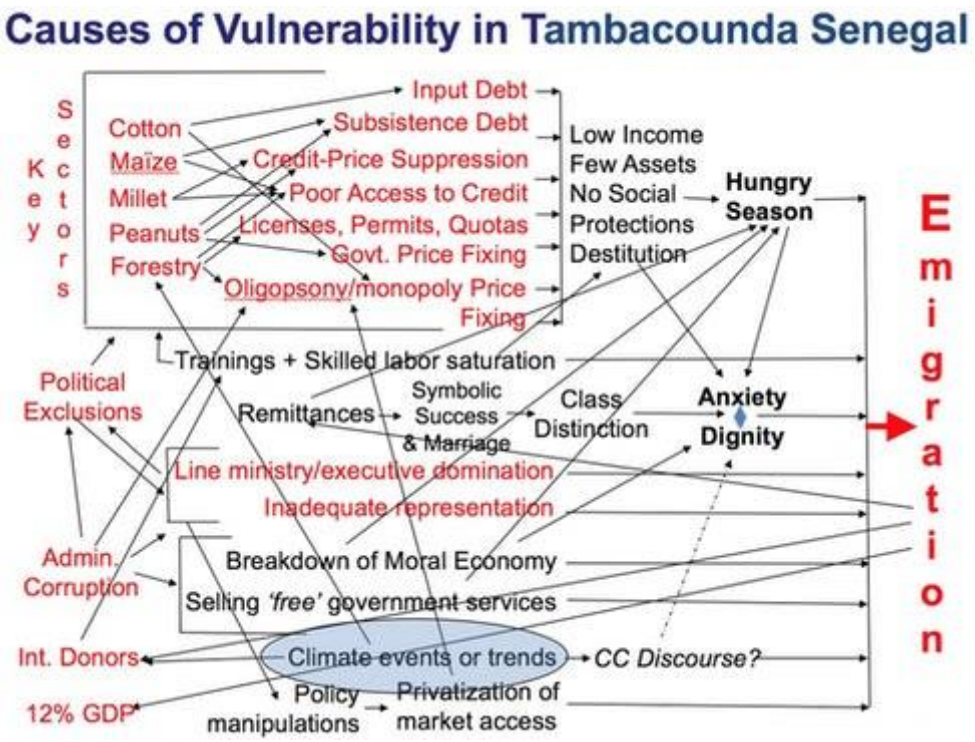
The Politics of Our Climate Attribution Obsession
Linking disasters to climate change is typically about more than just interesting science
Roger Pielke Jr. *post from The Honest Broker Newsletter.*

After every extreme weather event, politicians, journalists and scientists can be found quickly making claims that the event was caused by, made worse by, linked to, fueled by, or otherwise tied to climate change. This week's tragic tornado outbreak in Kentucky and surrounding states is no different. Yesterday, President Biden linked the tornadoes to climate change, and called for the U.S. Environmental Protection Agency to investigate the details, even as the big picture was clear: "the fact is that we know everything is more intense when the climate is warming. And obviously it has some impact here."

The science of climate, how it varies and changes, is absolutely fascinating, including the science of understanding observed trends in particular weather and climate phenomena, like tornadoes. The IPCC has done a nice job in summarizing what is currently known and not known about the detection of trends in weather and climate extremes and their attribution to greenhouse gas emissions, which I discussed in a recent post. Understanding climate is also important and vital to mitigation and adaptation policies.

In this post I focus not on the science of climate attribution but on the underlying politics of attribution claims. When attribution claim are made, more is being conveyed than just scientific details about the causes of a particular disaster – a message is being sent that climate change is important and support for climate policies is the goal.

This is the argument advanced in an insightful new article published last week by Myanna Lahsen and Jesse Ribot. They reflect the well-known fact that the impacts of weather and climate extremes are always a combination of an extreme event and the societal factors "on the ground." They illustrate this with the following figure, showing the complex chains of causality underlying dangerous migration across the Sahara.



Under such complexity, Lahsen and Ribot emphasize the importance of distinguishing an extreme event from the societal impacts that may follow that event: “Regardless of the magnitude of a climate event or the degree to which it is anthropogenic, however, the damages that follow depend on conditions in place.” As Gilbert White wrote in his 1945 PhD dissertation, “Floods are ‘acts of God’ but flood losses are largely acts of man.”

So if is so well known that disasters are the result of a complex interplay of social and climate factors, why then is *climate* typically the main focus of attention after every extreme event?

