Can climate change be beneficial?

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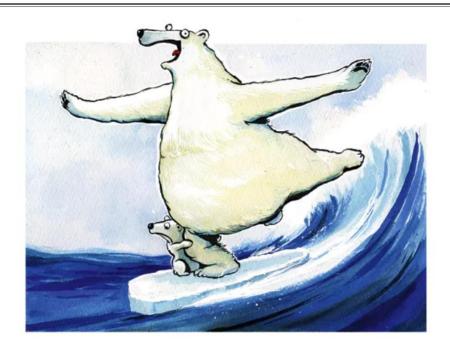
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FEATURES

Why climate change is good for the world

Don't panic! The scientific consensus is that warmer temperatures do more good than harm

Matt Ridley



Climate change has done more good than harm so far and is likely to continue doing so for most of this century. This is not some barmy, right-wing fantasy; it is the consensus of expert opinion. Yet almost

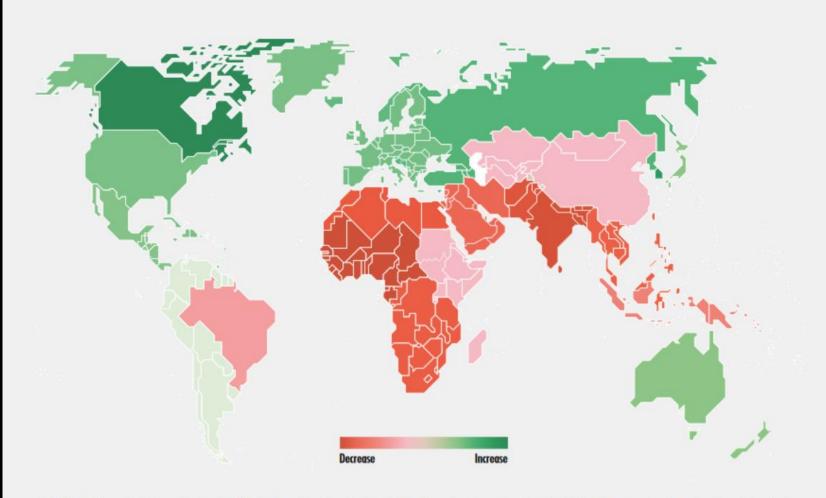
Matt Ridley 19 October 2013 9:00 AM "There are many likely effects of climate change: positive and negative, economic and ecological, humanitarian and financial. And if you aggregate them all, the overall effect is positive today — and likely to stay positive until around 2080" (Attributed to Professor Richard Tol, Sussex university).

"As Bjorn Lomborg has pointed out, the European Union will pay £165 billion for its current climate policies each and every year for the next 87 years."



Rank	Country ▼
1	Norway
2	New Zealand
3	Finland
4	Sweden
5	Australia
6	Switzerland
7	Denmark
8	Austria
9	Germany
9	Iceland
9	Singapore
12	United Kingdom
13	Canada
14	Luxembourg
15	United States
16	Republic of Korea
17	France
18	Netherlands
19	Slovenia
20	Japan
21	Ireland
22	Czech Republic
23	Poland
24	Spain
25	Estonia
26	Belgium
27	Portugal
28	Chile
29	Israel
29	Lithuania
31	Latvia
32	Italy United Arab Emirates
	Russian Federation
33	Russian Federation
173	Haiti
175	Niger
176	Sudan
177	Dem. Rep. of the Congo
178	Central African Rep.
179	Eritrea
180	Chad
181	Somalia

FIGURE 2.1 CHANGES IN AGRICULTURAL PRODUCTION IN 2050: CLIMATE CHANGE RELATIVE TO THE BASELINE



NOTE: The final boundary between the Republic of the Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area has not yet been determined. SOURCE: Based on data provided by Wageningen Economic Research. 2018. Climate Change and Global Market Integration: Implications for global economic activities, agricultural commodities and food security. SOCO 2018 Background Paper, Rome, FAO.

Context

 Global warming has (and will continue) to increase global economic inequality

 Wealthy counties have benefited disproportionately from the activities that have caused global warming, while poor countries suffer disproportionally from the impacts

Some climate change winners

- The Arctic Access to vast expanses of previously inaccessible land
- The oil, gas and mineral industries "I think it's important to realise that this [melt] is also an opportunity" (Norway's petroleum and energy minister)
- Shipping The northwest passage becomes a viable alternative to the Panama Canal
- High latitude agriculture— Production belts in the northern hemisphere shift northwards
- Plant growth Increased plant production
- Greenland Oil and gas, mineral extraction, fishing, tourism, agriculture, energy intensive industries (massive amounts of cheap hydropower), water exports

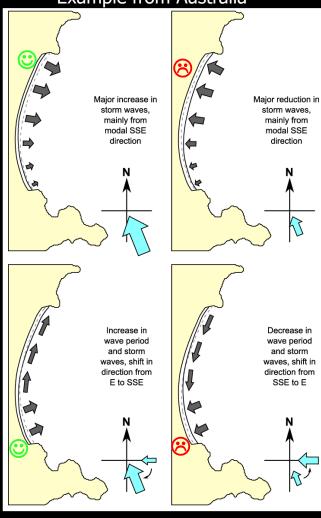
Some 'unexpected' benefits

- Sustainability As we are forced to fully engage with climate change we will also be creating the foundation for long-term sustainability
- Employment Millions of new green energy jobs
- Resilience Building resilience for climate will build more general societal resilience
- Additional benefits Climate change mitigation brings additional benefits such as improved health (e.g. cleaner air) and reduced resources use

Beaches and coasts

- Coastal change Sea level rise, erosion, inundation. There is not much to be positive about!
- Depending on the nature of process driver change, some sections of coast may benefit
- There will be some winners at the local level (at least for a period of time)

Example from Australia



Harley et al. (2011) doi: 10.1029/2011JF001989

Summary

- Some people and places will experience short term gains from climate change
- In the long term, negatives far outweigh the positives
- The world is (increasingly) interconnected e.g. migration
- Nowhere is immune from long term negative impacts of climate change
- The Challenge Find ways to take advantage of climate change while not contributing to it