

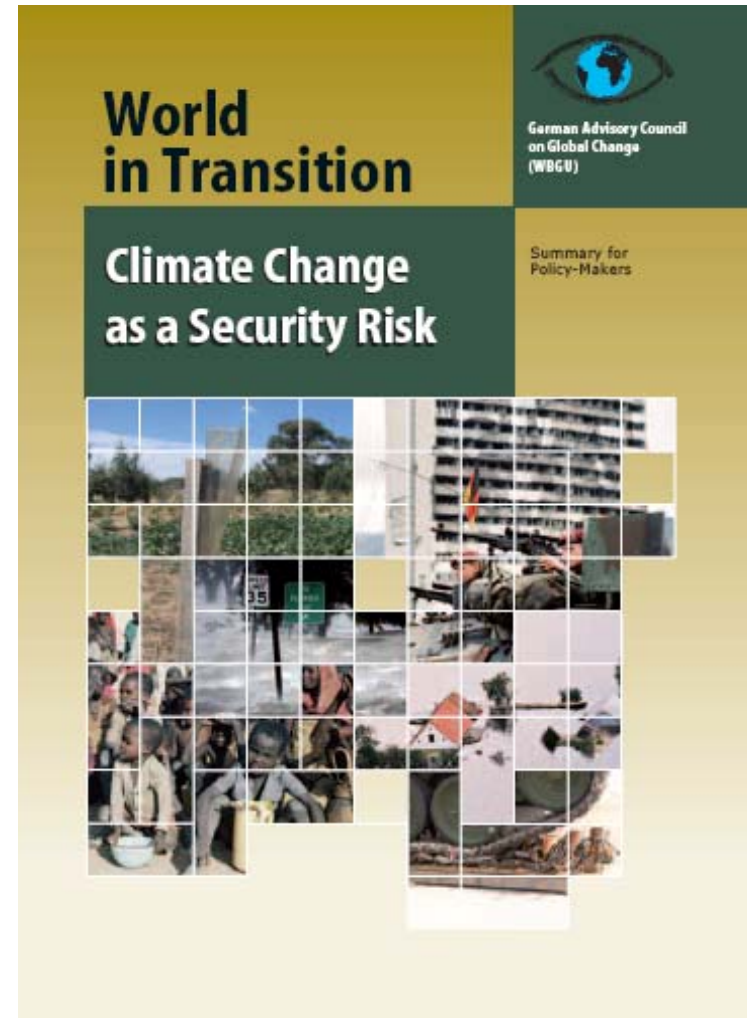


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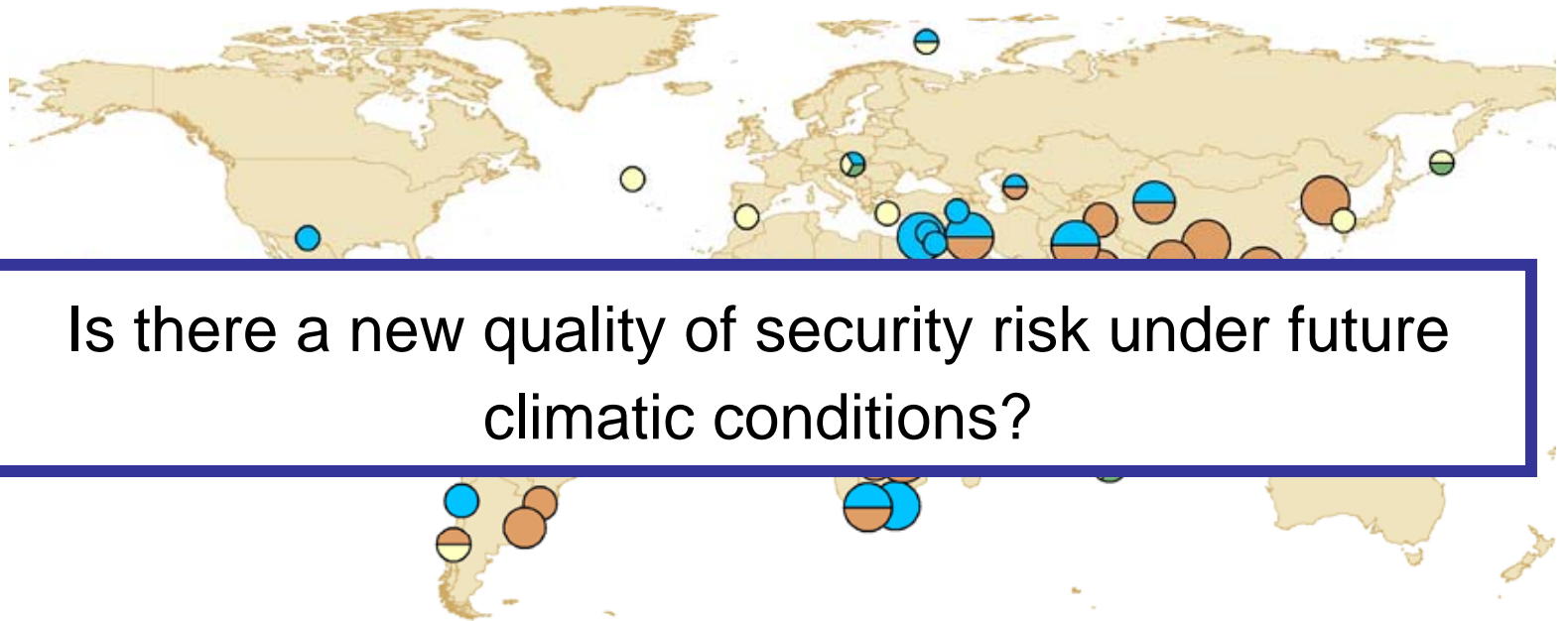
WISSENSCHAFTLICHER BEIRAT DER BUNDESREGIERUNG
GLOBALE UMWELTVERÄNDERUNGEN

Climate Change as a Security Risk

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WBGU



