



COLLEGE OF THE ENVIRONMENT
UNIVERSITY of WASHINGTON

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PROFESSOR OF
ATMOSPHERIC SCIENCES

DAVID
BATTISTI

David Battisti isn't trying to save the world. He's trying to understand it.

The professor of atmospheric sciences at the College of the Environment works to increase our understanding of the global climate system and its natural variation. He's interested in how the oceans, sea ice, atmosphere, and land interact and lead to variability in the climate—what we experience as weather.

"I love what I do: I get to solve puzzles concerning how nature works, and I get to share that journey with other people," Battisti said. "These really are the golden years of climate science."

Among other academic achievements, Battisti's pioneering research was fundamental for understanding the El Niño climate phenomenon—the largest source of year-to-year weather variability on Earth. Each year his work is used as a tool for agricultural decision-making in many regions.

It's this climate-agriculture connection that drives much of Battisti's work these days. Battisti emphasizes mapping large-scale climate patterns back to agriculture and those whose livelihoods depend on it.

The "bread basket" regions of the world are at a near-optimal temperature for staple crops. That's not the case everywhere. Critically, along with a changing climate comes a change in agricultural stability, putting large swaths of the global population's food supply at risk. There are already a billion malnourished individuals on the planet whose subsistence is in jeopardy, meaning that 1 in 7 people on Earth is unable to consume enough calories to fuel a healthy, productive life.

"It's very likely that we will double the amount of carbon dioxide in the atmosphere between pre-industrial times

and the end of the 21st century," Battisti said. "Pressures on regions where people are absolutely dependent on food crops will be severe."

Many scientists devote their professional lives to the discovery of new information about our complex and changing climate, from the nitty-gritty details to the massive system as a whole. Applying his research through the lens of agriculture has allowed Battisti to collaborate with an interdisciplinary group of experts from institutions across the globe, as well as community members, business owners, and farmers.

"The science being done at the University of Washington's College of the Environment is exciting—better than any other place in the world. A big part of our success is that there are no barriers to collaboration across disciplines," Battisti said.

Battisti's science delves precisely into our climate system—analyzing its past, deciphering its present, and projecting its future—and he maintains that his work alone isn't the key to saving 1 billion food-insecure people.

"Achieving food security today is primarily a policy problem and a political problem, not a science problem," he said. "There's enough food to feed everyone, but distributing it and making it accessible is a different story. If food was truly treated as a human right, we could make real, meaningful progress."

It's important, though, to understand how climate variability and change will affect people, and that knowledge is part of the solution. Connecting the dots between his own research and others' expertise, Battisti contributes to the mosaic that is our understanding of climate and its impacts.