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Climate Change and International Security

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- Understanding security responses to climate change
- Security actors and mitigation
- Responding to geopolitical challenges and opportunities
- Security reform in a climate changed world

A Security Sector Consensus?



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Retired US 3-4 Star Officers

(CNA Report “National Security and the Threat of Climate Change”)

1. Climate Change is a serious national security threat
2. Threat multiplier, particularly in the most fragile regions of the world
3. Will add to tensions even in stable regions
4. Climate change, energy security, and national security are related

Who is Saying This? Not Environmentalists



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Governments

- UN Security Council 2007; UNGA 2009
- US National Intelligence Estimate 2008
- European Council 2008
- NATO 2008 onwards
- Australian ONA 2005 onwards
- UK DCDC, MOD, FCO and National Security Strategy
- German Planners 2005
- China and India Planners?

Non-Governmental Organisations

- Centre for Naval Analysis
- CSIS-Brookings; Woodrow Wilson;
- RUSI, IISS; Chatham House
- German Global Trends Institute
- ICG; International Alert; Christian Aid; IISD

Current climate analysis generally assumes stability, rationality and (internal) equity



- Successful adaptation to climate change will be fundamentally challenged by borders, existing property rights (e.g. water) and vested interests
- Poor governance systems – especially communally controlled resource management – will amplify climate change impacts not damp them
- Impacts of climate mitigation policies (or policy failures) will drive political tension nationally and internationally; climate change driven deaths are different politically .
- In an interconnected world a wide range of interests will be challenged by climate change: investment in China; drugs and Afghanistan/Caribbean; extremism and economic failure in N Africa; oil prices and Niger Delta/Mexico extreme events.



“ climate change is a "threat multiplier". Natural disasters, environmental degradation and competition for resources exacerbate conflict, especially in situations of poverty and population growth, with humanitarian, health, political and security consequences, including greater migration. Climate change can also lead to disputes over trade routes, maritime zones and resources previously inaccessible.”

EU SGHR Report on Implementation of the EU Security Strategy December 2008

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Costs of Climate Change: high but not an existential threat



- Stern Review estimates cost of climate change to be between 5-20% of global GDP from 2050
- World Bank estimates that 40% of development aid investment is at risk from climate change
- Humanitarian costs could rise by 200% by 2015
- Weather disasters could cost as much as a trillion dollars in a single year by 2040

Preparing for Worst Case Scenarios



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- Current climate change politics and policy does not adequately reflect credible worst case scenarios
- A failure to acknowledge and prepare for the worst case scenario is as dangerous in the case of climate change as it is for terrorism and WMD proliferation
- Combination of climate policy failure plus worst case climate science:
 - Move to “defensive” adaptation response – no credible security guarantee
 - Global crash programme in nuclear fission

Security Sector Engagement



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- Communicate the security consequences of worst case scenarios to decision makers; no hard security solution to managing climate change risks
- Promote clearer strategic risk management approach to climate change policy
- Argue for far higher investment in innovative and disruptive R,D&D to prepare for crash programme: CCS, CSP, solar, biofuels and sinks
- Engage in policy discussions for design of large scale collaborative R&D programmes inside timescales.

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Geostrategic: Threats and Opportunities



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- Climate change could drive a more collaborative approach to international relations – extending to areas such as energy security, conflict prevention, development

Or

- Climate change could exacerbate tensions between and within countries, leading to a politics of insecurity as countries focus on protecting themselves against impacts

Geopolitical Issues: Climate change changes contexts, interests, threats and relationships



- **Mitigation policy:** balance of interests with China/India – from competition to cooperation; intellectual property rights; trade and investment policy.
- **Energy security:** move from producer to consumer relationships; managed transition in strategic producers (Russia; North Africa); politics of biofuels.
- **Nuclear proliferation:** large increased use of civilian nuclear power widespread, stresses on control of security and safety issues
- **Managing Borders and Neighbours:** Scramble for the Arctic; moving fisheries (collapse of the CFP!); managing migration and environmental refugees.
- **Global resentment:** increase in “anti-globalisation” resentment of developed world; Al-Qaeda statements;

Shifting to a low carbon economy can increase energy security



- Radical reductions in energy demand – especially space heating and cooling (-40% in EU gas demand by 2025?)
- New domestic sources of energy: EU 20% energy from renewables by 2020; plus coal with carbon capture and new nuclear?
- Investment in integrated intelligent grids and demand management
- Transportation revolution: much higher efficiency; new biofuels; plug-in hybrids. E.G. in 2007 European vehicle economy standards saved nearly 1% of EU GDP per year compared to the US.

