

USAWC STRATEGY RESEARCH PROJECT

NATIONAL SECURITY STRATEGY: WHAT ABOUT THE ENVIRONMENT?

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ABSTRACT

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Environmental issues pose a long-term national security threat that should be deliberately addressed in the National Security Strategy of the United States of America. Environmental security issues, such as resource scarcity and energy shortages, are triggers of regional instability. Many international and institutional supplementary tools exist to positively affect the environmental elements of this threatening instability. U.S. Government agencies are postured to significantly contribute to this effort. In previous National Security Strategies, former administrations have demonstrated an understanding of the long term impact of environmental degradation on national security. The current National Security Strategy does not adequately address or recognize the fragility of environmental thresholds and their potential impact on U.S. security and prosperity. Invigorating support for established environmental initiatives and protocols would allow the U.S. to better respond to the full spectrum of threats to its security. To accomplish this, the next National Security Strategy should include a specific environmental security strategy to address threatening environmental issues.

NATIONAL SECURITY STRATEGY: WHAT ABOUT THE ENVIRONMENT?

In this era of globalization, national security in the United States has become a multifaceted issue involving every sector of society. Current and potential threats, near-term and distant threats, all constantly shift position on the list of which is most likely or most dangerous, which most adversely affects our national interests, and which deserves political attention and resource allocation. These threats to national security are as evident as the U.S. involvement in Iraq and Afghanistan, the increase in violence around the world triggered by extremist ideology, the destruction of Hurricane Katrina and the Indonesian tsunami, and the devastation resulting from famine and AIDS/HIV in Sub-Saharan Africa. Other less obvious threats include the environmental and health hazards from radioactive contamination in Ukraine and Belarus,¹ drug and human trafficking, weapons proliferation to non-state actors, poverty, critical resource availability and distribution, and failed and failing states. Any threats to U.S. national interests must be examined and assessed when establishing the list of priorities for legislative action. In order to adequately deal with the complexity of the current national security environment, and to ensure consideration by Congress for resource funding, the President of the United States should address this realm of threats in the National Security Strategy.

National Security Strategy

National security is a heated discussion point among the United States' populace and is widely covered in media and political debate as well. Most relate national security to the physical protection of their homeland and their American way of life, especially since the attacks of September 11, 2001. There is more to it.

The national security considerations of the United States are very complex. This complexity is the result of the United States' size, power, political system, technological capability, economic and military strength, overwhelming influence throughout the world, and the free and open society itself. These factors contribute to the ambiguity and inconsistency of current national policies, which provide broad guidance concerning the country's global role in pursuit of the core national objectives: defend the United States, promote global security, and encourage democracy and open economies.

The National Security Strategy of the United States of America is the Presidential guidance that prioritizes the nation's interests and determines their intensity. It declares the nation's security interests. In order to ensure national policies comprehensively address the national security interests, the threats to these interests must be addressed in the National Security Strategy (NSS).

In 1986, Congress implemented the Goldwater-Nichols Department of Defense Reorganization Act. Section 603² of this act requires the President of the United States to formally declare the national strategy for securing the United States and protecting its global interests. The United States' National Security Strategy is supposed to communicate the current administration's strategic security plan to the various public, private, and international constituencies. By statute, the NSS is designed for the Congress to direct policy legislation and resource allocation in support of that policy. Additionally, the NSS speaks to other influential audiences to include: foreign constituencies; select domestic constituencies; internal Executive Branch constituencies, such as the Treasury and Defense Departments; and the American public, to present the President's agenda.

The National Security Strategy then is a formal document stating the intent of the Executive Branch to ensure the protection of its citizens from foreign and domestic threats. It is the President's vision of how (ways) he will direct his administration to influence the allocation of resources (means) to protect the country's vital security interests (ends). In accordance with the Goldwater-Nichols Act, the President must submit this document annually to Congress. However, in the twenty-year history of this Act, only nine National Security Strategies have been produced. This attests to the difficulty of compiling a specific, codified, relevant security strategy in the complex, volatile, internationally and domestically dynamic, political, and uncertain environment that has existed in the past two decades.

Nevertheless, the National Security Strategy of the United States is necessarily required to be a document thoroughly outlining the priorities of the President to secure U.S. national interests. It should consider the issues that are threatening to U.S. domestic or global security interests, such as threats that may affect domestic economic prosperity and free trade that create the wealth and power of the United States. The NSS should be visionary to the extent that it incorporates the realization of long-term effects from present situations and actions, and counter their negative impacts on security as soundly as the immediate threats that can be literally seen today. In his book *Arts of Power: Statecraft and Diplomacy*, Charles Freeman said, "Strategy is concerned with long-term advance."³ This nation's NSS cannot be obsolete once it is published. It must embody concepts that can evolve and adapt to the uncertain outcomes of the future. Freeman continued, "[Strategy] integrates all elements of national power in policies calculated to advance or defend national interests and concerns in light of anticipated trends and events."⁴ The language of the NSS must, therefore, allow the flexibility and provide the foundation for future generations to securely govern and sustain this country.

The George W. Bush National Security Strategy of the United States of America⁵ is in many ways just that. It does outline the President's priorities. It enumerates the country's goals and the actions that the government will take to achieve them. It thoroughly addresses our national intent to spread freedom, democracy, and free enterprise around the globe. The NSS does not, however, consider some of the major security issues that will affect the future of the United States based on what is done today. The NSS neglects the impact U.S. policies and actions have on the Earth itself, the very essence of human survival and stability on the planet. As such, it fails to address issues concerning the distant effect of United States policy on our natural environment, which in turn could set adverse conditions for our future security.

