

immediately explore the potential synergies between the Global Action Plan for the Prevention and Control of NCDs,<sup>11</sup> the Sustainable Development Goals, and efforts to close the nutrition divide manifested in the triple burden of malnutrition; all within the Earth's critical and non-negotiable planetary boundaries.<sup>8</sup> Comitigation policies need to build in health and ecosystem externalities through appropriate and progressive pricing mechanisms; protect freshwater resources; tackle and reduce food waste; invest in scalable plans and financing models for implementing renewable energies, emphasising the potential indirect health gains through lower rates of pollution-related disease; and encourage regional investment in urban active transport infrastructure which benefits both the cardiovascular health of populations and environmental health. These are just some of the examples of win-win policies that must be fought for, from all sides.

Achieving these goals will be crucial, but powerful corporate and political interests exist that have the potential to impede progress. With this in mind, we must forge and grow new partnerships for action. Linking health and environmental sustainability across science, business, politics, and civil society, the EAT Initiative strives to do just this. A multistakeholder platform that uses food as a vector for change, EAT identifies and exploits common solutions to these global challenges and aims to realise a sustainable food system for all.

We commend the report of The Rockefeller Foundation–*Lancet* Commission<sup>1</sup> and call on the global community to focus on synergies between human and planetary health. Communities, leaders, scientists, and advocates from both sides must align thinking, language, and points of action. Ours is a shared agenda and the stakes could not be higher. These risks to both

human and planetary health are issues we, as humanity, have created and therefore can and must solve. The future health of our planet, and our populations, depends on it.

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For EAT Initiative see <http://www.eatforum.org/>

## The need for a global health ethic

In the 1940s, the renowned Wisconsin, USA, conservationist Aldo Leopold wrote “The Land Ethic” as the culmination of his now celebrated work, *A Sand County Almanac*.<sup>1</sup> In his essay, Leopold articulated the need for, and the ethical basis of, a new relationship between people and the land. He imagined the awakening of an ecological conscience that redefines humanity as part of nature, rather than its external conqueror. The dire

conservation challenges he observed—soil erosion, water pollution, and wildlife loss—required solutions based not merely on ecological expediency, but on ethical conviction. “That land is a community is the basic concept of ecology,” he wrote, “but that land is to be loved and respected is an extension of ethics”.<sup>1</sup>

We posit that Leopold’s vision for the land can and should be extended to global health. Like the

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environmental challenges of Leopold's time, the global health challenges of today have become impossible to ignore. Widening health disparities, pollution of the land, water, and atmosphere, and the emergence of new and zoonotic infections threaten everyone. How can we, as a society, commit to addressing issues of such magnitude, for which the pace of progress will be measured in generations?

The solution might lie in the very fabric of an ethic, as Leopold envisioned: "All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts." Applied to global health, the health of each of us is linked to the health of all the rest. Our community already understands this as a general concept, but we have yet to translate it into a guiding principle. The inherent interdependency of health (human and otherwise) should, by extending Leopold's reasoning, be the philosophical basis for a global health ethic.

Fortunately, the idea of health as an interconnected entity is taking root. The "one health"<sup>2</sup> and "planetary health"<sup>3</sup> concepts capture this trend by emphasising the links between human health, animal health, and the environment, in accord with the report of The Rockefeller Foundation–*Lancet* Commission on Planetary Health.<sup>4</sup> Extension of Leopold's vision to global health will therefore seem natural to many people. Nevertheless, it will still take effort to ingrain this worldview into the world's collective conscience, ultimately creating the "respect for the community" that Leopold recognised as the core motivator for sustained societal change.

Nowadays, society remains far from a global health ethic, partly because of the primacy of economics. Leopold insisted that mere monetary valuation undermines the very notion of an ethic. "A system of conservation based solely on economic self-interest is hopelessly lopsided," he wrote. Might the recent proliferation of global health organisations in academia, government, and the private sector, tied to institutions driven by economic incentives, actually be impeding the development of a global health ethic? Growing unease exists about the use of economic metrics for gauging progress, shown by the intriguing search for alternatives to gross domestic product,<sup>5</sup> but such efforts do not generally consider that the higher goal might be the establishment of new ethical norms.



