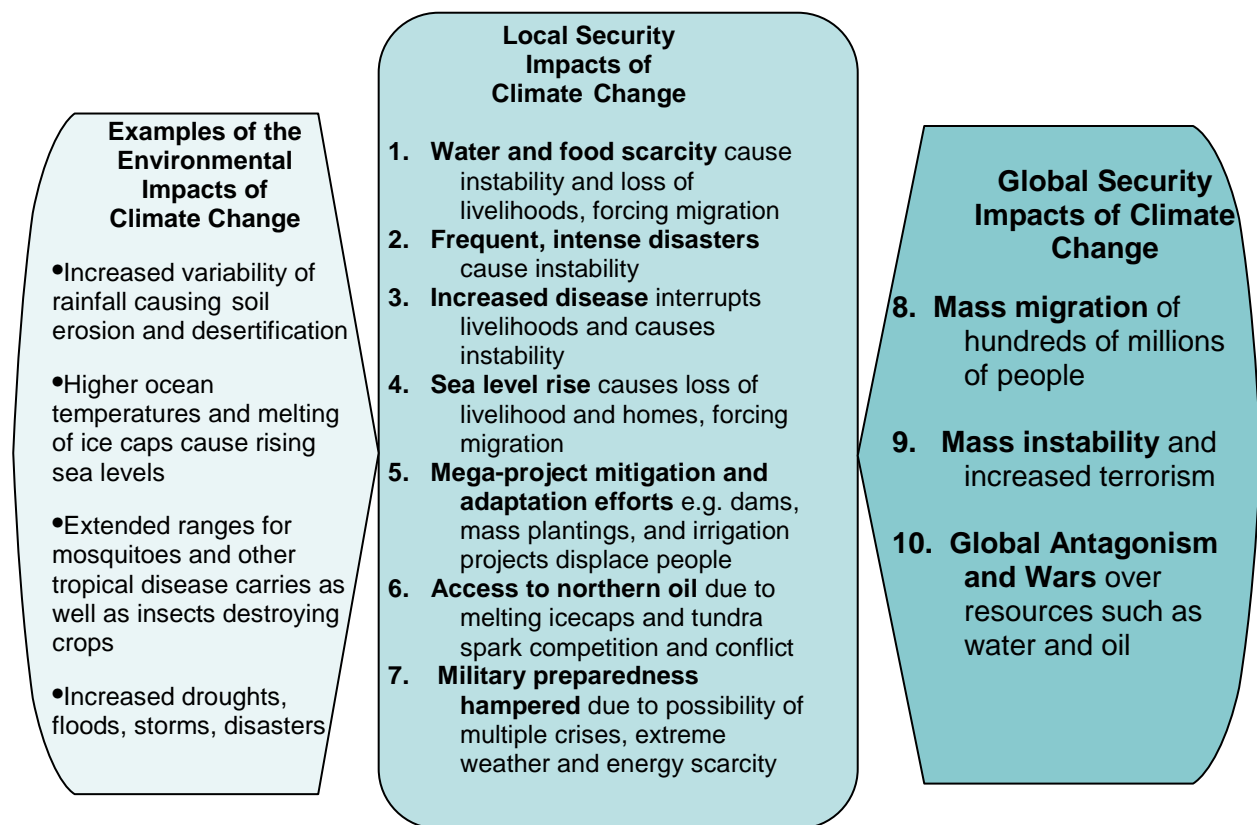


## 10 Security Implications of Climate Change

*The Bush Administration's 2006 National Security Strategy details a 3D approach including development, diplomacy, and defense. The 3D Security Initiative promotes conflict prevention and peacebuilding as security strategies.*

Military experts identify climate change as a threat on par with the threats of terrorism. This policy brief surveys the impacts of climate change on local conflicts, regional instability, and global security. Scientists are uncertain whether these changes will occur gradually, or whether interacting factors will cause abrupt and catastrophic climate change.



### 1. Water and Food Scarcity and Conflict

Changes in rainfall and increased temperatures will devastate livelihoods around the world. For every 1.8°F rise in temperature, grain production will drop 10%. Africa will likely experience a 50% decrease in crop yields by 2020. As desertification increases in Africa's Sahel region, clashes are increasing between herders and farmers competing for scarce productive land. The impacts of climate change amplify existing ethnic and religious struggles and destabilize large regions.

### 2. Disasters and Conflict

The number of disasters and the number of people affected has tripled in the last 20 years. The pace is

expected to accelerate in coming years as climate change stimulates more intense storms, flooding, heat waves, and droughts. Humanitarian responses to disasters can exacerbate conflict if relief and reconstruction aid resources favor some ethnic or religious groups over others.

### **3. Disease and Conflict**

The environmental impacts of climate change expand the range of infectious disease vectors, making more humans susceptible to diseases such as malaria and dengue fever. Major displacement due to health epidemics is more likely over the next 50 years. Health emergencies can expand into situations where people use weapons to obtain healthcare, vaccines, or access to uncontaminated safe areas.

### **4. Sea Level Rise and Conflict**

Hundreds of millions of people living on coastlines may need to migrate due to rise in sea level. The potential for sea level rise causing mass migration is already aggravating long-standing disputes. India, for example, is preparing to build a wall to keep potential Bangladeshi environmental refugees out.

### **5. Mega-Project Development and Conflict**

Efforts to build dams or irrigation projects, and mass tree plantings to address climate change are now leading to conflict with indigenous groups already living on land used for these mega-projects.

### **6. Access to Northern Oil and Conflict**

Melting ice and tundra are allowing access to new sources of oil, driving competition and sovereignty claims among Canada, Russia, and other northern countries.

### **7. Military Preparedness Hampered**

Climate change hampers military operations and preparedness due to the possibility of multiple, simultaneous crises, extreme weather inhibiting transportation, and energy scarcity in many areas.

### **8. Mass Migration and Conflict**

Climate change-induced rise in sea level, droughts, floods, water scarcity, soil erosion, desertification, deforestation, and disease create flows of displaced peoples in search of livelihoods and homes. Rising sea levels could flood millions of people each year, with millions more displaced by flooding and drought. Migration can lead to increased competition and conflict in receiving regions.

### **9. State Instability and Terrorism**

Instability is the chief threat to US national security interests as defined by the Department of Defense. Military experts identify climate change as a “threat multiplier” for instability in some of the most volatile regions of the world. Climate change weakens political systems, exacerbates resource scarcity causing food, shelter and income shortages, and increases migration. Failed states unable to provide basic services can lead to turmoil, extremism, and terrorism when governments do not have the capacity to cope with large scale disasters. According to Admiral T. Joseph Lopez, “Climate change will provide the conditions that will extend the war on terror.”

### **10. Global Antagonism and Wars**

Many experts agree that major conflict over water and oil is likely. In addition, while rich countries have historically been the chief consumers and polluters driving climate change, poor countries will suffer the worst consequences of it. Poor countries are at most risk from sea-level rise, increased droughts, floods and extreme weather. Some African and Latin American leaders call climate change “an act of aggression by the rich against the poor” and blame industrial countries’ for looming environmental disasters in their countries. Global antagonism over specific countries or corporations unwilling to limit their carbon emissions may also lead to conflict.

-Summary of research from the CNA report “National Security and the Threat of Climate Change,” the Intergovernmental Panel on Climate Change reports, the “Security Implications of Climate Change for the U.N. System” and the “Inventory of Environment and Security Policies and Practices”