Note: This is the pre-refereed version of a piece that was published on 14 May 2014 as
Campbell, B. 2014. Climate change: Call for UN to act on food security. Nature 509, 288. doi: http://dx.doi.org/10.1038/509288c

Seeking Consensus for Action as Climate Change Fractures Food Production

By Bruce Campbell, Director of the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

For many climate scientists, agriculture serves as the canary in the coal mine. They expect to first observe the world's changing weather patterns on farms across the globe.

The latest report¹ from the Intergovernmental Panel on Climate Change (IPCC) came as no surprise, therefore, when it concluded that surging levels of greenhouse gases are already affecting food production, particularly in poor, tropical regions.

The United Nations Food and Agricultural Organization (FAO) confirmed these impacts when it reported that food prices are rising quickly this year.² The FAO fingered bad weather as one of two culprits, and a long-range forecast reveals more clouds on the horizon.

Already, yields are dropping for wheat and maize, the two most important food crops. Warming oceans are wreaking havoc on fish harvests. Rising sea levels are poised to wash over fertile coastal regions. Extreme climate events—like floods, tornadoes, and droughts—have become more frequent. And as the FAO report shows, it all adds up to increasing levels of food insecurity.

Adaptation must become a priority for policymakers around the world. Research and other initiatives must begin now as they can take up to 20 years to deliver results.

But to unleash the innovation required, we need a climate change in the political realm. Despite all the data pointing to a rapidly warming world, governments have remained frozen solid with indecision.

Over the past few years, U.N. negotiations in particular have evaded the question of adaptation funding, always delaying decisions until the next meeting.

The next U.N. conference³ takes place in Bonn in early June; delegates there must embrace the IPCC report as an impetus for action, and the FAO report as a warning to end procrastination. For food production, climate change is no longer a future concern but a problem for the present day.

Bruce Campbell CGIAR, Copenhagen, Denmark. b.campbell@cgiar.org

¹ http://www.ipcc.ch/report/ar5/index.shtml

http://www.fao.org/worldfoodsituation/foodpricesindex/en/

³ https://unfccc.int/meetings/bonn_jun_2014/session/8015.php