Past environmental conflicts (1980–2005)



Is there a new quality of security risk under future climatic conditions?

($n = 73$)

Reason for conflict Intensity of conflict



- Water
- Land / soil
- Fish
- Biodiversity



Diplomatic crisis



Protests (partly violent)



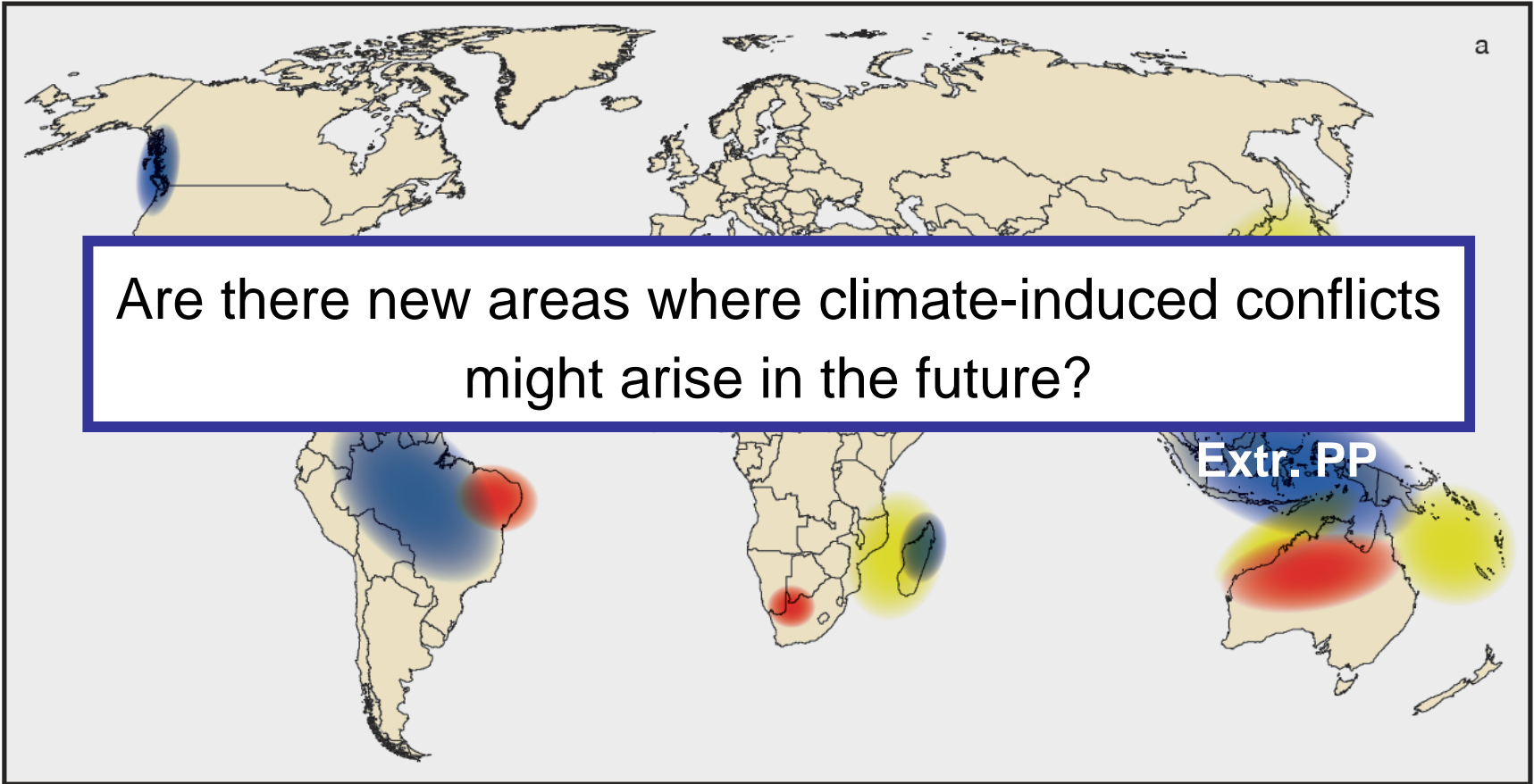
Use of violence (national scope)



