SSS SCIENCES FOR SUSTAINABILITY: FROM THE INTERNATIONAL YEAR OF BASIC SCIENCES FOR SUSTAINABLE DEVELOPMENT IN 2022/2023, TO THE INTERNATIONAL DECADE OF (ALL) SCIENCES FOR SUSTAINABLE DEVELOPMENT 2024 - 2033 PROCLAIMED BY UN AND UNDER THE AUSPICES OF UNESCO

MICHEL SPIRO PRESIDENT OF IUPAP

CHAIR OF THE

INTERNATIONAL YEAR OF BASIC SCIENCES FOR SUSTAINABLE DEVELOPMENT IN 2022/2023 (IYBSSD)

HTTPS://WWW.IYBSSD2022.ORG/EN/HOME/



INTERNATIONAL YEAR OF BASIC SCIENCES FOR SUSTAINABLE DEVELOPMENT IN 2022/2023, UNDER THE AUSPICES OF UNESCO

PROCLAIMED BY THE UNITED NATIONS GENERAL ASSEMBLY ON DECEMBER 2ND, 2021 OPENING JULY 8TH, 2022 AT UNESCO, CLOSING DECEMBER 15^{TH,} 2023 AT CERN RESOLUTION BROUGHT UP BY HONDURAS WITH THE SUPPORT OF ARMENIA, AZERBAIJAN, BAHRAIN, BOLIVIA, BRASIL, BURKINA FASO, CHAD, CHILE, COLOMBIA, CUBA, DOMINICAN REPUBLIC, ECUADOR, EL SALVADOR, FIJI, GEORGIA, GUATEMALA, INDIA, INDONESIA, ISRAEL, JAPAN, JORDAN, KYRGYZSTAN, MALAWI, NICARAGUA, PANAMA, PARAGUAY, PERU, PHILIPPINES, QATAR, RUSSIAN FEDERATION, SAUDI ARABIA, SERBIA, SPAIN, SOUTH AFRICA, THAILAND, VIETNAM

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RATIONALE

- CURIOSITY-DRIVEN SCIENCES CONSTRUCT THE POOL OF KNOWLEDGE WHICH FUTURE GENERATIONS WILL USE FOR THEIR DEVELOPMENT
- BASIC SCIENCES ARE NOT ALWAYS AND EVERYWHERE CONSIDERED AS THEY DESERVE, IN THE DISCUSSIONS CONCERNING THE SOCIETAL, ENVIRONMENTAL AND ECONOMIC DEVELOPMENT
- CURIOSITY-DRIVEN SCIENCES RE-ENCHANT OUR WORLD AND MAKE IT WORTH TO BE

SUSTAINABLE

- SERENDIPITY PLAYS A ROLE!

- BASIC SCIENCES EXPLORE THE SOUL OF THE UNIVERSE!!

Opening Ceremony

International Year of Basic Sciences for Sustainable Development





















ALL SCIENCES AND ALL KNOWLEDGE FOR EQUITABLE WELLBEING ON A HEALTHY PLANET ENABLING THE INTERNATIONAL DECADE OF SCIENCES FOR SUSTAINABLE DEVELOPMENT 2024-2033 (IDSSD)

TO IDSSD

In collaboration with





UNITED NATIONS RESOLUTION

Acknowledging that humanity is exposed to complex challenges, and that the full implementation of the 2030 Agenda for Sustainable Development in all its dimensions requires a more effective and inclusive approach based on synergistic cooperation of all sciences — basic and applied sciences as well as social and human sciences, including traditional knowledge — enabling the development of technology, innovation and education,

Emphasizing that the evidence-based methodologies and the models of operation and collaboration used in research can support policymakers in finding adequate responses to the present and future complex challenges, and that open science can help in promoting and strengthening international cooperation.

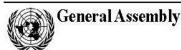
Recognizing that developing countries face specific challenges in accessing new sciences and technologies, stressing the need to bridge the divides within and between countries, and highlighting the importance of financing and capacity-building.

