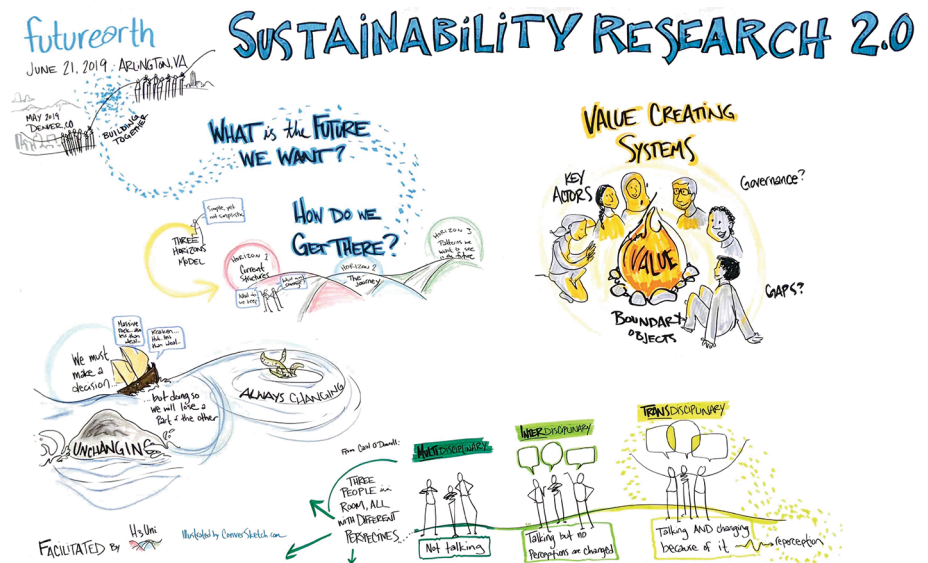


Building a joined-up effort

More effective ways of connecting research programmes and initiatives on the ground will amplify the impact of many sustainability scholars and practitioners around the world.

On 21 June 2019, an invitation-only meeting of experts took place at the Arlington Campus of George Mason University, USA; *Nature Sustainability* attended. The meeting, the second of a series of two, is part of an initiative named *Sustainability Science 2.0*, driven by the *US Global Hub of Future Earth* in collaboration with the *Science and Technology for Sustainability Program* of the US National Academies of Sciences, Engineering, and Medicine. The initiative — bringing together experts from different sectors including academia, industry, funding agencies and non-governmental organizations — has a very tangible aim: finding ways to build a research system for sustainability within the US so that research efforts more effectively contribute to global sustainability.

Debates and activities around building a more effective research system to promote and strengthen sustainability research have been intensifying recently in the US and beyond. The pressure of meeting the 17 goals under the United Nation's *2030 Agenda* for Sustainable Development is certainly playing a role here. There is no question about the critical importance of building the right institutional and cultural support for all of the parties involved in developing sustainability research with the aim of contributing to the UN Agenda. Many have debated about the types of transformations that are required, including through our pages. Recently, Liu and colleagues *discussed* the need to embrace a different knowledge generation model that allows experts to weave knowledge between disciplines to develop solutions, and showed how the model worked in Chinese and Indian contexts. In another Comment, published in 2018, Irwin et al. *focused* attention on the outdated reward system within academia that needs a significant transformation in order to incentivize interdisciplinary and transdisciplinary research for sustainability. And Maria Carmen Lemos and colleagues *reminded* us that co-producing knowledge with end users is not without cost and should be embraced where it is more likely to succeed. The debate is ongoing and we expect, and welcome, more voices to join the discussion and move it forward.



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However, sustainability research is not a new reality per se, nor is it reflecting a new research field. Whether explicitly classified as sustainability research or not, studies addressing the complexities of the interactions between society and the natural world have been taking place for decades. Why is it then that we still have to build a system for sustainability experts to have impact? Some of the experts in Arlington suggested that the research and practice domains for sustainability are too vast — in other words there might be a problem of scale. And, of course, others would argue that things have progressed, although in different ways, across and within countries, and that a lot has been achieved in some places while others still need to catch up. But at a global scale, the dots are not yet well connected. Too often, new initiatives start almost entirely from scratch and no mechanism or system allows young scholars and practitioners to learn lessons from others. It almost feels like there is no space owned by all sustainability experts across the globe and where accumulated knowledge is available — despite the incredible amount of work produced so far. As sustainability research is ultimately produced to inform decisions, lack of critical mass combined

with inadequate dissemination channels limits the impact that such research is supposed to have.

Will this situation change fast enough? We all hope so. Future Earth is perhaps the most significant effort regarding sustainability, coming from both the global research community and international policy, with the right motivation and vision to enable such change. After a few years of gestation, it became operative by the end of 2015. Its strategy includes four main pillars: facilitating research, convening networks, promoting innovation and turning knowledge into action. Sustainability Science 2.0 is one of its many initiatives, and many more are surely happening outside the Future Earth umbrella. Our wish is that they will converge soon in a joined-up effort, and that resources and work will go in the direction of building an accessible global knowledge network where anyone interested will be able to learn from previous successes and failures and to effectively build on them. There is need of significant critical mass in the sustainability domain, and we need it soon. □

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