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International Non-Governmental Organizations (INGOs) in Humanitarian Field: why and how to engage with Planetary Health?

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Abstract

Planetary Health is an emerging field reshaping Global Health understanding of health concerns and interventions living into the Anthropocene. Many challenges faced by humanitarian actors are exacerbated by the climate crisis that could be considered itself another humanitarian crisis. However, often the humanitarian response focuses mainly on disaster risk reduction and on efforts to decarbonize operations. Arguing that Planetary Health offer the missing piece to assess and respond to the complexity of the climate crisis, authors identify the added-value of this approach for humanitarian programs. They pinpoint the main barriers among humanitarian actors in adopting or exploring further the Planetary Health approach. Finally, they share few suggestions toward integrated Planetary Health programs in Low and Middle Income Countries (LMICs). Ultimately, this personal viewpoint calls for an inclusive debate to bring Planetary Health insights, critics, and innovations into Non-Governmental Organization (NGOs) hard daily-work in order to strengthen co-benefits for health and environment.

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Introduction

While authors debated if there is room for Planetary Health within humanitarian operations, humanitarian actors were fully engaged in supporting Turkey and Syrian people in coping with the aftermath of a 7.8 magnitude earthquake with a death toll of more than 22.000 people and 80.000 injured in early February this year.¹

Because of our current inability to forecast earthquakes and the traumatic scenes once triggered, those events seem confirming the idea of Nature as “an evil and indifferent stepmother”², as described by the Italian poet Giacomo Leopardi in 1824.

Rather than accepting such pessimism, lessons learned after big earthquakes, like in Haiti in 2010, in Pakistan in 2015 and again in 2022, or in Nepal in 2015, push humanitarian actors to rethink their assumptions. Namely about the understanding of the causes and the potential links with climate change³, the conceptualization of polycrisis (considering economic and political determinants that exacerbate negative outcomes among vulnerable groups), how humans inhabit their territories and the relationship with the local ecosystems, and, of course, the sustainability and resilience of the rebuilding agenda.

Planetary Health encompasses those topics and it could be a unifying narrative⁴ able to providing meaningful awareness of complex interrelated phenomena. There is no consensual definition of Planetary Health⁵, thus, definitions of similar approaches are polysemic and nuanced and this undermine a clear understanding.⁶ Nevertheless, the Planetary Health emerging discourse frames the understanding of what living in the Anthropocene means. It helps navigating such uncharted territory when coming to humanitarian crisis and health emergencies. Ultimately, it may catalyse efforts for living within a depleted and changing biosphere.

Nevertheless, the humanitarian actors that gained expertise in responding to earthquakes, conflicts, and protracted crisis, do not confront with the Planetary Health approach, and this latter has not offered operational prompt to face humanitarian crisis so far. This paper moves from such unsolved tension: is Planetary Health just one step more in the endless process of restructuration of the humanitarian organization⁷ (and jargon) or a signal of a new critical junctures⁸ (or a paradigm shift)? Does Planetary Health offer a useful frame for rethinking humanitarian action in a changing and bankrupted biosphere, fostering systemic transformation of deep roots of health inequity?

Climate crisis is a humanitarian crisis

While it is evident that the SARS-CoV2, a zoonosis, has been an unprecedented disaster, hazards related to climate continued to increase.⁹ In Pakistan, only in 2022, where unusually heavy monsoon rains destroyed and damaged more than 2 million houses, caused over 1.600 deaths and 13.000 injuries, forcing almost 8 million people to move, the natural calamity also increased the risk of water-borne diseases and other health concerns.¹⁰ Slow onset disasters are also dramatic: rapid urbanization of Kabul, the capital city of Afghanistan, coupled with drastic droughts, is reinforcing outdoor air pollution provoking respiratory problems and increasing the risk of non-communicable diseases for millions of inhabitants.¹¹

Most vulnerable countries, characterized by political violence, poor economy, weak health systems, and no social protection are the first paying the externalities of the unbalanced and colonial exploitation of ecosystems’ services. Therefore, is anything but surprising that Low and Middle Income Countries (LMICs) are suffering most from the negative impacts of climate change.¹²

While responding to current crisis, International Non-Governmental Organizations (INGOs) witnesses the ongoing dramatic direct and indirect effect of the climate crisis on health in those complex settings. Their experience in responding to such dramatic crisis push to stating that climate crisis is (another) humanitarian crisis.