In this light, we emphasise that our vision for a global health ethic is distinct from the noble but separate goal of identifying and correcting health disparities. Fair allocation of resources has to circumscribe any effort to improve global health, but it would fall short as a core principle for why such improvement might be sought in the first place. Rather, invoking Leopold, we argue that global health will most lastingly be achieved by raising the need for it to the sphere of ethics.

Leopold wisely declined to elaborate the particulars of the land ethic. "I have purposely presented the land ethic as a product of social evolution because nothing so important as an ethic is ever 'written.'" An ethic, to be an ethic, has to develop in the minds of a thinking community—ie, the people who will live by it—and not be thrust upon them. Leopold's vision defines the very essence of just and participatory governance. For this reason, we purposely do not suggest herein what specific doctrines or goals might be contained within a global health ethic. Instead, we leave these to social evolution and encourage the debate.

We also do not specify how a new ethic should be nurtured. The obvious answer is increased education, but Leopold himself was sceptical. "No one will debate this, but is it certain that only the volume of education needs stepping up? Is something lacking in the content as well?" Leopold offered little else, except, "One of the requisites for an ecological comprehension of land is an understanding of ecology, and this is by no means coextensive with 'education.'" We see a similar deficit of ecological understanding

and a parallel need for connected thinking in health education nowadays.

Leopold's "The Land Ethic" consolidated the modern conservation movement. At present, the global health movement is broad but ill defined, inspired by a sense of urgent purpose (staving off ill health around the world), but without the single, deeply internalised, central guiding principle that, according to Leopold, impels sustained societal commitment. Following Leopold, we advocate for a global health ethic that not only galvanises the world's efforts, but also does so by inspiring "an internal change in our intellectual emphasis, loyalties, affections, and convictions".

Despite its profundity, "The Land Ethic" remains principally a literary achievement; the philosophical aspiration at its core has not, as Leopold hoped, transformed society. Near the end of his essay, Leopold presciently writes, "Perhaps the most serious obstacle impeding the evolution of a land ethic is the fact that our educational and economic system is headed away from, rather than toward, an intense consciousness of land." We admit that, in the present, resource-limited, hypereconomised world, our plea for a new ethical norm to guide global health might seem quixotic. Even so,

each and every one of us, individually and through our relationships, will experience an intense consciousness of health—whether we live in a city in Africa or the woods of Wisconsin. Perhaps this shared reality might yet inspire the development of a global health ethic that all of society eventually embraces.

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## Governance for planetary health and sustainable development

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The landmark report of The Rockefeller Foundation–Lancet Commission on Planetary Health<sup>1</sup> is a clear and compelling articulation of the inextricable link between human health and environmental change. The report explores an array of complex, interlinked elements of concern, from environmental tipping points to the impacts of invasive species and the importance of protected areas. The United Nations Development Programme (UNDP) recognises planetary health as critical to achieving sustainable development across the economic, social, and environmental spheres—this ethos underpins our Strategic Plan for 2014–17.<sup>2</sup>

The Commission's report comes at an important time. It is released just before the UN General Assembly is due to adopt the post-2015 development agenda and Sustainable Development Goals (SDGs). This is just one of four major global processes this year. Disaster risk reduction, financing for development, and climate change are also being tackled at major summits.

Agreements in all these areas should encourage UN entities to "strengthen their collaborative mechanisms to ensure optimum coherence in tackling the threats to planetary health", as The Rockefeller Foundation–Lancet Commission on Planetary Health notes.<sup>1</sup> Indeed, decision making and accountability at international and national levels would be enhanced by following through on the recommendations of the Commission.

Implementing the Commission's comprehensive action framework to safeguard planetary and human health requires strengthening resilience and governance capacity. This objective is reflected in the proposed SDGs. Individual, community, and institutional strengths must be built on to prevent, mitigate the impacts of, and learn from shocks of any type—internal or external, natural or man-made, economic, health-related, political, or social. Strengthened resilience to such challenges needs improved governance capacities for implementing