But only if the politics of energy and climate security work together

Security is Security is Security



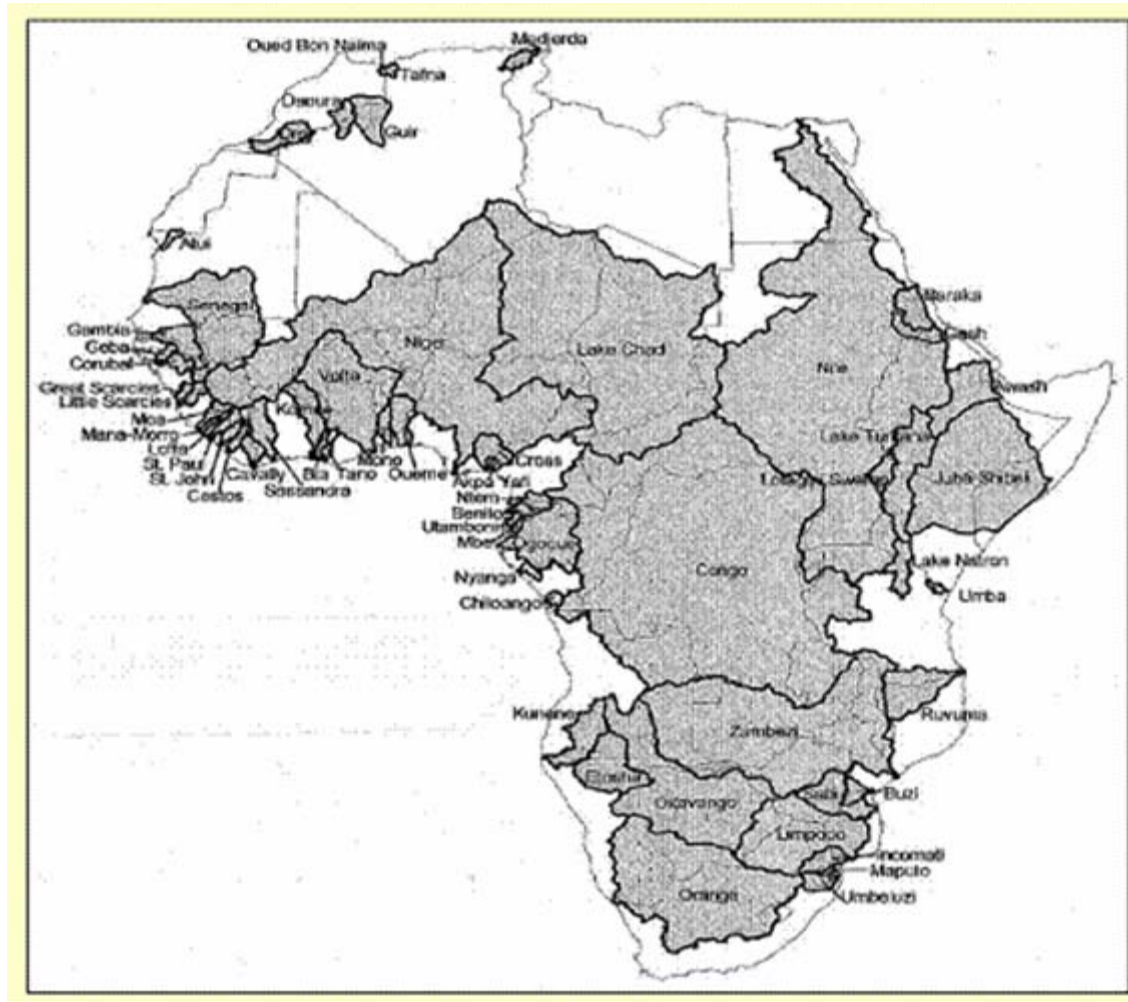
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- You cannot achieve energy security by undermining other countries' climate security
- You cannot achieve agreement on climate security without guaranteeing energy security
- There is no military solution to climate security (or energy security?)

Case Study: African Transboundary Water Management



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What does this mean?

