

Afghanistan: An Environmental Security Case Study in Climate Change and Security



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Environmental Security Not -New

“ ...national security is not just about fighting forces and weaponry. It relates to watersheds, croplands, forests, genetic resources, climate and other factors that rarely figure in the minds of military experts and political leaders,”

Norman Myers, *The Environmentalist*, 1986



Environmental Security – Defense and Environmental Communities Together

- A Critical function of government is to provide peace and security for its people, i.e. providing the common defense
- The military are required, as part of their security mission, to analyze present and future threats,
- Without a sustainable environmental setting that provides for basic human needs- no stable peace can exist, and therefore -
- Environmental Security is a component of defense/security policy assessment – A significant topic of National Interest of Every Nation, finally
- Climate Change is impacting Security and Peace today, and creating grave concerns for the future

Environmental Security Analysis

F= Awful
 D= Bad
 C= Average
 B= Good
 A= Good and improving

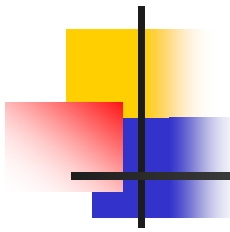
	RNI %	Fertility rate	Water Data	Arable land	Forest Data	Crops	ES Risk
Sudan	2.9	6.0	F	F	F	F	Extreme
Iraq	3.1	5.5	D	D	F	D	High
Somalia	2.5	6.3	F	F	F	F	Extreme
Zimbabwe	1.5	3.7	F	D	F-	F	High
Chad	3.1	6.6	F	F	F	F	Extreme
Ivory Coast	2.3	5.4	F	C	NA	F	High
Dem Rep of the Congo	3.2	7.2	F	C	C	F	High
Afghanistan	2.7	6.9	F	F	F-	F	Extreme
Guinea	2.7	6.2	F	D	D	F	High
Central Africa Republic	2.7	5.4	F	C	C	F	High
Haiti	2.5	5.7	F	F-	F-	F	Extreme
U.S.	0.6	2.0	A	B	B	A	Low
France	0.6	1.9	A	A	A	A	low

population data is 1995 based



Afghanistan Environmental Setting

- 23.8 million, 12.3 million males -44m by 2025
 - 3.88 % growth rate, 3rd in the world
 - 2.7 % RNI
 - 6.90 fertility rate, 8th in the world
 - Life expectancy -43.1 years
 - Median age – 18 years
 - Infant mortality rate -147
- 13 % access to safe drinking water
 - 39L/day/person (minimum std is 50)
- 21% access to sanitation in 1970, 12% today
- Management of solid and hazardous waste does NOT exist.
- Less than 3 % forest (rate data not available once forests are gone)
- Percent arable lands – 12 % including 3 % in forests
 - Food production dropped by 40% 1995 to 2000
- Air Quality - awful



Impact of Climate Change in Afghanistan; or, just when you think it can't get any worse, it does

- Temperature increase 1-2 degrees C, 1970-2004, projected to increase by more than 4 degrees by 2090
- Impact on snow and ice in Hindu Kush extreme
- Precipitation rates reduced by 5-20 %
- Runoff up to 40% less than 1980-1999 by end of this century
- Adaptation and mitigation potential, near zero
- Overall vulnerability to climate change very high

In real world terms – Disease, drought, famine,



Summary

- Defense and security is a much larger issue than wielding military power
- Protecting peace means assuring regional stability, therefore
- Environmental degradation is a major threat to peace and stability in the world

- Peace is not the absence of war, but the existence of stable communities of people who have their basic human needs satisfied

- Climate Change is/will make currently stressed environments worse (the failed states) and threatens currently stable regions. Afghanistan is just one example.

One picture is worth a thousand words

