

Klimawandel als Fluchtursache



Gualter Barbas Baptista · Umweltwissenschaftler · 21.10.2015



Death toll among refugees in Europe. Source: <http://www.unitedagainstracism.org/>

We have all migrated at some point



An artist's re-creation of the first human migration to North America from across the Bering Sea.

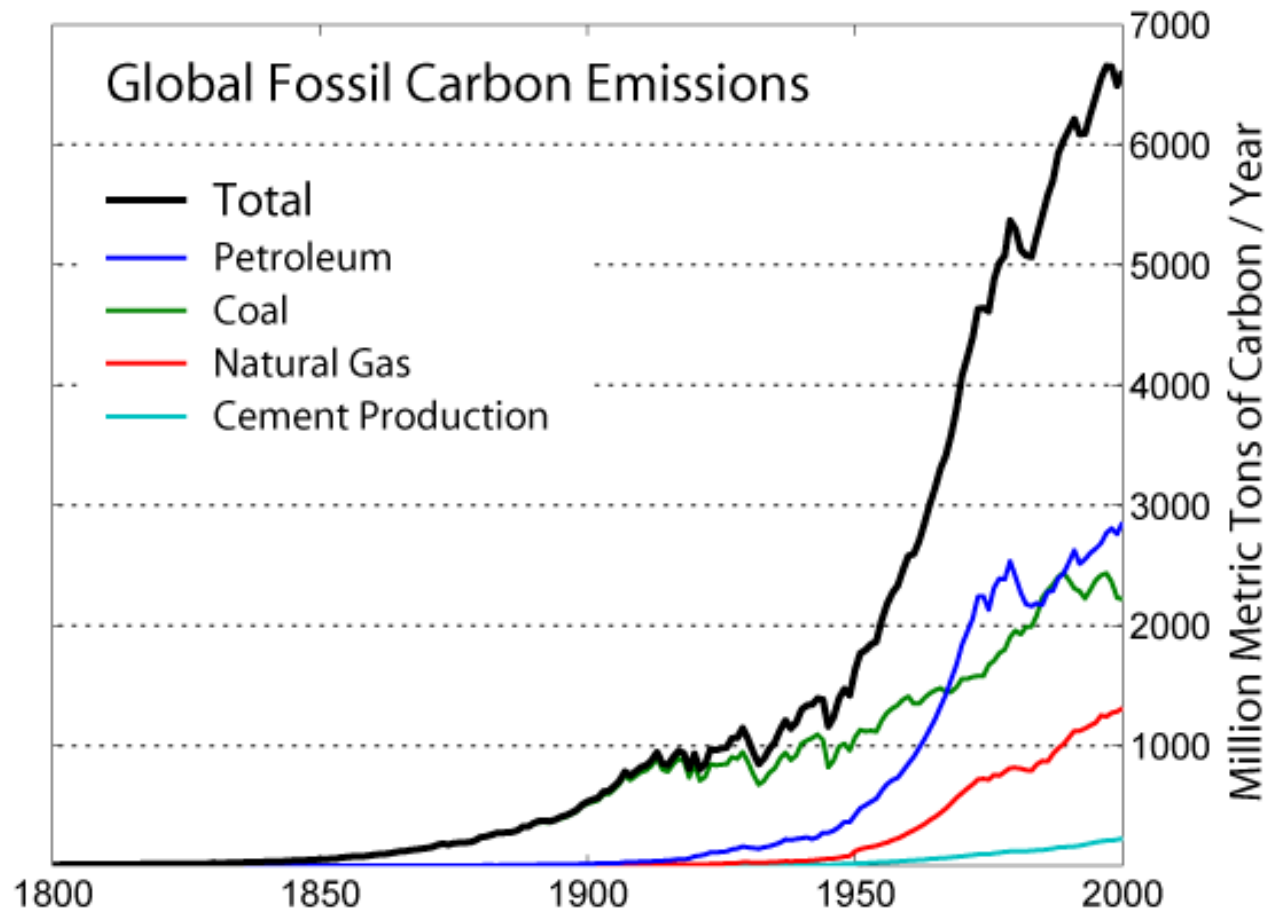
DEA Picture Library/De Agostini/Getty Images

Source: <http://www.npr.org/2012/09/17/161278993/what-drove-early-man-across-globe-climate-change>

