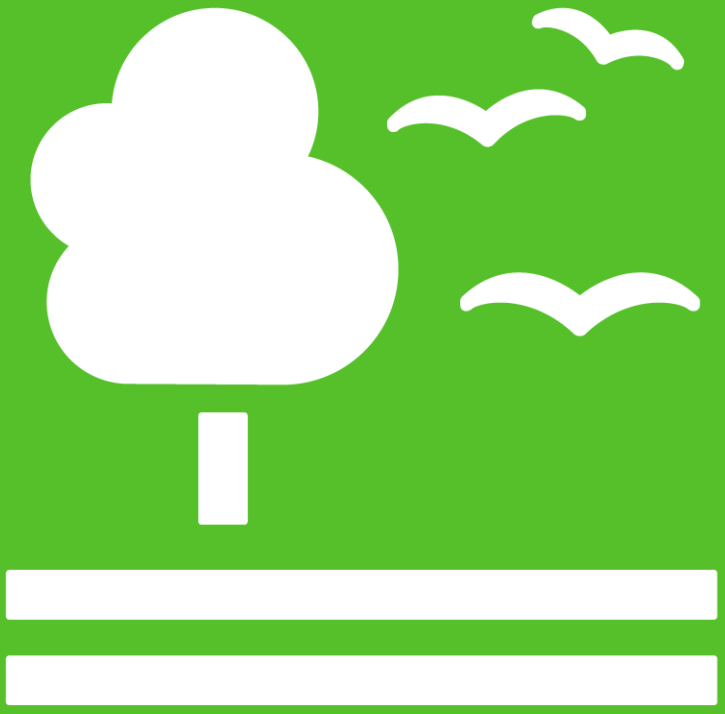
15 LIFE ON LAND



CO-LEADS

Anne Christianson, Director, International Climate Policy, Center for American Progress

Richard Florizone, President and CEO, International Institute for Sustainable Development

Rosina Bierbaum, Research Professor, Roy F. Westin Chair in Natural Economics, University of Maryland School of Public Policy and Professor and Dean Emerita, University of Michigan School of Natural Resources and Environment, and School of Public Health

17 ROOMS GLOBAL FLAGSHIP
2022 SUPPLEMENTAL DOCUMENTS
DECEMBER 2022

The 17 Rooms initiative is co-hosted by the Center for Sustainable Development at The Brookings Institution and The Rockefeller Foundation. Within the 2022 global flagship process, each Room, one per SDG, was asked to identify actionable priorities that can be advanced by the end of 2023 to improve some component of 2030 outcomes for its respective Goal. Room 15, a working group for Sustainable Development Goal 15 on Life on Land, focused on investing in nature through the Natural Security Initiative. This document details the roadmap for implementation and presents the nature and security conceptual framework.

Room Action Agenda 2022
Room 15: Life on Land

Rosina Bierbaum (Room 15 Co-lead), Anne Christianson (Room 15 Co-lead), and Richard Florizone (Room 15 Co-lead)

ROOM HISTORY AND FOCUS

The discussions in Room 15 (Life on Land) focused on deepening the Natural Security Initiative (NSI) concept, which first emerged out of the 17 Rooms 2021 Global Flagship process. In that 2021 process, the Room 15 discussions led to an initial proposal for a global-scale effort to speed up and foster investments in nature-based solutions to better prepare and protect people from disasters while addressing climate change and biodiversity loss. This initial NSI proposal received strong support and encouragement from other Rooms (namely Room 13 and Room 14).

Based on this strong endorsement, an NSI convening was held at The Rockefeller Foundation Bellagio Center in Italy from May 9-13, 2022, with the aim of drawing together a broad coalition of thought leaders to collaboratively define the focus of the NSI and validate its underlying value proposition. The convening achieved these objectives and served to articulate the purpose of the NSI, define the target audience, and chart how the initiative could be implemented.

The success of the Bellagio convening led to a commitment to continue developing the NSI through this year's 17 Rooms process. In particular, Room 15 participants in 2022 worked to elaborate a conceptual framework outlining the drivers and causal pathways in the nexus between nature and security, create a pathway to launch a Global Commission on Nature and Security, and develop and agree on a five-year journey map for NSI implementation.

CONTEXT AND CHALLENGE

Nature is foundational to human well-being. The loss of biodiversity, environmental change, and ecological degradation all generate stress on ecosystem services, which, when left unaddressed, pose a significant threat to human, national, and global security. Understanding of these connections is growing; however, nature loss and ecosystem degradation are not widely and

systematically factored into security risk management outside of climate security, and do not receive the necessary global attention or financing required to address the challenges associated with the nature-security nexus.

DEFINING SUCCESS

The Natural Security Initiative (NSI) seeks to: 1) deepen understanding of the security risks directly and indirectly linked to nature loss, environmental and climate change, and ecosystem degradation, 2) inform and engage key security and environmental decision makers about these risks, and 3) catalyze a global movement that responds to the urgency of the nature-security nexus. Achieving these goals will help better protect ecosystems and people in the places where they live.

More specifically, the NSI will:

- Increase understanding of the impacts environmental change and degradation pose to human, national, and global security.
- Bring together the traditional security, ecosystem protection, and climate change communities to advance multilateral collaboration on nature protection and to develop coherent and complementary approaches to addressing nature-related security risks.
- Ensure that the risks to security and stability posed by environmental degradation and the loss of biodiversity and ecosystem services are raised to the highest levels of government.
- Share research, experience, and expertise to inform responses and approaches to the risk posed by environmental change and degradation to human, national, and global security.