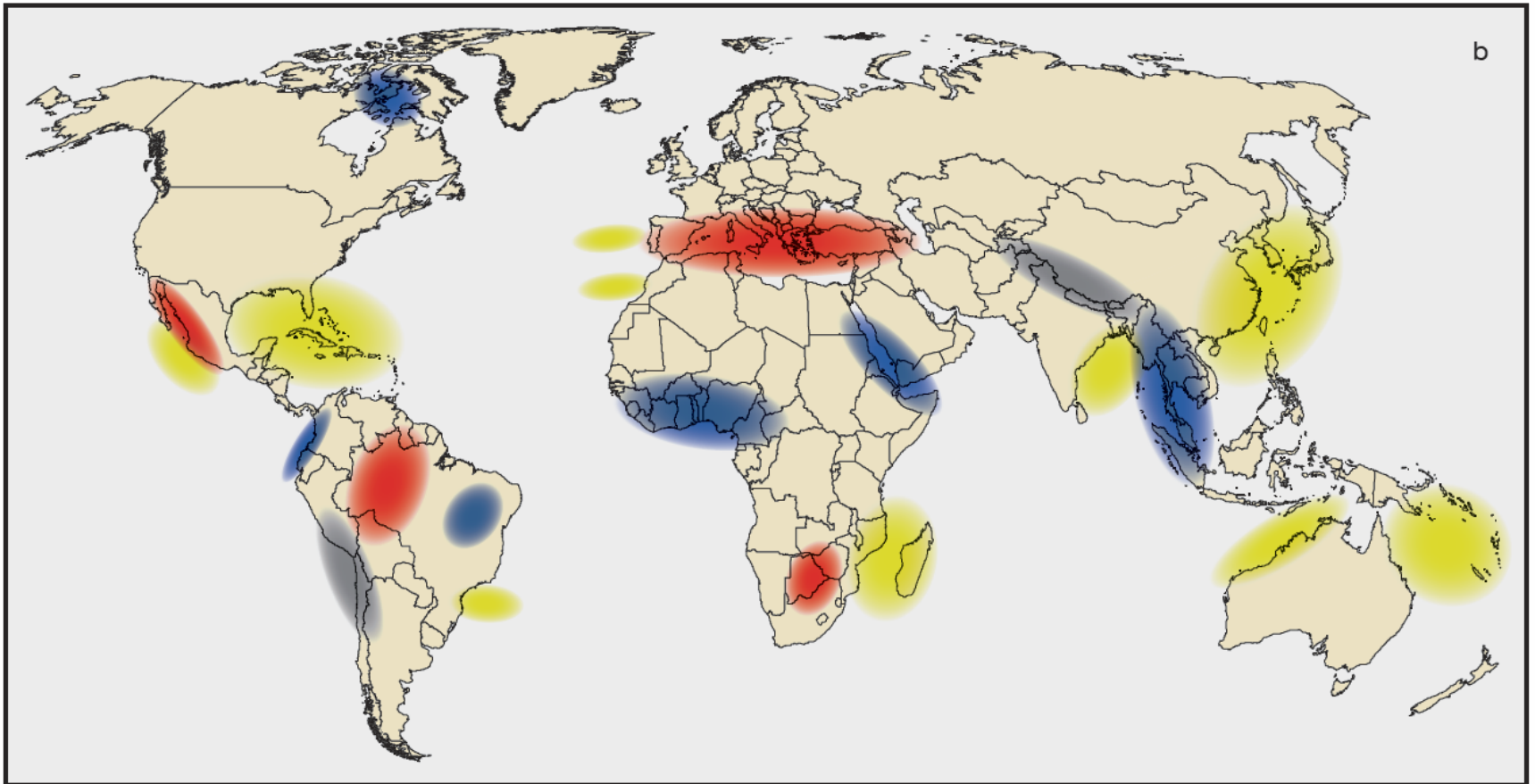
Use of violence (national scope)