Humanitarian responses to the climate crisis

To tackle environmental issues in developing countries since the late Seventies, United Nations (UN) experts and INGOs focused their efforts in risk and vulnerability analysis and Disaster Risk Reduction¹³. In 2015, the Paris Agreement on climate change, pushed states' efforts toward climate adaptation and mitigation strategies. This policy offers a common ground with the Sendai Framework for Disaster Risk Reduction 2015–2030, endorsed by the General Assembly of the UN¹⁴ that same year. Such ambitious agreements and relative convergent policies strongly oriented the limited and insufficient funds¹⁵ of humanitarian aid and official development assistance (ODA) dedicated to environmental issues. During the last eight years, Disaster Risk Reduction and Climate Change Adaptation (DRR-CCA) challenging tasks absorbed the efforts of many INGOs.

At the same time, as stated by the second point of the Climate and Environment Charter for Humanitarian Organizations¹⁶, INGOs committed to maximize the environmental sustainability of operations. Decarbonizing the aid sector is in line with the principle of “do no harm” extended from populations to ecosystems too. Implementation of this principle to the health sector could contribute to reduce the greenhouse gases emissions of the health sectors, of which many INGOs are part of, a sector that accounts for the 5% of global emissions¹⁷. However, it is difficult to measure the real carbon footprint of the humanitarian sector and it seems that reductions may achieve mainly symbolic goals⁸.

Interestingly, flights accounted for one of the UN's biggest emissions sources.¹⁸ Reducing travels means challenging the programs' ownership and power relationship between headquarters based in the so-called Global North and field operations in the Global South. It is not a simply logistical decision: it is matter of decentralization, empowerment, and, finally, decolonization of aid. Despite the debate about decolonization is regularly gaining space into humanitarian self-reflection¹⁹, sustainability action is likely to have limited impact on both the carbon footprint and decolonization journey. For sure, awareness of the impact of unnecessary flights, what Swedish call “flygskam” or flight shame, is a first step toward changing habits and social norms about travelling and even organizational schemes and power imbalance.

Despite the importance of both strategies, DRR-CCA and decarbonizing the aid sector, they may result insufficient to respond to the magnitude of the ongoing complex climate crisis.

Climate crisis is also a crisis of humanitarian aid

In the authors experience in humanitarian field and within global health networks of experts participating to and observing the emergent discourse about climate, the debate about how facing the climate crisis is often narrowed about operational

gaps. DRR-CCA and decarbonizing aid actions are for sure useful steps in this direction, but they hide a missing piece of the complex puzzle of climate crisis, its multiple effects, and the need for a systemic response, thus, it is difficult to catch the full picture of the environmental-health nexus.

Climate change and environmental degradation undermine the Sustainable Development Goals (SDGs) 2030 agenda. Global phenomena in the biosphere could work as threat multipliers exacerbating other needs and triggering cascade-crisis. From a more radical critic, some scholars stated that SDG are not only ineffective to save the planet, but they divert attention from deeper reforms of a system based on fossil fuel²⁰.

To avoid such a scenario, the humanitarian mantra has focused on scaling up what the sector learned and implemented so far. It is hardly likely that business as usual could be sufficient. There are many reasons for doubting. Since the early beginning of humanitarian aid more than 150 years ago²¹, witnessing violence and suffering, humanitarian actors focused their effort on immediate relief and life-saving actions. Humanitarian intervention is characterized by solution-oriented thinking; focus on managing difficult situations; and promotion of coping, but lacking agency on more structural issues. Moreover, considering alerts about tipping point of Earth vital systems, a sense of urgency is built-in in the climate crisis' narrative and this pushes attention, once again, toward immediate solutions. On the contrary, adopting systemic thinking raises doubts on current scaling-up strategies facing potential tremendous needs that could affect 3 billion people living in contexts highly vulnerable to climate change²².