1. Decides to proclaim the period 2024-2033 the International Decade of Sciences for Sustainable Development, within existing structures and available resources, to represent a unique opportunity for humanity to use the critical role that sciences play in the pursuit of sustainable development in its three dimensions as one

THE LANGUAGE AND
AMBITIONS OF THE UN
RESOLUTION DECLARING
THE INTERNATIONAL
DECADE FOR SUSTAINABLE
DEVELOPMENT ARE
TELLING OF THE PRIORITIES
BEING EMBRACED AND
PROMOTED BY THE EARTHHUMANITY COALITION

United Nations

 $A_{RES/77/2}$



Distr.: General 1 September 2023

Seventy-seventh session

Agenda item 13

Integrated and coordinated implementation of and follow-up to the outcomes of the major United Nations conferences and summits in the economic, social and related fields

Resolution adopted by the General Assembly on 25 August 2023

[without reference to a Main Committee (A/77/L.100)]

77/326. International Decade of Sciences for Sustainable Development, 2024–2033

ABOUT THE EARTH-HUMANITY COALITION

- A global bottom-up network to connect and mobilize all kinds of organizations worldwide
- Fostering transformative action at multiple scales (from local to global) and leveraging existing efforts, with dynamism, agility, and effectiveness
- Partnering and complementing with UNESCO, ISC and other organizations to achieve the ambitious goals of the IDSSD

In collaboration with











AMBITIONS

INTEGRATED KNOWLEDGE MOBILIZATION

- Collaborate across all sciences
- Including traditional & indigenous knowledge
- With a focus on sustainability driven by equity and wellbeing for all on healthy territories

REIMAGINING THE ROLE OF SCIENCE

- Enhance science's responsiveness to humanity's immediate and future needs
- Improve integration with governance and policymaking.

TRANSFORMATIVE IMPACT GOALS

 Reframe processes of research and innovation, and the science-society nexus





AMBITIONS

BRIDGING DIVIDES

• Leverage sciences and humanities to bridge cultural and national divides, promoting global equitable wellbeing

EQUITABLE KNOWLEDGE CREATION

Address equity barriers within processes of knowledge creation

STRATEGIC OUTCOME FOR 2033

• Sciences and society much better equipped to master existential threats and achieve positive societal transformations



CREATING THE CONDITIONS FOR TRANSFORMATIVE CHANGE

GOALS FOR A TRANSFORMATIVE DECADE

Co-create the Web of Earth-Humanity Sciences:

- Establish a global network of transdisciplinary hubs
- Promote transformative collaboration across cultures and disciplines
- Extend Big Science's spirit of intercultural bridges and peace

Support a new culture of wellbeing:

- Embrace science and wisdom for collective responsibility and creativity
- Redefine human development within Earth's boundaries
- View Earth as a living whole, emphasizing unity and interdependence

Formulate critical questions for equitable wellbeing:

 Use diverse knowledge sources to address existential challenges







SHAPING THE FUTURE OF RESEARCH, INNOVATION, AND DEVELOPMENT

STRATEGIC GOALS FOR SUSTAINABLE DEVELOPMENT

Reframe research and funding agendas:

- Align public and private sector agendas with the novel role of sciences
- Foster integrative approaches in research, innovation, and peace initiatives

Conceive practical instruments for sustainable transformation:

- Collaborate with all societal actors to navigate sustainable development
- Enable sciences to serve societal needs effectively

Co-design organizational structures to support IDSSD:

- Build the necessary processes and structures for the Decade's success
- Ensure long-term and significant impact



PHASES OF THE EARTH-HUMANITY COALITION

ACTIVATION (2 YEARS)

- Engage diverse actors and initiate key activities
- Funding up to €1M/year with a small, effective team

MOBILIZATION (3 YEARS)

- Expand scope and capacity, involving large communities around the world
- Funding: €5-10M/year with expanded personnel

EXPANSION AND CONSOLIDATION (5 YEARS)

- Test and grow integrated science models for global impact
- Funding: Expand budget to influence billions in funding



ORGANIZATIONAL LANDSCAPE OF EHC

Starting point:

Initiated by the partnership of IYBSSD and coordinated by IUPAP (2024), expanding to a broader coalition with all disciplines and societal actors

Target:

An appropriate "ecosystem" for representation, execution, governance, and accountability in partnership with UNESCO, prioritizing inclusion and diversity







ACTION PLAN 2024 (DONE)

Formation of the Steering Committee:

- Finalize foundational documents
- Support early stages of the Coalition

Inaugurate the EHC with the General Assembly on 16th April 2024

Designate the Operational Host for 2024: IUPAP

Public image and communication:

- coordinate with UNESCO on general communication for the Decade
- Develop the Coalition's logo, website, and public content

Plan of Activities for 2024-2025:

- Identify and set up the Working Threads
- Design and start implementing the EHC Work Programme





ACTION PLAN 2024 (IN PROGRESS)

Funding:

Secure financial contributions to reach a budget around
 €0,5 million from members and partners (public and private)