- Adaptation to perceptions of future climate change likely to drive the first wave of inter-state tensions over water
- Need to make African transboundary water agreements climate change proof
- Increase international attention on infrastructure issues including aid flows – its concrete that causes water wars!
- Increase role of regional and international mediators and arbiters in management processes - AU, EU, UN
- Should access to UN adaptation funding be conditional on policy reforms and transboundary agreement?



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Climate change will raise resource instability/conflict risks



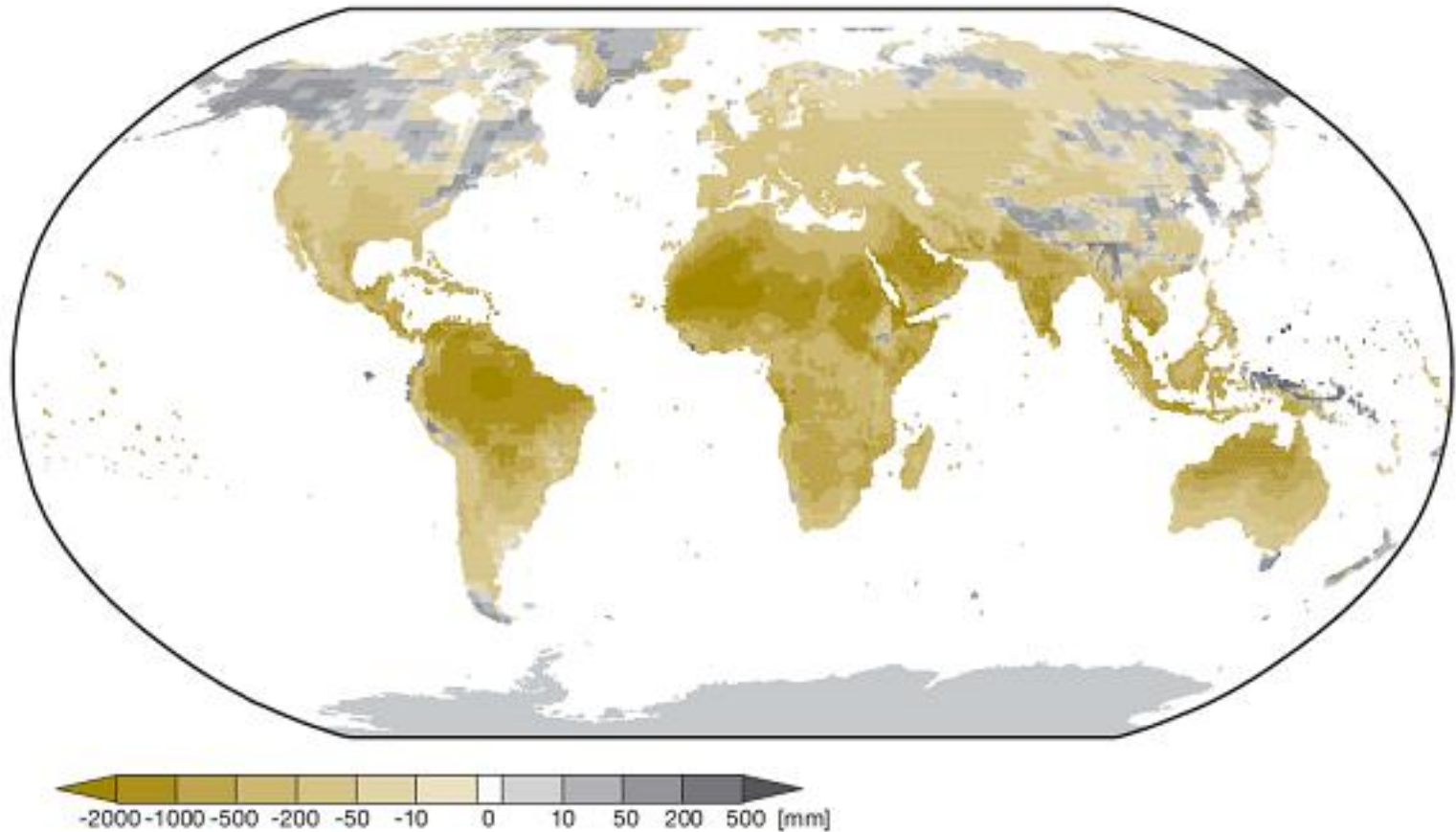
- Climate change will increase volatility of resource availability in water, land, fisheries etc
- In many regions disputes of resources become identified on communal lines (ethnicity; caste; religion etc) which exacerbates the underlying problem.
- In many areas traditional resource governance systems will be unable to cope with the increased stresses of climate change resulting in conflict and crisis