An imaginative gap

An INGO CEO admitted that “With the climate problem [...] the humanitarian sector isn't able to say to its support base ‘that's the problem, we've got a solution,’ because we haven't.” When there are no answer, it is probably better to reformulate the question. In this case, this could sounds like: “why we are not able to imagine such a solution?” Not only imagination is one of the greatest resources humans have²³ since primates' brain allowed them to engage in storytelling, but it promotes changes. Future is difficult to forecast, but not to imagine. In the postmodern era, there is no a single truth²⁴ to build over a revolutionary expectations for a better future. Therefore, science provides more and more evidences of the disaster our specie is facing, having broken 6 out of 9 planetary boundaries²⁵ that allow life functions on Earth, but those motivated to change and help others have no direction to move forward. Vision of an ideal (thus, sustainable) future could be considered a form of utopia. Despite the common pejorative meaning of an impracticable and naïve picture of society, utopian thinking challenges the status quo and open the door to creative solutions to new problems²⁶. There is no shame in defining the Planetary Health discourse a utopian storytelling.

Facing great uncertainty, humanitarian action needs a vision, a utopia, a narrative, or a frame. Frames matter²⁷, especially in Planetary Health, because they cluster information, concepts, images, thus the opinions and ideas humans use to make sense of the world and its transformations. Frames defines how conceptualizing a problem and if it could be considered as a priority, which solutions we have the right to imagine, and which possibilities we may consider available and feasible to solve it.

Planetary Health: A roadmap for tackling climate-related humanitarian crisis?

Authors argued that Planetary Health is an ongoing storytelling endeavour that helps to accept and understand the complexity of direct and indirect pathways between environmental conditions and human health. The Sars-CoV2 pandemic, as other zoonosis, offers a dramatic example: it has been actually described as an example of 'Anthropocene disease'²⁸ because the role of human activities in altering the patterns and mechanisms of interactions between species²⁹. Moreover, globalized transport system spread the virus incredibly fast, meanwhile environmental conditions such as outdoor air pollution, have been increased infectivity and COVID-19 mortality rate in England³⁰, for instance. It has been proved³¹ that in that same country COVID-19 indicators followed a social gradient, hitting more severely disadvantaged groups. Social injustice in accessing to social determinants of health³² (like, among others, education, employment, working conditions, weak local health systems, etc.) resulted in unacceptable health inequities. Climate related phenomena are likely to follow a similar pattern in determining negative health outcomes first and foremost among marginalized groups. What could be the added-value of a Planetary Health frame in looking at, preventing, and responding to climate-related humanitarian crisis?

Understanding and assessing syndemics: Planetary health framework zooms out from a single disease and it encompasses all those upstream factors that represents the deep roots a syndemic - the presence of two or more disease states that adversely interact with each other, negatively affecting the mutual course of each disease trajectory, enhancing vulnerability, and which are made more deleterious by experienced inequities³³. Applying such lenses to humanitarian settings will offer coherent and meaningful assessment of complex and interrelated elements of complex humanitarian emergency (CHE) and syndemics in humanitarian and fragile settings.

Coordinating diverse expertise: To understand and tackle such a complexity, Planetary Health promotes transdisciplinary research: this implies, as first step, bringing at the table diverse stakeholders as in Planetary Health global working groups and conferences³⁴. Such transdisciplinary dialogue is a pre-requirement for integrated humanitarian programs able to respond to multiple and simultaneous needs of persons suffering CHE and syndemics' short and long-term consequences. Nevertheless, transdisciplinary is also about expanding acceptance of diverse expertise and even epistemologies. In breaking knowledge silos, transdisciplinary research challenge societal and scientific norms, including established hierarchies and power relations³⁵ of experts.

Supporting efforts for decolonization: Marginalized and underrepresented groups are finally entitled to influence and collaborate to research, bringing diverse voices, languages, and way of thinking. The interest of Planetary Health practitioners to indigenous knowledge cannot hide the risk of recuperation of exploitation of cultural resources, but it also may genuinely contribute to the decolonization journey. Decolonizing aid is still an unsolved issue and Planetary Health participative and open approach could support this process.

