Drought, heat take toll on global crops
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Findings indicated that cereal harvests decreased by nine per cent to 10 per cent on average due to droughts and extreme heat. The impact from droughts also grew larger in more recent years.

Production levels in North America, Europe and Australasia dropped by an average of 19.9 per cent because of droughts - roughly double the global average.

"Across the breadbaskets of North America, the crops and methods of farming are very uniform across huge areas, so if a drought hits in a way that is damaging to those crops, they will all suffer," said first author Corey Lesk, a recent graduate of McGill's Department of Geography. "By contrast, in much of the developing world, crop systems are a patchwork of small fields with diverse crops. If a drought hits, some of those crops may be damaged, but others may survive."

The analysis did reveal a bright side: the extreme weather events had no significant lasting impact on agricultural production in the years following the disasters.

"Our findings may help guide agricultural priorities and adaptation efforts, to better protect the most vulnerable farming systems and the populations that depend on them," said Ramankutty.

The paper, "Influence of extreme weather disasters on global crop production," is published in Nature.

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