

# Operationalising planetary health as a game-changing paradigm: health impact assessments are key



We have watched with excited astonishment how relatively quickly the planetary health<sup>1</sup> paradigm has gained traction with major foundations, the UN system, and a wide range of actors in the public health<sup>2</sup> and environmental conservation<sup>3</sup> realms. The appeal is obvious: two of the great sustainability challenges humanity faces—the future of our health and the health of the natural systems we all depend upon—remain worryingly unaddressed.<sup>4</sup> Planetary health offers an integrative approach to further develop an evidence base to inform solutions that simultaneously address human health, environmental sustainability, and economic development. The need for bold, transformative actions to protect present and future generations, the foundational catalyst for planetary health as a field, is obvious and urgent.

Planetary health, in terms of an operational definition, is a field focused on improving the understanding of, and ability to measure, the public health impacts of anthropogenic environmental change, so as to inform decision-making in the land-use planning, ocean-use planning, environmental conservation, and public health policy realms. As other commentators have noted, what cannot be measured cannot be managed. The type of transdisciplinary work that planetary health by its nature demands can help in efforts to ensure that the public health consequences of natural resource management decisions get explicitly factored into these decisions at a range of scales, instead of remaining in the realm of vague and poorly quantified externalities.<sup>5</sup> Now more than ever, the question arises of how planetary health can most pragmatically get real world traction and catalyse a proactive, science-based way forward. In short, how can the concept be applied to maximum effect, as a go-to tool in the global problem-solving toolbox in support of the UN 2030 Agenda for Sustainable Development?

We propose that a key response to these questions would be the formal adoption of the Health Impact Assessment (HIA) concept at a wide range of scales. The HIA concept is not new,<sup>6</sup> but it is an idea whose time has clearly come.<sup>7</sup>

As described previously,<sup>7</sup> “Health impact assessment is a means of evidence based policy making for improvement in health. It is a combination of methods whose aim is

to assess the health consequences to a population of a policy, project, or programme that does not necessarily have health as its primary objective. Health impact assessment is a multidisciplinary process within which a range of evidence about the health effects of a proposal is considered in a structured framework. It takes into account the opinions and expectations of those who may be affected by a proposed policy. Potential health impacts of a proposal are analysed and used to influence the decision making process.”

If planetary health is going to meet our aspirations for it as a (long-overdue) working framework for integrated decision making,<sup>8</sup> it is imperative that the growing understanding of planetary health relationships be directly and expeditiously applied. This could undoubtedly be jump-started if global, national, and local institutions implement HIAs to account for the crucial interconnections between the condition of natural systems and public health, as measured, for example, in dollars or disability-adjusted life-years. The inclusive process that characterises a robust HIA builds a shared understanding of likely human health impacts of a pending policy, plan or project. In addition, the recognition of health impacts, especially if adverse and unintended, allows policymakers the opportunity to better prepare and account for tradeoffs from the outset—or even substantially alter their plans. Forest cover loss upstream can lead to increased risk of water-borne diarrhoeal disease in children living in rural settings.<sup>9</sup> Road construction and incursion into previously undisturbed landscapes can lead to an increased incidence of malaria.<sup>10</sup> And what if one was a priori legally bound to determine what the loss of migratory fishes due to damming of any of the world’s major river systems (for hydroelectric power generation)<sup>11</sup> would mean for protein and micronutrient nutrition for the millions of people who have depended on these fish generation after generation?

Development policies or projects that affect natural systems can directly or indirectly affect human health and should therefore be evaluated via HIA methodologies at the scoping stage. Moreover, if an HIA reveals any positive health impacts, then an opportunity

is provided to promote health co-benefits as part of the policy's or project's implementation. For example, peatlands conservation in Indonesia could prevent negative public health outcomes and thereby favour certain land-use policy choices based, at least in part, on such a co-benefit.<sup>12</sup> Whether positive and/or negative health impacts are identified, HIAs potentially provide policymakers with a fuller understanding of likely health consequences to assess and, in the case of negative consequences, proactively prevent or plan to mitigate. Mega-projects as funded by entities such as the World Bank have been required to undertake Environmental Impact Assessments (EIAs), with the Bank's new Environmental and Social Framework (ESF) on the horizon—and while HIA is clearly part of the lexicons of a range of relevant institutions including the World Bank, are they robust and mandatory in all relevant situations? And how many countries have formal, mandatory HIA processes of their own in place? Recognising the value of early integration of HIAs and EIAs into planning processes for major programmes, policies, and projects, some countries have encouragingly already institutionalised the HIA concept in their national laws, and even constitutions.<sup>13,14</sup> Clearly, colleagues who may not have been formally introduced to the planetary health concept have been converging on the idea of HIA as a critical decision-informing tool for more enlightened, sustainable policy and practice.

The field of planetary health is now at a crossroads: a focus is needed on the development and demonstration of methodologies that can enable transdisciplinary research, co-designed in consultation with primary stakeholders and end users, to increase the likelihood of science-based policy and meaningful action. HIAs drawing upon (for example) predictive models, assessment and monitoring tools, and mapping or visualisation platforms can and should be holistically used, taking advantage of the growing understanding of planetary health relationships, as part of the standard practice of reviewing development policies. HIA, as a valuable regulatory driver, could serve as a critical conduit for the integration of evaluative health and environmental sustainability data. In so doing, HIAs could also identify co-benefits-based opportunities and strengthen partnerships across multiple sectors.

Broader adoption of HIAs as described is one clear strategy that can complement WHO's strategic multisectoral actions to contribute to the Sustainable

Development Goals. In addition, the use of HIAs to address linked environmental change and health issues can be promoted by other leading multilateral organisations such as UN Environment and UN Development Programme to support science-based, integrative, policy-coherent approaches to the 2030 Agenda.

If planetary health is going to live up to its extraordinary potential as a transdisciplinary field capable of leveraging much more thoughtful decision making in the real world, we should all demand that our global, national, and local institutions engage in increasingly more sophisticated HIAs employing a planetary health lens. The future of humanity's health and the health of the planet's natural systems demand nothing less.

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