Environmental degradation poses a long-term national security threat that should be deliberately addressed in the National Security Strategy of the United States of America. This paper presents a case for consideration and mitigation of environmental issues that accompany some of the United States' established methods of economic development and government assistance in impoverished nations. It demonstrates how national policies designed to protect the environment and consciously manage natural and monetary resources can co-exist with, and actually enhance, the U.S. National Security Strategy. It also presents recommendations for greater cooperation with the United Nations for shared responsibility in confronting these global environmental concerns. This paper suggests there should be a supporting "environmental security strategy" to the NSS that articulates the near-term direction and desire to favorably shape the country's future national security conditions.

Environmental Impact on National Security

The scope of environmental issues that affect the national well-being of the United States is immense. Resource availability, in particular, is a critical national security issue, neglect of which at the strategic level is potentially dangerous. The Reagan Administration introduced the "modern notion of resource availability as a function of national security" when it recognized in the early 1980's the danger of the Soviet Yamal natural gas pipeline to Western Europe and U.S. national security.⁶ James Baker, U.S. Secretary of State, connected natural resource availability and national security again in 1990 when he said that "the allied effort to liberate Kuwait from Saddam Hussein was a matter of jobs" and "was understood to be making the connection between oil availability and market prices and economic growth."⁷ Today, much of the danger lies in the exacerbation of already poor human conditions in regions where some form of environmental degradation exists due to resource mismanagement or destruction.

If the environment is defined in terms of natural resources, degradation equates to misuse, over-use, scarcity, and eventual depletion of those resources, or the damage that makes them unusable, i.e. pollution and contamination. When environmental conditions deteriorate, human conditions deteriorate. This is another dimension of the impact of global resource availability and its connection to U.S. national security.

The connection between the environment and security becomes clear when human populations become unstable and conflict arises over the availability of resources. Examples of this range from food and fresh water resources in Sub-Saharan Africa, to timber and fishing grounds between North and South Korea, to seabed mining and drilling rights in countries surrounding the Caspian Sea. According to Ambassador Jan Kubis, Secretary General of the Organization for Security and Cooperation in Europe:

research suggests that -- though conflicts have multiple causes -- the degradation, depletion or mismanagement of natural resources linked to demographic change can harm local and international stability in two ways. The first is by reinforcing and increasing grievances within and between societies: where few alternatives remain, or where perceived inequities or opportunities for enrichment are great, groups may compete for resources, creating opportunities for violence. The second is by weakening states -- by providing revenue for insurgents and criminal groups, depressing economic productivity, or undermining the legitimacy of the state in the eyes of its citizens.⁸

When the government in a country or region cannot attend to the conditions that deprive its populace of food, water, and basic survival resources, the people can become desperate for any source of relief. This provides the fertile ground for instability and anarchy, and thus a threat to the security of the region and anyone who may interact with the region. In this age of globalization, all regions are interconnected. So, what threatens the stability of one region, affects all. Likewise, the conditions that create that instability affect all and can threaten their well-being and security as well. Globalization adds to this interconnectedness of peoples.

Globalization provides opportunities to enhance national security, and it poses additional considerations for maintaining national security. Globalization can be defined in many ways; here it is referred to as the growth in the international exchange of goods, services, information, and technologies, and the increasing levels of "the integration of the political, economic, and cultural activities of geographically and/or nationally separated peoples."⁹ It magnifies the effect of actions and policies around the world. Globalization opens the world up through immediate communication technologies, ease of global transportation, and advanced information systems. For the many reasons it will benefit the U.S. national security posture, it will also present huge security challenges. In her article "Globalization and National Security: A Strategic Agenda,"

Ellen Frost presents the ills of globalization and its inevitability. She instills a sense of urgency because “at present, economic and technological globalization is outstripping -- or highlighting the total absence of -- global and regional institutional means for coping with the impact of globalization on ordinary people and on the environment in which they live.”¹⁰ Through globalization, the potential for environmental degradation triggering regional instability increases. According to Frost:

From a security perspective, the impact of globalization on the availability of natural resources is a key concern. The most urgent shortage of the first half of the 21st century will not be oil, which is still relatively abundant, but clean water. The demand for water is outstripping the supply. Control of water supplies has long been a strategic objective and is a tension-creating factor in many parts of the world.¹¹

Examples of some global regions reflecting this tension are: the damming of the Upper Mekong River in the North China Plain and its impact on downstream agrarian communities in Indochina; water-related conflicts between Israel and Syria over the Golan Heights; Singapore’s uneasy dependence on Malaysia; and, the migration of Saharan Africans fleeing the increasing desertification of their grasslands.¹² On the other hand, Frost is hopeful that “Globalization can help promote human rights and environmental protection”¹³ as well. In terms of value to national policymakers, she offers that “...globalization has increased the value of “soft” power, which depends on alliances and coalitions for maximum effect.”¹⁴ For policymakers to grapple with the environment and security relationship, they must determine what the most relevant issues are, and then create international alliances to cooperate in dealing with them.