Expanding rights and values: Moreover, indigenous knowledge provides a holistic and interconnected vision of reality³⁶ accepting complexity from a relational way of thinking. In such a world vision, the boarder between the self and the other (the nature) become blurred and the very concept of humanity is accompanied by new kind of subjects entitled of rights³⁷.

If the definition of humanity as a form of ethic is shifting³⁸, humanitarianism, thus solidarity and care, are changing too as well as, by definition, humanitarian actors. Planetary Health is one of the platform to rethink humanitarian aid.

Fostering a structural critics perspective (a pre-requisite for social change): The early Anthropocene has been characterized by exploitation of natural resources beyond the safe operating limits of vital ecosystems, the myth of infinite growing based on consumption, and huge and structural inequities. Marxists' critical scholars argue that the Anthropocene is in reality a Capitalocene³⁹ epoch, spotlighting the economic ideology as a crucial topic in the field of health. This radical critic and revolutionary thinking has been pointed out as a reason for underfunding of Planetary Health by big global health players like the Gates Foundation or the Wellcome Trusts⁴⁰. INGOs often heavily rely on donors and the so-called 'philanthrocapitalism'⁴¹ generating moral injuries among those who work for changing the systems within that same model. Planetary Health reignite the critical political discourse in the field of cooperation.

In a nutshell, Planetary Health offers to the fatigue of an endless humanitarian work the priceless hope of making sense of the overall change we need for living healthy in the Anthropocene and caring for this new gestalt composed by humans, animals, and the environment.

Barriers to adoption of the Planetary Health framework in the humanitarian field

Despite the value of Planetary Health for the humanitarian system walking in the uncharted territory of a warmer and polluted planet, this approach raises sometimes resistances. The authors ongoing journey in translating Planetary Health to humanitarian programs brought out some of those frames that hinder the potential of adopting a new vision for new problems. The author identified ten frames that often drive the conversation about this topic within the humanitarian actors and limit its development:

1. *"It is (another) buzzword"*: being Planetary Health a storytelling in progress, some could believe that this concept is just a fashionable title for smart LinkedIn profiles instead of a emerging field for research, policy, and action.
2. *"It is not my field"*: Breaking silos, moving from coordination (a mantra in the humanitarian field in the last 20 years) to integration of diverse expertise and practices, implies a huge change in works habits and not enough support is given to such professional behavioural change;
3. *"I don't know"*: Integrating climate data when analysing health issues is still a challenge for researchers, so it is for project designers and managers without adequate capacity-building and tools on Planetary Health. More education is needed and framework and resources exist⁴²;
4. *"It is not for us"*: The traditional mandate of humanitarian organization sounds narrow in front of Planetary Health issues. The hyper specialization of INGOs in a competitive market impede to target a Planetary Health overall challenge;
5. *"It is too expensive"*: The Return of Investment (RoI) for cleaning humanitarian operations or for engaging in Planetary Health is not still clear and it is difficult to make the case for more mitigating actions;
6. *"It is political sensitive"*: Presenting Planetary Health as a neutral technical approach sounds naïf. It is clear that global

- health, in addition to suffer from colonial power imbalance, is a conflictive space and there is no reason for Planetary Health being different. The political consequences of this approach deserve further research by social sciences;
7. *"It is too fresh and new"*: wishing to ensuring professionalism, global health networks of experts set standards and protocols of interventions. Nowadays, there is limited room and scarce boldness for innovation in terms of processes, creativity is not nurtured, and piloting is considered too risky (and not funded).
 8. *"It is too complex"*: Planetary Health accepts complexity. For this reason, despite many good local practices, the lack of a ready-to-use handbook water down enthusiasm among frontline workers who are asked to solve urgent real problems;
 9. *"It is not measurable"*: complex processes where global and local phenomena interact constantly, simultaneously, in nonlinear way, and with feedback mechanisms cannot be reduced to discrete units. Therefore, measurement becomes a scientific endeavour rather than a task for those implementing programs, despite the pressure by donors within a neoliberal system based on the concept of performance, cost-benefits analysis, measuring rather than solving⁴³.
 10. *"It is too stressing"*: Action (even within complex systems as humanitarian aid or even global health architecture) happens through humans being. Therefore, there will be no change without support in acknowledging human emotions facing those existential challenges. Promoting Planetary Health among humanitarian workers should take care of such a negative emotions and positive coping. INGOs have gained huge expertise in staff-care and it is time to take care for Planetary Health emotions.