The answer, according to Lahsen and Ribot is politics:

> The desire to persuade the public of the dangers of climate change via attributions of climate events pressures scientists and the media alike to attribute extreme climate events (and associated crises) to climate change. Dedicated to comprehensively monitor, analyze, and correct climate skepticism and related misinformation circulating in U.S. media and society, the progressive research and information center Media Matters for America regularly scolds U.S. media outlets for failing to mention

> that climate change is driving the conditions that create this “new normal” of frequent crises—as, for example, in the form of destructive wildfires (Robbins, **2015**).

Indeed, just today Jack Tapper, CNN journalist and the head of the U.S. Federal Emergency Management Agency, Deanne Criswell, exactly followed the recommended Media Matters script when discussing the tornado disaster.

> TAPPER: And scientists warn that extreme weather events such as this one will only happen more frequently as the climate continues to warm. Is your agency, is FEMA equipped to handle this new normal?
>
> CRISWELL: This is going to be our new normal. And the effects that we're seeing from climate change are the crisis of our generation.

Far from being a “new normal”, on tornadoes the recent IPCC assessment report is quite clear on the state of detection of trends and attribution:

· “observational trends in tornadoes, hail, and lightning associated with severe convective storms are not robustly detected”

· “attribution of certain classes of extreme weather (e.g., tornadoes) is beyond current modelling and theoretical capabilities”

· “how tornadoes or hail will change is an open question”

Consider also that according to data from the U.S. National Weather Service from 2000 to 2020 only four of the strongest category of tornadoes were observed (which are labelled as F/EF5 tornadoes) In comparison, from 1954 to 1974 36 (!) such powerful tornadoes were observed. Our research on tornado damage in the United States over many decades shows a decline that is suggestive of an actual decline in tornado incidence.

Based on the IPCC assessment of the literature, along with the underlying data and research, the only scientifically valid answer to the question of whether greenhouse gas emissions and associated climate change are leading to more or more intense tornado outbreaks — a “new normal” — is that neither tornadoes nor the most intense tornadoes

have increased since at least the 1950s. There are of course other dimensions of the climatology of tornadoes worth paying attention to -- such as seasonality, geographical variability, and relationships with modes of climate variability like El Niño and La Niña. These many different characteristics are highly variable and may also be influenced by human-caused climate change.

Lahsen and Ribot argue that the choice to privilege climate in discussions of disasters reflects a political calculus:

> "Regardless of whether climate change is large, small, or unknown, disasters that follow extreme weather events have multiple causes. . . Analysts' choices of analytic frameworks always highlight one cause over others and are thus inherently political, whether or not they recognize this."

And although the most effective approaches to reducing the on-the-ground impacts of weather and climate on people are necessarily adaptive, Lahsen and Ribot argue that attribution claims reflect advocacy for climate mitigation through greenhouse gas reduction, with the perverse effect of distracting from those steps that would actually reduce on-the-ground vulnerabilities:

> "At the level of policy, the tension between climate-centric framings of disasters and attributions that foreground political factors, not least poverty and socio-economic inequality, is a function of the current climate regime's focus on greenhouse gas reductions (climate mitigation) over the reduction of deeper, social causes of both the pollution and the vulnerability."

Mike Hulme argues that such "climate reductionism" is ultimately pathological, because it limits our view as to the full scope of actions that might be taken to reduce our vulnerability to climate in favor of a myopic focus on the state of the climate:

> "The openness, contingency, and multiple possibilities of the future are closed off as these predicted virtual climates assert their influence over everything from future ecology, economic activity, and social mobility to human behavior, cultural evolution, and geosecurity."

Like me and Hulme, Lahsen and Ribot do not question the importance of climate change,

> "We view climate change as a major problem for humanity. We do not challenge, nor would we ever diminish, the important scientific effort to attribute extreme weather events to anthropogenic climate change. Explaining and reducing climate change is imperative."

They do however warn that the politics of promoting attribution are not without consequences: "Climate-centric disaster framing is politically useful to actors with interest in diverting attention from local, national and international policy initiatives that might bring—or could have brought—more direct and locally relevant remedial action."

So every time you hear or read a claim about this or that disaster being linked to climate change, as interesting as the underlying science may be, what is actually being conveyed is a stealthy promotional message encouraging you to consider climate change to be important and thus to support efforts to decarbonize the economy. As important as these messages are, what they leave out are all of those actions that are important for actually reducing the future impacts of extremes, regardless the particular details of a climate change influence.

Our obsession with attribution seems here to stay, but at the same time let's remember the importance of weather forecasting, evacuation and sheltering, building codes, emergency response and all of the other important factors that underlie the incredible long-term trend of fewer deaths from disasters and the greatly diminished role of disaster losses in our economy.