



**NATIONAL SECURITY
AND THE THREAT OF
CLIMATE CHANGE**

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TESTIMONY OF

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**Member, Military Advisory Board
To The CNA Corporation Report
“NATIONAL SECURITY AND THE THREAT OF
CLIMATE CHANGE”**

BEFORE THE

COMMITTEE ON FOREIGN RELATIONS

U.S. SENATE

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I am Chuck Wald and I recently retired from the U.S. Air Force after 35 years of active duty service. During my career I was stationed overseas for more than 15 years, the majority of the time in Europe and the Middle East. In my last assignment I was the Deputy Commander of United States European Command in Stuttgart, Germany. European Command's area of responsibility includes 91 countries in Europe, Eurasia, the Middle East and Africa.

As part of my duties as the DCOM of European Command, I traveled extensively and spent a considerable amount of time in countries facing significant challenges economically, politically and environmentally. The countries facing the greatest obstacles to stability and prosperity were in Africa. In European Command, we believed a new model of “engagement” was necessary to adequately address the issues required to create a stable, productive and secure environment. This is particularly true in Africa where

non-traditional “threats” to stability, like massive health issues due to extensive HIV-Aides problems, malaria, limited to non-existent infrastructure and poor governance all contribute to a very volatile and potentially explosive situation. These factors will be likely be severely complicated by shifting weather patterns due to climate change. Beyond the more conventional threats we traditionally address, I believe we must now also prepare to respond to the consequences of dramatic population migrations, pandemic health issues and significant food and water shortages due to the possibility of significant climate change.

I want to offer a bit more detail on how we as a group see climate change as a national security issue. And I’ll do that by focusing on Africa.

If we look at one country, Nigeria, we can get a sense of how projected environmental impacts could easily become serious security challenges. Even in a time of “relative” stability in Nigeria, there is very little civil governance and very limited capacity to provide huge numbers of people with the basics - such as electricity, clean water, health care or education. That’s the situation today – it’s a very tenuous environment.

If Nigeria’s access to fresh water is reduced or additional stresses on food production – which could be a result of projected changes in rainfall patterns – millions of people would likely be displaced. If the Niger delta were to be flooded from sea level rise, or if major storms damaged oil-drilling capacity, the region would lose its primary source of income. Again, millions of people could be displaced. There really is no controlled place in Nigeria for displaced people to go, no organically controlled capacity for an organized departure, and an extremely limited capacity to create alternative living situations. And the movements would be occurring in a country with a population of 160 million people that is split geographically between Muslims and Christians. These stresses would add dramatically to the existing confusion and desperation, and place even more pressure on the Nigerian government. It makes the possibility of conflict very real.

If we look at Darfur, we can see that impact of climate change is not just an issue off in the distant future; it is having an affect on security today. The conflict in Darfur has many root causes, but one of its key instigators was driven by climate. Long periods of drought resulted in the loss of both farmland and grazing land to the desert. The loss of grazing lands led the nomads to migrate southward in search of water and herding grounds. This, in turn, led to conflict with the farming tribes occupying those lands. With the added stress of population growth, and ethnic and tribal differences, the competition for land became violent. It is a perfect case study of how existing marginal situations can be exacerbated beyond the tipping point by climate related factors. It is also why we refer to climate change as a “threat multiplier.” The Darfur region was already fragile and replete with threats – but those threats were multiplied by the stresses induced by climate change.

The same can be said of Somalia, where alternating drought and floods led to migrations of varying size and speed. A prolonged instability grew out of those conditions – and the warlords capitalized on it. It’s a glimpse at how climate change can cause the type of

instability and failed states that lead to extremism and terrorism. Ungoverned spaces, filled with desperate people, are also the perfect recruiting grounds for terrorist groups.

These examples are all from Africa, and I think there are many reasons why Americans should be concerned about Africa and African security issues.

- Many exotic minerals, found only in Africa, have essential military and civilian applications.
- We import more energy from Africa than the Middle East today – probably a shock to a lot of people – and that share will grow significantly in the near future.
- Other powerful nations, including China, are taking a keen interest in Africa, largely because of oil mineral resources
- There is also the very real human suffering taking place in Africa. Even in the context of security discussions, this reason matters, because part of our security depends very much on remaining true to our values as a Nation.

It's important to note that the examples I have given, while all from the African continent can be replicated elsewhere. Our view is that climate change could be a threat multiplier in every global region.

I'd like to finish by very briefly noting the recommendations made in the report, "National Security and the Threat of Climate Change. As a group, we made the following recommendations:

- The national security consequences of climate change should be fully integrated into national security and national defense strategies. The intelligence community should incorporate climate consequences into its National Intelligence Estimate. In this regard, we support the legislation introduced by Senators Durbin, Hagel and Feinstein calling for a National Intelligence Estimate on Global Climate Change.
- The U.S. should commit to a stronger national and international role to help stabilize climate changes at levels that will avoid significant disruption to global security and stability.
- The U.S. should commit to global partnerships that help less developed nations build the capacity and resiliency to better manage climate impacts.
- The Department of Defense should enhance its operational capability by accelerating the adoption of improved business processes and innovative technologies that result in improved U.S. combat power through energy efficiency.
- The DoD should conduct an assessment of the impact on U.S. military installations worldwide of rising sea levels, extreme weather events, and other possible climate change impacts over the next 30 to 40 years.

The Military Advisory Board drew a very narrow line in making these recommendations, not wanting to stray too far from our National Security area of expertise. But as Admiral Prueher and others have stated, security is a broad field, and enhancing our nation's

security is certainly not the sole purview of the Defense Department. There are many steps we can take as a nation to enhance our security. Some of those steps include reconsidering our energy choices and our carbon emissions. Some initiatives will include engaging with other nations, working together to bring about changes that will improve our environment. Some of the steps will be as difficult as they are necessary. I'm very grateful that this Committee understands this, and has chosen to consider climate change through the very important prism of our national security. Your decision to address this matter is, by itself, an important statement.