The environmentally related security issues that need attention are two-fold: those that present an immediate hazard to human security; and, those that will affect the health of the planet and its human inhabitants in the future. Both are equally important. Human security encompasses the protection of resources and intangibles that allow for basic human survival. That is, safe surroundings, free from physical and psychological harm or disease, which can provide food, water, shelter, and social interaction. The long-term security issues are those that impact the ability of our natural environment to sustain the growing human population, as well as our ability to prevent or mitigate human suffering and environmental destruction through applied techniques, behavior, or technology. Some examples of these long-term security issues are disease, such as malaria and HIV/AIDS, and environmental degradation, such as over-fishing, deforestation, and hazardous waste. Policymakers cannot afford to sacrifice attention on one issue for the sake of the other. They must remain attentive to proportional monetary resource allocation, despite the duration of time required for the resolution of these issues.

In regards to U.S. national security, the list of global environmental issues that require consideration is extensive. A thorough, but by no means exhaustive, list includes: global warming; carbon dioxide emissions; land/air/water pollution; alternative energy sources; flood control measures and structures; waste management and recycling programs; population growth; availability of fresh water; ozone depletion; deforestation and rain forest destruction; loss of arable land; pesticides and agricultural management; erosion control/soil preservation; over-fishing; and, habitat and biodiversity preservation. These issues are complex and interrelated. They are also common knowledge to the American public and are a growing concern for the entire world community.

The United States is a world leader in environmental degradation. With only five percent of the world's population, the U.S. is responsible for 25 percent of global carbon dioxide emissions (1.5 billion metric tons annually). A tremendous amount of raw materials is extracted from the Earth annually to support the average American lifestyle. Ninety-five percent of U.S. commercial goods end up as waste, and only five percent of this waste is recycled in any way.¹⁵ U.S. consumption of natural resources is disproportionate to its population and the American public is aware of the resulting environmental situation and their contributions to it. A recent article in *International Studies Perspectives* stated that "A majority of the U.S. population is concerned about global warming, believe that rising temperatures would pose a real danger to the environment, and support regulating CO₂ as a pollutant."¹⁶ A 2004 Yale University survey indicated that 70 percent see global warming as a serious issue. Predictably, jobs/economy was the number one issue for 90 percent of the respondents.¹⁷

The economic security of the United States is the primary concern for Americans. Accordingly, it is the government's priority and has been reflected in the National Security Strategy of every administration since Ronald Reagan. Besides the popular concern, trade and economics are the foundation of this country. America depends on them to maintain its free, capitalistic, democratic way of life. The challenge the U.S. faces is how to concurrently satisfy the requirements for economic security now, and environmental security to ensure economic security in the future. Environmental degradation adversely affects America's free trade and economy by limiting resource availability and access, as well as by limiting the potential sustainable growth and development of regions not yet able to trade. Limited free or available trade markets limits potential business development and national prosperity. In a very real sense, this limitation and the environmental reasons for it are of national interest and a national security concern.

How environmental degradation can impact the United States' national security requires an explanation from a global strategic perspective. For the U.S., and ultimately all nations due to pervasive globalization, it starts with the basis of U.S. national power: wealth. The measure of any country's wealth is generally based on its Gross Domestic Product (GDP). GDP measures "the aggregate yearly monetary income of all of a country's people and businesses."¹⁸ The GDP of the United States is 20 percent of the entire world's GDP. It exceeds the GDP of the entire European Union and is almost 40 percent greater than China's GDP.¹⁹ Accordingly, the U.S. is the wealthiest nation in the world. Along with its industrial base, geographic location, military strength, natural resources, and population, the wealth of the United States translates into world power and influence. The sources of this wealth must be protected from internal and external threats. Therefore, the National Security Strategy should consider the broad range of threats that may impact the economic prosperity, free trade, and commerce that sustain the wealth and global power of the United States.

All would agree that terrorism is the focus of the current National Security Strategy. Terrorism poses an immediate threat to the nation's physical safety and interests. It is also recognized that we cannot combat the tactic of terrorism, but rather must battle the network that supports and resources those who employ this tactic. Lieutenant General (Retired) Wallace C. Gregson, former Commander, U.S. Marine Corps Forces Pacific, in addressing the conditions that foster terrorism points out that, "Terrorism is only one of the tools the insurgents are using, just as submarines and airplanes were tools of World War II."²⁰ Ideological, political, and religious fanaticism appear to foster the development of terrorist activity. However, the problem is complex and we have to dig deeper to reveal the true causes of why people turn to fanatic ideals and become willing to participate in terrorism to achieve their goals.

Survival is a basic motivation for human action. In countries or regions where survival is a daily struggle, people do what they can with the resources they have, and rely on their governments and local leadership to provide the rest. The margin between the peoples' needs and the government's resources is increasing. Growing populations are competing for scarce resources. Expectations that governments will fill in the gaps are not being met. In regions where natural resources, such as water, arable land, mining or fishing resources, are scarce, or where the infrastructure cannot accommodate economic development, transportation or communication networks, Nation-states have limited capacity to meet their people's needs. Over time, the people lose faith in and become discontent with their leadership's ability to govern the country, promote development, create a prosperous national economy, distribute wealth, and provide basic goods and services. Kubis notes, "Such environmental pressures

could make social polarization and internal struggle more acute. And a government's failure to effectively manage natural resources and environmental conditions in the interests of its citizenry could result in a loss of legitimacy by the state."²¹ As a result, these governments and leaders can lose their credibility, which may result in internal conflict and regional instability.

