

Jubilee of Knowledge

**Braiding Scientific and Indigenous Knowledge in the Cherishing of Our
Common Home**

**Societal Transformation and Integral Human Development through
Education for Climate Resilience**

October 30, 2025

Casina Pio IV, Vatican Gardens, Holy See

Pontifical Academy of Sciences and Pontifical Academy of Social Sciences

This conference brings together leading scientists, social scientists, Indigenous knowledge holders, educators, and youth to explore how braiding scientific and Indigenous knowledge can drive societal transformation and integral human development, locally and globally, primarily through education for climate resilience, using the hitherto presented method for Climate Resilience: MAST, that is, Mitigation, Adaptation and Societal Transformation.

8:30 Opening Welcome

Joachim von Braun, President PAS and Helen Alford, President PASS

8:40-10:10 Session 1: Braiding Scientific and Indigenous Knowledge for the Mitigation of Climate Change. Chair: Dean Christina Christie, UCLA (TBC)

8:40 Healing Humanity's *Carbon Story*: The Academies' initiatives of Science & Indigenous Knowledge

Cardinal Peter Turkson, PAS & PASS Chancellor

8:55 An Introduction to the MAST approach, and Science and Indigenous Peoples' Knowledge Perspectives in Bending the Warming Curve

Veerabhadran Ramanathan, Scripps, and Marcelo Suárez-Orozco, UMass & Brijal Chaudhari, Global Home for Indigenous Peoples

9:40 Bridging Indigenous Knowledge and Science for Health

Ulrich Pöschl, Max Planck Institute, and Ester Innocent, Muhimbili University

Coffee Break: 10:10-10:40

10:40-12:45 Session 2: Societal Transformation: Ethical, Scientific and Indigenous Perspectives. Chair: Dolores Sánchez Galera, Official of the Dicastery for the Promotion of Integral Human Development (TBC)

10:40 Religion and Societal Transformation

Retired Archbishop Dr. Dr. h.c. mult. Antje Jackelén, and Vittorio Hösle, PASS

11:10 Philosophical and Evolutionary Perspectives on Development and Societal Transformation

Eddy de Robertis, PAS, and Michela Massimi, University of Edinburgh

11:40 Holistic Innovation in Water and Food Systems

Ora Marek-Martinez, Northern Arizona University, and Cecilia Tortajada, PAS

12:10 Ancestral Wisdom and Artificial Intelligence for Societal Transformation

Tania Eulalia Martínez Cruz, FAO, and Gustavo Béliz, PASS

12:35 Migration and Societal Transformation

Fr Aldo Skoda CS, Director, Scalabrini International Migration Institute

Lunch: 12:50-14:20

14:20-15:50 Session 3: Braiding Scientific and Indigenous Knowledge in Adapting to Climate Change. Chair: Calisto Ochieng, World Organization of the Scout Movement (TBC)

14:20 Indigenous Knowledge and Science-based Innovation for Adaptation

Stanley Kimaren ole Riamit, Indigenous Livelihoods Enhancement Partners, and Frances H. Arnold, PAS

14:50 Indigenous and Science-based Responses to Habitat and Resource Adaptation Challenges

John Schellnhuber, PAS, and Hindou Oumarou Ibrahim, Association for Indigenous Women and Peoples of Chad

15:20 Braiding Indigenous and Scientific Knowledge in Adaptation and Building Resilience

Agnes Leina, Il'laramatak Community Concerns, and Charles Ian McNeill, UN Environment Programme

Coffee Break: 15:50-16:20

16:20-18:50 Session 4: Education for Climate Resilience and Societal Transformation.

Chair: Marcelo Suárez-Orozco, University of Massachusetts & PASS Academician (TBC)

16:20 Education for Addressing the 2030 Agenda

Stefania Giannini, UNESCO, and Mohammed Hassan, PAS

16:50 Engaging Students in a Sustainability Curriculum

Carola Suárez-Orozco, Harvard, and Christina A. Christie, Dean, UCLA

17:20 Science Education and Indigenous Knowledge

Vanderlei S. Bagnato, PAS, and Pierre Léna, PAS

17:50 Teaching & Learning for Building Climate Resilience

Georgia Lazo, UCLA, and Octaviana Trujillo, Northern Arizona University

18:20 Lifting Student Voices in a Time of Crisis

Chaired by Ananya Gupta with 3 other youth

Discussion

19:00 Closing Session, led by Joachim von Braun and Helen Alford

19:15 End of Session, followed by Dinner