

## Future Shock: How Environmental Change and Human Impact Are Changing the Global Map

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## Edited Transcript – Geoff Dabelko

Well, welcome to the Woodrow Wilson Center. My name is Geoff Dabelko, and it's my privilege to be collaborating with the Pell Center and to be hosting today's event on behalf of former Congressman Lee Hamilton who is our present director. It's a real privilege to see Mrs. Pell here and to work with our friend Peter Liotta and the Pell Center. It's been tremendous. And we appreciate you all coming to hear what the four of us have to say on related but different topics.

And I'm going to, in some ways, pick up one of the bullet points of Peter's and focusing on the water issues. Building on some of the assumptions of the world that Peter has laid and try to, in some ways, have a particularly positive story even in the face of some real challenges and pose it as a question, water wars or water woes. Water management as conflict management.

We have seen these statistics before, but it never ceases to kind of shock me in terms of, when we are looking at water and understanding what in terms of we think about the water that we can use, it's really just a tiny fraction of the world's water. So 97 percent of the world's water is salt water, essentially. The oceans, right? Of the remaining 3 percent, most of that, almost 100 percent of that is locked up in ice. Mostly polar ice.

And so really, when we're talking about accessible fresh water focused on human needs, we're really talking about just a fraction. And this is to give you a sense, in Sub-Saharan Africa, the dark blue lines are water per capita availability in Sub-Saharan Africa in 1990. The light blue lines are what it is now -- or what it was in 1990. Excuse me. The dark blue kind of moving down and showing lower and lower levels of water availability per capita in Sub-Saharan Africa. So all countries in a state of water vulnerability, many in stress, and about 10 or so in absolute scarcity per capita.





I'll give you a picture of the challenge, particularly for Sub-Saharan Africa, in terms of water.

Peter alluded to some of these figures. But right now, we know that we have 1.2 billion people without access to clean water, 2.6 billion without access to adequate sanitation. And adequate sanitation, I must say, is a fairly low bar, nothing that we're kind of used to here in the United States. Results among many results, and this, I would say, is probably a conservative estimate of at least 2.2 million deaths, mostly children under five, mostly dying from diarrhea, something, in many ways, completely preventable. We now how to deal with it. But we don't deal with it. And it moves to be a real challenge.

In part, you will hear a number of human security frames here and understanding what it is that's actually killing people. It doesn't always have to be at the end of a gun for us to care in this broadest security term. And I think this figure illustrates that.

So as a result, though, of particularly those scarcity graphics, we hear this phrase of "Water wars are coming." Countries are going to fight over water based on these scarcities. And we see it in our newspapers every time. This is a favorite refrain of newspaper headline writers, not always the journalists, but the headline writers, even if it's kind of a considered story, will blow it up in this context.

And then also, our politicians. Notably, often Egyptian politicians because the Nile River in Egypt, of course, sits downstream of the Nile, and there is great concern and understandable concern given the dependency of Egypt on the waters of the Nile. But there is a common refrain from senior politicians. You can see it kind of even continuing today, whether water is going to be the next source of war in the Middle East is the common refrain and such. But it's really framed as we have them now, and they're certainly coming. Just look at the scarcity figures.

I would suggest that there is a lot of logic, even not just those per capita figures. But we have 263 rivers that are shared by two or more countries. So our water systems are highly interdependent between countries.

This is a map of the Nile Basin. And in many ways, the Nile is the poster child for this argument based on the fact that particularly Ethiopian highlands are the source of so much of the water, a terribly poor country, lots of potential for hydropower and development. And



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What we do see is a lot of cooperation, a lot of it, again verbal, where there is a fairly low threshold. But we do see a trend, that may be slowing down, but a trend in the last 20 to 30 years of increased cooperation around basins, in part because of the interdependencies around water. And so you're starting to see part of my argument, which is, if we frame our water difficulties just in the most dramatic in terms of water wars, we're going to miss some of these opportunities for cooperation and garnering some of these joint development outcomes that are really, hopefully, ultimately benefiting people on the ground.

That said, I don't want to paint such a rosy picture as to suggest there is not a lot of conflict around water. I think for the most part, we've just been looking at the wrong levels between states. There is an awful lot of conflict below states in more local levels. So one that we're most familiar with, certainly have plenty of examples in this country, some of which are incidentally violent, not necessarily organized violent.

Something that's in the news now, again, not to suggest as some, I think, wrongly suggested that, well, Darfur is a climate change problem or Darfur is a water conflict. Well, there are all sorts of things that go into a crisis and a tragedy such as Darfur. And obviously, a conflict entrepreneurial regime in Khartoum exploiting this issue is first and foremost.

But I would say that on some of these issues, we can't understand the full picture, especially if we're going to try to fundamentally address it unless we understand some of the underlying issues, some of which are the demographics that Peter talked about. But also in this case, the notion that there have been fundamental changes from the water connection in terms of rainfall. So it dropped 30 percent over the last 50 years in this region, so long and sustained droughts.

The predictions in terms of climate change really largely based on declining availability of water, really meaning that foodstuff production in these areas are going to be bad. And then also just a loss of arable land because of the process of desertification.

So one can ultimately then -- really exacerbating what we have had historically in terms of the fights between the pastoralists and the agriculturalists, two different ways of making a living, but then really exacerbating and coming to a head, especially when someone is willing to exploit it for their own purposes, as the government in Khartoum is so willing to do.



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In part because of their experiences, they recognized the criticality of water to the development and to avoid going back to some of those days in terms of they saw the potential for fighting over water but also the ability for these issues to come together and have both been engaged, as have, including our government in supporting some of the negotiations in this basin, a basin that we don't hear a lot about.

It gets none of the headlines that something like the Nile does, but nevertheless is one where we have seen conflict in the region. We have seen water be a strategic asset in it. But we are also seeing it be part of the building blocks of this region of the world coming out of a really rough period in that apartheid era and finding ways to come together on water, and so trying to see the positive side of the interdependencies rather than the negative vulnerabilities.

So I'll stop there and thank you all very much.