(Carius et al. 2006)

Extreme climatic conditions: today

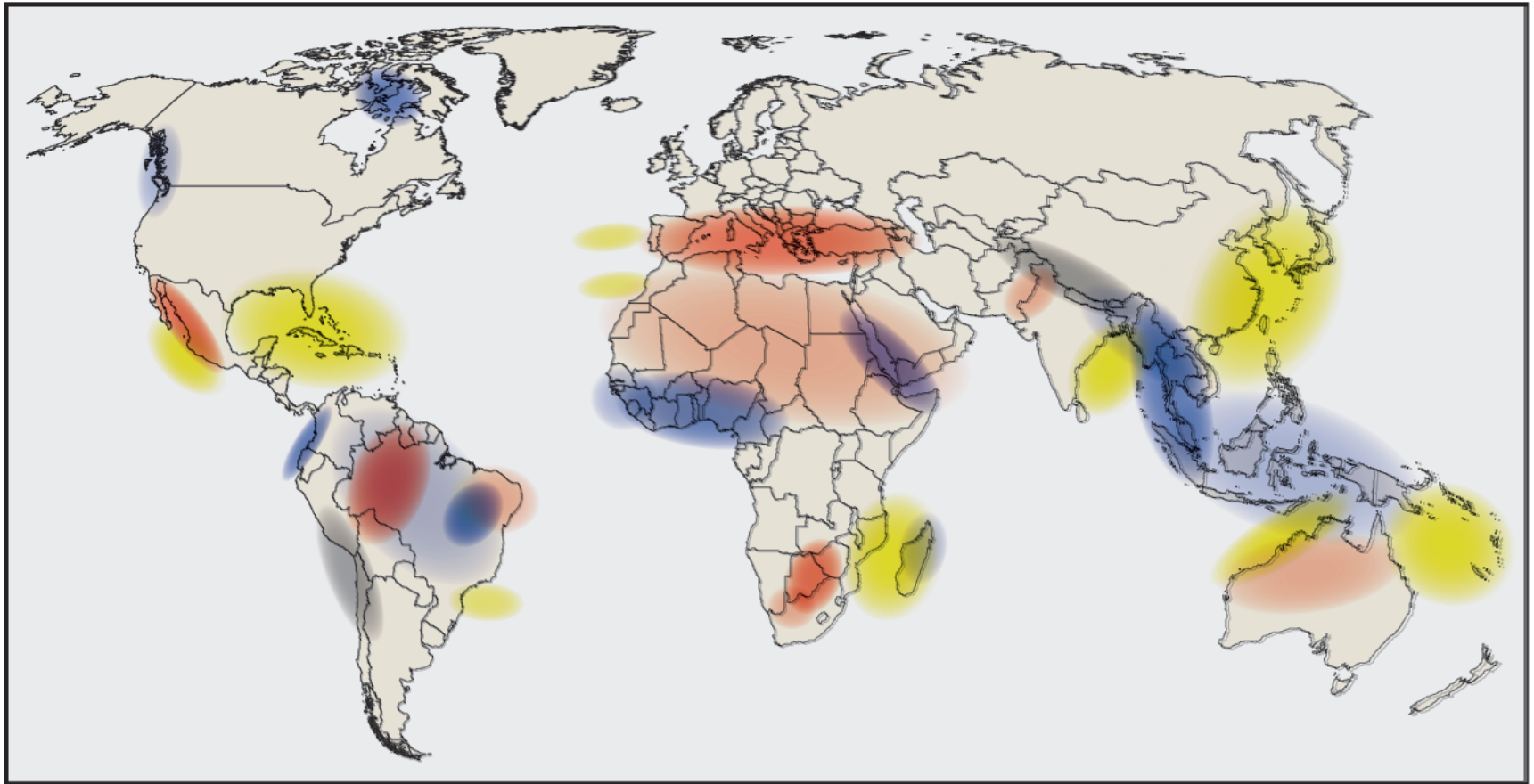


