

# Our environment, our health, our challenge: perspectives from a Southern Brazil tragedy

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The Brazilian health system is still recovering from the sanitary and ‘necropolitical’ crisis of the COVID-19 pandemic<sup>1</sup> and now it is confronting one of the world’s most pressing issues: climate change and its impact on health.<sup>2</sup> In May 2024, torrential rains and floods devastated 90% of the State of Rio Grande do Sul, a province larger in area than the United Kingdom, marking one of the biggest natural disasters in the history of Brazil. Waters that rose to 14 m above normal levels caused extensive damage, destroying roads, highways, and bridges, affecting over 2 million people, and leaving over 150 people dead or missing.<sup>3</sup> The estimated damage exceeds 10 billion dollars.

In the healthcare sector, various services were suspended or compromised, from primary and mental health care to hospitals and tertiary centres. The difficulty of accessing care is compounded by damage to health infrastructure, a shortage of medical personnel, and limited resources, adding pressure to an already overburdened system. Moreover, the region now faces a resurgence of infectious diseases such as gastroenteritis and leptospirosis, caused by contaminated drinking water and exposure to open sewage. With limited state resources available, the response to these challenges has been multisectoral, combining efforts from public, private, and civil society sectors.

The magnitude of this dramatic event shows the brave resilience of the volunteers who took on many roles in the rescue and relief efforts; however, it also underscores the fragility of current policies to prevent and mitigate such a disaster. Over the last decades, Rio Grande do Sul and Brazilian authorities have systematically underfunded and neglected actions countering climate change. Despite Brazil’s renewed diplomatic leadership in international environmental matters, as demonstrated by its stance at COP 28, governmental policies still poorly balance environmental conservation with socio-economic development. The country remains tied to a poorly designed, production-focused development model, economically reliant on ecologically

harmful practices such as oil extraction, mining, extensive livestock farming, and monoculture agriculture. This scenario hinders progress toward concrete actions for sustainability, particularly in climate dimensions.

When climate discussions began at the 1972 Stockholm Conference and subsequent international forums, the focus was on intergenerational environmental protection. It is now clear that the climate crisis impacts current generations directly. Most notably, the current crisis in Brazil—and the several climate-related others we are witnessing worldwide—highlights how climate emergencies are multidimensional, affecting not only economies but also, and very significantly, health. Heatwaves, droughts, floods, hurricanes, and more elevate the risk of infectious diseases, heat-related illnesses, malnutrition, trauma, and several other health problems, highlighting one of the largest dengue epidemics ever observed in the country.<sup>4</sup>

The need for a more holistic approach by health professionals towards climate change is now more pressing than ever. Conversations on mitigation should expand beyond elite environmental gatherings. It is urgent to formulate policies across every tier that recognise climate change as a fundamental factor affecting health, integrating these considerations into the global health agenda. This strategy should include measures to mitigate the effects of environmental changes and enhance the resilience of health systems, which are increasingly challenged by higher incidences of climate-related illnesses and strained infrastructure. To achieve this, we must focus on building—or in some cases, even establishing—robust public health systems capable of safeguarding communal well-being, particularly for the most vulnerable.<sup>5</sup>

Additionally, the integration of global health systems, such as PAHO-WHO, with the practical experiences of national frameworks, such as Brazil’s SUS health care networks, is essential for swift assistance during disasters. These systems are critical for overcoming immediate crises and ensuring timely responses as well as



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fostering best practices among countries. Reviving the discussion on Essential Public Health Functions is also crucial, particularly in crafting action frameworks that facilitate sustained actions, allocate budgets effectively, and enhance risk surveillance, resilience and emergency management.<sup>6,7</sup>

The health sector must play a significant role in reshaping our global economic model. Our goal should be to foster well-being, not through an outdated, development-centric agenda, but through a socio-environmental initiative grounded in ethical and humane decisions. Disasters, such as those in southern Brazil, compel us to consider bold strategies that uphold values of solidarity and consciousness amidst the large transformations our societies face. Addressing denialism and neoliberal capitalist rationality is imperative to sustain life in a world with limited natural resources. The climate crisis in Southern Brazil starkly reminds us that our existence is in jeopardy and at risk of extinction.

#### Contributors

All the authors contributed equally to the stages of conceptualization, data collection, analysis, writing, and revision of the document.

#### Declaration of interests

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