



## ***Planetary Health as a Central Context to the Sustainable Development Goals (SDGs)***

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The 2016 World Health Organization's Shanghai Declaration on Health Promotion - 'Promoting Health in the SDGs (Sustainable Development Goals)' - established a primal place for health promotion on the SDGs agenda and contextualized health promotion as a central framework of the 17 Sustainable Development Goals<sup>1, 2</sup>. However, there exist ongoing enquiries that identify gaps in this proposition and provide evidence to rather advance planetary health as a more appropriate central context to the SDGs.

From systems-thinking and socio-ecological perspectives, the concept of health goes beyond human well-being to include well-being of natural ecosystems, healthy transactions and flow of resources between humans and nature, in a manner that precludes vulnerabilities and inequities for humans and other socio-ecological systems<sup>3</sup>. Health promotion, however, acknowledges a socio-ecological analysis to health of human populations by considering the impact of social factors, actors and institutions, as well as abiotic and biotic components on human health<sup>4</sup>. It leaves gaps, as it does not explicitly capture how humans interact within their surrounding ecosystems and the impact of human activities and human health

interventions on biotic and abiotic components as well as on the integrity of planetary entities in socio-ecological systems. These gaps put holes in health promotion, which though embraces useful approaches and localizing ideas for human health, but lacks capacities to promote ecological health and human health as inseparable, co-evolving, co-dependent concepts in a coupled human-environment system. Such gaps also explain why advancement of human health and pursuits of environmental sustainability have long been treated as two separate domains of interventions<sup>5</sup>. The current state of health research has reinforced that the health of living systems is intrinsically linked with the health of their surrounding natural and human-made ecosystems<sup>6</sup>. Therefore, the attribution of health promotion, as an intrinsic core of the Sustainable Development Goals, should be progressed to embrace a more systems-thinking nuanced term, such as Planetary Health<sup>7-9</sup>.

#### ***Parallel Dynamics of the SDGs and Planetary Health***

The SDGs agenda space is a web of 17 interrelated and interacting goals set within the boundaries of coupled human-natural systems;

with nested socio-ecological components having multi-scalar patterns, overlapping dynamics, feedback loops, and resilience parameters<sup>10</sup>. In the same vein, planetary health is a systems-thinking paradigm that explores coupled human-natural systems and draws on trans-disciplinary approaches (wise stewardship) in wide-ranging fields such as public health, environmental science, ecology, anthropology, welfare economics, geography, policy, and organization theory<sup>11</sup>. It addresses the contemporary challenges of human progress and civilization, which threaten the health and wellbeing of humans and planetary resources<sup>11</sup>.

In 2015, the Rockefeller Foundation report on 'Safeguarding Human Health in the Anthropocene Epoch'<sup>8</sup>, published in the Lancet Commission on Planetary Health, refers to Planetary Health as "the health of human civilization and the state of the natural systems (biodiversity, planetary entities and ecosystems resources) on which it depends<sup>8</sup>." To shed light on the complexities of the term 'human civilization,' it is a concept conditioned by socio-economic freedom, human progress, economic development, industrial and technological advancement, urbanization, social movements, population growth, and increased flow of resources between humans and nature<sup>6</sup>. All of these factors are drivers of the global ecological change<sup>6</sup>. It is, therefore, apparent that planetary health draws on the established interdependencies of human health and natural ecosystems to lay emphasis on appropriate conduct and stewardship of economic, environmental, political, social, and cultural processes<sup>8</sup>. These processes which shape transactions and interactions of the human-natural systems should be conducted within planetary boundaries in order to avoid sabotaging the health of humans and disrupting life-supporting ecological systems (natural and human-made) that support humanity and our planet<sup>8</sup>.

Moreover, planetary health favours the achievement of sustainable human civilization, in its broad-ranging dimensions, with emphasis on approaches that are environmentally sound, socially and culturally responsible and appropriate

<sup>12</sup>. As the challenges erupting from human civilization continue to emerge as sustainability challenges clogging the wheel of progress in the sustainable development agenda, how do we nurture efficient stewardship to ensure that advancement in human civilization stays within the planetary boundaries? Particularly, how do we design and coordinate implementation efforts of the 17 SDGs to avoid violating planetary boundaries or producing imbalance and conflicts with one another?

These questions bring home the utility of "systems and complexity thinking",<sup>12</sup> which is inherent in planetary health science as a way to unravel interconnections and inter-relationships and to address a broad array of issues that are overlapping and deeply intertwined<sup>10-12</sup>. Planetary health employs a whole-of-systems perspective and tackles extensive range of challenges driven by equally wide-ranging actors and factors in the social, economic, and environmental domains<sup>8,11</sup>. As opposed to current reductionist or siloed approaches employed in interventions to tackle challenges of the SDGs, planetary health offers a holistic, all-encompassing, and whole-of-systems approach to investigate all systemic parts, structures, conditions, processes, and functions culminating in a challenge. This facilitates unpacking inherent complexities and uncertainties. Hence, a SDGs intervention that is framed using a planetary health context at its core (as depicted in figure 1), will apply systems thinking to understand and frame the problem from diverse points of sustainability concerns and map complex, multi-scalar, and multi-dimensional pathways that produce the problem. Such an intervention will also mobilize collaborations that utilize the capacities of trans-disciplines<sup>13</sup>, sectors, geographies, and generations. These systems-thinking capacities amplify the spectrum of solutions, including nexuses that transcend conventional siloed approaches.

Systems thinking conditions planetary health as a unifying framework for the Sustainable Development Goals (SDGs), its implementers, researchers, solution designers and sectors. In

order to have a clear perception of planetary health utilization in the SDGs, it is important to unpack all the complex dynamics between human civilization, natural systems, and each of the

SDGs. Furthermore, complex realities and scalar dimensions of health should be deconstructed in the context of social-ecological systems<sup>14</sup>.



**Figure 1:** What should be? Planetary Health as a framework at the Core of the Sustainable Development Goals. Adapted from WHO<sup>2</sup>

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