Instability can be a catalyst for criminal activity, injustice, and violent conflict, such as terrorism and civil war. Dr. Kent Butts, of the U.S. Army War College Center for Strategic Leadership, relates many of these factors and the strife they create as the "roots of insurgency."²² He portrays the nature of insurgency as a tree: the visible branches and leaves are the "insurgent power factors"; the base of the trunk represents the "misdistribution of the fruits of the land"; and, the underground "roots of insurgency" consist of corruption, poor delivery of services, government inefficiency, uneven distribution of wealth, poverty, criminality, disease, environmental degradation, poor resource base, low quality of education, and land conflicts.

While Dr. Butts connects these roots to combating terrorism, he proposes through a political rendition of Maslow's Hierarchy of Needs paradigm that "The Environment" forms the foundation of the pyramid. "The Environment" here refers to the natural landscape and resources within it. The subsequent levels that build the pyramid are food and shelter, health and physical security, economic growth, nationalism, and environmental concerns at the apex. These "Environmental Concerns" include the peaceful, effective, and efficient management, conservation, and preservation of global natural resources.

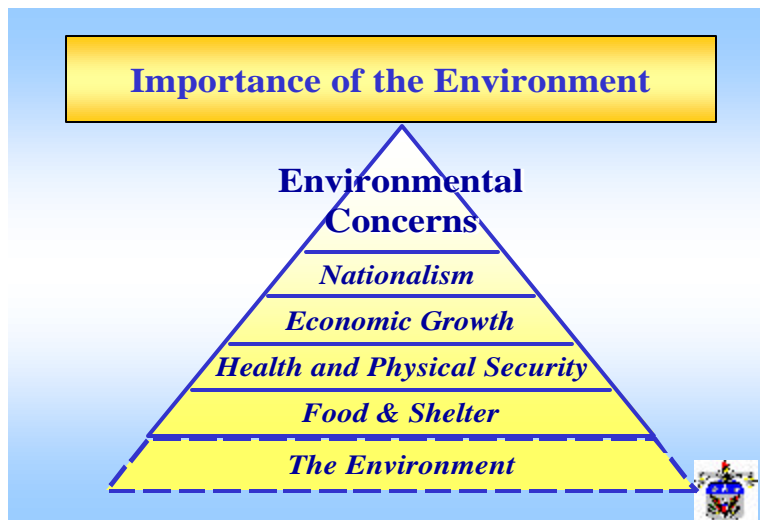


FIGURE 1

An underlying cause of instability is the scarcity of resources. Populations unable to meet their basic survival requirements for food, water, shelter, health, and physical safety, in other words achieve human security, are at risk. Entire geographic regions consisting of populations at risk can quickly become regions of instability. Therefore, in terms of resource availability, human security is directly correlated to environmental security. Securing natural/environmental resources through public policy and international cooperation can help reduce the degradation that exacerbates resource availability as an underlying cause of regional instability. Proper management and distribution of resources by local and national governments can enhance government legitimacy and lead to economic opportunity and development, which may further stabilize a region. These may be significant ways to regional stability and peace, which should be provocative to U.S. and world policymakers. Upon her acceptance of the 2004 Nobel Peace Prize for her work toward peace in Kenya, Professor Wangari Maathai commented about environmental degradation in Africa leading to international tensions. She said:

The migration from South to North is partly because the migrants are leaving behind a very degraded environment because they have had very poor governance and a very poor distribution of resources. There can be no peace without equitable development, and there can be no development without sustainable management of the environment in a democratic and peaceful space. I hope that this prize will help many people see the link between these three things.²³

Each U.S. Presidential administration determines, evaluates, and prioritizes the threats to national security and how to address them. These threats can be divided into categories that define them and how they are addressed. They include internal, external, immediate, near-term, and long-term threats. Internal threats affect our domestic tranquility, health, or prosperity. External threats include international and transnational entities or actions that threaten United States' interests, such as free trade, commerce, diplomacy, and national safety. Immediate threats are usually physical threats that pose an immediate danger to the population's well-being or livelihood. Similarly, near-term threats pose a danger to our well-being within a finite period of time. Long-term threats are those that present no apparent danger now or which have consequences that cannot be measured at this time, but may adversely affect human or economic well-being; global warming is an example. The threats imposed by environmental degradation meet all of these criteria, but are most commonly a long-term concern. Nevertheless, they are potentially the most dangerous threat because they involve the planet itself and the natural resources on which we all depend for energy, product materials, and our basic human survival.

The Bush administration should reevaluate its prioritization of threats to U.S. national security interests, especially those whose effects may be long-term. A more thorough assessment of threats to U.S. interests would include critical environmental security issues. By deliberately addressing environmental issues as national security issues in the next iteration of the National Security Strategy, they will receive the attention necessary to begin to resolve their long-term effects. To be successful, the strategy must be supported by a global effort with U.S. leadership and international cooperation, and with a holistic, integrated approach. Zbigniew Brzezinski, author of *The Choice: Global Domination or Global Leadership*, affirms that, "Only the persistent pursuit of a global strategy that addresses the underlying causes of global strife can reduce America's current national insecurity."²⁴ U.S. leadership on environmental security issues, with the simultaneous leveraging of diplomatic, military, technological, and economic assets, can help to stabilize the world.