Projected extreme conditions



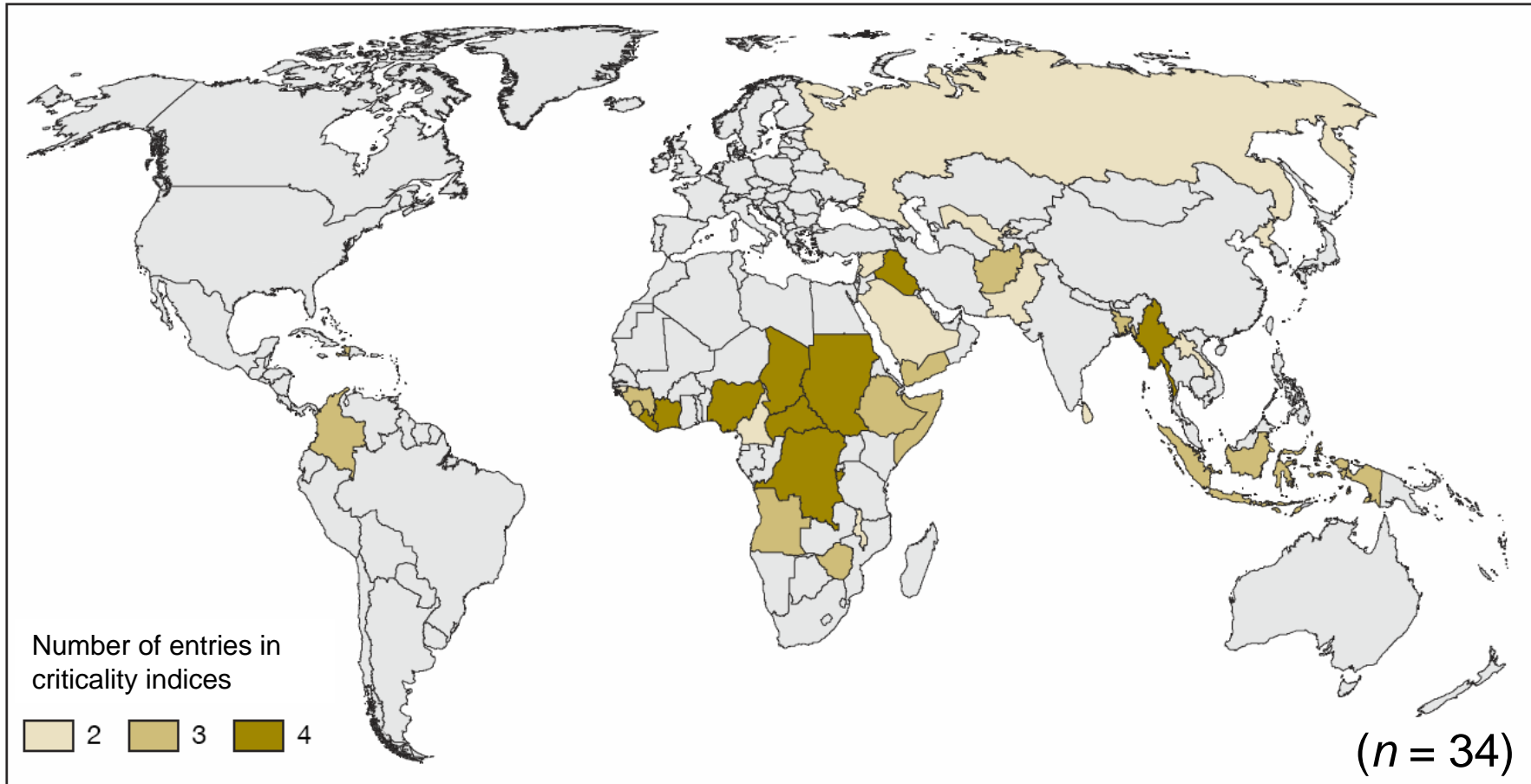
 Drought  Hurricanes  Extreme precip.  Glacial retreat

