

Planetary health and food systems: insights from global SDGs



An article by Pradhan and colleagues¹ in *Earth's Future* contributes to the empirical basis for planetary health action. The article, which looked at country-level trends of Sustainable Development Goal (SDG) indicators between 1983 and 2016 for 227 countries, showed the challenge of intersectoral coordination in the era of the SDGs. The key findings are that SDGs 3 (good health and wellbeing), 12 (sustainable consumption and production), and 15 (life on land) were the most prevalent country-level trade-offs, and this Comment further analyses the findings.

The first important finding in Pradhan's article from a planetary health perspective is that the trade-off between SDG 3 and 12 was the most prevalent one among countries assessed.¹ In other words, the health of a country's population has improved in the recent past and so has unsustainably generated wealth. This is directly relevant to a claim made in *The Lancet's* Commission on planetary health that recent health gains have come at the cost of health of future generations.² In fact, Pradhan and colleagues found that SDG 12 had trade-offs with several other SDGs. Therefore, sustainable consumption and production is a central concern of the SDGs and this has largely been neglected by global developmental discourse until now. The public health and development sectors have mostly focused on people with low incomes and less on people with high incomes, in both developed and developing countries—this should be an important agenda item for action.³ One might also add that some of the health improvements in higher-income countries have come at the cost of shifting polluting industries to lower-income countries, and also that there might be lag effects for health outcomes for instance, of climate change. While the progress in the health sector is highly laudable, there is a need for serious reflection on the approach to improve and sustain population health.

A second very interesting and related finding in Pradhan's article is that the second most common trade-off pair was SDG 3 and 15.¹ SDG 15 focuses on terrestrial ecosystems, and the activity that has affected them the most is agriculture. While great improvements in food production and safety have led to reduction in under-nutrition and associated deaths, it has come at the cost of degradation and pollution of land (and water)

ecosystems. My proposition is that the food system is the entity that primarily connects SDGs 3, 12 and, 15. A report by the UN Environment Programme⁴ discussed that food systems have a central role for achieving the SDGs. Food systems were also a key concern in *The Lancet's* Commission on planetary health.² Interestingly, the main causes of ill health and mortality globally are dietary risks and undernutrition.⁵ There continues to be inequitable access to wholesome and adequate food, while the epidemic of obesity and chronic disease continues to rise in developed and developing countries. Therefore, there is great incentive to focus on food systems at local and national levels, from both health and environmental sustainability perspectives—not just for future challenges but also to address current health challenges.

Finally, Pradhan and colleagues¹ have identified countries that have shown synergies between SDGs 3, 12, and 15, and suggest that they could be models for other countries. These countries could show how development and health can go hand in hand, and that there is no need to choose one over the other. This is especially important for developing countries that are de-prioritising health in order to realise economic growth—eg, the presence of toxic hotspots and the alarmingly high air pollution levels in several cities in developing countries. However, one needs to carefully examine whether those model countries have externalised environmental health costs by exporting polluting activities to other countries. I propose a more detailed exploration of the data from Pradhan's article from a health perspective.

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I declare no competing interests.

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- 1 Pradhan P, Costa L, Rybski D, Lucht W, Kropp JP. A systematic study of sustainable development Goal (SDG) Interactions. *Earths Future* 2017; 5: e1169–79.
- 2 Whitmee S, Haines A, Beyrer C, et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. *Lancet* 2015; **386**: 1973–2028.
- 3 Pradyumna A, Decoster K. The neglected rich. *International Health Policies*. Sept 15, 2015. <http://www.internationalhealthpolicies.org/the-neglected-rich/> (accessed March 3, 2016).

- 4 Westhoek H, Ingram J, van Berkum S, Özay L, Hajer M. Food systems and natural resources. A report of the Working Group on food systems of the international resource panel. UN Environment Programme. 2016. <http://www.resourcepanel.org/file/133/download?token=6dSyNtuV> (accessed Oct 3, 2017).
- 5 Abajobir AA, Abate KH, Abbafati C, et al. Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 2017; **390**: 1345–422.