

Does climate change cause war ?

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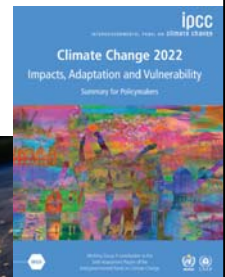


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Presentation given at online workshop as part of Science4Society Week, 17 March 2022

Research so far...

- 20 years of research on links between climate change and conflict
- Summaries of research published by:
 - Climate Security Expert Network – research body
 - Intergovernmental Panel on Climate Change – advisors to United Nations
- Regions commonly examined:
 - Africa
 - Asia, especially Middle East
 - Pacific
 - Arctic
 - Latin America



- CSEN web library: <https://www.climate-security-expert-network.org/library>
- IPCC 2022 report: <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>

Image credits: CSEN; IPCC

Does climate change cause war?

- No simple answer
- Climate change can reduce access to key 'natural resources', for example:
 - Water – due to reduced rainfall
 - Food – due to reduced crop growth
 - Land – due to sea-level rise, flooding, storm damage, or heat
- This can contribute to conflict
 - Directly
 - Indirectly, following migration of 'climate refugees'
- Whether it does depends on many political and social factors



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Political and social factors across the world

- Is the government poorly run?
 - Important for fairness, help during crises
- Is there high inequality or poverty?
 - Do poor people currently lack enough food?
- Are there existing disputes between different social groups?
 - Ethnic, religious, political
- Is there a history of recent conflict?

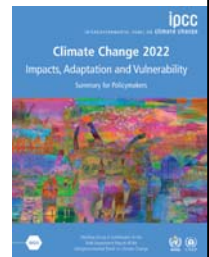
➤ *If yes, then climate change can be a 'threat multiplier'*



Image credit: Javaistan

What does the latest research say?

- Intergovernmental Panel on Climate Change – 2022 report:
 - “While non-climatic factors are the dominant drivers of existing... violent conflicts, in some assessed regions extreme weather and climate events have had a small, adverse impact on their length, severity or frequency”
 - “Violent conflict... in the near-term will be driven by socio-economic conditions and governance more than by climate change”
 - “Compared to other socioeconomic factors the influence of climate on conflict is assessed as relatively weak”
 - “At higher global warming levels, impacts of weather and climate extremes, particularly drought... will increasingly affect violent... conflict”



- IPCC (2022). Climate Change 2022: Impacts, Adaptation and Vulnerability; the Working Group II contribution to the Sixth Assessment Report. <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>
- Quotes from p11, p13, p16 & p16 of the Summary for Policymakers

Potential solutions

- Improve governance
 - e.g. better training of government officials, reduce corruption, fairer elections, international diplomacy
- Reduce poverty
 - e.g. well-funded water & sanitation services, better education – especially for girls, support for farmers, well-funded public health services
- Reduce inequality
 - e.g. more taxes on wealth, reduce corruption, well-funded public health services
- Conflict resolution
 - e.g. better education – especially of different cultures & religions, well-funded legal & justice system
- Climate change adaptation
 - e.g. flood & storm protection, building cooling, well-funded emergency services, forestry protection

- More detail in: IPCC (2022).

Solutions consistent with...



United Nations SDGs website: <https://www.un.org/sustainabledevelopment/>

Case study: Syria



Image credit: Google Maps

Case study: Syria (continued)

- Severe drought from 2007-2010
- Worst drought on record
 - Climate scientists estimated drought of this severity 2 to 3 times more likely due to human-caused climate change
- Unsustainable agricultural policies pursued by government
 - E.g. crops needed more water than was available, farming subsidies abolished
- Massive crop failure & death of farm animals
- Food shortages led to major rise in food prices



- Kelley et al (2015). Climate change in the Fertile Crescent and implications of the recent Syrian drought. PNAS, vol.112, no.11, pp.3241–3246.
<https://www.pnas.org/cgi/doi/10.1073/pnas.1421533112>
- *Image credit: iStockphoto*

Case study: Syria (continued)

- About 1.5 million people migrated from countryside to towns
- Syria already host to nearly 1.5 million refugees from war in neighbouring Iraq
- Populations in cities became 50% higher
- Undemocratic government did not respond well
 - Led to illegal settlements, overcrowding, high unemployment, high crime
- 2011 'Syrian uprising'
 - Protests against govt – part of 'Arab Spring'
 - Govt response often violent
- Civil war began in 2012 – continues to this day
 - Many other countries involved



- Main reference: Kelley et al (2015)
- Additional info: Wikipedia (2022). Syrian Civil War. https://en.wikipedia.org/wiki/Syrian_civil_war
- *Image credit: VOA*