Regions with extreme climatic conditions: future



● Drought ● Hurricanes ● Extreme precip. ● Glacial retreat

Poor governance: Weak and fragile states



World Political Context

- Asian Drivers of Global Change
 - increasing significance of China & India: politically, economically
- End of Hegemonic Unipolarity
 - US: relative loss in power due to emerging new powers
- Deepening North-South Antagonism
- Increasing South-South Diversion
- » Turbulence in a Multipolar World!
- » Renaissance of Unilateralism and Power Politics?

Conflict constellations

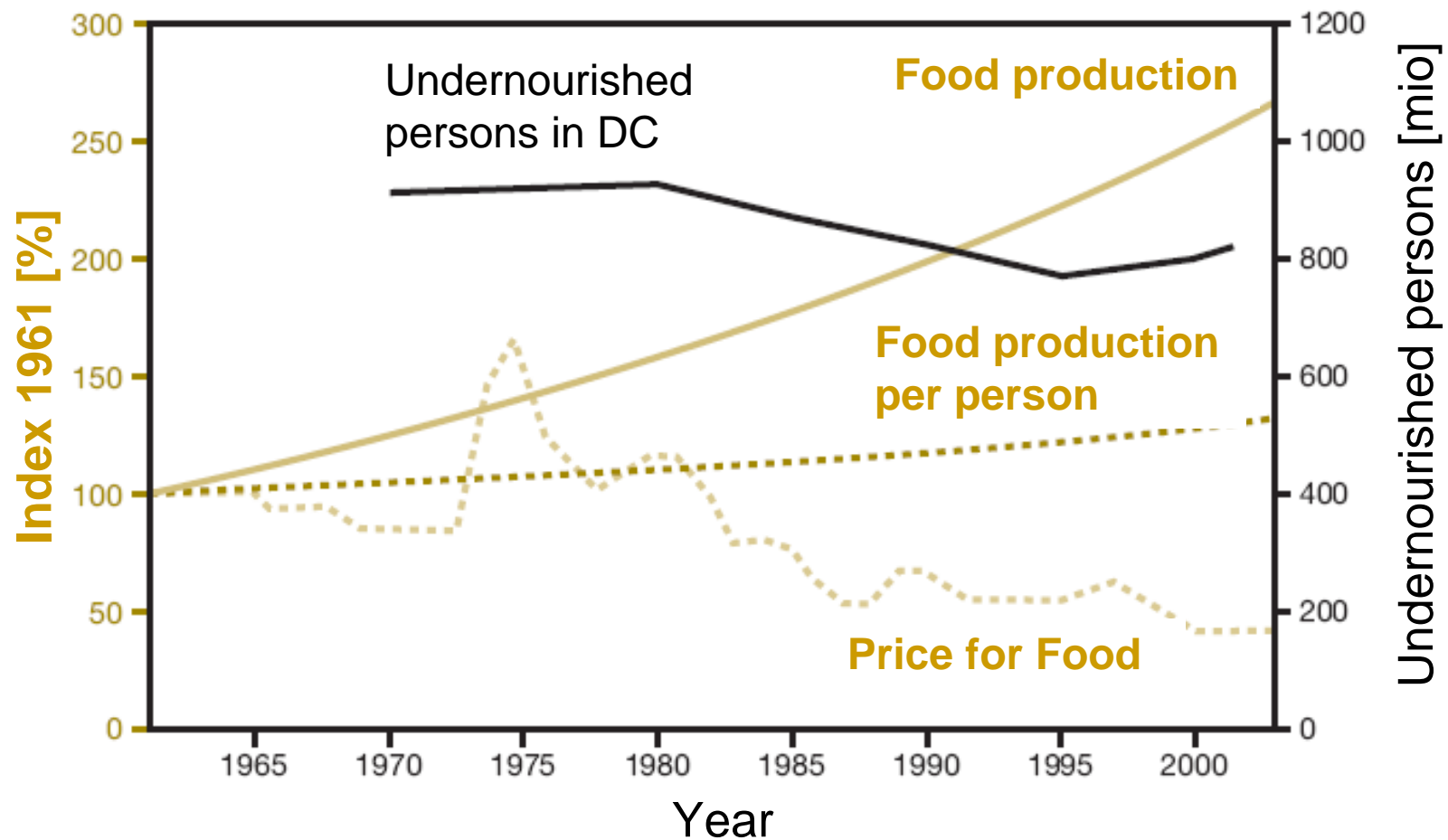
are defined as typical causal linkages at the interface of environment and society, whose dynamic can lead to social destabilization and, in the end, to violence.