U.S. National Security Strategies on the Environment

The current National Security Strategy of the United States of America, published in September 2002, expresses the same basic goals as the national security strategy produced by the Clinton administration in 1998.²⁵ The stated goals for both strategies are essentially to enhance security, promote economic prosperity, and promote the ideals of democracy around the world. One noticeable difference between the two is the acknowledgement of environmental issues as a component of national security.

The stated goals of the 2002 NSS are to make the world a safer and better place through "political and economic freedom, peaceful relations with other states, and respect for human dignity."²⁶ The body of the Bush strategy is arranged in chapters addressing the specific ways the United States will achieve these goals, namely, to:

champion aspirations for human dignity; strengthen alliances to defeat global terrorism and work to prevent attacks against us and our friends; work with others to diffuse regional conflicts; prevent our enemies from threatening us, our allies, and our friends, with weapons of mass destruction; ignite a new era of global economic growth through free markets and free trade; expand the circle of development by opening societies and building the infrastructure of democracy; develop agendas for cooperative action with other main centers of global power; and, transform America's national security institutions to meet the challenges and opportunities of the twenty-first century.²⁷

The threat of terrorism is the backdrop that influences all of these security efforts. This emphasis is understandable in the wake of the September 11, 2001 attacks on the Pentagon and World Trade Center.

On the other hand, geographically distant threats, and threats whose effect is more long-term, such as malnutrition, pandemic disease, fresh water availability, and environmental degradation, received scant attention in the 2002 overarching National Security Strategy. The two primary stated actions that could begin to encompass environmental issues are the effort to “work with others to diffuse regional conflicts” and expansion of the “circle of development.” All other actions are accomplished within these: the former takes in global cooperation to address the roots of regional conflict; and, the latter helps to build democratic infrastructure and grow free markets and free trade. Both promote human dignity, counter weapons proliferation, and address the challenges faced by our security institutions.

The current NSS does not demonstrate an appreciation by the administration of the impact that environmental degradation has on national security. It does not appear to comprehend how mismanagement of natural resources, industrial pollution, and the deterioration of landscapes add to regional instability, or how they can translate to adverse long-term health, economic, and security affects. Sarkesian, Williams, and Cimbala, authors of the book *U.S. National Security: Policymakers, Processes, and Politics*, agree that “Although questions have been raised about national interests, national security, and the U.S. role around the world, the terrorist threat seems to have overshadowed everything---at least for a time. But over the long term, how we define these [environmental] issues is critical.”²⁸

The Bush administration is not alone in their miscalculation of environmental impact on national interests, or in their failure to address it in the National Security Strategy. Before the Goldwater-Nichols Act, it was not unusual for presidential administrations to neglect the formal articulation of a national strategy at all. This Act was put into effect precisely because “The Executive Branch has more often than not failed to formulate, in an integrated and coherent manner judiciously using resources drawn from all elements of national power, a mid- and long-term strategy necessary to defend and further those interests vital to the nation’s security.”²⁹

Even though articulation of a national strategy is now mandated, it is easy to see why long-term, indirect issues, like the environment, are still put off in light of more immediate, physical security issues, like terrorism. However, long-term threats are national security threats nonetheless, and should be addressed in some capacity to ensure they do not escalate to become more imminent threats. The United Nations Report of the Secretary General’s High-level Panel on Threats, Challenges and Change notes that its primary challenge is “to ensure that, of all the threats..., those that are distant do not become imminent and those that are imminent do not actually become destructive.”³⁰ The United States should recognize this and take the same position on “distant” threats.

The U.S. National Security Strategy should consider the full spectrum of potential threats, both near-term and distant. Snider and Nagl, authors of “The National Security Strategy: Documenting Strategic Vision,” in which they specifically addressed the documentation of strategic vision within the branches of the U.S. Government, stated that “Others, less political and more public-minded, want to see coherence and farsightedness in the security policies of their government: a strategy they could, as citizens, fully support.”³¹ In the 1991 NSS, written during equally tumultuous times with the dissolution of the Warsaw Pact and Iraq’s invasion of Kuwait, there is already a precedent for holistic, visionary strategy that helped to shape our future security climate.

In an attempt to realistically address the potential security threats during the post-911 era, the purview and time context of security issues must be expanded. In the summary of their article, “The Global Infectious Threat of New and Reemerging Infectious Diseases: Reconciling U.S. National Security and Public Health Policy,” Bower and Chalk said, “Emerging security threats such as terrorism, drug trafficking, and environmental degradation differ significantly from traditional statecentric paradigms both in their causes and the policies designed to ameliorate them.”³² In other words, it is time to redefine national security, again, just as the 1991 National Security Strategy did. In specific reference to the 1991 NSS, Snider and Nagl noted, “Even more than the previous reports, [this] document attempted to communicate the idea that American economic well-being was included in the definition of national security...”³³ Here the definition of national security was expanded to encompass what the President saw as one of the most critical national interests: the U.S. economy. President George H. W. Bush recognized that the long term health and security of the American way of life depended on the prosperity of the economy. So, in addition to full engagement in the Persian Gulf War, and the ongoing reorganization of the political boundaries of Eurasia, securing the economic well-being of the United States was deserving of deliberate attention in the National Security Strategy. Despite the potential immediate physical security threats to the country, the economic well-being of the U.S. had to be secured at the same time. This is also true today.

