The Security-Stability-Sustainability Nexus

Environmental Considerations

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The mission of the Army Environmental Policy Institute is to assist the Army Secretariat in the development of proactive policies and strategies to address environmental issues that may have significant future impacts on the Army.

- **Visualize** · Scanning the horizon for environmental issues and forecasting probable impact on the Army in the future
- **Analyze** · Gathering the best environmental intelligence from government, industry and academia or develop internally
- **Inform** · Providing sound recommendations that Army leaders can incorporate into planning and policy making decisions
- **Act** · Building a bridge between policy and implementation through pilot programs, strategic plans, policy recommendations
America is now threatened less by conquering states than we are by failing ones” (National Security Strategy, 2002)
Terms

Security – freedom from fear, want, and deprivation (1)

Stability – capacity to manage effectively and peacefully and adapt to change, while addressing structural underlying factors associated with instability and external stabilizers (2)

Sustainability – capacity to meet the needs of the present without compromising the needs of future generations (3)

Environment – complex of physical, chemical, biotic factors that act upon an organism or ecological community at any point in the life cycle and ultimately determine its form and survival (4)

The Nexus Articulated

“Humanity will not enjoy security without development, it will not enjoy development without security, and it will not enjoy either without respect for human rights” … “all of our efforts to defeat poverty and pursue sustainable development will be in vain if environmental degradation and natural resource depletion continue unabated.”

Kofi Annan

United Nations Secretary-General’s Report
2005 World Summit

Source: Human and Environmental Security – An Agenda for Change, ed. By Dodds and Pippard, 2005
The Nexus Depicted
Pillar Framework

Regional & State Stability

Social
Communities

Economic
Development

Institutional
Governance

Environmental
Natural Resources

Traditional & Non-Traditional Security

STABILITY

SUSTAINABILITY
[Dimensions or Pillars]

SECURITY

Source: Adapted from Whelan, 2008
Whole of Government “Plus” Framework
the Means

Major Sectors of National Power (3Ds)

Defense
Dept of Defense

Diplomacy
Dept of State

Development
US Agency for International Development

Other Departments
e.g., Energy, Agriculture, Commerce

Whole of Government Integration

Whole of Government Plus Framework – the Means

External Actors

Donor Agencies

International Government Organizations

Non-Government Organizations

Private Organizations

Source: Hearne, Pre-publishable Paper Submitted to George Marshall Center, 2008 [Adapted from Miklaucic and Baltazar, 2006]
On Future Threats: [next 20+ years] “certain pressures – population, resource, energy, climate, economic, and environmental – could combine with rapid cultural, social, and technological change to produce new sources of deprivation, rage and instability”

On Engagement: “the military is in a supporting role to civilian agencies “

On Resourcing: “American civilian institutions of diplomacy & development have been chronically undermanned and underfunded for far too long”

On Integration: “the challenge we face is how best to integrate these tools of statecraft with the military, international partners, and the private sector”. 

"Climate change, energy, global health and environmental security are often intertwined, and while not traditionally viewed as "threats" to U.S. national security, they will affect Americans in major ways."

"... the greatest danger may arise from the convergence and interaction of many stresses simultaneously ... such a complex and unprecedented syndrome of problems could cause outright state failure, or weaken pivotal states counted on to act as anchors of regional stability."

Source: Annual Threat Assessment of Intelligence Community for the Senate Select Committee on Intelligence, Feb 12, 2009
Instability and Fragile States (FM 3-0)
Trends Affecting Ground Force Operations

- Globalization – underscores disparities that can spawn instability
- Technology – advanced technology available to unstable states
- Demographic Changes – population growth in Africa
- Urbanization – overcrowded megacities near geological fault lines
- Resource Demand – competition for water, gas, and oil – are finite
- Climate Change/Natural Disasters – destabilizing, migration, disease
- Proliferation Weapons of Mass Destruction - catastrophic attacks
- Failed or Failing States – safe havens for adversaries

“A fragile state is a country that suffers from institutional weakness serious enough to threaten the stability of the central government”

Systems Framework for Instability

Risk factors for Instability

External
- Bad regional neighborhood
- Geopolitical competition
- Organized crime and terrorist networks
- Conflict financing systems
- Climate change