Applying Planetary Health lens to humanitarian action: a challenging reframing

Planetary Health aims a transformation of unhealthy pathways between human action on the environment and health, going beyond impact assessment only. Following this principle, scholars⁴⁴ proposed a roadmap for guiding transdisciplinary research in this emerging field for changes needed to achieve the SDG2030 agenda. Nevertheless, there is not an agenda for action and implementation of Planetary Health in humanitarian settings, this remains a blind spot of humanitarian debates. This simple statement could sound obvious to researchers who may find absurd to summarize transdisciplinary evidence in a "to do list"; however, it sounds a big obstacle for action by humanitarian workers at the frontline of the climate crisis in need for concrete tips to better respond to multiple and urgent needs. Far from the ambition to fill too quickly such a gap, the author is aware that experts can play the role of knowledge broker in moving toward real world solutions. However, in parallel to disseminate clear information and building options for action, this paper argued that a shared framework is needed to nurture a vision where meaningful solutions become possible. Therefore, instead of pragmatic recommendations about 'what do to' or 'what is a priority'⁴⁵, conclusions drafted here connect the dots of thematic evoked above in order to offer a map of challenges for humanitarian actors interested in Planetary Health vision of a healthy future for all.

1. **Reframing the issue of climate crisis:** Environmental changes are coupled with policy landscape shifting and even epistemological transformations. Reframing current disasters and problems in terms of Planetary Health is a long-term journey. Stating that climate crisis is a health crisis⁴⁶ is a first step;

2. **Open dialogue** within humanitarian organizations and networks, Planetary Health researchers and practitioners, and engaging in an honest and active listening to local communities and indigenous knowledge are pre-requirements to look for enriching the understanding of unseen crisis;
3. **Develop common language** about what the current crisis is about, naming pathways in the continuum between environment and health, and agree on convergent approaches like One Health and Planetary Health to not waste time for defending one field or term (and the related power of experts);
4. **Engage in Planetary Health storytelling and learning.** Action is the elephant in the room: how to operationalise Planetary Health in pragmatic terms has not yet been answered. However, Hannah Arendt conceptualization of labour, work, and action⁴⁷ made clear that speech and action are intertwined and not aiming to producing results, but to enrich relationships. Storytelling is not a futile exercise: it is probably the most valuable capability of humans being;
5. **Strengthen advocacy** efforts towards ambitious changes is part of the storytelling efforts in order to create new opportunities from donors, asking for flexible calls for innovating proposals instead of vertical programs based on current insufficient measures;
6. **Promote acceptance** of the new understanding of the situation and its dramatic implications, changing our current personal and collective lifestyle and working, including the way of expressing solidarity and caring, and the need for radical action may generate anxiety, mourning, and frustration, among other emotions. Humanitarian workers and groups are not exempt from a deep work on their own emotions to go successfully through the great transition and its existential challenge. The well-developed system and knowledge for staff support could help such self-reflection and integration;
7. **Expand goals of climate action:** integrating DRR-CCA and decarbonising aid engagements with a cross-cutting effort to apply the Health in All Policies approach⁴⁸ that promotes an inter-sectorial and synergic work on social, commercial, and environmental determinants of health for reinforcing prevention;
8. **Promote innovative partnership:** Expertise required by addressing multiple dimensions of the environmental-health nexus, thus diverse determinants of health at global and local level, cannot be found in one single consultant profile or organization, but it is the effort of strong partnerships. The Quadripartite Agreement for One Health by the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE), the UN Environment Programme (UNEP) and the World Health Organization (WHO)⁴⁹ is a good example that invites to similar initiatives at INGOs level;
9. **Focus on localization and pilot experiences:** representing our society as a web of networks⁵⁰ change the architecture of centralized INGOs system based where donors are, fostering bottom-up small experiences of care of local ecosystems and communities;
10. **Redefine the target** of interventions from the sole focus on the potential victims of the climate crisis disasters to social and behavioural change of emitters.