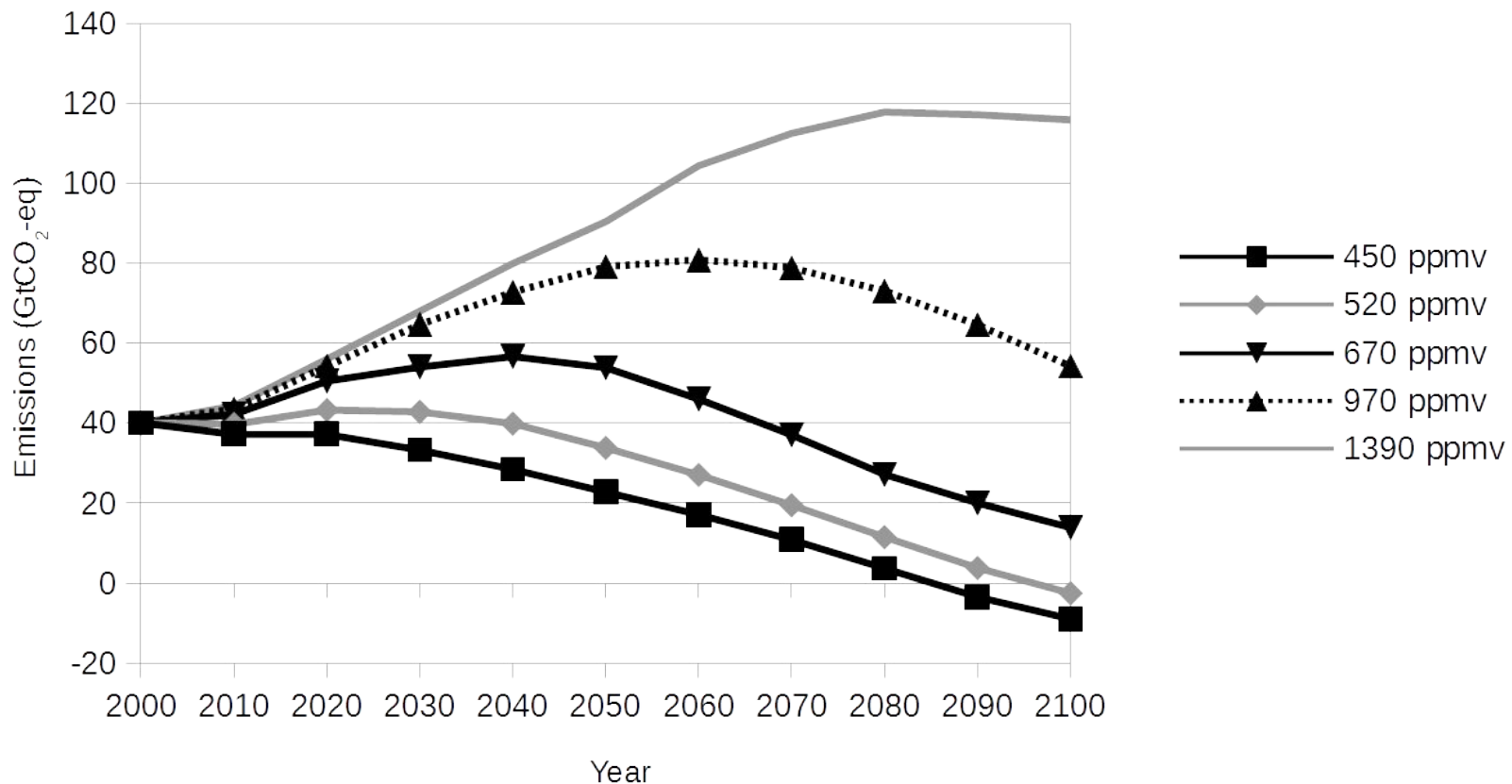
Why do people migrate away from their home territories?



