Laudato Si' and the emerging contribution of Catholic research universities to planetary health



Climate change, pollution, and biodiversity loss stem from human misuse of the Earth's natural resources, especially fossil carbon. These threats to planetary health result in disease, disability, and premature death, which fall disproportionately on marginalised, disadvantaged, and minority communities. They stem from a philosophy of unconstrained consumerism and are guided by an economic paradigm that focuses almost exclusively on short-term gain, as measured by Gross Domestic Product (GDP),¹ and takes little cognisance of human capital, natural capital, or social justice.²

Technical and legal solutions to planetary threats are necessary and frequently effective, as seen in the sharp declines in the manufacture of chlorofluorocarbon resulting from the Montreal Protocol, reductions in air pollution in the USA, UK, and Japan over the past five decades following the passage of national clean air laws, and large decreases in the costs of wind and solar energy.

All these solutions have, however, been reactive. None offer protection against hazards yet to come. Durable protection against current and future dangers will require solutions that extend beyond specific threats. Such solutions must address the underlying political, economic, and ethical causes of the planetary crises. Their assessment will require metrics that go beyond GDP and explicitly value human and natural capital.²

In his 2015 encyclical letter, Laudato Si': On Care for Our Common Home,³ Pope Francis examines the current planetary crises, offering insights into their root causes, and suggesting strategies for planetary restoration and regeneration.⁴ Pope Francis' analysis draws on reports by the Intergovernmental Panel on Climate Change (IPCC)⁵ and the Lancet Commission on planetary health⁶ and on scripture and the social teachings of the Catholic Church. With this integration of science and theology, Pope Francis breaks through the stereotype, dating to the time of Galileo, that there is an inherent conflict between science and religion and opens the way for new solutions based on both faith and reason.

Citing the IPCC, Francis states unequivocally that climate change is "mainly as a result of human activity". He declares that there is "an urgent need" to reduce greenhouse gas emissions, replace fossil fuels, and

encourage the development of renewable energy. Drawing on theology, he argues that climate change, pollution, and biodiversity loss are not only environmental problems, but also moral injustices—affronts to human dignity.

Pope Francis argues that sustainable strategies for healing the planet must be both just and scientifically sound. He urges us to move beyond one-off solutions, to examine the structures and metrics we use to manage our economy, and to reimagine how these structures could be redesigned for the benefit of all. He states that every solution to the planetary crisis must incorporate "a preferential option for the poorest" and "restore dignity to the excluded". He terms this approach integral Ecology. Integral ecology moves ecologic thinking beyond purely green concerns and puts people in the landscape. It is anchored in Pope Francis' view that the Earth is a shared inheritance, a "common home", whose "fruits are meant to benefit everyone".

To implement his vision, Pope Francis has developed a 7-year implementation plan, the *Laudato Si'* Action Platform. Francis invites each of the world's 1·3 billion Catholics, all Catholic institutions, and every person on Earth to take concrete, scientifically informed actions to advance equitable and lasting solutions to the planetary crises.

In response to this challenge, universities affiliated with the Catholic Church are forming interdisciplinary institutes designed to generate new knowledge about planetary threats and their impacts on human health and wellbeing. Eight of these institutions have formed the Strategic Alliance of Catholic Research Universities (SACRU), a collaborative network spanning North and South America, Europe, Asia, and Oceania. SACRU universities conduct basic, applied, and translational research, and support interdisciplinary scholarship in the sciences and at the interface of science and the humanities. To keep their research grounded in the concerns of communities, especially those of disadvantaged people and people with low income, they have created structures that foster collaborations between climate scientists, anthropologists, theologians, sociologists, economists, public health scientists, and physicians, as well as with communities themselves.7

For more on the *Laudato Si'* **Action Platform** see https://laudatosiactionplatform.org/

For more on the **Strategic Alliance of Catholic Research Universities** see www.sacrualliance.net/

SACRU universities are committed to solving the planetary challenges of our age in ways that incorporate the precepts of integral ecology. They are deeply engaged in educating future planetary health leaders. Scientific education in these institutions is embedded in a liberal arts curriculum that emphasises education of the whole person. This distinctive pedagogical approach, termed formative education, is intended to help young people not only become good scientists but also discover who they are and how they can best use their scientific knowledge to advance the common good.

To translate science from the academy to the world and advance equitable food policy, SACRU has established a collaboration with the UN Food and Agriculture Organization.⁸ This joint endeavor is using a systems-based approach to improve food security and reduce malnutrition. It aims to develop sustainable solutions that consider the food system as a whole; advance the preferential option for people with low income; and safeguard human, animal, plant, and ecosystem health.

Similarly, on the eve of the fifth Conference of the Parties (COP) in 2022, COP27, SACRU issued an urgent communique that invoked both climate science and moral theology and urged world leaders to heed the IPCC's findings⁵ and "take action before it is too late".⁹ This statement calls for a political and economic transformation that will reduce greenhouse gas emissions and slow global warming. It urges leaders to invest in clean energy to preserve human health, advance social justice, protect the planet, and promote world peace.

Going forward, the SACRU universities are well positioned to forge new alliances between scientists, humanists, Indigenous communities, and faith communities and bring new perspectives to the conversation

on planetary health. They can bridge political divides and serve as models of transdisciplinary research, while also nurturing the deep realignment of people's relationship with the planet and with each other, which Pope Francis calls for in *Laudato Si'* and which the world urgently needs. SACRU universities can empower new generations to create and maintain a better future for all.

We declare no competing interests.

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