Conclusions

It could be quite easy to acknowledge that, living in the Anthropocene, scaling up 'business-as-usual' is not an option.

However, it is much more difficult to find a more meaningful alternative action able to respond to current needs and to next social and environmental changes. This paper pointed out the imaginative gap that precede the operational one. This particularly affects the ability of humanitarian actors to rethink at their practice beyond equipping the aid system to face the consequences of the climate crisis, thus preventing and responding to disaster, while no harming.

We evoked the potential of the Planetary Health approach in expanding the understanding of complex crisis and syndemics, contributing to decolonizing aid and global health.

However, we also highlighted some misunderstanding and stigmatizing assumptions about Planetary Health that limit the debate among humanitarian actors as well as creativity in exploring new approaches to new needs.

We sketched few recommendations that attempt to promote the dialogue between the Planetary Health scholars with humanitarian actors. It is pivotal to build the Planetary Health narrative via an inclusive and participative process, and this paper has been an humble attempt to add one voice to such a polysemic discourse. INGOs could fruitfully contributing to such a dialogue and also connecting the Planetary Health discourse with the local reality of marginalized or underrepresented communities. Only inclusive dialogue let emerge collective intelligence that may ultimately fill the imaginative gap humanitarian community is suffering now and making Planetary Health a reasonable hope to cope with the Anthropocene and its related humanitarian crisis and finally thrive.

Declarations

Authors declare no competing interests.

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Footnotes

¹ *Turkey-Earthquake: Emergency Situation Report (11.02.2023)*. Support to Life, 2023. Accessed February 12, 2023. <https://reliefweb.int/report/turkiye/turkey-earthquake-emergency-situation-report-11022023>

² Leopardi, G. *Dialogo della Natura e di un islandese*, Operette Morali, 1824. Accessed February 12, 2023. <https://giacomoverri.wordpress.com/2019/04/02/le-nuove-operette-morali-dialogo-della-natura-e-di-un-islandese/>

³ Usman, M. A study on the enhancing earthquake frequency in northern Pakistan: is the climate change responsible?. *Nat Hazards* 82, 921–931 (2016). <https://doi.org/10.1007/s11069-016-2226-z>

⁴ Salk J. Planetary Health: A New Reality. *Challenges* 2019; 10(1). doi: <https://doi.org/10.3390/challe10010007>

- ⁵ Lerner H, Berg C. A Comparison of Three Holistic Approaches to Health: One Health, EcoHealth, and Planetary Health. *Frontiers in Veterinary Science* 2017; 4. doi: <https://doi.org/10.3389/fvets.2017.00163>
- ⁶ Correia T, Daniel-Ribeiro CT, Ferrinho P. Calling for a planetary and one health vision for global health. Editorial. *One Health* 2021; 13. doi: 10.1016/j.onehlt.2021.100342
- ⁷ Laissus-Benoist P. The endless restructuring of the humanitarian sector: an inappropriate search for performance? *Humanitarian Alternatives*, 2018; 9:52–62.
- ⁸ Egger C. About the critical junctures in humanitarian history. *Humanitarian Alternatives*, 2018; 9:1–5.
- ⁹ *World Disasters Report 2022 Trust, Equity and Local Action*. IFRC, 2022. Accessed February 12, 2023. <https://www.ifrc.org/document/world-disasters-report-2022>
- ¹⁰ *Pakistan Floods Response Plan*. OCHA, 2022. Business Brief. Accessed February 09, 2023. <https://reliefweb.int/report/pakistan/business-brief-humanitarian-overview-and-call-action-pakistan-floods-response-plan-17-october-2022>
- ¹¹ Waniyah M, Sakina A, Hamid U, et al. Impact of climate change on health in Afghanistan amidst a humanitarian crisis. *The Journal of Climate Change and Health* 2022; 6:100139.
- ¹² Abeygunawardena, P, Vyas, Y, Knill, P et al. *Poverty and climate change: reducing the vulnerability of the poor through adaptation (English)*. World Bank Group; 2009. Accessed February 09, 2023. <http://documents.worldbank.org/curated/en/534871468155709473/Poverty-and-climate-change-reducing-the-vulnerability-of-the-poor-through-adaptation>
- ¹³ UNDRR. A walk through the history of disaster risk reduction. Prevention Web. Accessed February 09, 2023. <https://www.preventionweb.net/walk-through-history-disaster-risk-reduction>
- ¹⁴ Resolution A/RES/69/283 adopted by the UN General Assembly on 3 June 2015
- ¹⁵ OECD. Net ODA. OECD Data. Accessed February 09, 2023. <https://data.oecd.org/oda/net-oda.htm#indicator-chart>
- ¹⁶ *The climate and environment charter for humanitarian organizations*. ICRC and IFRC; 2023. Accessed February 09, 2023. <https://www.climate-charter.org/>
- ¹⁷ Karliner J, Slotterback S, Boyd R, Ashby B, and Steele K. *Health care's climate Footprint* Health Care Without Harm and Arup; 2019. Accessed February 09, 2023. <https://noharm-europe.org/ClimateFootprintReport>
- ¹⁸ Salzenstein L, Pedersen K. What's the aid sector's carbon footprint? *The New Humanitarian*. October 27, 2021. Accessed February 09, 2023. <https://www.thenewhumanitarian.org/investigations/2021/10/27/aid-sector-carbon-footprint-environmental-impact>
- ¹⁹ Decolonising Aid: A reading and resource list. *The New Humanitarian*. August 12, 2022. Accessed February 09, 2023.