To achieve these outcomes, Room 15 has been working to refine the conceptual framework underpinning the nature-security nexus and outline an action agenda through the development of a robust five-year NSI Journey Map.

TARGET AUDIENCE AND STAKEHOLDERS

Given their role in responding to threats and risks emanating from environmental and climate change, degradation, and loss of ecosystem services, a key target audience for the NSI is the global and regional security and intelligence communities. A second key target audience is the U.N. Office of the Secretary-General and other leadership groups, such as multilateral development banks (MDBs), with a global mandate to address both environmental and security threats. A third group is the Conferences of the Parties working to achieve progress on the multilateral environmental agreements of climate change, biodiversity, and combatting desertification, among others

CONCEPTUAL FRAMEWORK

The Room first developed a “Causal Loop Diagram” (see Attachment 1) to identify the main components of the nature-security nexus system and the relationship among these components. The process of creating the “Causal Loop Diagram” resulted in a shared understanding of the

dynamics within the nature-security system and provided a foundation for developing the "Conceptual Framework."

The "Conceptual Framework" (see Attachment 2) was designed to easily communicate the relationship between nature and security to experts from the security and intelligence communities, using both Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) terminology and traditional security language and framing.

The Conceptual Framework identifies the underlying biophysical and socioeconomic drivers of environmental change, the stresses this change places on critical ecosystem services, and—depending on the political, social, and economic context—the risks this change can create for human, national, and global security.

JOURNEY MAP FOR IMPLEMENTATION

Room 15 developed a "Five-year Journey Map" (see Attachment 3) outlining the strategy and key milestones for supporting the NSI's objective of catalyzing a global movement that underscores the importance of the nature-security nexus.

A key component of this strategy is the 2023 launch of a Global Commission on Nature and Security (see Attachment 4). The Global Commission would convene high-level political and public figures from the security and environmental communities to increase understanding and awareness of the nature-security nexus; advocate for increased attention, financing, and action on addressing the global biodiversity crisis; and create global momentum to address the security risks posed by nature loss and ecosystem degradation.

The "Journey Map" was organized around three phases of activities:

Phase 1 (Feb-Sept 2022): Phase 1 activities include the work undertaken by Room 15, finalization of the nature-security conceptual framework, and outreach to senior U.N. representatives to elicit feedback and secure concept buy-in. This phase also includes securing follow-up funding for Phase 2.

Phase 2 (Oct 2022-June 2025): Phase 2 activities include public events on the NSI within multilateral fora and international conferences, identifying and securing diverse and high-profile co-chairs and representatives to participate in the Global Commission on Nature and Security in 2022-23, a public launch of the Commission in 2023, and then the development and publishing of a flagship report on the nature-security nexus in 2025.

Phase 3 (Jul 2025-Dec 2027): Phase 3 activities begin with the launch of the flagship report and include related outreach activities, such as the development of a website and digital content (e.g., videos, infographics, etc.). The activities in this phase would also include continued advocacy and outreach; education, training, and capacity building; and continued coalition and community building.

By the end of 2023, Room 15 will have been instrumental in advancing this Journey Map through finalizing the nature-security conceptual framework, catalyzing outreach efforts to the security and intelligence communities and high-level U.N. representatives, identifying potential funding opportunities, and supporting the public launch of the Global Commission on Nature and Security.

Room 15 will support several immediate next steps to be delivered before the end of 2022 that build on the existing momentum, including:

- Development of a **nature-security nexus literature review** to support identification of knowledge gaps; this is being developed with the input from Rod Schoonover, a Room 15 ember (September-December 2022)
- Publish a **perspectives piece** on the nature-security nexus in the Philosophical Transactions of the Royal Society; led by Room 15 Co-chairs Rosina Bierbaum and Anne Christianson (September 2022-February 2023)
- **Public panel** discussions at the UN Framework Convention on Climate Change COP27 in Sharm El-Sheikh, Egypt and UN Convention on Biological Diversity (CBD) COP15 in Montreal, Canada; led by Room 15 co-chair Anne Christianson and room members Alice Ruhweza and Chizuru Aoki, with participation of additional room members and Bellagio participants as panelists (November and December 2022)
- **Breakfast roundtable** on the margins of the CBD COP15 to bring together leaders within 35 identified organizations actively working on nature-based solutions; led by Room 15 co-chairs (December 2022)
- Development of standard "**NSI Talking Points"** (Attachment 5) to share with Room 15 members participating in relevant events; led by co-chair Anne Christianson
- Preparation of a **funding proposal** to support the phase 2 of activities outlined in the "Journey Map," including an informal donor roundtable meeting; led by IISD & CAP
- Organization of a **briefing session** for key stakeholders in the security and environmental communities (2023)
- Align efforts to develop **implementation measures** for a National Nature Assessment with the related work of the USGCRP Decadal Strategic Plan on Global Change research to further coordinate U.S. government efforts on including ecological elements in global change research; led by Room 15 co-chair Rosina Bierbaum and Room member Sherri Goodman

Attachments

Attachment 1: Causal loop diagram
Attachment 2: Conceptual framework
Attachment 3: NSI journey map
Attachment 4: Background note on Global Commission on Nature and Security
Attachment 5: NSI talking points for room member outreach

The nature-security nexus

Nature is in a state of urgent crisis. Declines in biodiversity and the degradation of ecosystems are accelerating, driven by unsustainable resource extraction, demographic pressures, pollution, land and sea-use change, invasive species, and a rapidly changing climate. Within a context of weak governance, multidimensional poverty, and existing fragility, these dramatic changes—by undermining livelihoods, compromising human health, disrupting economies, increasing resource competition, and heightening food and water insecurity—are posing a growing threat to human security and if unaddressed could exacerbate drivers of national and global conflict and security.