Human-induced climate change



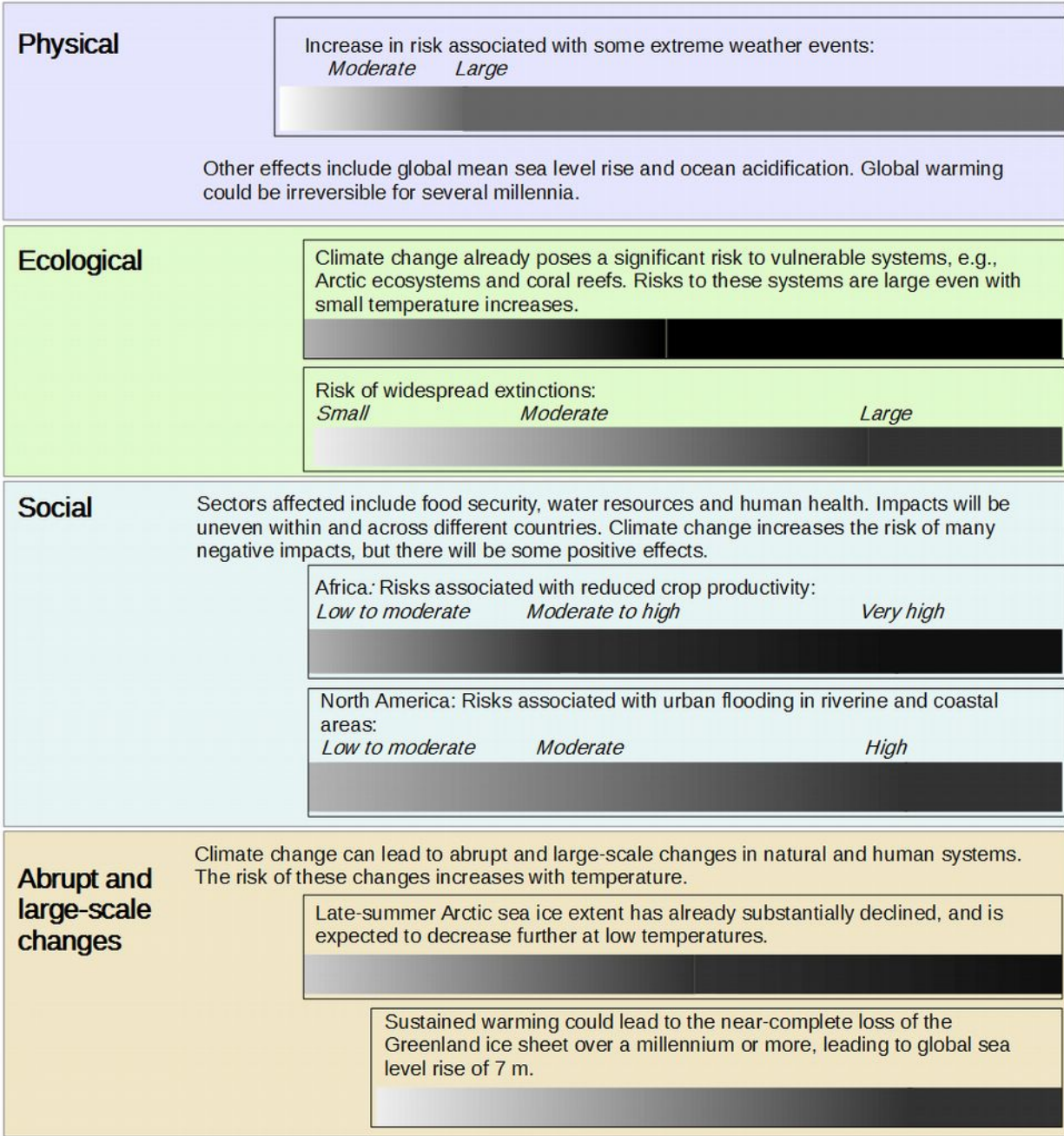
Current levels of atmospheric CO₂



This graph shows projected changes in annual human greenhouse gas (GHG) emissions between the years 2000 and 2100 for a range of climate change mitigation scenarios. Emissions are measured in billion tonnes of carbon dioxide-equivalent (GtCO₂-eq) using data from International Institute for Applied System Analysis (IIASA) GGI Scenario Database Ver 2.0
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Increase in global mean temperature, relative to pre-industrial levels

