Climate Change and Environment Theme

Trend Review – Climate Change and Environment

1. Climate change/climate variability will continue to be a risk 'multiplier' by affecting planning, readiness, operations and strategy related to defence and security
2. Climate change impacts on the environment will have both direct and indirect effects on all other themes and trends (utilizing a systems-level view)

Key Takeaways

1. Risk 'multiplier' in the context that risk is related to a variety of stressors that can be amplified ('additive stressors') through their interactions
2. Scenario planning and foresight will allow for an understanding of defense and security implications and risk mitigation/adaptation approaches for both near-term (<5 years) and far futures (>30 years)
   - Geographic risk profiles compiled using systems-level view
3. A positive potential remains such that stability could be facilitated through climate change-related risk mitigation/adaptation
   - For example, 2nd order resource security and stability positive effects
   - Could equate to risk reduction against this 'common enemy'

Climate Change and Environment Theme

Trend Review – Natural Disasters

1. Co-occurring or cascading disasters will continue to increase vulnerability of countries with increased low probability/high risk and high probability low risk events; however, better forecasts and early warning of unprecedented events likely as scientific knowledge and models improve

Key Takeaways

1. Climate/weather induced sudden on-set (e.g., floods, hurricanes) and slow on-set (e.g., drought) events in combination with non-climate induced events (e.g., earthquakes) will continue to occur in domestic and foreign contexts
   - Potential number of people affected to increase
2. Decreased vulnerability and increased resilience of countries to sudden and slow on-set disasters depends on:
   - Risk-based planning processes
   - Critical infrastructure development
   - Integration of multiple risk-based early warning systems
   - Maintaining redundancies within national and international defence and security communities (to ensure sufficient capacity)

Climate Change and Environment, Natural Disasters Trends

Implications

Climate Change and Environment

1. Allies will need to consider climate and environmental stressors, extreme weather events, etc., in their situational awareness, risk-based planning processes and mitigation/adaptation efforts (prudent risk taking)
2. Allies will more frequently be working in areas of humanitarian aid, which will require fully comprehensive (military, governmental and NGO) interoperability
3. Legitimacy of governments could be undermined by their inability to respond to evolving climate and environmental stressors and by failing to uphold social contract with their populace
4. ~~Climate migration away from certain areas may open up ungoverned space and leave power-vacuums or safe-havens for others to fill~~; Undergoverned or un-governed areas could provide refuge to potential adversaries
5. Allies will need to address climate adaptation measures for their defence and security. Increased pressure will be placed on their defence and security organizations to shoulder their share of climate mitigation plans as well

Natural Disasters

1. As nations increasingly respond to disasters with the use of their military forces to aid civil powers, there will be a subsequent effect on military availability. A large scale, environmentally-triggered disaster within an Allied Nation is possible and could affect their international commitments
2. Enhanced trust will be needed between civilian and military entities and non-governmental stakeholders to ensure effective strategic coordination, planning and execution