Expand the Membership:

- Organizations representing disciplines across the whole space of human knowledge
- Institutions already embedded in transdisciplinary science for sustainability, especially at local/national levels
- All kinds of organizations supporting the EHC vision

Partnerships for resource mobilization:

• Establish alliances to support the Coalition's goals and activities

Co-create the key elements for 2025 onwards:

- Refined version of the Charter
- Design organizational processes and structures



THROUGH THE WORKING THREADS

Working Thread	Status	Team / Actions
1) Activate the Web of Earth-Humanity Sciences (WEHS), a worldwide network of thousands of hubs	Active	Luc, Raad, all Steering Committee, others? Recruiting of new members
2) Explore Frontier Concepts at the intersection of multiple epistemologies to unveil the potential of deep transdisciplinary thinking for sustainability	Not active yet	Proposal by Lesley could be a start
3) Promote the Reframing of Human Development and Well-Being, to support the emergence of a new culture of well-being, grounded on leading edge science	Not initiated	CoR has significant capacities, also in connection with WEAII
4) Create WGTHS, the Worldwide Grid of Transdisciplinary Hubs for Sustainability	Active	Michel, Jens, others? Proposal to CERN on Grid MoU Belmont for open access
5) Develop Sciences for Planetary Reconciliation to overcome fractures created by geopolitical clashes and all kinds of violent conflicts	First steps	Carlos, Barbora Bruant Gulejova Rolf Heuer 1st conversation in August



THROUGH THE WORKING THREADS

Working Thread	Status	Team / Actions
6) Reframe the Interfaces of Science, Policy, Innovation and Society to make science-technology-society interactions evolve to wide participation and co-creation	Initiating	Carlos, Patrick Caron Montpellier Process
7) Promote Transdisciplinary Practices in Education	Not active	BBG interested in helping
8) Establish and Co-Construct the Key Processes, to support the effective implementation of the goals of EHC	Not explicitly addressed	Luc, Raad, all Steering Committee Setting a roadmap is becoming urgent
9) Establish the EHC High-Level Support Committee, to mobilize prestigious personalities and organizations from all sectors in support of the goals of EHC and IDSSD	First steps	Nebojsa, Carlos, Hans d'Orville Proposal by Hans could be a good starting point Connections with #10
10) Reframe Scientific Agendas and Funding, to reflect and accelerate the role of sciences called by IDSSD	First steps	Carlos, Ruth Morgan, others? Public comm (op-eds)? Start discussions with Belmont, Future Earth, ISC?



IDENTIFYING THE VALUE ADD OF EHC

Cooperative and open attitude and work practices

Holistic knowledge integration

Global bottom-up network of transdisciplinary hubs

Mobilizing infrastructures for sustainability at all scales

Focus on equity, just futures and planetary reconciliation at all territorial scales

Ambition to reframe science-policy nexus and R&I agendas



Working for resonance

- Partnering with UNESCO and ISC, to ensure the synergy and complementarity with the wider IDSSD agenda
- Partnering with The Club of Rome, the UNESCO-MOST BRIDGES Coalition and the World Academy of Art and Science to promote integrated knowledge production and action for transformative change at local community and regional levels

THE EARTH-HUMANITY

SOME EVENTS...

21-22 APRIL

6th African Regional Science, Technology & Innovation Forum (ARSTIF), Addis Ababa – Co-organized by UNESCO

25 APRIL

IDSSD program @ Zhongguancun Forum, Beijing – Organized by UNESCO

10-15 JUNE

SRI Sustainability Research & Innovation 2024, Helsinki and Espoo – Organized by Future Earth & Belmont Forum

20-23 NOVEMBER 2024

World Science Forum

22-25 SEPTEMBER 2025

World Conference on Science and Art for Sustainability, Belgrade – Organized by WAAS











- Michel Spiro, President of IUPAP and Chair of the Steering Committee of IYBSSD, France
- Carlos Alvarez Pereira, The Club of Rome, Spain
- Lesley Green, University of Cape Town, South Africa
- Steven Hartman, UNESCO-MOST BRIDGES Coalition, Sweden
- Nebojša Nešković, The World Academy of Art & Science, Serbia
- Marian Nkansah, Kwame Nkrumah University of Science and Technology, Ghana
- Prajval Shastri, Raman Research Institute, India
- Luc Allemand, Coordinator, The Earth-Humanity Coalition
- Raad Sharar, Program Coordinator, The Club of Rome

In collaboration with







