I am honored to be here today to work with the Pell Center and the Embassy of Liechtenstein and our friends here at the Woodrow Wilson Center with whom we have done so much over the years.

And when I see the team that we have here today addressing these issues, I am buoyed because there's a change in the wind. If you follow what's going on in the Department of Defense, you see that we actually have a new regulation, DOD 3000.05, that looks at stability operations and demands that the military be nation-building competent as well as combat-ready.

So there is this balance of roles that recognizes the importance of stability in addressing environmental security types of issues in maintaining governments in power, maintaining legitimacy and satisfying those human security needs. So it's an opportunity for me today to speak to the issue of how you might use the military element of power to effect change and improve human security and improve stability around the world.

I know in the early 1990s, there was great reluctance to see the military involved in doing environmental security for various reasons. We would sit in the castle at the old Wilson Center and people would say, well, we have this new concept of environment and security. Environmentalists were against it because we don't want the impure military involved. And they've done so much to harm the environment.

Other agencies didn't want to see the military involved because the military's force structure, if it was reduced, it provided resources. If they had a justification to do environmental things, then maybe they'd maintain force structure, and there wouldn't be resources for other agencies.
There were so many good reasons, not the least of which was the military wanted to maintain the tip of the spear. We're doing the war on drugs. If we're doing these environmental issues, if we're helping with issues that could be addressed by other agencies, then how can we be combat-ready, because no one else can fight wars while other agencies can address these human security, destabilizing needs.

And we found, though, by the end of 2000, that we had had requests from the combatant commanders. And the world is divided up into these military organizations that maintain a military presence. For environmental security and access for the Pacific command, for the Southern command, even now, the Africa command, from the Central command, and that they had used the environment and security as outreach vehicles for their regions to build a positive role for their military. So they weren't always involved in issues that could be seen as repressive. Or even if you had a regime, for instance, under the Marcos regime where they had a bad record in the military for abusing human rights, there was a way to change and turn things around.

So ever so briefly, I'd like to go through these. I don't want to say it all began with, but certainly when NATO recognized in this 1991 new strategy, that it wanted to move away from traditional force on force issues, they recognized the fact that we have other variables, in fact, really the variables that constitute sustainable development that were going to determine stability and security in the future and that NATO needed to be able to address those.

And later on, in '94, we had the human development report come out of the U.N. that articulated the importance of environmental security to human security. It allowed people to determine, if we have an end state of stability and human beings reaching their potential, then what are concepts for achieving that? And then what are the resources for achieving it?

So our national security strategy began in the late '80s to address environment and security. The Goldwater-Nichols Act mandated that the President each year determined what was the U.S. strategy to preserve America as we have known it. And so in the latest national security strategies, in the Bush administration, defense diplomacy and development have all figured mightily into trying to achieve those end states.

Here was a quote I thought was very important to show, from President Reagan, when he was our President, and his national security strategy to stress the importance of the environment
to U.S. national security interests. "It's easy to disregard that and portray the environment as something that's not a hard security issue as something that perhaps the right doesn't embrace the way that the left does." And I wanted to show that that's not necessarily the case. Visionary people recognize its importance.

So to achieve the end state, the United States typically uses its four elements of national power. Certainly, how we teach it at the War College to senior leaders who are going to go out and wear four stars and try to maintain our interests around the world: Economic, diplomatic, informational and the military. People typically dedicate one resource to a given problem instead of saying, how might all four of these be used with synergy and synchronized to give us the best effect?

So the national security strategy gives rise to each agency's effort to contribute to achieving the objectives of the national security strategy so the United States military develops a national military strategy, national defense strategy, the quadrennial defense review that lay out how environmental issues, and they do, affect security around the world. And then it's up to the theater, security cooperation plan as managed by that four-star, think General Schwarzkopf in the first war or General Abizaid in Iraq, too. How do they use this issue to promote goodwill or to head off conflict?

Our national security issues have been portrayed in the national security strategy over the year. Quote in the middle that it's contributing to political conflict came from President Bush the first. And the idea of using the environment to shape international affairs came out during the Clinton administration, where Secretary Perry spoke of preparing responding, but let us also shape the security environment. Let us be proactive so that we don't necessarily have to put 20,000 combat troops in the Horn of Africa to distribute food. Perhaps if we had addressed the environmental security issues ahead of time, it would be more cost effective. And so what are some of those issues that threaten U.S. national security and human security around the world?

It's important to look at both sides because soft security issues don't resonate with all Americans the way hard security issues do. And by understanding the dimensions of both sides of the debate, it allows you to get the audience fully cognizant of the interrelationship of the two.
These are difficult issues if they occurred in the United States. When they occur in developing countries, how will you solve those without the military or some of these issues? Climate change is coming, irrefutably. We can predict changes over the next 10 years in parts of the world that are important to U.S. national security where stability is already threatened, where governments are strained or failing. How do we address that? And the answer is, quite often, with great difficulty.