Increased action to protect, restore and sustainably manage biodiversity, ecosystems, and the services they provide to people will be critical to preventing and resolving conflicts and promoting peace. However, the security dimensions of such stresses, particularly those destabilizing the biosphere, must be better understood. This requires increased cooperation, particularly among the scientific and security communities, to understand, communicate, and address the dangers ahead.

Aligning security with risk

What constitutes *security* has often evolved to align with the changing risks confronted by societies and nations. Traditionally focusing narrowly on the interests of nation-states, national security has increasingly incorporated elements of human security that focus on threats to individuals and communities. In the modern era, national security encompasses more than just military aspects, extending to economic, energy, and food security as well as crime and terror prevention.

However, at its essence, security is protection from, or resilience against, harm. In this formulation, security risks to nations and people can arise from particular conditions or hazards and not exclusively from well-defined actors (such as battalions, insurgent groups, or transnational criminal organizations). Indeed, the casualties and socioeconomic disruption rendered by "actorless threats" such as natural disasters, climate change, and pandemics rival and often surpass those from war and conflict. And yet most nations continue to allocate vast financial and human resources towards security infrastructures focused almost exclusively on threats from malign actors.

What is the nature-security nexus?

Human activity has dramatically altered many of Earth's critical systems, with biodiversity loss and climate change often cited among the most pressing crises for humanity. Multinational entities such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the Intergovernmental Panel on Climate Change (IPCC) have repeatedly sounded the alarm over the negative consequences for humanity if climate change and the loss of biodiversity and ecosystem services are not halted and reversed. Even so, the pace of policy response and behavioral change continues to lag behind what is required, locking us into an increasing amount of climatological and ecological stress in the years ahead.

The downstream effects of these stresses on societies and security are an essential line of inquiry. For climate change, scholarship dedicated to understanding its security implications has emerged and, in part, matured. Climate security experts have largely converged on the "threat multiplier" concept, which assumes climate change amplifies existing stresses that affect security through multiple pathways. As a result, climate security risks have far-reaching implications for how the world manages peace and security.

Comparatively, less effort has been put into understanding the potential and existing security threats arising from disruptions to the planet's ecosystems and to the ecological functions that support humanity, including its water and food security. While some foundational research has been done into how environmental change threatens security, including by the Council on Strategic Risks and the Stockholm International Peace Research Institute, little attention has been paid to the human, national, and global security implications of the collapse of pollinators, the dieback of coral reefs, the degradation of soils, and the proliferation of crop-destroying insects – to name but a few examples. Although many of the links between the biodiversity crisis and security remain unclear and poorly studied, stresses to the biosphere and ecosystem services nevertheless have profound - and potentially expanding - implications for human, national, and global security.

The proposed **nature-security nexus** conceptual framework (Figure 1) seeks to a) understand and articulate how stresses in natural systems can propagate into adverse security outcomes and b) identify and actualize points of intervention to prevent or impede such adverse security outcomes.