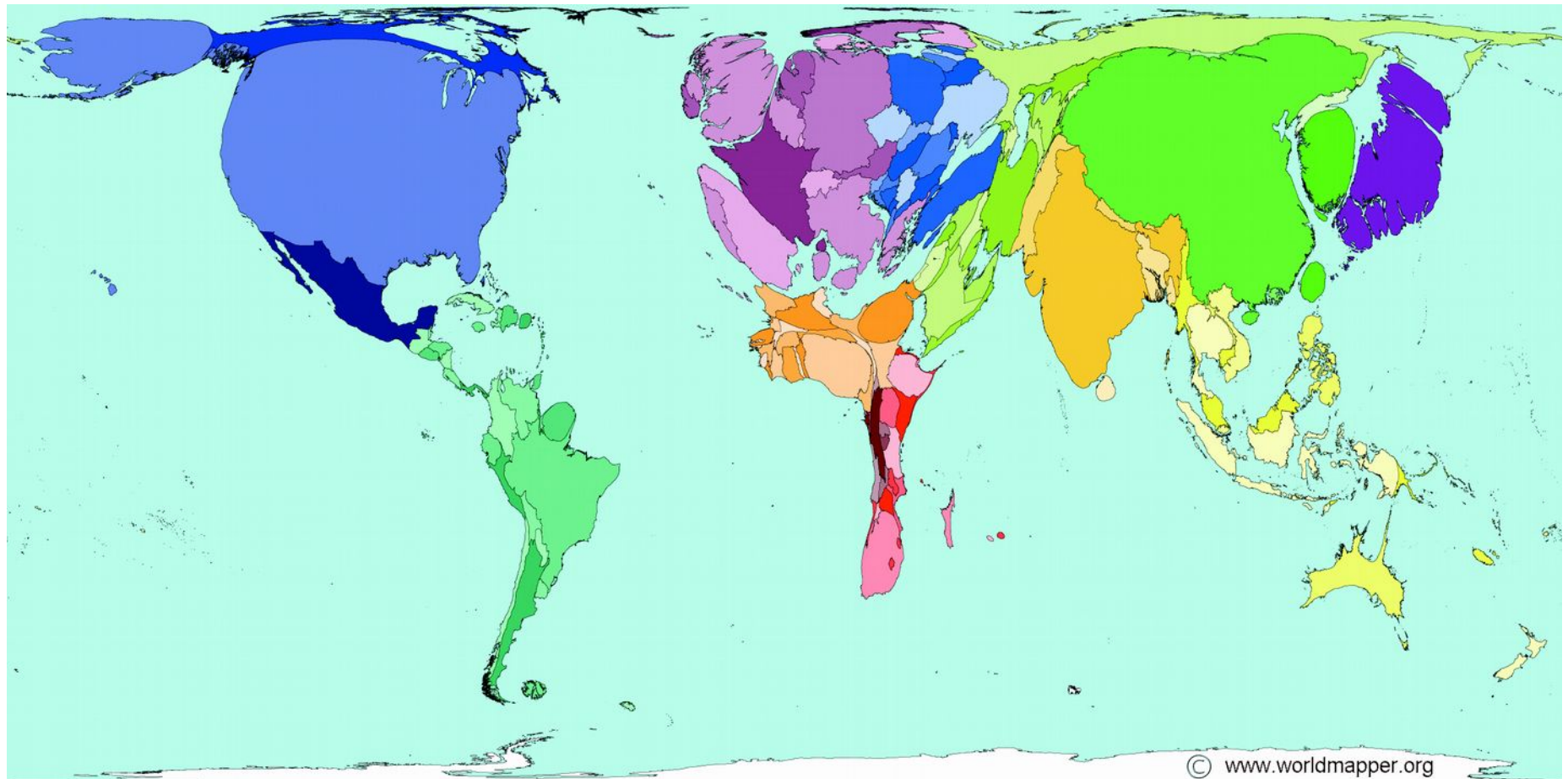
0 1 2 3 4 5 6 7 8 9 °F



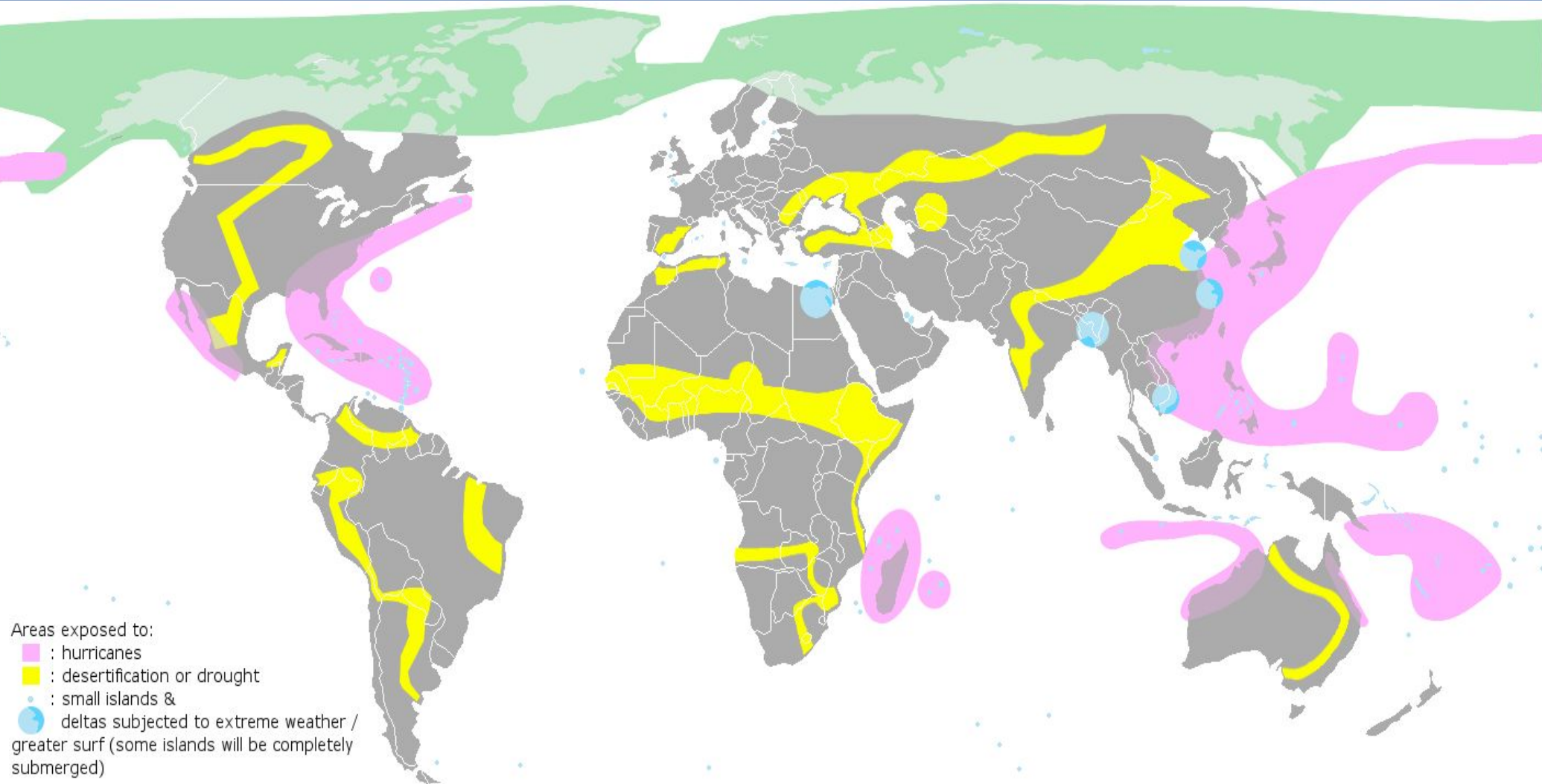
0 1 2 3 4 5 °C
Recent temperatures (2003 to 2012)

Source: Wikimedia Commons
Licence: CC0
URL:
https://commons.wikimedia.org/wiki/File:Impacts_of_global_warming_2.png