One of the nation’s goals is to secure “economic freedom.”³⁴ It is a given that free markets and free trade for U.S. businesses are vital national interests. As such, it is clearly stated in the National Security Strategy that “We will promote economic growth and economic freedom beyond America’s shores³⁵ as well as at home. Therefore, the U.S. economic interests throughout the world must be secured. In the same way the economy is recognized as a vital national interest and included in the definition of national security, so should the environment.

In the Clinton administration's 1994 National Security Strategy, "the conception of security is much more broad than that used by earlier administrations."³⁶ It showed the recognition of the security threat that environmental degradation presents to the United States and the world. This continued to a greater extent in the 1998 Clinton strategy, named "A National Security Strategy For A New Century," which embraced environmental issues as a key component of national security. Protecting the global environment was rated among the important national interests and fully addressed throughout the strategy. The administration realized that "Other problems...such as resource depletion, rapid population growth, environmental damage, new infectious diseases, and uncontrolled refugee migration---have important implications for American security."³⁷ The 1998 NSS clearly acknowledges the causal relationship between environmental degradation and humanitarian crises:

Decisions today regarding the environment and natural resources can affect our security for generations. Environmental threats do not heed national borders and can pose long-term dangers to our security and well-being. Natural resource scarcities can trigger and exacerbate conflict. Environmental threats such as climate change, ozone depletion and the transnational movement of hazardous chemicals and waste directly threaten the health of U.S. citizens.³⁸

The 1998 National Security Strategy introduced several environmental initiatives, such as the Environmental Security Initiative (ESI) and the development of an environmental forecasting system. The ESI joined U.S. agencies with foreign partners to formally address regional environmental concerns. The forecasting system was designed to provide policymakers advanced notification of environmental stress situations. This measure would assist policymakers in establishing appropriately responsive and sustainable development programs for the identified environmentally stressed regions.

The Clinton NSS also proposed working multilaterally through the Global Environment Facility (GEF). The Global Environment Facility, established in 1991, helps developing countries fund projects and programs that protect the global environment. GEF monetary grants support projects related to biodiversity, persistent organic pollutants, climate change, the ozone layer, international waters, and land degradation.³⁹ The GEF, with its 176 member states, was "an important instrument for this cooperation"⁴⁰ and to facilitate countering environmental threats and assisting the United Nations with imposing binding limits on greenhouse gases through the Kyoto Protocol.⁴¹ Few of these initiatives took hold, however, before the U.S. presidential elections of 2000. Now, with the ensuing battle against terrorism, environmental security measures have been all but eliminated from the NSS.

The 2002 National Security Strategy speaks to a variety of issues that affect national security, most of which are aimed at immediate physical security. It also addresses the causes of near-term instability that threaten global markets and free trade, which in turn affect the economic security of the United States. The notable omission in the current NSS, and its ultimate deficiency, is the lack of serious consideration of long-term, environmental security threats. Consequently, it neglects the impact of environmental degradation on global stability and national security.

Despite the U.S. State Department's acknowledgement, in the 2004-2009 Strategic Plan Mission Statement, that "Environmental degradation and deforestation threaten human health and sustainable development",⁴² the neglect of environmental security issues in the NSS necessitates a change in the outlook of U.S. national security institutions. These institutions should continuously reassess the global situation and, when necessary, redefine the national security interests of the United States. In the process, underlying situations, root causes, and triggering mechanisms must be evaluated to determine the level of consideration required to guard against their negative outcomes and consequences. The environment should be among these considerations for both near- and long-term impacts on national security.

Recommendations for the Future

Terrorism should be a primary concern for this country, but not its only concern. A balance must exist in the attention and resources devoted to immediate, near-term, and long-term threats. As the most powerful nation on the planet, the United States must thoroughly address the large realm of threats more proactively than reactively. The analysis must be holistic and consider the root causes of threats, not merely their obvious symptoms. In his book *Environmental Security and Global Stability*, Max G. Manwaring urges senior leaders and their staffs, in order to tackle the multidimensional origins of our national security issues, to "analyze the problem as a whole and develop the vision necessary for complete success."⁴³ Frost, author of "Globalization and National Security: A Strategic Agenda," agrees that "U.S. policymakers should forge a strategy based on cross-disciplinary analysis ..., including technological, military, political, environmental, ...perspectives. Holistic thinking has become a national security imperative."⁴⁴ With this approach, global environmental issues should resurface as major national security threats worthy of attention in the National Security Strategy.

The 2002 National Security Strategy does not adequately address environment-related threats to our national security. Manwaring puts environmental security into the context of the

larger, global stability-security issue and analyzes the complex environmentally stressed threat situation. As such, he claims:

U.S. interests, and those of the fragile and interdependent global community, demand a rethinking of contemporary security and stability. In general, this should be done with the clear understanding that non-military socio-economic, political, and environmental issues are integral parts of a new security-stability paradigm. In particular, this should be done with the clear understanding that environmental degradation is a major cause of instability that has implications for intra-national and cross-border conflict.⁴⁵

If the NSS is to be truly a thorough document addressing legitimate threats to national security, it should address environmental threats to U.S. security interests.

The Bush administration would fare well in this endeavor by picking up where the Clinton administration left off in the 1998 NSS. Reinvigorating the internationally cooperative efforts of the Environmental Security Initiative and the Global Environment Facility to reduce harmful industrial emissions and to address environmental concerns in undeveloped regions of the world would be a sound start. Reexamining United Nations environmental protocols to collaborate on ways ahead would demonstrate the leadership and support needed to effectively confront the threats imposed by environmental degradation on a global level.