Attachment 2: Conceptual Framework

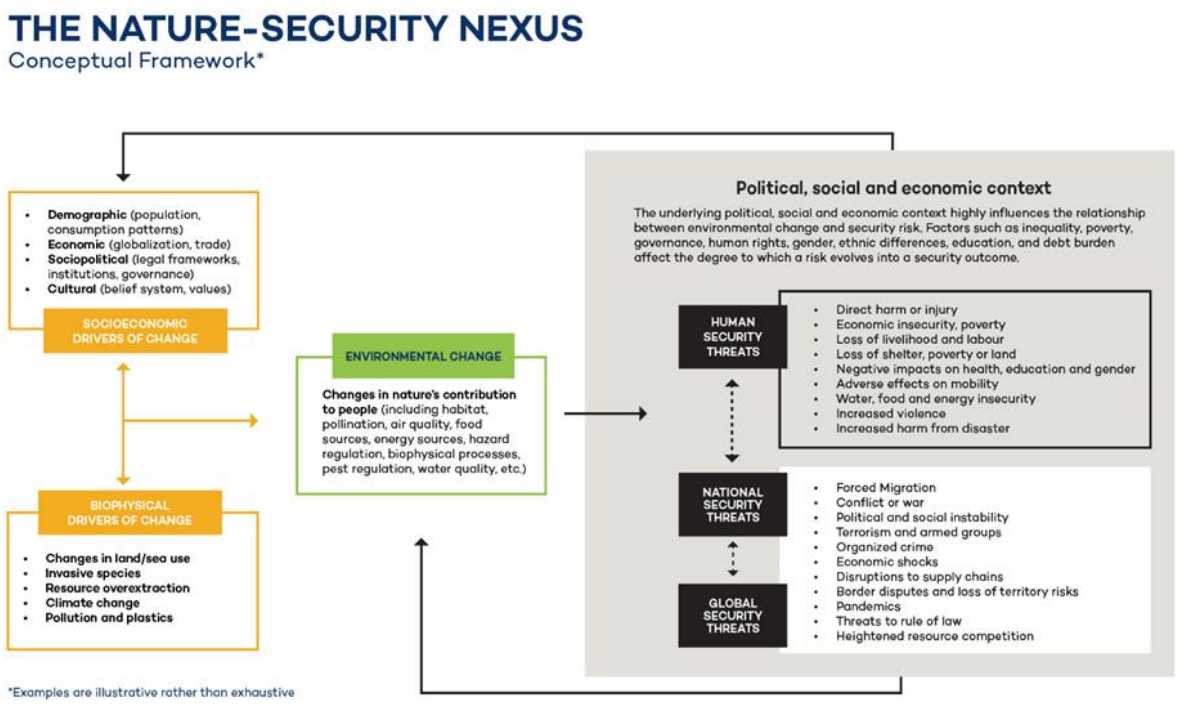


Figure 1: The nature-security nexus conceptual framework

Drivers of change

Environmental change—and its associated stress on people and societies—arises from a number of human-driven biophysical and socioeconomic drivers of change. The primary biophysical drivers of change, described below and taken from the IPBES Global Assessment Report (2019), are changes in land- and sea-use, invasive species, resource over-extraction, climate change, and pollution and plastics, and these forces affect ecosystems and their functions by changing their physical, chemical, or biological conditions. Similarly, socioeconomic drivers of change operate by changing social, political, cultural, demographic, or economic conditions.

Each of these drivers–increasing pollution, more intense weather events, and so on–can, on their own, pose direct threats to people and societies. However, the complex interactions between these biophysical and socioeconomic drivers can also result in these changes indirectly contributing to instability as "threat multipliers" by exacerbating and intensifying existing risks and threats to security. For example, pollution, land-use change, and the spread of invasive species may contribute to the collapse of pollinators in a given ecosystem, threatening local food security and agricultural livelihoods. Warming temperatures and the over-extraction of marine resources are driving the dieback of coral reef systems, with the same food and livelihood results for coastal communities.

Should these types of stresses emerge in contexts of weak governance, inequality, multidimensional poverty, histories of violence, and other traditional drivers of conflict, the end result may be a push toward increased local and national instability. In 2019, unusually high rainfall and flooding brought on by climate change triggered the worst locust outbreak in a generation, with different swarms blanketing East Africa, the Middle East, and South Asia. By mid-2020, these locust outbreaks had devastated crops and livestock pastures. In Ethiopia alone, nearly 200,000 hectares of cropland and 1.35 million hectares of pasturelands were destroyed. The overlapping crisis of the COVID-19 pandemic further impacted agricultural production, disrupting supply chains for pesticides and farming equipment and contracting the imports of critical food alternatives. Up to 20 million people in Somalia, Ethiopia, and Kenya could suffer from malnourishment and starvation—a situation that is expected to get worse should historic drought conditions in East Africa continue. In Somalia specifically, this food insecurity and drought are driving additional political instability and civil unrest. Over 1.7 million people have left their homes since the start of 2022, one of the greatest incidents of internal displacement in the world.

Biophysical drivers of change

Changes in land- and sea-use

Human activities have produced profound changes on the planet's landscapes and seascapes, with oftentimes severe implications for the biodiversity and ecological systems they harbor. Forests, wetlands, grasslands, and other land cover types are often destroyed or fragmented for crop production, livestock, forestry, mining, infrastructure, or urban expansion. The resulting degradation of soils and elevated pollution levels can have significant impacts on local and downstream populations. Activities that adversely affect marine habitats include industrial fishing, mining, dredging, pollution, construction, and aquaculture.

Climate change

The bulk of scientific and policy attention on climate change has been focused on abiotic (nonliving) effects, such as higher temperatures, changes in precipitation rates, sea level rise, and the increasing frequency and intensity of extreme weather events. Less examined but still critical are biotic (living) impacts of climate change, driven by temperature and rainfall changes, such as alterations in species distributions, infectious disease patterns, ecosystem stability, and agricultural productivity. In addition, temperature changes and acidification of the oceans and freshwater, driven by rising greenhouse gas emissions, are further degrading these ecosystems. Climate change, happening in the context of other biophysical and socioeconomic drivers of change, is pushing us toward reaching the planet's ecological tipping points, increasing the probability that hazards will be more intense, rapid, or

otherwise surprising than anticipated. Surpassing these tipping points poses even more hazards and surprises.

Invasive species

Plant and animal species introduced by humans outside their native range have a broad range of negative impacts on native biodiversity, ecosystem services, and human wellbeing. Invasive species—particularly those that rapidly consume resources and have no natural predators —are a significant driver of biodiversity loss and one of the most critical threats responsible for the extinction of amphibians, reptiles, and mammals. Expanded trade networks, human mobility, habitat degradation, and climate change are all significant contributors to dramatic increases in invasive species.

