

Brazil's sustainability needs social sciences

The country achieved impressive environmental and sustainability successes in the past. Now more than ever, scientists should focus on providing evidence to support policy that helps Brazil to continue doing so.

Brazil needs all the science and support that the research community can give. This must especially come, we argue, from social scientists. On 28 October 2018, Brazilian voters chose a new president, Jair Bolsonaro, who has raised unprecedented concerns after suggesting radical changes that will undermine sustainability policies¹. Potential changes include reducing environmental licensing requirements, relaxing control over toxic agrochemicals and withdrawing from the Paris Agreement on climate change. Importantly, the Environment Ministry will be merged with the Ministry of Agriculture, likely led by a person close to the agribusiness lobby. These changes will occur in a country where 145 environmental activists were killed since 2015², attacks against environmental agency officials increased recently, and banners and events at universities were intervened by authorities just days before the final election round³. For some commentators the future of sustainability in Brazil looks dire.

Against this backdrop, we have prepared a [Focus](#) on sustainability research in Brazil, to highlight significant research that can contribute to sustainability policies in this new period. Brazil has made significant achievements in this regard. The country legally recognized the importance of the environment as the basis for wellbeing in its National Environmental Policy of 1981 and in its Constitution, well before most other countries. In 2012, the country reached its lowest deforestation rate since records began. Such achievements resulted from multiple actions steered towards the same goal, by scientists, regulators and activists among others, as discussed in a [Comment](#) by Britaldo Soares-Filho and Raoni Rajão published in this Focus.

The contrast between turmoil and achievements stems from the tension between a wonderful environment and the struggles of people to have a good life, which Brazil epitomises. The most iconic forest of all, the Amazon, is under enormous pressure from agricultural expansion to feed the world's demand for soya and other crops. Other terrestrial ecosystems, such as Cerrado and the Atlantic forest, are also under threat. Water provision in big cities, such as Sao Paulo, is increasingly complicated. Poverty and inequality are high, as is discrimination against indigenous



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groups. Likewise, an emerging interest in the blue economy — the sustainable use of ocean resources — may bring new challenges to coastal and marine areas, as discussed in a [Q&A](#) with Marinez Scherer and Alberto Lindner, in this Focus.

All these matters need social sciences and humanities, and cooperation with Brazilian scholars. The elected president called for academia to focus on specific (we assume, practical) priorities. We argue that addressing social issues with direct effects on sustainability must become a research priority. Reflecting on the public debates in the lead up to Brazil's electoral choice, it appears that many worried about violence and government corruption. Further votes came from the farming lobby. These reasons for electoral support reflect a society struggling to achieve equality, justice and sustainable livelihoods, key principles of the United Nations Sustainable Development Goals. Without a sustainable society, environmental sustainability is in danger.

In order to promote conservation and sustainability, we need to better understand society, economics and policy. In particular, we need to understand the livelihoods and perspectives of those with the most direct impact on ecosystems, such as farmers. Besides, evidence about policy effectiveness and regulatory gaps can be particularly useful. In this Focus for example, João Campos-Silva and colleagues evaluate the impacts of the largest community-based conservation programme in Brazil in their

[Article](#). In another [Article](#), Flavio Freitas and colleagues uncover how a specific provision in extant forest law could legalize significant additional deforestation. External drivers also have enormous environmental impact. For instance, demand for water, energy and food in cities and globally affect what goes on in the Amazon. Yet we know little about these systemic drivers. We know even less about how to address them: how to satisfy needs more sustainably, reduce crime and inequality, and mitigate the power of lobbies in favour of the common good, or why people choose to support certain political messages in times of fear, uncertainty or despair. Understanding these phenomena can equip us to better mitigate threats, not just to the Amazon forest, but to all ecosystems.

The recent turmoil in Brazil and the international attention around it mean that the stakes have become much higher. We need compelling evidence to support sustainable development, and to make it evident that steps backwards in sustainability policy are not just bad for the environment, but also for Brazilians and the world. □

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