We focused on:

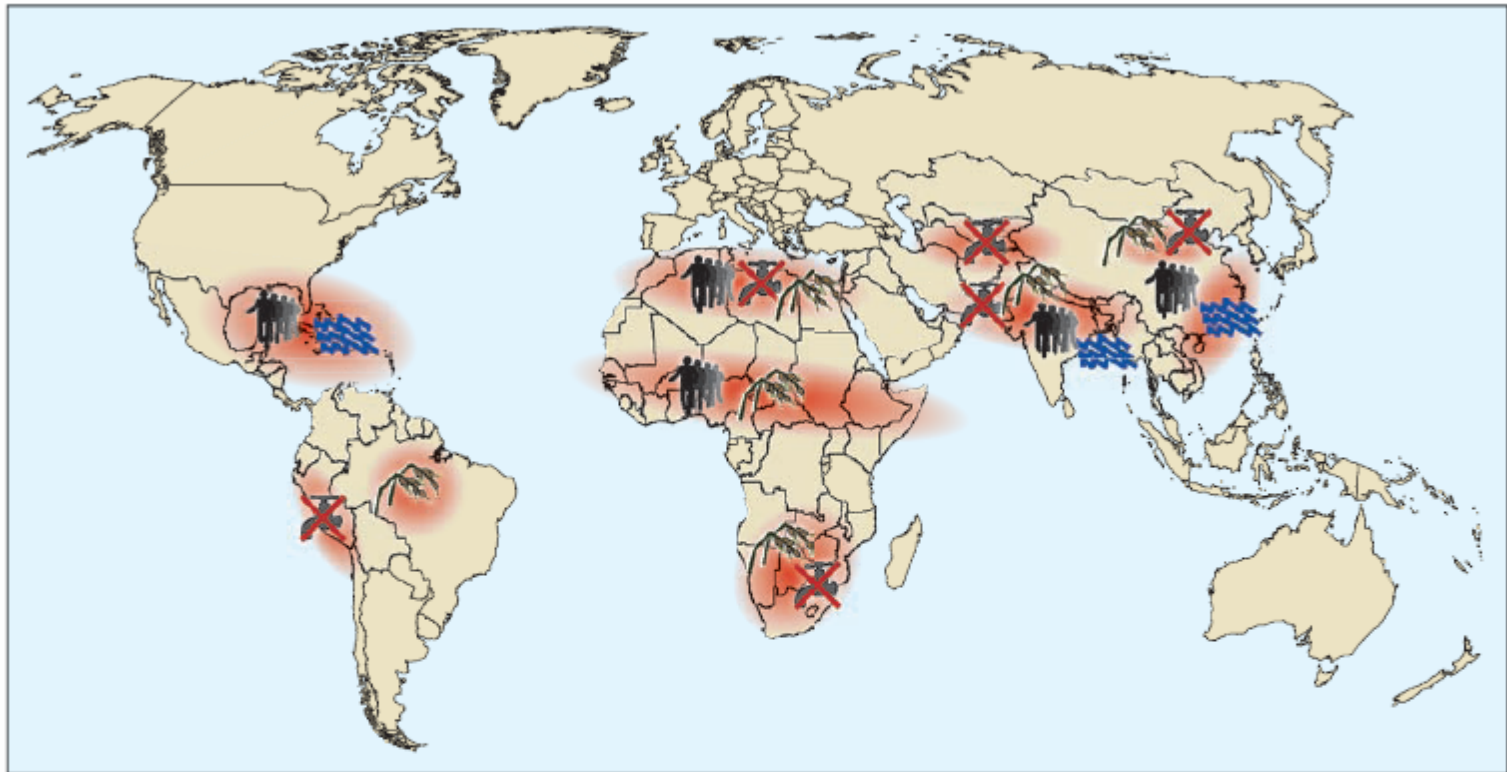
- “Climate-induced degradation of freshwater resources”
- “Climate-induced decline in food production”
- “Climate-induced increase in storm and flood disasters”
- “Environmentally-induced migration”