Internal
- Low GDP/capita
- Economic decline
- History of conflict
- Natural resource dependency
- Horizontal inequality
- Demographic patterns
- HIV/AIDS

Shocks
- Natural disasters
- Global/regional financial crisis
- Commodity price shocks
- Assassinations

Country capacity and resilience

State Capacity
- Security
- Macro-economic fundamentals
- Public goods provision

Civil Society
- Traditional/religious/interest groups

Constraints on state power
- Political institutions
- Legal/economic institutions
- Executive checks & balances

Social Contract
- Leadership
- Legitimacy
- Expectations vs. delivery

External stabilizing factors

Security Guarantees
- Bilateral
- Multilateral

Political Relationships
- Bilateral diplomatic ties
- Regional organization

Economic Associations
- Open external markets
- High quality FDI
- Remittances

Feed-back: Violent Conflict, Political Instability, Loss of Territorial Control, Economic Crisis

Source: UK, 2005 – An International Strategy to Manage Risks of Instability and Improve Crisis Response
### Indices of State Fragility

**Failed States**

- Somalia
- Sudan
- DRC
- Zimbabwe
- Afghanistan
- Iraq

**Critically Weak States**

- Afghanistan
- Iraq

**States to Watch**

- Somalia
- Sudan
- DRC
- Zimbabwe

Source: Foreign Policy and Fund for Peace Conflict Assessment System Tool (CAST), 2008

Source: Rice and Patrick, 2008 – Reproduced with Brookings Institution Permission
Africa - Most Vulnerable

- World’s **hottest** continent and the 2\(^{nd}\) **driest**
- 20 of 30 countries - **fastest growing populations**
- By **2050** Africa will have the fastest growth rate in the world – **twice rate of any other region**
- Rapid **urbanization** – highest rate for decades
- World’s highest rate of **deforestation**
- Land degradation leading to **desertification**
- Estimated 65% of **agricultural land is degraded**
- Emits **only 4% of global CO\(_2\) emissions**
- African **biodiversity** – opportunity for proactive intervention to address decline and hotspots

# Comparison of Indicator Sets and Indices

Notionally Represented by Sustainability Pillar

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Source: Hearne, Pre-publishable Paper Submitted to George C. Marshall Center, 2008
Environmental Sustainability & State Fragility
NATO Advanced Research Workshop Presentation – June 2007

Correlation Coefficient (r) = 0.60
Number of Countries (n) = 138

Failed State Index (FSI)

Environmental Sustainability Index (ESI)

High Stability & Sustainability

Low Stability & Sustainability

State Weakness & Environmental Performance

Source: Hearne, Preliminary Analysis – Working Document in STATA, April 2009
Non-Integrating Gap: Area envisioned to be removed from the politically stable, economically integrated countries of globalization’s functioning “core”; characterized by repression, poverty, disease, and chronic conflict.

Response to Instability and Fragile States

The Fragile States & Stability Operations Frameworks (FM 3-07)

Intervention Phases:

- **Initial Response**
  - Stability Tasks
- **Stability Tasks**
- **Post-Conflict Reconstruction, Stabilization**
- **Long-Term Capacity Building**
- **Fostering Sustainability**
- **Transformation**
  - Crisis
  - Vulnerable
  - Failed
  - Failing
  - Recovering

Violent Conflict → Normalization

Stability Operations - Basic Human Needs

“Stability Operations encompass various military missions, tasks and activities conducted outside the United States in coordination with other instruments of national power to maintain or re-establish a safe and secure environment, and to provide essential government services, emergency infrastructure reconstruction, and humanitarian relief.” [Source: Joint Pub 3-0]

Core US military mission comparable to combat operations

- Conducted to help establish/maintain order across the full spectrum of operations - peace through conflict
- Best performed by indigenous, foreign, or civilian professionals but military must be prepared to perform tasks when civil authorities cannot
- SOs are typically lengthy endeavors
Importance of Environment in Stability Ops
Addressing Basic Human Needs

Physiological/Survival

- Clean air and fresh water
- Sanitation and waste disposal
- Identifying disease vectors and vaccines
- Uncontaminated food supply

AEPI Foresight Bulletin
Stability Operations (Aug 06)
**Basic Services & Insurgency - Baghdad**

