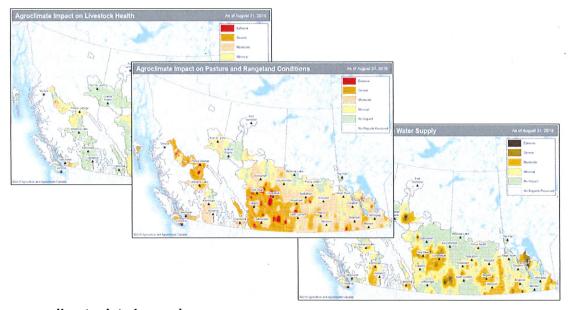
The Agroclimate Impact Reporter

The Agroclimate Impact Reporter (AIR) is an online geospatial program designed for the collection and reporting of weather and climate *impacts* on-farm operations across Canada. Each month, Canadian producers are invited to participate in a short online survey. The results inform AAFC's National Agroclimate Information Service (NAIS) about recent agroclimate impacts on their farm.

Extreme weather events and climatic variability can have significant effects on Canada's agricultural sector and the economy. Over the past ten years, drought, flooding and excess moisture have resulted in high costs to the Canadian economy. AIR has made a mission of monitoring the impacts of weather on water, soil and agricultural production to help impacted regions adapt, withstand and recover from climatic extremes.



How agroclimate data is used

NAIS analyzes and maps agroclimate impacts reported through the survey. Not only do responses inform scientists about conditions in a particular area, but once responses are compiled into a map, scientists have a better picture of conditions across Canada. This tool can then be used to identify developing agroclimate trends as well as visualize the extent of agroclimate impacts so that assistance can be provided.

AIR maps are used by AAFC to help assess drought for the Canadian Drought Monitor. AIR results contribute to assessments for financial risk management programs such as the Livestock Tax Deferral Provision.

Importance of citizen science

Scientific advancements have allowed monitoring services to capture current agroclimate conditions faster than ever. NAIS uses a variety of tools, including satellite-derived data to evaluate impacts such as drought and flooding. While this technology has come a long way, we rely on citizen scientists to provide eyes on the ground.

These individuals have a passion for agriculture and can offer valuable information. Citizen scientists provide a

unique perspective from the ground that cannot be fully captured by scientists. For example, while technology can be used to visualize the extent of a flooding event, it cannot describe the effects of flooding on seeding or harvest.

This is where you can come in! Here at NAIS, we are always interested in expanding our volunteer network. Our AIR survey depends on the participation and expertise of producers across Canada. The AIR network primarily consists of approximately 600 producers throughout Western Canada. We are actively seeking more producers in Eastern Canada.

AIR is not just about climate; we are interested in the impacts of pests, soil erosion, and wildfires too. For instance, in Ontario, 2018 saw more corn ear moulds with higher amounts of DON. In 2013 strawberry production in Nova Scotia was affected by a plant virus. Mapping reports of crop disease can help scientists better interpret and predict situations that contribute to crop disease. While also supporting policymakers to understand better the stresses faced by producers.



Get involved!

If you are a Canadian producer or someone who loves agriculture, we encourage you to take five minutes to fill out a short survey providing AAFC valuable information on how agroclimate impacts are affecting farm operations. During the active survey period, the last week of the month from April to October, navigate to the Drought Watch web site (www.agr.gc.ca/air) and click on the 'Submit Impacts" button. We are grateful to all of our contributors and the individuals that encourage producers to try our survey and

products.

If you are interested in learning more about the **Agroclimate Impact Reporter** and how you can participate, please contact <u>droughtwatch@agr.gc.ca</u> or visit AAFC's **Drought Watch** website at <u>www.agr.gc.ca/drought</u>.

Agroclimate Impact Reporter

© Her Majesty the Queen in Right of Canada, represented by the Minister of Agriculture and Agri-Food (2021). Paru également en français sous le titre Rapports sur les impacts agroclimatiques For more information reach us at www.agr.gc.ca or call us toll-free 1-855-773-0241.