An unequal ecological footprint

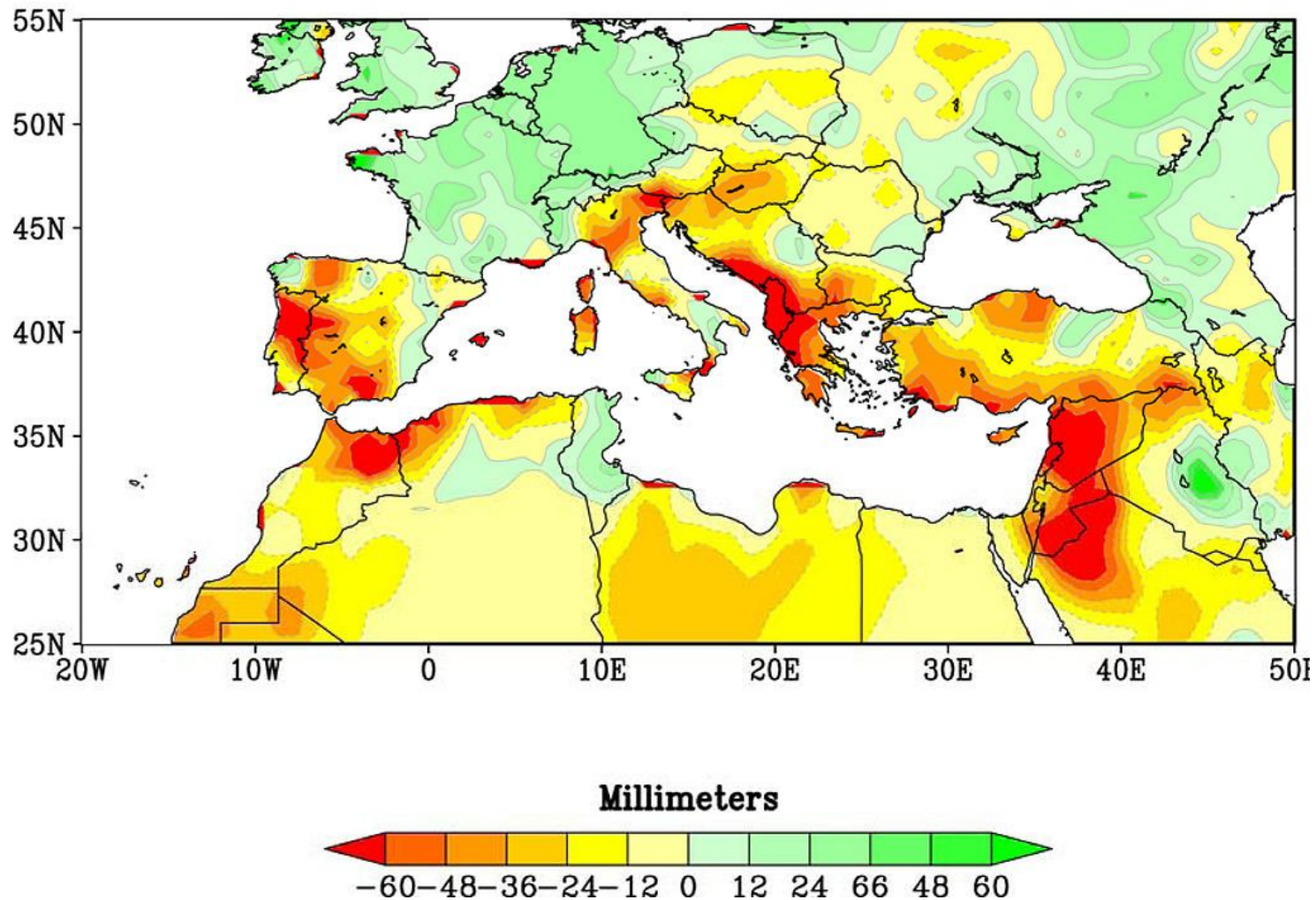


Natural disasters caused by climate change



Die Weltkarte zeigt Gebiete in denen auf Grund des Klimawandels lokale Umweltveränderung zu Klimaflucht führen könnten. Rosa: Hurrikans/Tropische Wirbelstürme - Gelb: Desertifikation/Dürre - Blau: Veränderungen durch Meeresspiegelanstieg (Inseln, Deltas)
Source: https://de.wikipedia.org/wiki/Umweltfl%C3%BChtling#/media/File:Natural_disasters_caused_by_climate_change.png
Author: KVDP License: Creative Commons Attribution-Share Alike 3.0 Unported

Mediterranean drought 2007-2010



Source: Martin Hoerling, Jon Eischeid, Judith Perlwitz, Xiaowei Quan, Tao Zhang, and Philip Pegion, 2012: On the Increased Frequency of Mediterranean Drought. *J. Climate*, 25, 2146–2161. doi: <http://dx.doi.org/10.1175/JCLI-D-11-00296.1>
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Climate change and the Syrian conflict

Colin P. Kelleya, Shahrzad Mohtadib, Mark A. Canec, Richard Seagerc, and Yochanan Kushnirc, 2015. Climate change in the Fertile Crescent and implications of the recent Syrian drought. *Proceedings of the National Academy of Sciences of the United States of America* **112**(11), 3241–3246

- **“We conclude that human influences on the climate system are implicated in the current Syrian conflict.”**
- weakening of winds that bring moisture-laden air from the Mediterranean
 - hotter temperatures > more evaporation
- increasing aridity in the region
 - a drought this severe became two to three times more likely to occur