Key strategy is to identify high risk areas and invest in technical, economic, social and political resilience over resource management

Global Rainfall Changes 2040-70



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Source: WGBU (2007)

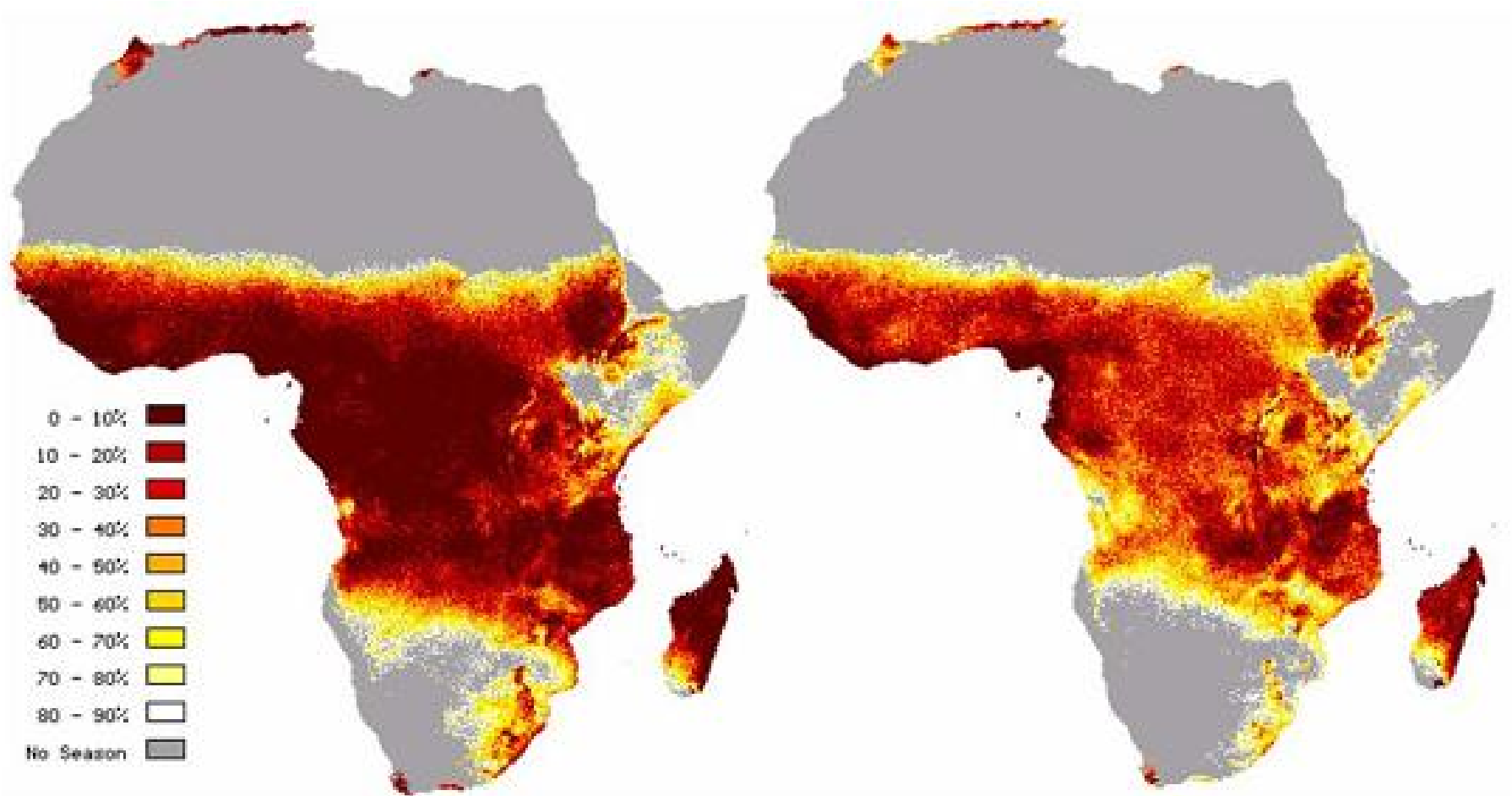
Increased Failure of Growing Season



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2000