Pollution and plastics

Human activity is responsible for increased concentrations of pollutants in the air, water, soil, and the biosphere. In addition to heat-trapping greenhouse gasses, airborne contaminants significantly impact the health of nature and people. Chemical, biological, pharmaceutical, industrial, and radiological contaminants often compromise water and soil quality. In addition, plastic and microplastic waste accumulation across geographies and scales is an acute and growing problem for organisms and ecosystems.

Resource extraction

With increasing human population and per capita consumption, there are growing levels of extraction of living biomass, such as forests, fish, and wildlife. At the same time, the increasing extraction, processing, and transportation of non-renewable resources, including oil, gas, minerals, and metals, is having a profound impact on biodiversity and ecosystems. Degradation of ecosystem functions and biodiversity often occurs due to the cascading effects of extraction, and the depletion of these ecosystem services—chief among them the provision of clean air and freshwater—contributes to many negative impacts on nature and people. Ultimately these impacts, particularly those linked to species extinction, can affect the biosphere's evolutionary trajectory.

Socioeconomic drivers of change

Biophysical drivers of change do not act in isolation but in concert with socioeconomic drivers that together significantly affect the extent of anthropogenic stress on Earth's systems. The numerous drivers can be *demographic*, such as population growth, consumption patterns, and urbanization; *economic*, such as globalization, trade, and inequality; *sociopolitical*, such as legal frameworks, institutions, governance, and corruption; and *cultural*, such as belief systems and values.

Socioeconomic drivers affect and are affected by biophysical and other socioeconomic drivers and can in turn be affected by the environmental stresses they produce.

Environmental change and impacts on nature's contributions to people

Both socioeconomic and biophysical drivers of change affect the climate, oceans, freshwater, soil, and other domains historically conceptualized as "the environment." Crucially, these drivers greatly affect the biosphere—in which humanity is embedded. Understanding the implications of ongoing extinctions, extirpations, population declines, and other manifestations of biosphere instability on security has been historically neglected in scholarship and policymaking, as well as in the doctrine and architecture of national security communities worldwide.

When ecosystems are degraded or disrupted, important ecological processes are often impaired—including those processes that are foundational to the health and wellbeing of individuals, communities, and societies. Designated nature's contributions to people (NCPs) by IPBES, these processes include the material benefits people accrue from ecosystems, such as food, water, energy, and timber; the nonmaterial benefits, such as inspiration and psychological well-being; and the regulation or support of other ecosystem processes, such as climate regulation, water purification, and pest control. IPBES identifies eighteen NCPs (Table 1).

The socioeconomic and biophysical factors outlined above combine to drive environmental change, biodiversity loss, and ecosystem degradation, which in turn compromising nature's contributions to people. IPBES notes that most of the NCPs are not fully replaceable, with some of the contributions of nature being irreplaceable. Understanding the security implications of environmental change must include a robust analysis of the status and trends for each NCP. In its "2019 Global Assessment Report of Biodiversity and Ecosystem Services," IPBES reported that the overwhelming majority of NCPs showed global declines while also assessing regional reductions in NCPs, particularly at continental scales. Analysis of how and where NCP declines may manifest as security outcomes is crucial for anticipating and mitigating the adverse effects of their continued degradation.

Table 1: Nature's contribution to people (by IPBES)

Material NCP	Non-material NCP	Regulatory NCP
Sources of energy (NCP11)	Learning and inspiration (NCP15)	Habitat creation and maintenance (NCP1)
Sources of food and feed (NCP12)	Physical and psychological experiences (NCP16)	Pollination and seed dispersal (NCP2)
Sources for materials and assistance (NCP13)	Supporting identities (NCP17)	Regulation of air quality (NCP3)
Medicinal, biochemical, and genetic resources (NCP14)		Regulation of climate (NCP4)
		Regulation of ocean acidification (NCP5)
		Regulation of freshwater quantity (NCP6)
		Regulation of freshwater quality (NCP7)
		Regulation of soil quality (NCP8)
		Regulation of hazards and extreme events (NCP9)
		Regulation of detrimental organisms and biophysical processes (NCP10)
	Maintenance of options (NCP18)	

Security risks and outcomes

Individuals and societies may experience harm from environmental change that threatens their security directly, such as death, injury, or loss of shelter, or indirectly, such as the impairment or collapse of systems and institutions that support the health and wellbeing of people and their communities. Some outcomes will be acute and target particular individuals, communities, sectors, or regions, while others will be diffuse and multisectoral.

The degree to which environmental change and ecological strains evolve into human, national, and global security risks and outcomes will depend to a large extent on the particular social, political, and economic context in which those changes occur. While the assumption should not be made that populations experiencing hardship and suffering as a result of environmental change and nature loss will automatically turn to conflict and violence, the presence of existing conflict drivers–including low adaptive capacities, wide income and gender inequalities, political marginalization, widespread poverty, weak governance, histories of instability, and high debt burden–increases the risk that the degradation of NCPs pushes a society toward instability.

Risks to human, national, and global security

Human security is people-centered, focusing on protecting individuals and communities from harm. Environmental change is usually experienced unequally, with those already disadvantaged—such as women, youth, elderly, disabled, and the poor—experiencing repercussions to a greater extent. Some possible human security outcomes from environmental change include water stress; food stress; economic insecurity; loss of livelihoods and labor; negative impacts on human health; adverse effects on education; increased gender inequality; loss of shelter, property, or land; negative impacts on human mobility; increased violence; and increased harm from disasters.

