The funding available for research and development varies greatly across the globe, with some countries being able to devote as much as 3% of their GDP, and others only able to manage 0.01% of GDP.

Even with access to larger pots of money, however, the scale of investigations possible is limited because this money is split up among many competing individual researchers, research groups, and research institutions; never mind the geographical bias to the questions being asked, and the methods being employed.

To generate the kind of science that can effectively address the global challenges embedded in the SDGs, this model of funding and doing science falls short. Given that no one “global” challenge is experienced the same way everywhere, context must be taken into account. What's more, a full understanding of any one challenge cannot be arrived at by an individual scientist or group of scientists; we have to work across disciplines and, critically, beyond the research community to include policy makers and practitioners. All this to say that is necessary to work on these challenges at the larger holistic scale, crossing borders, multiple timescales, and a broader range of investigators.

The current science funding models do not easily support such work, which is why the Global Commission for Science Missions on Sustainability is exploring a radical alternative: how might we mobilise global resources and carry out research that is based on the principles that recognize and work with the complexity of societal change; that fully embrace fairness and inclusivity as fundamental to all research practice; that encourage humility and reflexivity on the part of the scientific communities; and are adaptive, pragmatic and accountable in working with all stakeholders.

The current funding models simply cannot get us to realizing the SDGs to the extent that we have set out.