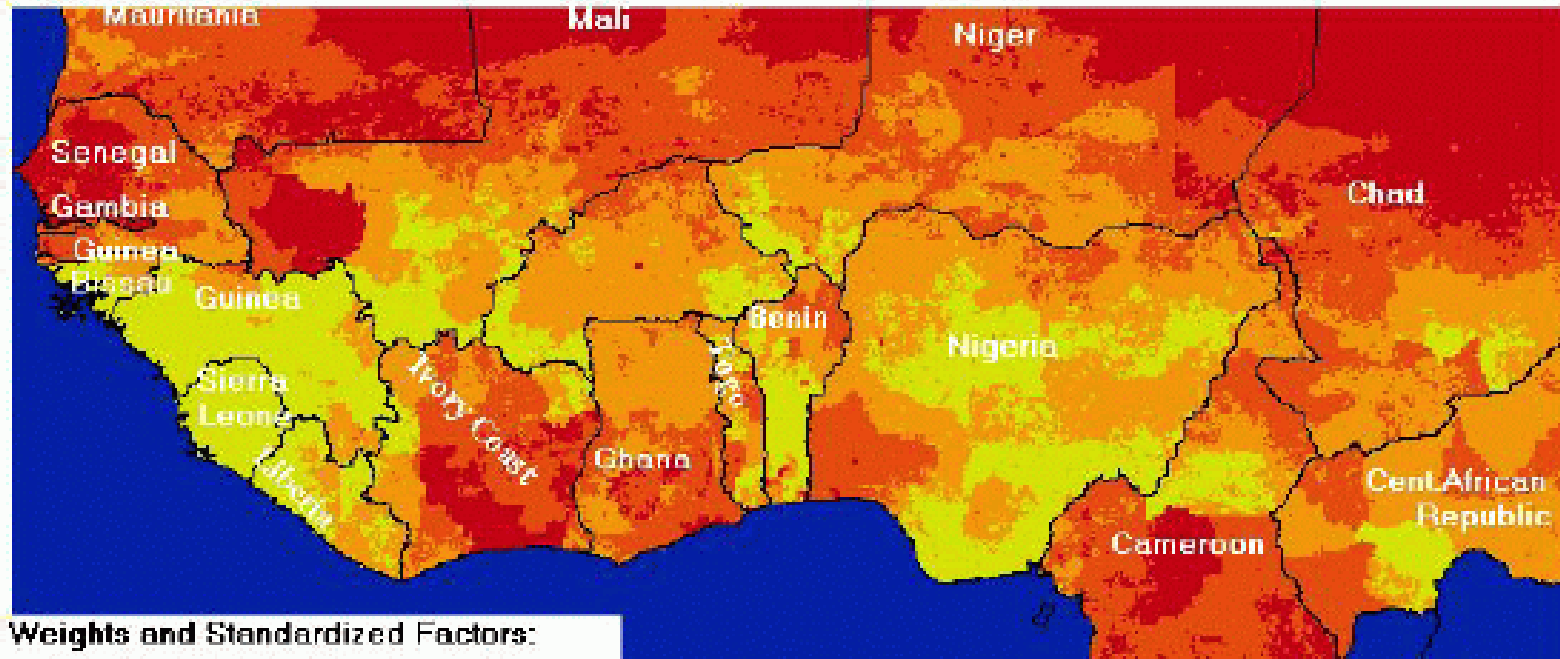
2050



Mapping Economic Vulnerability







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Weights and Standardized Factors:

- 0.14 Precipitation
- 0.14 Coeff. of Variability of NDVI
- 0.14 Supply as a Percentage of Demand
- 0.14 Market Accessibility
- 0.14 Percentage Cash Crop
- 0.14 Population Density
- 0.14 Percentage Crop Area