These human security outcomes can be devastating at the individual and household level. However, should they extend across a broad swath of society, and should governments find themselves unable or unwilling to address them, these outcomes can generate grievances and tensions that become crucial vectors for political instability, community breakdown, and a fraying of the social contract between governments and their citizens. Declining agricultural yields linked to poor soils, collapsing pollinators or insect infestations will undermine livelihoods, threaten supply chains, and heighten food insecurity. As with climate stressors, this could lead to increased competition for land and water; forced migration; unemployment; and the increased recruitment of the underemployed and marginalized–particularly young men–into criminal or terrorist activities. In a world of porous borders and global food supply chains, national security outcomes could quickly spill over into neighboring countries and trading partners. The emergence of zoonotic diseases linked to ecosystem degradation and land-use change offers another all-too familiar risk to human, national and global security.

Points of intervention

Humans have agency and are not powerless with respect to ecological trends underway. Points of intervention are those policies and actions available to prevent or impede the emergence of adverse security outcomes linked to environmental change, and they appear across the nature-security nexus. Some important policy initiatives are underway, such as the proposed International Partnership for People and Places in the US, which aims to increase investments in conservation in the most vulnerable parts of the world, in part to address national security, food security, health, and stability implications of ecosystem degradation. The Nature-Security Nexus framework makes clear that expanding and strengthening such policies and programs are vital for human, national, and global security, in addition to the positive effects they have on biodiversity and ecosystems. Further, elucidating effective points of intervention is itself a primary goal of the framework.

Mitigating drivers of change

The most straightforward way to avoid adverse security outcomes from ecological stress is to mitigate the drivers of change in the first place. Policies should focus these efforts on understanding both sets of biophysical and socioeconomic stressors and their interactions. Although some biophysical drivers, such as climate change and resource extraction, have been incorporated into security discourse, others, such as habitat change, invasive species, and pollution, must be equally considered. Crucially, mitigation efforts focusing solely on biophysical stressors are unlikely to be sufficient unless socioeconomic factors are also addressed. Mitigation-only strategies are also likely to be insufficient.

Bolstering nature's contributions to people

Without intervention, risks to individuals and societies increase as NCPs degrade. Declines in some NCPs, such as water, energy, and food sources, have relatively clear security implications. Reductions in other NCPs, such as pollination, seed dispersal, and spiritual services, have fewer clear ramifications for security but are almost certainly too important to overlook. Finally, some NCPs, such as climate and air quality regulation, are so central to humanity that any significant decline in them embodies existential risk. More work is urgently needed to understand and address the NCP-security pathways.

Reducing vulnerability to ecological stress

Preventing or offsetting adverse security outcomes rendered by ecological stress can also be addressed through political, social, and economic interventions. Policies focused on reducing vulnerabilities to known and anticipated environmental stressors are likely to be among the most effective in the short-term and regional scales. In addition, inclusive nature-based solutions to reduce vulnerability are likely more effective and less expensive than traditional engineering approaches.

The need for a nature-security nexus framework

Events of recent years have shown that nature and security are inextricably linked. Biodiversity loss and climate change represent but two sets of stresses that have profound implications for people and societies. Therefore, a nature-security nexus research agenda is needed to:

- Provide a holistic understanding of the links between natural world stresses and human, national, and global security
- Better understand the pathways from the degradation of specific NCPs to security outcomes: how a loss of pollinators and seed dispersers, reductions in soil quality, and ocean acidification, to name just three, could result – or are already impacting – human, national and global security

Attachment 2: Conceptual Framework

- Identify particular geographies and sectors of concern
- Prioritize and act upon entry points and strategies to offset, prevent, or resolve adverse security outcomes, and
- Promote and advocate for actions on and investments in nature protection and restoration as a means of preventing and resolving conflict.

Attachment 4: Background note on Global Commission on Nature and Security

A Global Commission on Nature and Security

Background information on commissions and their purposes and structures

Overview

A Global Commission on Nature and Security could raise the profile and expand the understanding of how security risks are directly and indirectly linked to nature loss, ultimately leading to nature being **embraced as a foundation for human, national, and global security.** The commission would be the home for establishing the intellectual basis of the nature-security nexus, helping to create partnerships, incorporate nature loss into national, regional, and global security risk analyses, and unlocking additional financing for nature-based solutions. This brief gives and overview of the purpose, structure, and characteristics of past commissions, to facilitate the development of a Global Commission on Nature and Security.

Purpose of the commissions

Commissions, whether in global environmental governance or other fields, often serve the following purposes:

- Act as a **convener** of high-level political or public figures, philanthropists, the research and practitioner community, and other relevant stakeholders to spur ideas, change, and dialogues advancing a common agenda.

  For instance, the **Global Ocean Commission** was convened by a group of former high-level politicians to gather public figures from all relevant sectors and countries to exchange on issues relating to the governance of the high seas. Similarly, the **Global Commission on the Future of Work** was convened by the International Labour Organization to create opportunities of dialogue on how to achieve a future of decent and sustainable works for all was convened by the International Labour Organization to create opportunities of dialogue on how to achieve a future of decent and sustainable works for all.
- Act as an **advocator** for a specific issue or agenda that is commonly overlooked or underdiscussed; or an issue or agenda that is emerging which opens the opportunity for agenda-setting and narrative creation.

