Statement of Conclusions of the Jubilee of Knowledge Workshop on Braiding Scientific and Indigenous Knowledge in Support of Current Youth and Future Generations in Our Common Home

30 October 2025



This conference gathered scientists, social scientists, Indigenous knowledge holders, educators, and youth from many regions of the world. Together we examined how braiding scientific and Indigenous knowledge can advance integral human development and societal transformation, especially through education for climate resilience. Our common reference point throughout the dialogue was the MAST framework – Mitigation, Adaptation, and Societal Transformation – as a holistic method for climate resilience.

1. Protecting the freedom required for braiding knowledge systems

Braiding scientific and Indigenous knowledge requires intellectual freedom, respect for diverse sources of wisdom, and protection of those who produce knowledge in different ways. These freedoms are increasingly under pressure around the world. As noted in our June statement, resilience requires resistance to these threats. Safeguarding scientific inquiry and Indigenous cultural expression is fundamental to any authentic partnership.

2. Conceptual clarity and shared understanding

Our discussions were guided by theory, philosophy, faith traditions, and conceptual clarity. We recognized the need for more precise definitions of local and Indigenous knowledge systems to improve dialogue and collaboration. The workshop surfaced many actionable pathways – grounded both in IK and contemporary sciences – that can serve people and planet in the Anthropocene.

3. Addressing structural inequalities between knowledge communities

Braiding traditions cannot succeed without acknowledging the deep asymmetries between scientific institutions and Indigenous communities. Humility is required from the scientific world, as is a concrete commitment to strengthening the capacities of Indigenous Peoples. This includes equitable access to the best scientific tools, laboratories, and research infrastructures – necessitating new, justice-oriented science policies.

4. The MAST framework as shared ground

The MAST concept provides a common framework for integrating IK and scientific expertise. Our deliberations emphasized that the world is currently underinvesting in mitigation, adaptation, and social transformation alike. Adaptation – particularly for the health, nutrition, and safety of the most vulnerable – remains severely underfunded. Investment in science and knowledge is also insufficient, and must rise substantially to meet the scale of crises.

5. Recognizing resilience without romanticizing suffering

While the scientific community greatly admires the resilience of Indigenous communities, it must never overlook the suffering that has often accompanied it. Local and regional climate summits should expand the inclusion of Indigenous leaders, ensuring that their perspectives shape solutions rather than simply inform them.

6. Youth as protagonists of transformation

Young people are not passive recipients of decisions made by older generations; they are already protagonists of societal transformation. Youth must be engaged as co-creators, not only learners. Education for climate resilience must therefore equip youth with three pillars of agency:

- scientific understanding of climate systems and solutions;
- ethical formation, rooted in solidarity and responsibility;
- community-rooted wisdom, including Indigenous knowledge systems that teach reciprocity with nature.

7. Higher education and emerging sciences

Advanced college and university education has a crucial role in exploring how emerging scientific breakthroughs – across disciplines – can contribute to braiding. The right to science includes the right of all peoples to benefit from new knowledge and technologies. Our institutions must take this responsibility more seriously.

8. Addressing emerging issues and opportunities across disciplines

The conference highlighted several cross-cutting areas in which IK and scientific knowledge can be braided for societal transformation:

(1) Societal Transformation

Ethical, scientific, religious, Indigenous, philosophical, and evolutionary perspectives offer complementary insights. Opportunities are emerging at the intersection of ancestral wisdom and artificial intelligence, which must be ethically guided and inclusive.

(2) Adaptation and Resilience

Braiding Indigenous and scientific knowledge can strengthen responses to habitat change, biodiversity loss, and resource pressures. Both knowledge systems contribute essential tools for local and regional resilience.

(3) Connecting Basic Science to the Issues of Braiding

Digitization of Indigenous languages will soon allow modern AI systems to learn from a greater diversity of linguistic and cultural traditions. This creates opportunities for preservation and empowerment – but also new risks of cultural extraction and exploitation. Ethical cooperation between scientists and Indigenous communities is imperative. Quantum sensing may complement Indigenous experiential knowledge, expanding capabilities in environmental and health monitoring.

(4) Earth Sciences, Food and Water Systems

Earth sciences increasingly rely on satellite data, open global datasets, climate models, and regional adaptation research. Indigenous Peoples must have full access to these resources – and representation in leadership roles within such programs. Food loss and waste can be reduced through scientific advances and behavioral transformation. Innovations in plant science and climate-adaptive agronomy must be accessible to all. Nature-based solutions need accelerated implementation.

(5) Health and Trauma

Climate-related stresses – including heat, floods, and deteriorating air quality – pose major health burdens. Neuroscience sheds light on the impacts of climate trauma, potentially extending across generations through epigenetics. Indigenous knowledge offers valuable insights into community-based healing and trauma resilience.

Closing Call: Educational Renewal for Our Common Home

Education emerged as a central theme across all sessions. We identified key priorities:

- Climate literacy for all, integrating both scientific and Indigenous knowledge.
- **Teacher training** that equips educators to teach climate resilience holistically.
- Student empowerment, enabling youth to speak, lead, and innovate in a time of crisis.
- Whole-curriculum transformation toward sustainability, systems thinking, and cultural understanding.
- **Community-engaged learning**, where students learn from local ecosystems, Indigenous traditions, and lived experiences.
- Intergenerational learning, connecting elders, scientists, teachers, and youth as co-educators.

These educational pathways form the backbone of societal transformation.