<https://www.thenewhumanitarian.org/feature/2022/08/12/Decolonising-aid-a-reading-and-resource-list>

²⁰ Saito K. *El capital en la era del Antropoceno*. Sinequanon, 2020.

²¹ ICRC. History. Accessed February 09, 2023. <https://www.icrc.org/en/who-we-are/history>

²² *The Sustainable Development Goals Report 2022*. UN, 2022. Accessed February 09, 2023.

<https://unstats.un.org/sdgs/report/2022/>

²³ Reich B. *The Imagination Gap: stop thinking the way you should and start making extraordinary things happen*. Emerald publishing, 2017.

²⁴ Vattimo G. *Addio alla verità*. Booklet Milano, 2009.

²⁵ Planetary boundaries. Stockholm Resilience Centre. Accessed February 09, 2023.

<https://www.stockholmresilience.org/research/planetary-boundaries.html>

²⁶ Logan AC, Berman SH, Berman BM, Prescott SL. Project Earthrise: Inspiring Creativity, Kindness and Imagination in Planetary Health. *Challenges* 2020; 11(2):19. doi: <https://doi.org/10.3390/challe11020019>

²⁷ Framing matters. Editorial. *The Lancet Planetary Health* 2022; 6(7): 548. doi: [https://doi.org/10.1016/S2542-5196\(22\)00150-4](https://doi.org/10.1016/S2542-5196(22)00150-4)

²⁸ Parker R, Ferraz D. Politics and pandemics. *Global Public Health* 2021; 16: 8-9. doi: <https://doi.org/10.1080/17441692.2021.1893372>

²⁹ O'Callaghan-Gordo C, Antó JM. COVID-19: The disease of the anthropocene. *Environ Res*. 2020 Aug; 187:109683. doi: [10.1016/j.envres.2020.109683](https://doi.org/10.1016/j.envres.2020.109683)

³⁰ Travaglio M, Yu Y, Popovic R, Selley L, Santos Leal N, Martins LM. Links between air pollution and COVID-19 in England. *Environmental Pollution* 2021; 268: 115859. doi <https://doi.org/10.1016/j.envpol.2020.115859>

³¹ Marmot M, Allen J, Goldblatt P, Herd E, Morrison J. *Build Back Fairer: The COVID-19 Marmot Review. The Pandemic, Socioeconomic and Health Inequalities in England*. Institute of Health Equity; 2020. Accessed February 09, 2023. <https://www.instituteofhealthequity.org/resources-reports/build-back-fairer-the-covid-19-marmot-review/build-back-fairer-the-covid-19-marmot-review-full-report.pdf>

³² CSDH. Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. World Health Organization; 2008.