The United Nations has identified environmental degradation as one of six clustered "threats with which the world must be concerned now and in the decades ahead."⁴⁶ In so doing, it has taken a strong stance to present protocols establishing global guidelines to protect the environment from further deterioration caused by humans. The first of these was the Montreal Protocol on Substances that Deplete the Ozone Layer.⁴⁷ It was adopted in 1987 in response to the concern about the destruction of atmospheric ozone from chlorofluorocarbons (CFCs) commonly found in aerosol and refrigeration products. Most recently, the Kyoto Protocol has taken the stage. It is one of the United Nation's most innovative environmental programs and demonstrates promising potential for positive international discussion about global environmental issues.

The Kyoto Protocol of 1997 established limits for greenhouse gas emissions. Its early success was achieving agreement among the industrialized nations of the world on this issue for the first time. The limitation and reduction commitments are tailored to each country based on their emission level in the year 1990 and their national socio-economic conditions. The Kyoto Protocol adds protections not covered in the Montreal Protocol and extends restrictions against other emissions beyond greenhouse gases. It promotes sustainable forest and agricultural management practices, research and development, and increased use of renewable forms of energy and innovative, environmentally sound technologies. Most significantly, this

Protocol strives to implement policies “in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties.”⁴⁸ However, the definitions within the Protocol awarding this “developing country” status to China and India, in particular, will prevent future ratification of this Protocol. Despite this, the form for a viable and comprehensive vehicle for international cooperation on environmental security issues exists in these UN Protocols, and supporting such efforts should continue.

Universal consideration and adherence to international protocols, and other environmental protections, requires some recognition of the special situations of developing countries, albeit defined differently than in the Kyoto Protocol. Nations in their infancy of instituting sound governance, securing territorial borders, developing competitive economies, establishing viable trade and commerce, and building their national infrastructures are vulnerable to the exploitation of their natural resources. This exploitation may be internally generated or the result of the highest commercial bidder. Regardless of the source, there is tremendous pressure on developing countries to use the resources they have now, with little regard for the future. Ellen Frost points out that, “A major culprit in environmental deterioration is the uncontrolled use of resources backed by misguided and unbalanced development policies in developed and developing countries alike.”⁴⁹ Therefore, internationally sanctioned measures to prevent environmental degradation should consider the temptation and environmental stressors experienced by these nations.

A method should be established to subsidize development efforts in impoverished and failing states to prevent the total exploitation of their natural resources. Research studies and assessments to further identify the issues can help to educate governments, International Organizations (IO), and potential investors. Already, The World Bank Institute, recognizing the conflict potential related to natural resource management, “has developed a peace and conflict impact assessment that, together with spatial planning and integrated social and environmental impact assessments, can provide comprehensive policy tools for sustainable development.”⁵⁰ Promotion of such assessments to inform national leaders will allow them to recognize that environmental management is in everyone’s best long-term interest. Likewise, policymakers can raise domestic interest and international assistance to develop programs for economic support to implement corrective measures to problems identified by these assessments.

Environmental protection and management do not just benefit developing countries economically. They provide the opportunity for planning and sustained development over an extended period of time. Civic planning can also help prevent the loss of arable land, fresh

water scarcity, over-fishing, deforestation, and the alteration of ecosystems. Population growth, medical care, education, public works and services, and continued financial development must all be planned for within an environmentally supported framework. The rate of development and expectations of the citizenry must accommodate the careful management of resources to achieve ecological balance and national objectives. The United Nations is one of the international institutions that can assist and advise developing countries. The World Bank and the International Monetary Fund are among many International Organizations structured to do this as well.

Combinations and cooperation between multiple organizations have also proven effective in addressing environmentally-related security issues. In November 1998, the Center for Strategic Leadership of the U.S. Army War College hosted a series of Environmental Security seminars, games, and conferences in the spirit of exploring “ways of using environmental issues to promote regional cooperation and enhance global security.”⁵¹ This International Environmental Security Seminar brought together military and civilian representatives from over 40 countries drawing on their collective experiences and unique national and regional perspectives. More recently, the Environment and Security Initiative (ENVSEC), a joint effort of the United Nations Environmental Program (UNEP), the Organization for Security and Cooperation in Europe (OSCE), and the United Nations Development Program (UNDP),⁵² prepared a report addressing the regional cooperation in the Southern Caucasus for environmental and resource sharing issues to prevent the escalation of local political tensions and conflicts. This report, *Environment and Security: Transforming Risks into Cooperation – The case of the Southern Caucasus*, was the topic of discussion at the Meeting of the Environment Ministers from the Eastern Europe, Caucasus and Central Asian Region, and Their Partners, in Tbilisi in October 2004. Tamar Lebanidze, the Georgia Minister of Environment Protection and Natural Resources, discusses in his article, “Security in Turbulence,”⁵³ how this meeting helped to demonstrate that shared regional environment and security concerns can act to bring countries together for cooperative discourse and resolution. Cooperation on relatively neutral environmental issues can develop channels of cooperation on other issues. This approach to non-violent cooperation between conflicting states is utilized by established International and Non-Governmental Organizations who rely on membership commitments. The United Nations is the most prominent of these organizations.

In order for the United Nations to be effective, however, it relies on the economic support and political influence of its member states. The United States is one of five permanent members with veto power within the United Nations. Because of its military and economic

strength, the U.S. wields tremendous influence on the United Nation's ability to effectively implement its global initiatives. When the U.S. does not ratify UN agreements, they are often less effective or fail to have the intended international impact. This is the case with the Kyoto Protocol.