Typically, environmental issues are considered last. Apply Maslov's Hierarchy of Needs to a developing country and its efforts to meet the needs of the people. Can it provide food and shelter? Do we have health and physical security? If not, how do you think in terms of economic growth where only 15 percent of the people may be employed in the performance sector? And the feeling of nationalism, David and I were talking last night, about six o'clock, about the nationalism as an issue in Africa and which countries could be called nation-states, had to achieve that feeling of not -- of being from Zaire, Congolese and not Bemba or Shona or Ndebele.

So environmental concerns are typically addressed last when, in fact, they are essential to success in addressing each one of those issues as one moves up that hierarchy of needs. And increasingly, we have recognized that. And then the question is, how do you use all elements of power to achieve this? Because as the sustainable development model demonstrates, sustainable means that you have focused on the environmental issues, not just the economic issues. And that they are equitably distributed across all parts of the country, as Geoff described how water can and has led to conflict intrastate because of a particular part of a country that feels disenfranchised from the largesse that's developed by the government.

And I would argue that the military has a very strong role in helping to address that at minimal cost. Quite often, developing countries will have unusually large militaries that are able to determine the longest of a government. That's why they haven't been downsized, at least in part; 40,000-man Army left over from the cold war era, reduce the size of that military at your own risk. How do we get them to use their good communications, their presence on the frontier?

And ask yourself, those of you who are familiar with developing countries, how large is their ministry of the environment or energy or interior? And what kinds of resources do they have? Can they even drive to the frontier, much less have any a presence? But you can have the military out there monitoring diseases as they come across, not just the transmission of
contraband. That they could be telling you when you have water issues that need to be addressed. And so this has been recognized.

Our own DOD in the early 1990s was given, by Congress, $21 million to address non-lethal uses of the military in Africa. And these are some of the projects that resulted from that. I was the defense attaché in Malawi at one time. When I arrived in country, the day I got there, 20,000 refugees came over fleeing the drought and war in Mozambique. And the question is, well, how do we settle them? How do we meet their needs? How do we differentiate between the relatively well-taken-care-of refugees and the host nation people that don't have the blue tarp, the guaranteed food, the roof over their head, necessarily? And how do we maintain governmental legitimacy?

When I left country two years later, we had 700,000 refugees, 10 percent of the population equivalent living in Malawi. And the same questions remained. So the military became involved in helping with this because you might have a small group of refugees, let's say 10,000, where two or three children a night were dying of dysentery because they didn't have clean water. And the military could come in and drive a bore hole in a simple level. Or we could try to get grain into Mozambique in insecure areas, and the military would be essential at providing security on the train, distributing the resources later on, finding welders to weld the steel that we got from Zimbabwe to put on the locos to go down the Nakala Rail Line and deliver that grain from the World Food Program.

So the problem, of course, with the military is cross-cultural communication. They have to learn to deal with their own agencies internally. I have argued to say that the United States is -- our military struggles today to talk between Army and Navy, or between -- what is that article we saw? State is from Venus, and defense is from Mars. Do we speak the same language? And then take that overseas where people don't join the military to distribute food. So it's a constant problem. But it's essential because in times of emergency, the military will be called upon.

So in countries that have a bad human rights record and a bad military human rights record such as the Philippines under Marcos, the military, under Fidel Ramos developed an approach where it says we will support civil authority not just attacking insurgents on Mindanao, but helping to cut the roots of insurgency by addressing those. And many are environmental security issues: Land degradation, water abuse, maldistribution of resources
between urban dwellers and the elite and other religious groups such as the Muslims down on Mindanao.

So the military was quite successful in doing that. They developed a stewardship program. They took one of their officers, a Harvard graduate, and sent him to Mindanao with a brigade to reconstitute reforests. And it's not something that's just to turn off conflict as has been done on Jolo Island and Basilan Island and now Mindanao. But it's also being used by countries that are dealing with climate change issues to build good legitimacy with the people.

This is Mexico where they have 46 military forest nurseries. I got these facts from a student of mine at the War College. Planting trees, the PLA has done reforestation for millions of trees and worked with civil authority to do it in China, and has demonstrated a willingness to work with other countries in the region.

And so it comes down to this: If we recognize environmental issues as a factor in regional stability, we can use them to build confidence and communication between countries that may already be struggling over territory. Or we can leave these issues untended until they become issues in elements of conflict such as we have seen in Kenya.

And it's important, I think, that we use all viable resources to do it, such as the U.S. military, by encouraging, not doing it themselves, rarely, but to encourage host nation militaries to assume this role and support civil authority in addressing the needs of the people and maintaining legitimacy.

Thank you very much for the opportunity to speak.