  For instance, the **Global Commission to End the Diagnostic Odyssey for Children with a Rare Disease (Rare Disease Global Commission)** was founded by a multi-disciplinary group of experts to call attention to medical research funding and technological innovation in pediatric rare diseases' diagnosis, prevention, and treatment. Similarly, the **Global Commission on Adaptation** was convened by a group of developed and developing countries alike to raise the profile of adaptation in global climate governance

was convened by a group of developed and developing countries alike to raise the profile of adaptation in global climate governance.

- Act as an **innovative solution incubator and knowledge producer** to conduct research on the issue area it is focusing on and propose new, actionable, and practical ideas and pathways being a catalyst to help bring tangible solutions or outcomes.

For instance, the **Global Commission on Adaptation** produced numerous knowledge products and guidance on all thematic areas of adaptation, and funds research by third-party groups to conduct targeted research on adaptation. Alternatively, the commission could conduct its own research and produce knowledge products based on its exchanges, dialogues, and discussions. The **Global Commission on International Migration**, convened by the International Organization for Migration conducted research on the intersectional and interrelated linkages between migration and other areas, such as trade, sustainable development, media, human security, and international cooperation., convened by the International Organization for Migration conducts research on the intersectional and interrelated linkages between migration and other areas, such as trade, sustainable development, media, human security, and international cooperation.

- Act as a **knowledge disseminator** to share its knowledge and insights from not only the commission's own work, but also from other organizations through maintaining a library of relevant resources and a centre for knowledge-sharing – in order to achieve the aforementioned aims of the commission.

The **Global Commission on HIV and the Law** maintains a e-library of legal cases, policy briefs, capacity-building materials, research reports, and regional case studies for the benefits of public health policy decision-makers, lawyers, and medical practitioners. maintains a e-library of legal cases, policy briefs, capacity-building materials, research reports, and regional case studies for the benefits of public health policy decision-makers, lawyers, and medical practitioners.

- Act as a **philanthropic connector** for underfunded topics to raise the capital and resources required to implement the solutions envisioned by the commission.

The **High-Level Panel for a Sustainable Ocean Economy**'s advisory network consists of many private sector companies that are well connected to provide the necessary financing and resources for its initiatives' advisory network consists of many private sector companies and foundations that are well connected to provide the necessary financing and resources for its initiatives.

Structure of commissions

Common themes are seen across commission structures, which often include the following components:

- **The commissioners or members of the commission**: Usually consist of high-level political or public figures, including heads of states and leaders of international

organizations or NGOs. They may not be involved in all the activities of the commission, but their representatives or delegates are usually involved in the key discussions, brainstorming, or validation of the commission's outputs. This group is the core to the commission structure as the entire mechanism rely on this group to set strategic directions and their network and profile to get the right people, resources, and interests in place in support of the commission's core objectives.

- **An advisory panel, committee, or network**: In science-policy interface settings, the advisory group's functions are to provide technical, scientific, and policy advice to the core commissioner group. Members of the advisory panel could include key subject area experts, notable scientific leaders and researchers, relevant members of the private sector and civil society organizations. A lot of commissions might involve key business leaders or companies in their advisory committee to increase the networking and philanthropic opportunities to support its objectives. This is also the group that would be tasked with the majority of the research outputs (or at least, providing key inputs into and reviewing the research outputs of the commission).
- **A secretariat**: A secretariat to support the administrative, research, communications, and daily operations of the commission.

Common characteristics for success

1. Positioning as a catalyst for practical and tangible actions. **Identifying a common problem** or agenda that the commission intends to solve or bring awareness to and **setting the goal as solving the identified issue with actionable solutions.**
2. **Having a clear purpose and objective that resonate with the public or target audiences**. With a common problem or agenda, the commission will need to have a clear idea on the pathway towards achieving the outcome (e.g., solving the issue). This **pathway should be developed in a co-creation process with the commissioners and the advisory group** that would guide the commission's work and its outputs.
3. **Engaging the right people for the commission**. The commissioners are the core of a commission– and ensuring that they (or their delegate) are committed to the common agenda and are willing to contribute positively, providing time and resources, and leveraging on their network is crucial for the long-term success of the commission.
4. **Creating a business case for private sector engagement**. Involving businesses and other private sector stakeholders will be crucial for a commission to mobilize resources and bring different perspectives to its work. **Convincing these private sector actors would usually require a business case on 'what's in it for them'?** This could be networking opportunities, or fulfilling their environmental, social, and governance (ESG) or social consciousness commitments.
5. **Responding to evolving needs. Determining what to do after the commission has fulfilled its intended commitment of outputs** is important for the longevity of the initiative. Having an iterative review process that would review, assess, and realign the commission's objectives and mission would be important for responding to "wicked problems" and their cascading impacts, and so to respond to the evolving needs of the target audiences.

