

Non-Traditional Threats: Climate, Crime, Conflict and Migration

Presentation to the Tunisian National Defense Seminar

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Marcus D. King, PhD

John O Rankin Associate Professor

Director, Master of Arts in International Affairs Program

George Washington University

Climate Security: Three Focal Areas



I. Mitigation



II. Adaptation



III. Consequence Management

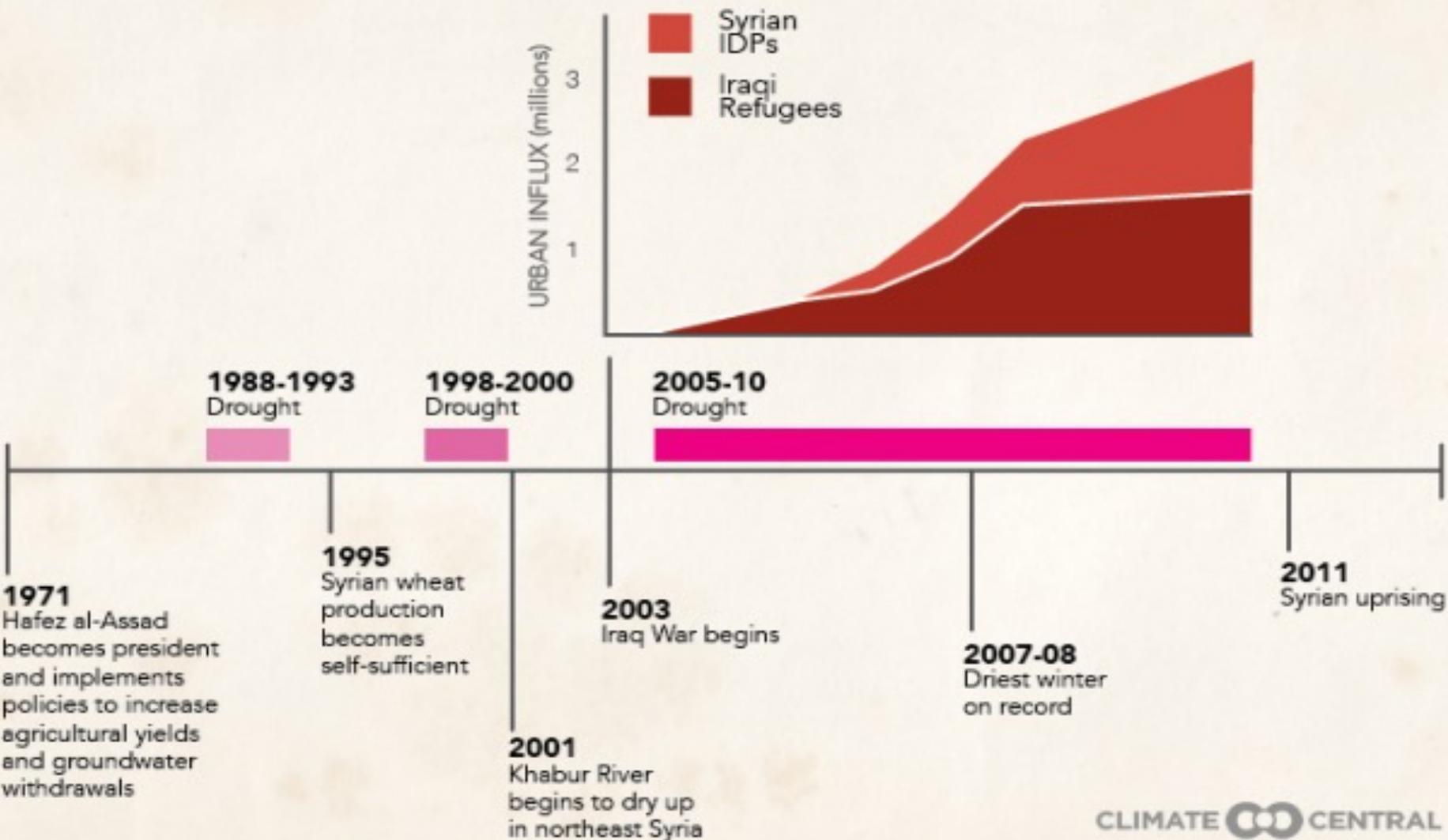


Climate Security

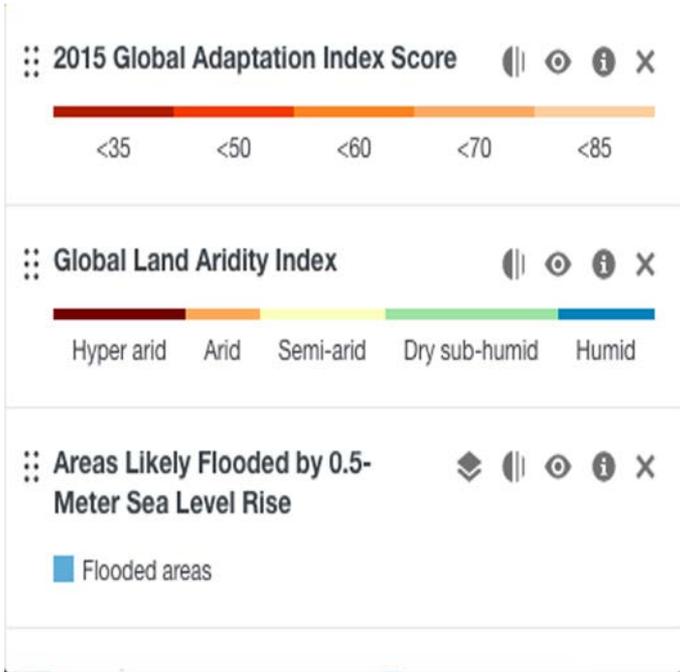
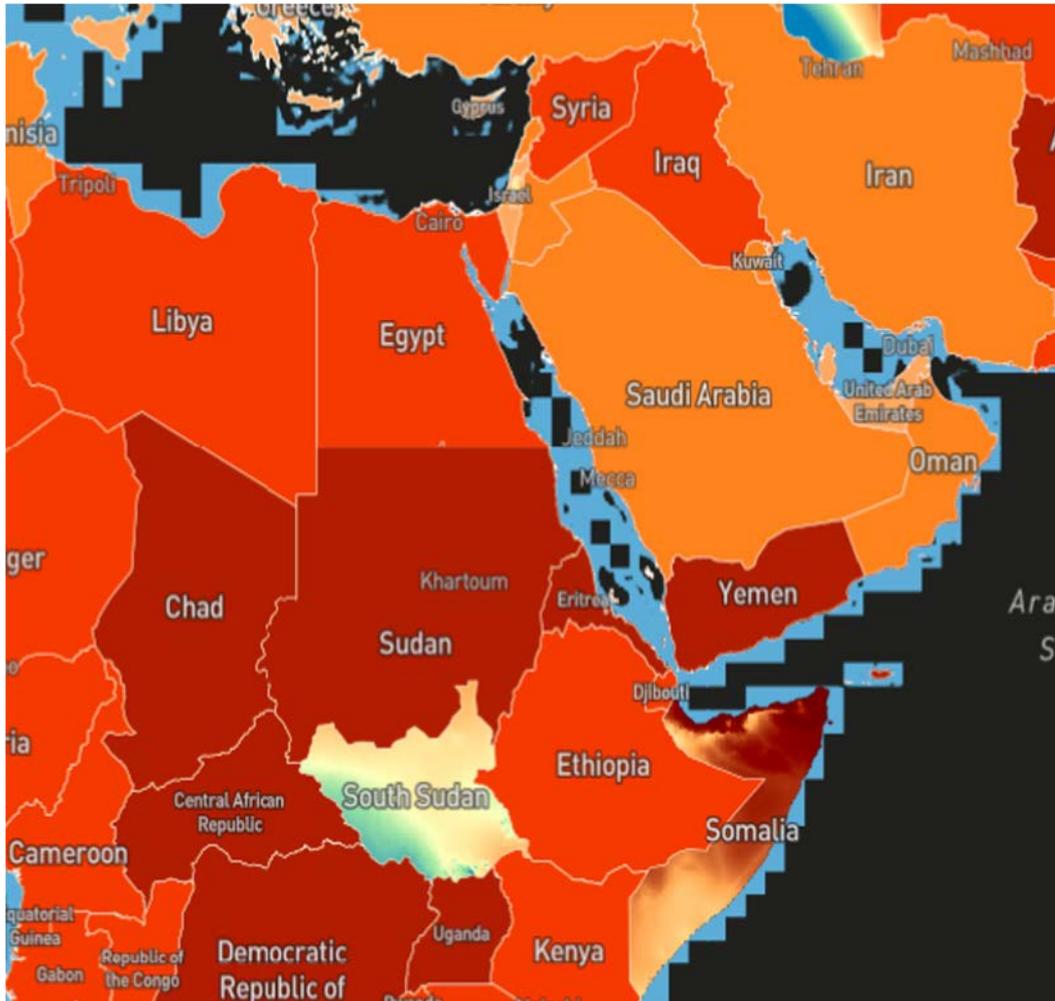
- Refers to the security risks induced, directly or indirectly, by changes in climate patterns.
- Implies that climate change can pose risks to national, international, ecological, and human security.
- Implies that climate-related security risks have far-reaching implications for the management of peace and security.

