

The Pope tackles sustainability

The war on environmental degradation has a powerful new ally: Pope Francis. Prompted by a Joint Workshop of the Pontifical Academy of Sciences and the Pontifical Academy of Social Sciences on sustainability that was convened in May 2014, the Vatican has articulated some of its strongest environmental statements to date, calling for all of us to take personal responsibility and redirect our relationship with nature to ensure the future habitability and sustainability of this planet (see the Perspective on p. 1457). The problems that motivate the Vatican are no different from those that concern the scientific community: depletion of nonrenewable resources, loss of ecosystem services, and risks from changing climate. But what the Vatican contributes is the rationale for taking action: because it is our moral responsibility to bequeath a habitable planet to future generations.

When I received an invitation to present a paper on “The Risks of Rising Seas to Coastal Populations” to the group of distinguished international scholars assembled by the Pontifical Academy, my expectations were high that the threat of climate change could relate to broader concerns about poverty and equity. The latest report from the Intergovernmental Panel on Climate Change* places “death or harm from coastal flooding” as the number-one risk from climate warming, and estimates that the current investment in adaptation to sea-level rise is orders of magnitude less than what is needed to address the critical problem: a rapidly expanding population of poor people living within reach of ever-rising seas. This meeting promised to be interdisciplinary in more dimensions than others I had attended, with the addition of the Vatican’s influence. The proceedings were overseen by His Excellency Monseigneur Marcelo Sanchez Sorondo, a Catholic bishop with degrees in philosophy and theology and Chancellor of the Pontifical Academy of Sciences and Pontifical Academy of Social Sciences. The addition of leaders

from the Vatican enriched discussions of ethics, values, morality, and social justice with regard to climate change and sustainability.

An elite minority of the world’s population consumes the majority of resources, especially energy, with climate change being one of the most universal impacts, affecting everyone, even those who may have contributed the least to greenhouse gas emissions. The diverse group convened by the Vatican called for a universal change in convictions and behaviors that currently condone an attitude of indifference with respect to what we leave for future generations. We advocated for new

measures of wealth that replace income or gross domestic product with more constructive metrics such as natural capital, environmental and human health, social equality, and educational attainment. Science and engineering can deliver the technological capability to be good stewards of the planet, but we must counteract the forces that resist change. As a society, we urgently need to make the choice to redirect our relationship with nature by adopting, for example, the United Nations Sustainable Development Goals to promote a sustainable pattern of economic development and social inclusion.

Pope Francis took the time to personally meet with all of the members of the workshop and even suggested some of the session themes. He struck me immediately as a very humble and kind person—and yet someone with the power to change the world. Although the meeting

was convened by the Catholic Church, the attendees included Hindus, Muslims, Protestants, Jews, atheists, and agnostics, all willing to follow this leader, not because of his religious significance, but because of his moral high ground. We need more leaders to step forward, claiming this moral high ground. Although the current trajectory we are on is dangerous, the message is also one of hope. A safer, more just, more prosperous, and sustainable world is within reach.

– Marcia McNutt



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*Intergovernmental Panel on Climate Change, Working Group 2. Climate Change 2014: Impacts, Adaptation, and Vulnerability, www.ipcc.ch/report/ar5/wg2/.