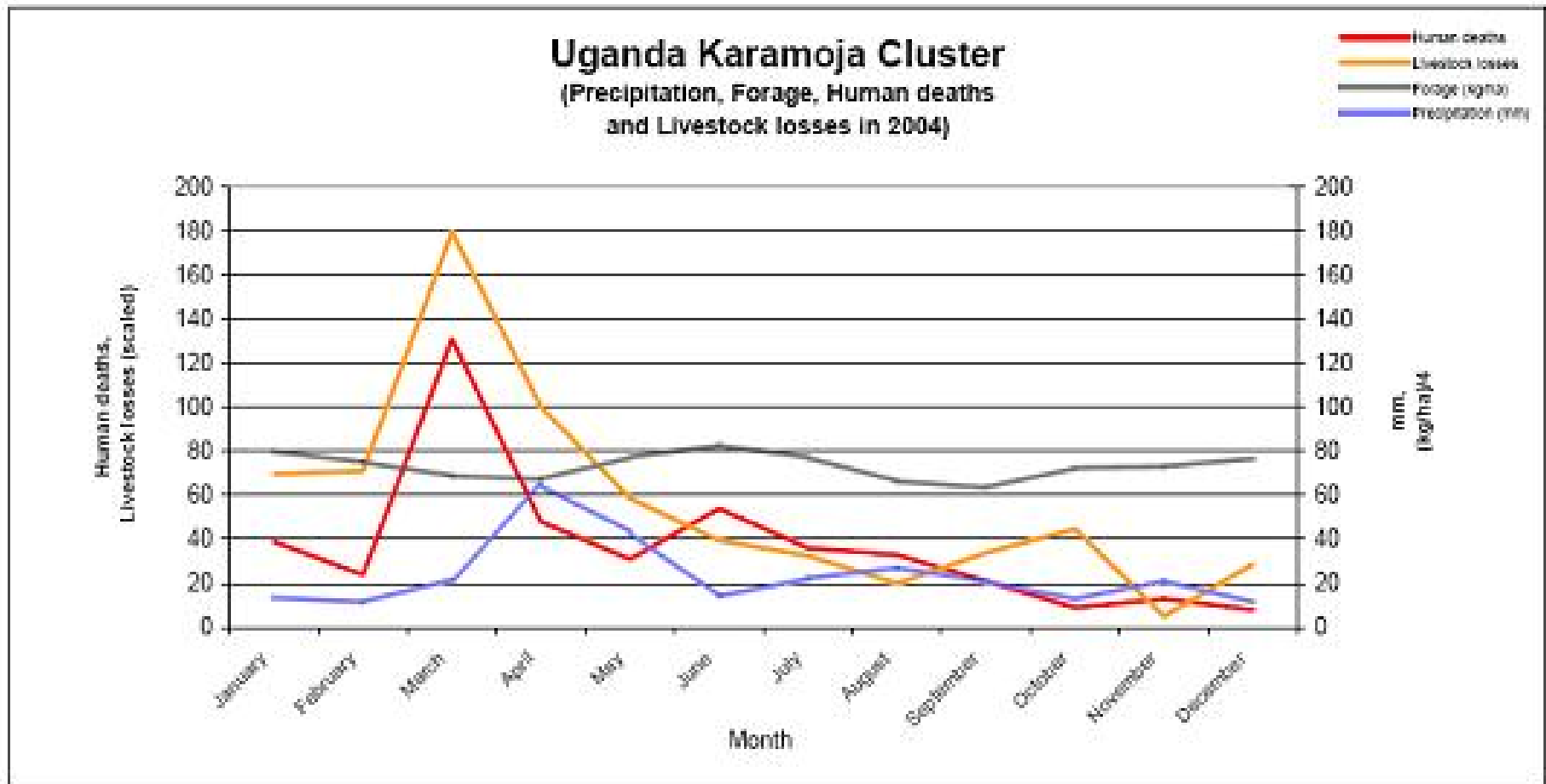
-  Low Vulnerability
-  Med Vulnerability
-  High Vulnerability
-  Very High Vulnerability

Multi-Attribute Analysis of Vulnerability 2

Detailed understanding of resource conflicts



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Need to focus on prevention



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- Climate Change is another serious stressor in already unstable countries, regions and communities (Africa, ME, S Asia, SIDS)
- If worst impacts hit it will dominate most other factors by 2020-50 in many vulnerable countries
- Climate change is a strong motivation for a more preventative and multidisciplinary approach to managing instability and conflict prevention
- This goes well beyond current approaches to adaptation

EU policy responses



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- EU should fully implement and fund institutionalisation of the actions in the December 2008 EU Climate Security Route map.
- In support of an ambitious 'Global Climate Deal', the EU security community should draw up a clear analysis of "What is needed at Copenhagen to deliver European Climate Security".
- EU should carry out an assessment of the impact of climate change on humanitarian spending and agree a target for increased spending on preventive action; currently only 5% of humanitarian spending
- The EC + Member States should agree a major programme to develop tools for field practitioners to guide investment in climate resilience
- The European Council should put tackling climate and resource security at the heart of the mission and structure of the new EU External Action Service.

Thank You



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- More information at www.E3G.org
- “Delivering Climate Security” available from RUSI