A Syria Timeline: Policy, Drought and Conflict:

A series of social and climate factors became confounding elements that contributed to the uprising in Syria.



Cumulative Regional Impacts of Climate Change





The ND-GAIN Country Index summarizes a country's vulnerability to climate change in combination with its readiness to improve resilience.

It aims to help businesses and the public sector better prioritize investments

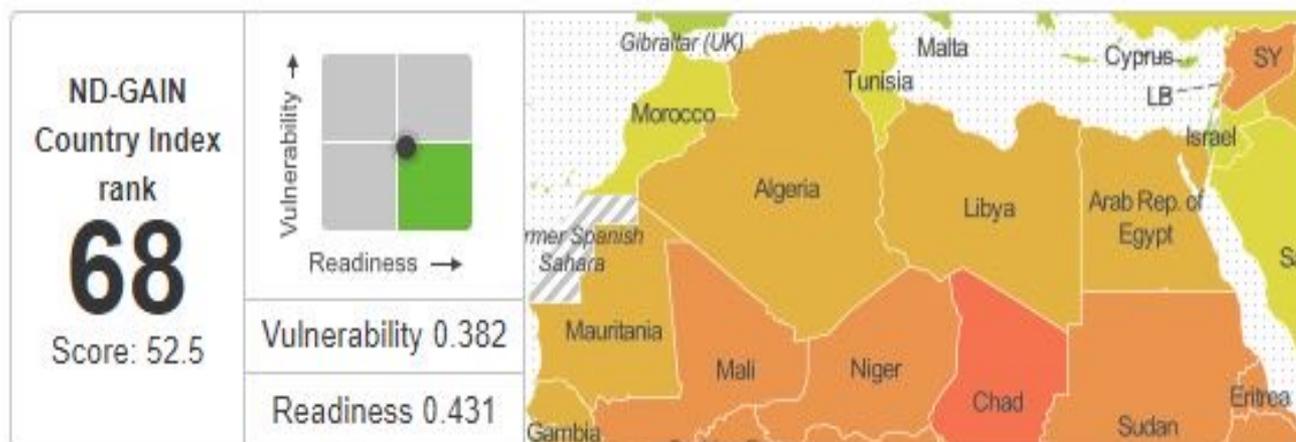


Tunisia

GDP (PPP) per capita (2019): 11,231.57 Int. Dollar

Population (2019): 11,694,719

HDI (2019): 0.74



The low vulnerability score and high readiness score of Tunisia places it in the lower-right quadrant of the **ND-GAIN Matrix**. Adaptation challenges still exist, but Tunisia is well positioned to adapt. Tunisia is the 65th least vulnerable country and the 84th most ready country.