We call for an **Educational Renewal** that draws upon *all* sources of human knowledge – scientific, Indigenous, philosophical, ethical, and spiritual. This renewal should shape curricula at all levels, from primary school to university, and empower learners to become agents of climate resilience and social transformation.

The **Jubilee of Knowledge** renews our shared commitment to weave together: faith and reason, tradition and innovation, youth and experience, Indigenous knowledge and scientific discovery – all in service of people and planet, and for the flourishing of present and future generations in our common home.

List of participants

Prof. Sr. Helen Alford

President

The Pontifical Academy of Social Sciences United Kingdom

Prof. Dr. Joachim Von Braun

President

The Pontifical Academy of Sciences

Germany

Prof. Edward De Robertis

Distinguished Research Professor University of California, Los Angeles PAS Academician

United States of America

Dr. Josep Garì

Head of Climate, Forests and Land

UNDP

Switzerland

H.E. Cardinal Peter K.A. Turkson

The Pontifical Academies of Sciences and Social Founder & President

Vatican City

Msgr. Dario E. Viganò

Vice Chancellor

The Pontifical Academies of Sciences and Social High School Student

Sciences

Chancellor

Sciences

Vatican City

Prof. Vanderlei S. Bagnato

Professor

USP-Brazil/TAMU-USA

PAS Academician

Brazil

Prof. Gustavo Beliz

Technological Innovation

Law, Economic and Social Development,

Technology and Innovation

PASS Academician

Argentina

Ms. Audrey Borr

Trainer, Project Coordinator

University of Lorraine / House for Science

(France)

Luxembourg

Prof. Chien-Jen Chen

Distinguished Professor

PAS Academician

Taiwan

Prof. Christina Christie

Wasserman Dean of the School of Education and Information Studies at UCLA

United States of America

Dr. Agnes Leina

Executive Director

Ms. Jennifer Gross

Blue Chip Foundation United States of America

Ms. Ananya Gupta

University of California Los Angeles (UCLA)

United States of America

Prof. Mohamed Hassan

President

Sudanese National Academy of Sciences

PAS Academician

Sudan

Mr. Ludolphe Hessou

Student

Collège Paul-Verlaine

Malzéville

France

Archbp. Dr. Antje Jackelén

Archbishop emerita / Senior Advisor

Church of Sweden / Lund University

Sweden

Mr. Sanjib Kumar Chaudhary

Author

Global Voices

Nepal

Dr. Georgia Ann Lazo

Associate Dean UCLA Partnership Schools University of California Los Angeles UCLA United States of America

Prof. Carola Suárez-Orozco

Professor in Residence

II`laramatak Community Concerns

Kenya

Prof. Pierre Léna

Professor Emeritus

Observatoire et Université de Paris

PAS Academician

France

Mr. Jose Manuel Sauna Mamatacan

Lider en el proceso de comunicación de saberes

ancestrales

Mexico

Dr. Ora Marek-Martinez

Associate Vice-President/ CO-Principal

Investigator

Northern Arizona University/ Center for Braiding

Indigenous Knowledges and Science

United States of America

Prof. Michela Massimi

Professor of Philosophy of Science

University of Edinburgh

United Kingdom

Dr. Juergen Mittelstrass

Professor

University of Konstanz

PAS Academician

Germany

Ms. Victoria Moebus

Professor

Geffen Academy at UCLA

United States of America

Mr. Calisto Ochieng

Manager, Strategic Partnerships and Fundraising Executive Director

World Organization of the Scout Movement

Kenya

Ms. Noelani Ogasawara

Professor

School of Education and Information Studies at

UCLA

Harvard Graduate School of Education

United States of America

Dr. Marcelo Suárez-Orozco

Chancellor

University of Massachusetts Boston

PASS Academician

United States of America

Amb. Hindou Oumarou Ibrahim

President

AFPAT

United States of America

Fr. Michał Paluch OP

Full Professor

Pontifical University of St. Thomas Aquinas

"Angelicum"

Italy

Prof. Ulrich Pöschl

Director

Max Planck Institute for Chemistry

Germany

Prof. Veerabhadran Ramanathan

Distinguished Research Professor

University of California at San Diego

PAS Academician

United States of America

Mr. Carlos Emiliano Bautista Reyes

Geffen Academy at UCLA

High School Student

United States of America

Mr. Stanley Kimaren Ole Riamit

Indigenous Livelihoods Enhancement Partners

(ILEPA)

Kenya

Ms. Nithya Ramanathan

Witness

United States of America

Prof. Claudia Robles

Director

Innovation in Science Education (INNOVEC)

Mexico

Dr. Maria Dolores Sánchez Galera

Senior Research Advisor

Dicastery for Integral Human Development

Vatican City

Prof. Hans Joachim Schellnhuber

Director General

International Institute for Applied Systems

Analysis (IIASA)

PAS Academician

Austria

Dr. Vian Sharif

Founder & President

Nature Alpha

United Kingdom

Prof. Wolf Singer

Distinguished Physiology Professor and

Researcher

PAS Academician

Germany

Prof. Fr. Aldo Skoda

Director

Scalabrini International Migration Institute

Italy

Prof. Ester Innocent Tissian

Associate Research Professor

Institute of Traditional Medicine

Muhimbili University of Health and Allied

Sciences

Tanzania

Prof. Cecilia Tortajada

Professor

University of Glasgow

PAS Academician

United Kingdom

Prof. Octaviana Valenzuela Trujillo

Professor Emeritus

Northern Arizona University

United States of America

Prof. Ewine van Dishoeck

Professor and Researcher

Leiden University

PAS Academician

The Netherlands