Drought as catalyser of the conflict

- Conceptual and empirical research on environmental constraints and conflict has a long track
 - Is the Environment a National Security Issue?
Marc A. Levy, *International Security*, Vol. 20, No. 2 (Fall, 1995) , pp. 35-62. URL: <http://www.jstor.org/stable/2539228>
- Reduced precipitation and runoff as critical factor
 - “A particularly worrying trend is the extreme loss of precipitation in North Africa and the Middle East, as well as Central Asia during the winter and summer months”
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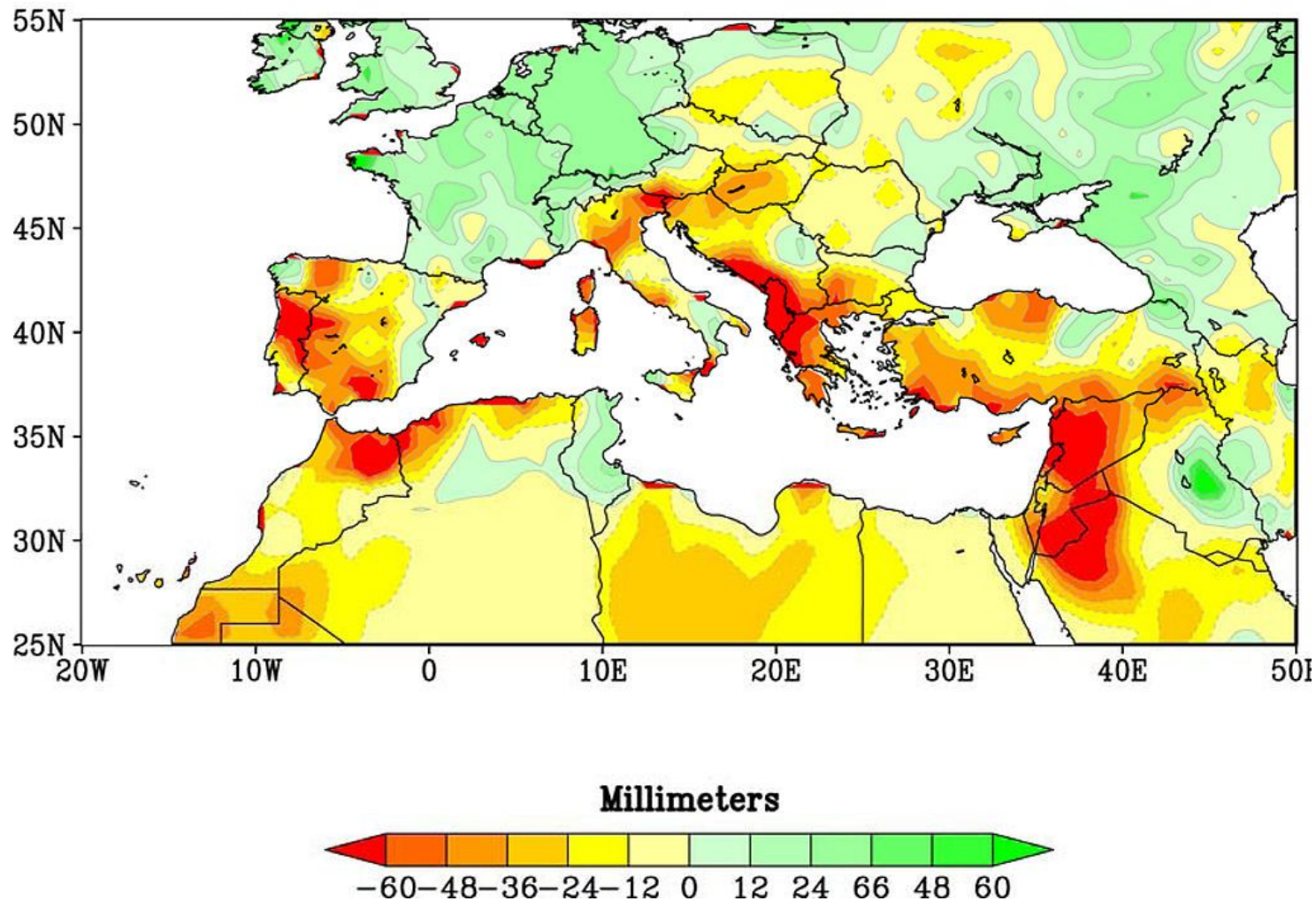
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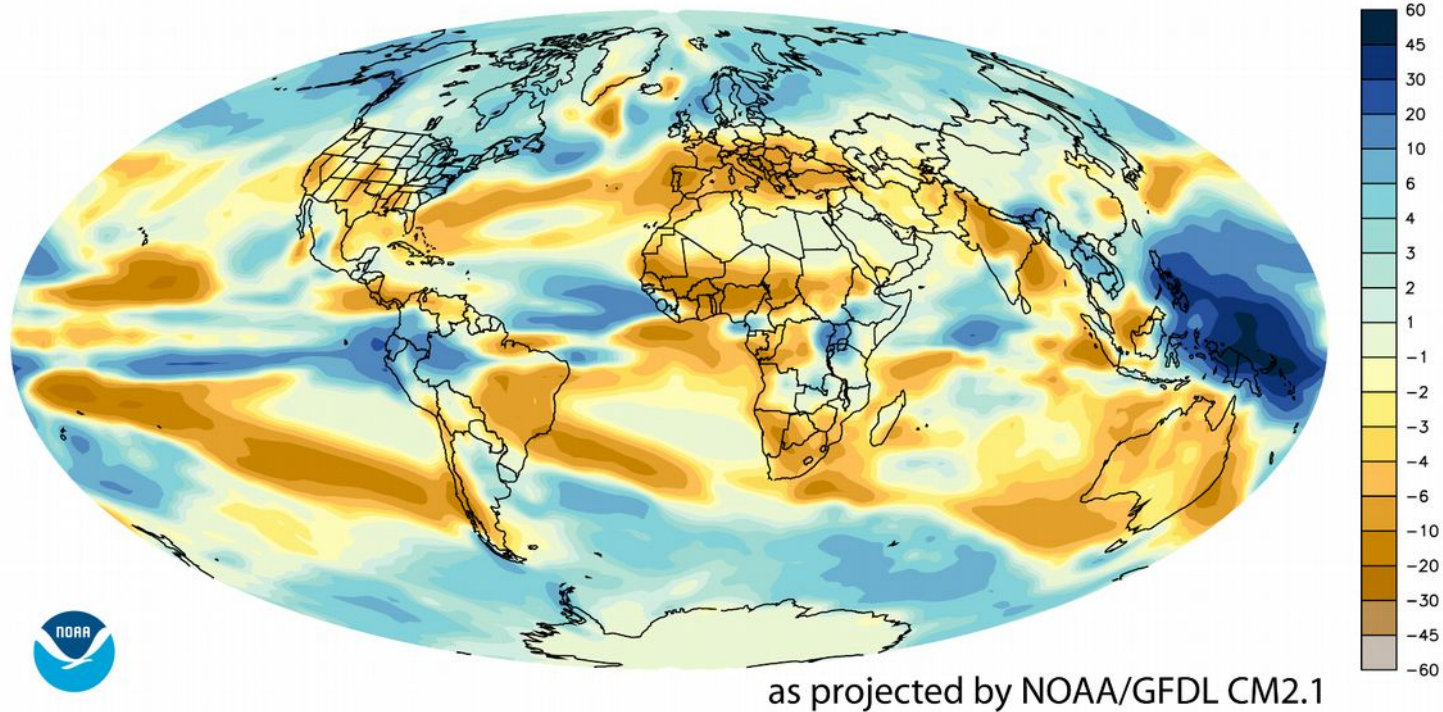
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Increasing frequency of floods and droughts

