

**ENERGY/ENVIRONMENT** 

#### **Briefing**

# How climate change threatens national security (+video)

Researchers have grown increasingly concerned by the threat that global warming poses to global peace. And political leaders are beginning to take notice.

By Michael Holtz, Staff writer MAY 26, 2015

From shrinking coastlines to mass animal extinctions, the potential effects of climate change have been well documented. But a growing body of research points to a parallel threat: As global temperatures rise, so too does the risk of human conflict.

### What is the "farmhands-to-fighters" argument?

The argument links reduced economic opportunity in agriculture to increased violent activity. A study by Edward Miguel, an economist at the University of California at Berkeley, found that young men are "more likely to take up arms when income opportunities are worse for them in agriculture." With empty fields, the argument goes, they have less to lose.

But critics say this explanation risks oversimplifying the complexities of war. Some contend that state governance is a much bigger factor in conflicts than

environmental changes. They argue that it's more accurate to look at climate change as a "threat multiplier," much like the Pentagon does.

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"Rising global temperatures, changing precipitation patterns, climbing sea levels and more extreme weather events will intensify the challenges of global instability, hunger, poverty, and conflict," US Defense Secretary Chuck Hagel said in a speech last October. "We are already beginning to see some of these impacts," he added.

#### Can it help explain the conflict in Syria?

Before civil war broke out in Syria in 2011, the country experienced a devastating three-year drought. Subsequent crop failures and a mass migration of farming families helped catalyze political unrest, according to a study by earth and social scientists published earlier this year. That unrest ultimately led to the violence that has since engulfed the country.

And Syria is not alone. In a report issued on Wednesday, the White House said climate change would act as "an accelerant of instability around the world." Researchers found in a separate study that one standard-deviation change in heat or rainfall boosts the risk of a riot, civil war, or ethnic conflict by an average of 14 percent.

Water scarcity and food shortages are prone to further destabilize places like the Horn of Africa and other countries in the Middle East. Research on violence in Colombia and modern-day piracy is consistent with this theory. Climate change may also exacerbate tensions related to natural resource competition, underdevelopment, and overpopulation.

### Does climate change pose a national security threat to the United States?

Yes, according to the US commander-in-chief. President Obama said last Wednesday in a commencement address at the Coast Guard Academy that the US military will need to factor climate change into its plans and operations. He warned that extreme-weather events increase the need for humanitarian missions and rising sea levels threaten coastal military bases.

"No nation is immune," the president said. "I am here today to say that climate change constitutes a serious threat to global security, an immediate risk to our national security, and, make no mistake, it will impact how our military defends our country."

#### Are other countries concerned?

Yes. The European Union has begun to develop "climate security" strategies.

Militaries across the continent, for example, have improved their disaster response and reduced their energy consumption.

But Richard Youngs, an international relations professor at Warwick University, argues that practical follow-through has been limited. In apaper published last year, Mr. Youngs said European leaders were preoccupied with shorter-term crises and had done relatively little to integrate environmental factors into conflict-prevention.

Last May, the African Union released a 76-page report detailing its own strategy. In acknowledging that "Africa is the most vulnerable continent to climate variability and change," the AU called on its member states to design "robust approaches" to help mitigate the effects of climate change, including economic and social unrest.

## How much progress has been made toward a global pact on climate change?

So far, 38 of 196 UN member states have submitted plans outlining their actions to slow global warming beyond 2020. The plans are meant to be the building blocks for a new international climate accord that is the focus of a UN conference in Paris in December.

The conference will be the first attempt at a planet-wide deal on global warming since the 2009 UN summit in Copenhagen. Its aim is to limit global warming to a maximum of two degrees Celsius (3.6 degrees Fahrenheit) over pre-industrial levels.

Among the world's major carbon emitters, submissions have been made by the US, the EU, Russia, and Canada, but not by China, Brazil, and Japan. The US has committed to a 26 to 28 percent cut by 2025 from 2005 levels, while the EU has a target of 35 percent below 2005 levels by 2030.