Visible Progress \[ \int \text{Local} \left( \frac{\text{Sewer} + \text{Water} + \text{Electricity} + \text{Garbage}}{\text{Employment} + \text{Governance}} \right) \] = Deny Insurgent Influence

### Sources:
Addressing Basic Human Needs

Maslow’s Hierarchy

- **Physiological**: Physical survival needs: water, food, shelter, warmth, sleep, etc.
- **Safety/Security**: Physical safety, economic security, freedom from threats
- **Social (Belonging)**: Acceptance, be part of a group, identification with successful team
- **Ego (Esteem)**: Important projects, recognition from others, prestige and status
- **Self-Actualization**: Challenging projects, opportunities for innovation and creativity, learning and creating at a high level

Sources: Adapted from Maslow, 1943; Butts as reported by Damonte, 2006
Stability Operations - The Bottom Line
Promote Stability and Foster Sustainability

Combat [kinetic] operations win the battle …

… but addressing human needs helps win the war

Source: Leppert, Sustainability lecture on RC-East Agribusiness Development Teams, Jun 08
Consider environmental impacts early and often:
- Protect Soldier health and safety - minimize risk
- Gain tactical and strategic benefit in meeting objectives
- Improve community relations, e.g., sewage, water, trash

Recommendations include:
- Fill gaps in policy/guidance – DoD-wide policy
- Improve pre-deployment/field environmental training
- Invest in skilled personnel and innovative technologies
- Integrate strategic environmental considerations in plans

Encourage Sustainable Environmental Practices:
- Reduced logistics tail - fewer convoys and Soldiers at risk
- Safer and more efficient base camps - less waste
- More stable and sustainable country upon re-deployment

"Sustainability is a national security imperative in a world of decreasing natural resources and increasing demand. The Army is building green, buying green, and going green in order to ensure that soldiers have the resources they need to accomplish their mission in the United States and globally"  
(Pete Geren, Secretary of the Army)

"Triple bottom line" Plus  
Mission, Environment, Communities + Economy

Post-Conflict Environmental Assessments
United Nations Environmental Programme

UNEP in Afghanistan:
• Phase 1 (2000-2003) – Assessment
• Phase 2 (2003-2007) – Capacity Building
• Phase 3 (2008-2010) – Implementation

Reported UNEP Achievements:
• Environmental Institutions and Coordination
• Environmental Law and Policy
• Environmental Impact Assessment and Pollution Control
• Environmental Information and Education
• Community-Based Natural Resources Management
• Network of Protected Areas
• Multilateral Environmental Agreements (MEAs)

Environmental Security Discourse
Contending Pathways – Cooperation vs Conflict

Environment as a Peacebuilding Tool
Promoting Regional Cooperation/Engagement

UNEP Report: *From Conflict to Peacebuilding*

Natural resources and the environment can be involved in all phase of the conflict cycle … cooperation over management of natural resources is investment in conflict prevention … provides new opportunities for peacebuilding


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**Homer-Dixon Causal Model**

Source: Adapted from Homer Dixon, *Environment, Scarcity, and Violence*, 1999

**NATO: Env. Change & Security**

Source: NATO CCMS Final Report No. 232, 1999
The diagram illustrates the Six-Phase Planning Construct (Phase 0 to V), focusing on the importance of "Phase 0"—Shaping/Engagement. It outlines phases from OPLAN activation to OPLAN termination, with activities ranging from Shaping to Stabilizing.

Key phases include:
- Phase 0: Notional Phases
  - OPLAN approval
  - Shaping
- Phase I: Seize the Initiative Activities
- Phase II: Dominating Activities
- Phase III: Stabilizing Activities
- Phase IV: Enabling Civil Authority Activities
- Phase V: Shape

The diagram also highlights Theater Shaping and Global Shaping, with activities such as shaping, deterring, and seizing the initiative.

Source: Joint Publication 3-0 – Joint Operations, 2006
Proactive “Phase 0” Engagement
Environmental/Sustainability Initiatives

- Provide a non-threatening and constructive avenue for mil-to-mil and other engagement activities
- Environmental and Sustainability activities help to build stable and secure societies
- Military sponsored environmental and sustainability-related activities build important relationships between the military and civil society – increasing military legitimacy and credibility
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