Vulnerability

ND-GAIN

- **Exposure:** degree of exposure to climate change from a biophysical perspective.
- **Sensitivity:** Country is how dependent upon a sector negatively affected by climate hazard, or % of population susceptible
- **Adaptive Capacity:** The availability of social resources for avoiding worst climate impacts

Readiness

ND-GAIN

- **Economic Readiness:** ability of business environment to accept investment in adaptation
- **Governance Readiness:** Governmental factors that enhance investment for adaptation.
- **Social Readiness:** factors such as social inequality, IT infrastructure, education and innovation, that effect investment to promote adaptation.

Climate Change's Sectoral Impacts in Tunisia

SOURCE: USAID CLIMATE RISK PROFILE TUNISIA

Infrastructure

Climate Stressors and Climate Risks Infrastructure	
Stressors	Risks
Sea level rise and coastal flooding	Damage to roads and transportation infrastructure
	Damage to coastal structures, such as homes and hotels
Erosion	Damage to water supply and distribution infrastructure
	Reduced tourism revenue



Agriculture

Climate Stressors and Climate Risks AGRICULTURE	
Stressors	Risks
Rising temperatures	Decrease in crop yields
	Shifts in growing seasons
Sea level rise leading to saline intrusion	Degradation of soil quality and productivity
	Increased salinization of aquifers and decreased availability of water for irrigation
Change in precipitation patterns	Increase in food prices/food shortages
	Economic losses (both national and household incomes)



Tourism

Climate Stressors and Climate Risks TOURISM	
Stressors	Risks
Rising temperatures	Decrease in tourism revenue Loss of biodiversity
Sea level rise	Beach erosion
Water scarcity	Increase in tourism costs



Health

Climate Stressors and Climate Risks HEALTH	
Stressors	Risks
Rising temperatures	Higher mortality rates from extreme heat
Increase in extreme events	Increased malnutrition due to crop failure
Increased coastal flooding	Potential increased spread of disease
	Lack of access to clean water



Governance

Climate Stressors and Climate Risks GOVERNANCE	
Stressors	Risks
Increased temperatures and reduced rainfall	Increased pressure on existing government institutions
Increased dry spells	Damage to essential transportation infrastructure
Sea level rise and coastal flooding	Reduced economic resources



Climate and Security Peacegame Egypt 2030

Egypt: Climate Change and the Nile River

- Sea level rise is flooding the Delta
- The desert is encroaching
- Flooding increases soil salinity
- Potential conflict with Ethiopia over upstream dam development
- Food availability and price shocks insecurity
- Arab Spring #2?



Climate Migration and an Arc of Tension

Climate migration in northwest Africa

Nigeria, Niger, Algeria and Morocco bear the brunt of this growing security challenge



Source: Center for American Progress (2012).

Moving Forward: Secretary Austin on Climate Change



- **"Today, no nation can find lasting security without addressing the climate crisis .. We face all kinds of threats in our line of work, but few of them truly deserve to be called existential. The climate crisis does."**

Climate Change and Conflict: Evolution of U.S. Defense Perspective

- ***threat multiplier*** for instability in some of the most volatile regions of the world: presents significant national security challenges for the United States.”
 - CNA [National Security and the Threat of Climate Change](#), (2007)
- ***accelerant of instability or conflict***, placing a burden on civilian and military institutions around the world
 - DoD- [Quadrennial Defense Review](#) (2010, 2014)
- vulnerabilities and tensions which, when set against increasingly decentralized power structures are now identified as a “***catalyst for conflict***.”
 - CNA [National Security and the Accelerating Risks of Climate Change](#),
 - NSS

QUESTIONS?

Marcus King PhD
mdking@gwu.edu