GEOENGINEERING: Humanitarian Perspectives

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System Dynamics Modeling
Advice: Block sunlight to cut warming rate

Driver’s Task: Deliver refrigerated medicine
Your Task: What else could change?
To Gabon or not to Gabon: A geoengineering question

Caldeira & Wood (2008)

CC + No SunBlock

CC + SunBlock

Precipitation change (m yr⁻¹)

(Caldeira & Wood 2008)
2010: Two Geoengineering Qs from Red Cross

1. How will the most vulnerable help make geoengineering decisions?

2. Who will pay for humanitarian work in a geoengineered world?
Geoengineering: A humanitarian concern

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Abstract The humanitarian sector is active at the global frontline of climate impacts, and has a track record in influencing the climate change policy agenda. Geoengineering is a humanitarian concern: the potential for deliberate large-scale intervention in the Earth’s climate system has major implications in terms of impacts on the most vulnerable. Yet, so far the humanitarian community has largely been absent from geoengineering deliberations. Geoengineering may be perceived as too theoretical, too complex, and not imminent enough to merit attention. However, early engagement by the sector is imperative to ensure that humanitarian considerations are integrated into policy decisions. Those who can suffer the worst outcomes need to be involved; especially given the plausibility of “predatory geoengineering” where recklessly self-concerned actions may result in harmful consequences to others. This paper explores the humanitarian dimensions of geoengineering, specifically relating to solar radiation management (SRM). Drawing from the engagement of the Red Cross Red Crescent Climate Centre in SRM discussions, we discuss how to improve linkages between science, policy and humanitarian practice. We further propose the creation of a geoengineering risk management framework to ensure that the interests of the most vulnerable are considered and addressed - including the voices of all stakeholders.

1. Introduction

Less than two decades ago science began loudly warning about the potential for climate change to trans-
“The potential for [geoengineering] has major implications in terms of impacts on the most vulnerable.”

“No one likes to be a rat in someone else’s laboratory.”

“Predatory Geoengineering”

“Potentially delusional assumptions of rationality.”

Less than two decades ago, science began loudly warning about the potential for climate change to trans-
“Try honking again.”
“No, Thursday’s out. How about never—is never good for you?”
“In the context of tipping points or runaway climate change scenarios, SRM could help reduce impacts on some of the most vulnerable, but global power dynamics are not set up to ensure that the interests of the most vulnerable are elicited, considered, and addressed.”
“To Geoengineer Or Not To Geoengineer”, with Regie Gibson