Iowa Climate Statement 2020: Will COVID-19 Lessons Help Us Survive Climate Change?

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Statements from Presenters:

David Courard-Hauri, Chair of the Environmental Science and Sustainability Dept at Drake University

Good morning, everyone, and thanks for joining us today. I'm David Courard-Hauri, Chair of the Env Science and Sustainability Dept at Drake University, and one of the organizers of the Iowa Climate Educators group, and I'm here with Silvia Secchi, Associate Professor in the Department of Geographical and Sustainability Sciences at the University of Iowa, and Eric Tate, also an Associate Professor in U of I's Department of Geographical and Sustainability Sciences.

We're here today to announce the release of the 10th Annual Iowa Climate Statement, a collaborative effort by researchers and educators from nearly all of Iowa's colleges and universities. The current statement was endorsed by a record 230 researchers and educators in climate and climate-impacted fields, from 37 colleges and universities located in every part of Iowa. These statements, vetted by hundreds of Iowa's top experts, place pivotal climate change research into an Iowa-specific context, encouraging preparedness and resilience in the face of the climate crisis. Previous statements have drawn attention to agricultural impacts as well as human and animal health impacts.

We are releasing this statement after yet another extremely difficult year in some parts of Iowa. About half the state is currently experiencing abnormally dry or drought conditions which, as we've discussed previously, are becoming more frequent in Iowa along with other extreme events like flooding. More unusual was the derecho that cut off power to several hundred thousand Iowans in August this year, 75,000 for more than a week, caused devastation to homes, trees, and vehicles, while destroying close to a billion dollars worth of crops and some $300 million worth of grain bins. Damage from extreme events continues to pile up in our state at an unprecedented rate.

Of course, the event that overshadowed everything in Iowa and around the world in 2020 was and is the global coronavirus pandemic. Due to the many similarities between predictions about climate change and previous predictions about pandemics, we felt this would be a good time to consider with new appreciation some of the key lessons from the pandemic.

Of course, the first lesson we'd like to highlight is the role that science can play in addressing a crisis of this sort, and the danger that comes from discounting or even actively attempting to discredit consensus science. In climate science, all of the major scientific bodies, from the National Academies to the Intergovernmental Panel on Climate Change, to the American Association for the Advancement of Science, the American Geophysical Union, and even this group have spoken with one voice regarding the dangers of unaddressed climate change, the opportunities for mitigating future changes, and the need to adapt to changes we can't avoid. As in the climate discussion, confusion about the science that was created by the amplification of fringe voices and the downplaying of expert opinion led to uncertainty, ineffective, conflicting, and even counterproductive actions from policymakers and the public, which studies show led to unnecessary hardship, economic loss, and death. There are times when the science itself is uncertain, but there are things that we can say with a high level of confidence, and scientists are working hard to communicate these with the public.

Silvia Secchi, Associate Professor in the University of Iowa Department of Geographical and Sustainability Sciences

Good morning. I'm Silvia Secchi, Associate Professor in the Department of Geographical and Sustainability Sciences at the University of Iowa.

Promoting community resilience is sound, cost effective public policy that saves money and lives. We know from current comprehensive policy approaches and expert guidance that it is critical to invest in activities that promote resilience and can help communities better weather multiple kinds of disasters, many of which are directly or indirectly linked to climate change.

Measures such as robust public health systems, an effective and well-funded disaster responses infrastructure and workforce, forecasting and early warning systems, the development of water and energy conservation infrastructure and the use of renewable energy are cost-effective activities. They reduce the risk of multiple disasters and associated costs, and increase community resilience. These policies would help communities in Iowa be better prepared for and recover from droughts, floods and other extreme events. They would also promote more economic activity in rural areas, and several of them would also help mitigate climate change.

One example of a proactive Iowa investment in resilience has been the creation of the Iowa Flood Center after the historic 2008 floods. For the past decade the Flood Center has developed effective tools and has worked with communities, emergency managers and others to make Iowa more flood prepared and resilient.

It is not efficient to rely on emergency payments after hurricanes, floods or droughts, nor is it financially sustainable. The state of the Federal Flood Insurance Program, in chronic debt and on the General Accountability Office high risk list, illustrates the kind of funding problems we will continue facing unless we start being more proactive and promote resilience.

The science tells us that, as the climate keeps changing, we are likely to be confronted by more numerous and intense threats. In a global economy, public health emergencies such as COVID will also remain a constant danger. We cannot afford to waste resources in ineffective policies.

This means thinking across disaster types to find synergies, funding cost-effective activities that promote preparedness and, as experts agree, "Build Back Better" in recovery, rehabilitation and reconstruction. The implementation of these approaches requires leadership and coordination across governance scales, from local to national and beyond. More of the same and putting policies in silos is going to cost all Iowans, but disproportionally affect the more vulnerable among us.

Eric Tate, Associate Professor at the University of Iowa in the Department of Geographical and Sustainability Sciences

Good morning. My name is Eric Tate. I'm an Associate Professor at the University of Iowa in the Department of Geographical and Sustainability Sciences.

Disasters affect everyone. The COVID pandemic has inflicted severe and ongoing threats to the physical and mental health, employment, housing stability, and food security of households across Iowa. But some populations persistently face greater impacts due to living situations that are chronically precarious. This includes those living in poverty, with chronic health problems, at extremes of age, racial and ethnic minorities, and recent immigrants. Populations falling into multiple groups experience even deeper obstacles in achieving and maintaining well-being.

Similar to COVID-19, climate hazards are well understood to produce socially unequal effects. Severe floods, drought, winter storms, tornadoes, and extreme heat affect all Iowans, but vulnerable populations even more. This is a concern for the future, but also of today. For example, damage from the August derecho generated widespread disruption, but exposed significant gaps in resource access that are delaying the recovery of socially vulnerable households. Iowans experienced similar outcomes only a year ago during the 2019 floods.

Planning for resilience offers a pathway to address inequities in disaster impacts. Resilient communities and households have a greater ability to withstand disruption and absorb impacts from climate hazards, as well as adapt to change. At the local level this necessitates increasing social resources including trust, partnerships, social networks, recognition, and collective learning.

At state and national levels this means investing in mitigation and preparedness planning that aims not only to reduce threats and their economic toll, but also seeks to eliminate inequities in terms of who is affected and who recovers. With a future featuring more frequent climate hazards, more severe climate disasters, and compounding effects from health and economic disasters, building equitable resilience is both urgent and imperative.

As we develop policies and major investments to recover from the deep societal impacts of the coronavirus pandemic, there is a unique opportunity for recovery funding to simultaneously address climate change. "Green economic stimulus" plans translate broad climate objectives into specific actions through programs including energy efficiency, renewable energy, and green jobs that analyses have shown to be cost effective. Putting such policies into place will require proactive leadership rooted in an understanding of climate science.

I'll now turn it back to David Courard-Hauri.