CHANGE IN PRECIPITATION BY END OF 21st CENTURY
inches of liquid water per year



Change is in response to increasing atmospheric concentrations of greenhouse gases and aerosols based on a "middle of the road" estimate of future emissions

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https://commons.wikimedia.org/wiki/File:Projected_change_in_annual_average_precipitation_for_the_21st_century_based_on_the_SRES_A1B_emissions_scenario_and_simulated_by_the_GFDL_CM2.1_model.png

Climate change, land grabbing, resources exploitation

- "Countries are buying up long-term access to farmland in sub-Saharan Africa," Levy said. "It's good for their food security, but it's creating problems" for African consumers and small landholders. (Reuters)
- Nations grappling with climate change "tempted" to pursue policies that benefit themselves in the short term but make others worse off
 - Russia banned grain exports following a heat wave in 2010, benefiting domestic consumers, but causing a supply crunch, rising prices and hunger in other regions. (Reuters)

Unequal impacts and adaptation

- “In a world of rising sea levels and melting glaciers, climate change is most likely occurring but with uncertain overall effects. I argue that we can predict the effects of climate change on migration by exploring the effects of environmental problems on migration in recent decades. People can adapt to these problems by staying in place and doing nothing, staying in place and mitigating the problems, or leaving the affected areas. The choice between these options will depend on the extent of problems and mitigation capabilities. People living in lesser developed countries may be more likely to leave affected areas, which may cause conflict in receiving areas.”

Rafael Reuveny, Climate change-induced migration and violent conflict, Political Geography, Volume 26, Issue 6, August 2007, Pages 656-673, ISSN 0962-6298, <http://dx.doi.org/10.1016/j.polgeo.2007.05.001>.

An history of the Syrian conflict

- <http://www.upworthy.com/trying-to-follow-what-is-going-on-in-syria-and-why-this-comic-will-get-you-there-in-5-minutes>

Adapting to climate change?

- The effects of man-induced climate change will increase and probably last for centuries
- Nevertheless climate and environmental change **do not fit** the definition of refugees set out in the UN convention
 - Climate refugees have **no right** to ask for asylum

Resilienz und Solidarität vor Ort aufbauen

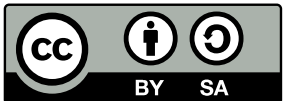
- Was brauchen Menschen die aus ihren Länder flüchten? Was bringen sie mit?
- Was können Menschen vor Ort für neu Ankommende leisten? Was können sie brauchen?

**Werratal Ressourcenpools für lokale Resilienz
und interkulturelle Solidarität**

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