³³ Syndemics: health in context. Editorial. *The Lancet* 2017; 389(10072): 881. doi [https://doi.org/10.1016/S0140-6736\(17\)30640-2](https://doi.org/10.1016/S0140-6736(17)30640-2)

³⁴ Be-Cause Health. Be-cause health conference 2021. 2021. Accessed February 09, 2023. <https://bchmatters15.be-causehealth.be/>

- ³⁵ Wardani J, Bos JJ, Ramirez-Lovering D, Capon AG. Enabling transdisciplinary research collaboration for planetary health: Insights from practice at the environment-health-development nexus. *Sustainable Development* 2022; 30:375–392. doi: <https://doi-org.ez.lshtm.ac.uk/10.1002/sd.2280>
- ³⁶ Tu'itahi S, Watson H, Egan R, Parkes MW, Hancock T. Waiora: the importance of Indigenous worldviews and spirituality to inspire and inform Planetary Health Promotion in the Anthropocene. *Global Health Promotion* 2021; 28(4):73-82. doi:10.1177/17579759211062261
- ³⁷ O'Donnell E, Macpherson E. Voice, power and legitimacy: the role of the legal person in river management in New Zealand, Chile and Australia. *Australasian Journal of Water Resources* 2019; 23(1):35-44/ doi: 10.1080/13241583.2018.1552545
- ³⁸ Tickin MI. From the human to the planetary: Speculative futures of care. *Medicine Anthropology Theory* 2019; 6(3). doi: <https://doi.org/10.17157/mat.6.3.666>
- ³⁹ Moore JW. Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism. PM Press/Kairos, 2016.
- ⁴⁰ Butler CD. Philanthrocapitalism: Promoting Global Health but Failing Planetary Health. *Challenges* 2019; 10(24). doi: <https://doi.org/10.3390/challe10010024>
- ⁴¹ Butler CD. Philanthrocapitalism: Promoting Global Health but Failing Planetary Health. *Challenges* 2019; 10(24). doi: <https://doi.org/10.3390/challe10010024>
- ⁴² Faerron Guzman CA, Potter, T. *The Planetary Health Education Framework*. Planetary Health Alliance 2021. Accessed February 09, 2023. <https://www.planetaryhealthalliance.org/education-framework>
- ⁴³ Butler CD. Philanthrocapitalism: Promoting Global Health but Failing Planetary Health. *Challenges* 2019; 10(24). doi: <https://doi.org/10.3390/challe10010024>
- ⁴⁴ Ebi KL, Harris F, Sioen GB, et al. Transdisciplinary Research Priorities for Human and Planetary Health in the Context of the 2030 Agenda for Sustainable Development. *International Journal of Environmental Research and Public Health* 2020; 17(23):8890. doi: <https://doi.org/10.3390/ijerph17238890>
- ⁴⁵ Logan AC, Berman SH, Berman BM, Prescott SL. Project Earthrise: Inspiring Creativity, Kindness and Imagination in Planetary Health. *Challenges* 2020; 11(2):19. doi: <https://doi.org/10.3390/challe11020019>
- ⁴⁶ Tedros Adhanom Ghebreyesus. The climate crisis is a health crisis. November 2, 2022. Accessed February 09, 2023. <https://twitter.com/drtedros/status/1587801253278584835?lang=en>
- ⁴⁷ Arendt H. *The Human Condition*. 2nd ed. The university of Chicago Press; 1958.
- ⁴⁸ Promoting Health in All Policies and intersectoral action capacities. World health Organization. 2023. Accessed February 09, 2023. <https://www.who.int/activities/promoting-health-in-all-policies-and-intersectoral-action-capacities>

⁴⁹ Quadripartite Memorandum of Understanding (MoU) signed for a new era of One Health collaboration. World Health Organization. 2023. Accessed February 09, 2023. [https://www.who.int/news/item/29-04-2022-quadripartite-memorandum-of-understanding-\(mou\)-signed-for-a-new-era-of-one-health-collaboration](https://www.who.int/news/item/29-04-2022-quadripartite-memorandum-of-understanding-(mou)-signed-for-a-new-era-of-one-health-collaboration)

⁵⁰ Castells M. La sociedad red: una vision global. Alianza; 2006.