Attachment 5: NSI Talking Points for room member outreach

Natural Security Initiative
Talking points
September 16, 2022

TOPLINES:

- The Natural Security Initiative (NSI) is committed to elevating the security risks that are directly and indirectly linked to nature loss. In doing so, it aims to unlock new policies, programs, and sources of financing for nature and reframe how nature is considered within security spaces to better protect people in the places where they live.
- The loss of nature is a profound threat to human, national, and global security around the world—and climate change is only making things worse.
- Most immediately, the degradation of key ecosystem services and loss of biodiversity is causing communities to struggle in meeting their basic needs and maintaining their livelihoods.
- Now and over time, the combined impacts of the nature and climate crises threaten to exacerbate tensions around resource access, increased migration within and across borders, and the emergence and spread of diseases. Without urgent interventions to address accelerating nature loss, these threats will continue to undermine political stability and contribute to conflict.
- The connections between climate change and security have gained important attention over the last decade. But the security dimensions of nature loss, despite the magnitude of its risks, are far less understood, particularly within traditional security communities.
- The collective finance that is currently available for nature is grossly insufficient, with an annual gap of over $700 billion to reverse the biodiversity crisis by 2030 and meet our conservation and restoration needs.
- Mainstreaming and mitigating nature-related security threats will require a multi-faceted approach that includes:
    - Incorporating nature considerations into the threat analyses, decision-making processes, and operations of traditional security communities
    - Scaling up nature-based solutions that benefit biodiversity and ecosystems, mitigate, and adapt to climate change, and support communities
    - Protecting, restoring, and sustainably managing biodiversity, ecosystems, and their services

IF ASKED:

What is the NSI?

- The NSI was created in 2021 by the Center for American Progress (CAP) and International Institute for Sustainable Development (IISD) through the 17 Rooms Global Flagship, organized by the Brookings Institution and the Rockefeller Foundation. Its guiding objective is for **nature to be embraced as a foundation for human, national, and global security.**
- It is an ongoing initiative aiming to establish the intellectual basis of the nature-security nexus, shape and raise the profile of the global dialogue around nature and security, engage new stakeholders, inspire action, and ultimately unlock new policies, programs, and sources of financing to scale up nature-based solutions and conservation.

Attachment 5: NSI Talking Points for room member outreach

How are nature loss, climate change, and security related?

- Nature is in a state of urgent crisis. Declines in biodiversity and the degradation of ecosystems are accelerating, driven by unsustainable resource extraction, demographic pressures, pollution, land and sea-use change, invasive species, and climate change.
- Within a context of weak governance, multidimensional poverty and existing fragility, these dramatic changes—by undermining livelihoods, compromising human health, disrupting economies, increasing resource competition, and heightening food and water insecurity - are posing a growing threat to human security, and if unaddressed could exacerbate drivers of national and global conflict and security.
- Increased action to protect, restore and sustainably manage biodiversity, ecosystems, and the services they provide to people will be critical to preventing and resolving conflicts and promoting peace.
- Recent events are a testament to the interrelationship between nature, climate, and security. For example:
    - In 2019, unusually high rainfall and flooding brought on by climate change triggered the worst locust outbreak in a generation, with different swarms blanketing East Africa, the Middle East, and South Asia. By mid-2020, these locust outbreaks had devastated crops and livestock pastures. In Ethiopia alone, nearly 200,000 hectares of cropland and 1.35 million hectares of pasturelands were destroyed. The overlapping COVID-19 crisis further impacted agricultural production, disrupting pesticide and farming equipment supply chains, and contracted the imports of critical food alternatives. Today, more than 20 million people in Somalia, Ethiopia, and Kenya are suffering from malnourishment and starvation - a situation that is expected to worsen should historic drought conditions in East Africa continue. In Somalia, food insecurity is driving additional political instability and civil unrest. Over 1.7 million people have left their homes since the start of 2022, one of the greatest incidents of internal displacement in the world.
    - Habitat destruction - driven by human activities like logging and agricultural expansion - disrupts ecosystem composition and wildlife populations. Species are crowded into smaller areas and the contact between people and wildlife increases, creating new opportunities for zoonotic diseases to spread. Wildlife trade and trafficking makes this risk of exposure to zoonotic diseases more likely. This was put in stark relief by the spread of COVID-19, which is thought to have originated in bats and transmitted through a wet market in Wuhan, China. Now almost three years later, the COVID-19 pandemic has killed over 6.5 million people worldwide and devastated global economies. The management of the pandemic, or lack thereof, by political leadership has fueled additional civil unrest, with the Institute for Economics and Peace recording some 5,000 pandemic-related violent events between January 2020 and April 2021.

How can I get involved in the NSI?

- There are a number of different ways that you or your affiliated institution can help champion and advance the work of the NSI:
    - Attend or take part in events at upcoming multilateral conferences where the issues discussed are central to the work of the NSI, including multilateral environmental agreements such as the UNFCCC, CBD, UNCCD, among others, and security gatherings such as the Halifax International Security Forum.

Attachment 5: NSI Talking Points for room member outreach

    - Make connections between the NSI and other experts working in this space, to build awareness of the nature-security network, and broaden the network of interested stakeholders
    - Provide funding to support the next phase of the NSI
- Please contact one of the NSI steering committee members for more information:
    - Anne Christianson, Director of International Climate Policy, Center for American Progress | achristianson@americanprogress.org; Elise Gout, Senior Policy Analyst, Center for American Progress | egout@americanprogress.org
    - Ben Simmons, Director of Sustainable Infrastructure and Director of the Nature-Based Infrastructure Global Resource Centre, International Institute for Sustainable Development | bsimmons@iisd.org; Anika Terton, Senior Policy Advisor, Resilience Program, International Institute for Sustainable Development | aterton@iisd.ca; Alec Crawford, Director Nature for Resilience, IISD | acrawford@iisd.ca