Past and current global food production



Security risks associated with climate change: Selected hotspots



Conflict constellations in selected hotspots



Climate-induced degradation of freshwater resources



Climate-induced decline in food production



Hotspot



Climate-induced increase in storm and flood disasters



Environmentally-induced migration

6 threats to international stability & security

1. Possible increase in the number of weak and fragile states as a result of climate change (no capacity adaptation to CC)
2. Risks for global economic development (sites, growth, ..)
3. Risks of growing international distributional conflicts between the main drivers of climate change and those most affected (i.e., “equity gap”): confrontation: originators vs. victims
4. Risks to human rights and to industrialized countries’ legitimacy as global governance actors
5. Triggering and intensification of migration (“environmental migrants”)
6. Overstretching of classic security policy (destabilization, state failure, diffuse conflict structure, ..)

Policy recommendations

- Fostering a cooperative setting for a multipolar world
- Climate policy as security policy I: mitigation
- Climate policy as security policy II: adaptation

Fostering a cooperative setting for a multipolar world

- *Initiative 1: **Shaping global political change*** (China, India, CSCE-model conference)
- *Initiative 2: **Reforming the UN*** (Security Council, upgrading UNEP, for greater coherence establish Council on Global Development and Environment)

Climate policy as security policy I:

Preventing conflict by avoiding dangerous climate change (*mitigation*)

- **Initiative 3: Ambitiously pursuing international climate policy**
(2° C guard rail, 50% reduction by 2050, integrating new industrializing countries – NICs, conserving carbon stocks)
- **Initiative 4: Transforming energy systems in the EU**
- **Initiative 5: Developing mitigation strategies through partnerships**
(climate protection as cross-cutting scheme in poverty reduction strategies – PRSs, promotion of sustainable energy systems, emission avoidance from land-use change, decarbonization partnership with NICs - G8+5)

Climate policy as security policy II:

Preventing conflict by implementing *adaptation* strategies

- **Initiative 6: Supporting adaptation strategies for developing countries**
 - a) Adapting water resource management (mainstreaming climate impacts...)
 - b) Strengthening the agricultural sector (rural development, diversification, compensation...)
 - c) Strengthening disaster prevention (emergency planning, decision-making structures, coastal development, include in PRSs)

- ***Initiative 7: Stabilizing weak and fragile states that are additionally threatened by climate change***
Strengthening civil crisis protection, implementing OECDs working principles
- ***Initiative 8: Managing migration through cooperation and further developing international law***
Comprehensive strategy needed, migration as field of action in development policy, new multilateral convention needed
- ***Initiative 9: Expanding global information and early warning systems***
Enhance coordination between UN agencies
- **Boost Finance**



It is not important to predict the future,
but to be prepared for the future.

Perikles, 493-429 BC