The Clinton administration did not ratify the Kyoto Protocol when it was introduced in 1997. The Bush administration continues to withhold ratification "on the grounds that it would hamper the competitiveness of U.S. firms."⁵⁴ Most countries have not instituted the modest emission limits established by the Protocol. During the ensuing eight years, there has not been a climatically significant atmospheric decrease in any of the six regulated greenhouse gases. The industrial release of these gases is increasing, especially from developing countries that are using older technologies to establish their economies at the lowest cost. U.S. leadership and cooperation with the United Nations and other IO could promote global consideration of environmentally sound development and economic policies. In his article "No Procrastinating on Climate," U.S. Senator Joseph Lieberman promoted his Climate Stewardship Act and said:

Consider the costs and consequences of inaction, for they will ruin the [U.S.] economy with a far more destructive certainty than any greenhouse control program ever could. As the largest emitter of greenhouse gases, we in the United States must show that we are accepting of our responsibility to be part of the global solution to this global problem.⁵⁵

Many countries whose economies are growing are still operating their industries with machinery that is decades old. Older machinery and its dated technology usually lead to energy and production inefficiency. Antiquated machinery wastes precious resources and causes unnecessary environmental degradation, not only from inefficiency, but also from polluting emissions. Pre-1980 coal burning electrical power plants are an example of energy use and production inefficiency. Modern power plant technologies can burn cleaner fuels, recycle burnable products back through the plant to produce additional energy, and have a greater energy to fuel unit production ratio. Inefficiency, waste, pollution, and scarce resources tax economies and decrease the growth and economic potential of developing regions. Regions with limited resources to begin with are more severely affected when resources are wasted or rendered unusable due to pollution. There can be intense competition for scarce resources when they are required for basic human existence or livelihood, for example pollutant-free fresh water and clean air, or coal or wood for cooking or heating fuel. Conflict can then arise between those who have these resources and those who do not, as has been seen between India and Bangladesh over the diverted flow of the Ganges River,⁵⁶ within the Philippines and Mexico following deforestation, and from competition for timber in Liberia and Brazil.⁵⁷

Conflict between members of a community for essential resources becomes a cause of instability. Instability within developing countries, or those with a lack of governance, becomes a security concern. For the United States, such unstable regions present potential security threats to our free trade and commerce, the safety of our citizenry in these areas, and the possibility for terrorist havens, to name just a few. Such regional instability presents a national security threat because it can directly affect the safety of Americans, our economic freedom, peaceful relations within the region, and respect for human dignity. These are the goals of the current National Security Strategy. Environmental issues, such as pollution, deforestation, and restricted resource availability, can trigger instability by exacerbating political tensions, highlighting the leadership's inability to provide services, and magnifying inequity in resource distribution. Instability within regions with scarce natural resources can lead to security threats and interference with attainment of U.S. goals. In the same way as other threats to national security, environmental issues that trigger instability should be deliberately addressed in the National Security Strategy.

Including environmental issues as an important national security consideration is easy. The foundations exist in the Clinton administration NSS and in the International and Non-Governmental Organizations already structured to confront such issues of global concern. The Bush NSS could immediately and adequately address the environment by invigorating the Clinton initiatives, increasing cooperation with the United Nations on its global environmental perspective, and by assuming a holistic approach to countering national security threats, both near-term and long-term.

Conclusion

Today, as much as ever before in history, the United States faces a complex security environment. The demand for resources to keep Americans and national interests secure is unprecedented. However, in spite of the immediate fears invoked by terrorist acts, other threats, whose effects are more insidious and long-term, should also receive the attention of U.S. legislators. Environmental degradation is an underlying cause of many human population stressors, conflicts, and regional instability. As such, environmental security is a national security issue that deserves acknowledgement in the United States' foremost plan for dealing with such issues, the National Security Strategy.

Given its unrivaled economic, technological, and military strength, now is the time for the United States to take the lead to positively influence the world toward preservation, conservation, and manageable renewal of our planet's natural resources. Never before, and

perhaps never again, will one nation, one people, have the power to exercise policy and development with such magnitude and far-reaching effect in terms of time, resources, and benefit to human kind. How this effort will simultaneously and ultimately affect global stability and security will be seen, but action toward this end cannot be put off any longer. Senator Lieberman, in reference to the U.S. waiting for more scientific proof before taking action on Global Warming as an environmental security issue, said, "Our nation and, indeed, our planet cannot wait for us to stumble toward an answer. The consequences and costs are too great."⁵⁸

The United States must take the lead to minimize environmental degradation, and articulate as much in the National Security Strategy. National instruments of power and resources should be allocated for environmental security efforts in balance with other threats to our national security, such as terrorism and HIV/AIDS. In this regard, Manwaring concluded that "The special status of the United States allows it the opportunity to facilitate positive change. By accepting this leadership challenge, the country can help replace conflict with cooperation and harvest the hope and fulfill the promise that global security offers."⁵⁹ The current National Security Strategy also acknowledges that "... this position comes with unparalleled responsibilities, obligations, and opportunity."⁶⁰ Now is the time for the United States to seize this opportunity to enhance the quality of life and to ensure security for all Americans, as well as promote good stewardship of our planet Earth.

Endnotes

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