Agriculture's climate change costs could be minimized by trading crops

If countries and farmers make adjustments in what crops they grow and where, then the effects of climate change on the global economy may not be as severe as feared, say economists.

Dave Donaldson, an associate professor of economics, writes in a new policy brief for the Stanford Institute for Economic Policy Research that because of agriculture's small share in total gross domestic product for nations around the world, the expected impact on global GDP could be considerably smaller if farmers made those changes.

"We find that much of the potential harm that could be done by climate change, in terms of reducing farmers' earnings, will be avoided if farmers are able to switch the crop that they grow in response to changing relative yields," says Donaldson.

In many areas of the world, he notes, many experts predict climate change will affect yields for some crops, but not all, and this may depend on location. For example, many regions are expected to see changes in wheat and rice productivity, the world's two most important crops.

"If climate change were to (in some regions) make wheat scarce, how willing would consumers there be to substitute imported wheat, or rice, instead?" writes Donaldson, who conducted his research with MIT economists Arnaud Costinot and Cory Smith.

In their simulations, if the countries' trade flows are constrained so that they cannot respond to climate change, those countries are not harmed much more by climate change than they would be in the absence of that constraint, he says.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: CAN TRADING CROPS MAKE CLIMATE CHANGE LESS COSTLY?