

## Research links Social Violence with Occurrence of Climate Change

Written by Betty Laseter on 30 Oct 2014

New research connects social violence with the occurrence of climate change. People frequently relate individual and regional conflicts to geography.

The National Bureau of Economic Research in Cambridge, Massachusetts, has published a sobering meta-analysis that directly links increases in temperature and rainfall to both personal violence and civil unrest.

The study clearly showed that the prediction is correct. Marshall Burke, an environmental and food security specialist at Stanford, and two others Solomon M. Hsiang and Edward Miguel collaborated to conduct the research, Climate and Conflict.

Methodological issues about estimating causal relationships have been studied by Burke and his team. On the personal level, they looked into domestic violence, road rage, assault, rape, and murder. They took more time to study sociopolitical instability of riots, gang violence, ethnic violence, land invasions, coups, and civil war.

Standardization of specifics within each effect group and conflict category allowed the team to perform a hierarchical meta-analysis. There is a possibility that they both might estimate the mean effect of climate variation on conflict results, and quantify the degree of variability across studies.

The results are not attractive. The risk of conflict systematically increases due to deviations from moderate temperature and precipitation. The effects are not just statistically important but considerable too. For example, the authors found that a 1 degree Celsius increase in temperature could cause civil disturbances in Africa to increase by as much as 20%.

Temperature has the bigger average effect by far. The new research also offers a little hope for civilization. It outlines that what scientists at present consider may be the most useful means of solving the small and large scale violence expected to go with climate change. Mechanisms have been identified that relates the two variables and also evaluate the ability of societies to adapt to climate changes and understand the possible impacts of global warming.