



**Inception Symposium on
Broadening the Application of the Sustainability Science Approach
in support of 2030 Agenda for Sustainable Development**

**UNESCO Headquarters, Room IX
5–6 April 2016**

PROGRAMME

DAY 1

(Facilitators and Rapporteurs: Julia Heiss and John Crowley, UNESCO)

09:30 Opening session

Address by Ms Nada Al-Nashif, Assistant Director-General for Social and Human Sciences

Address by H.E. Mrs Kuni Sato, Ambassador Extraordinary and Plenipotentiary, Permanent Delegate of Japan to UNESCO

10:00 Introduction to the UNESCO-Japan/MEXT Project on “Broadening the Application of the Sustainability Science Approach” (Salvatore Aricò, UNESCO)

Presentation of the objectives of the Symposium (Dendev Badarch, UNESCO)

10:30 *Coffee/tea break*

11:00 PANEL 1: From academic advances in sustainability science to their applications in public policy: Challenges and required steps

Chair: Kazuhiko Takeuchi, United Nations University

In 2007, the American Association for the Advancement of Science counted 32 sustainability science programmes at colleges and universities in the United States. Today, there are 118. Universities across the country are increasingly buying into the idea of sustainability science as an academic discipline. This new discipline was founded upon the idea that scientific research should do more to understand and solve the world’s complex problems. This would allow science to better fulfill its commitments with society, and to provide solutions to most pressing problems such as climate change, poverty reduction, etc., in exchange for continued support from policymakers.

Panel 1 overriding question: *How can the reflection within natural and social sciences on their increased societal relevance, and the dynamic relation between them, be better incorporated in emerging policies that integrate the science-policy-sustainability nexus?*

Keynote: Kazuhiko Takeuchi, United Nations University

Case studies:

- A brief history of the evolution of the sustainability science approach, Joanne Kauffmann, Integrated Research System for Sustainability Science, University of Tokyo
- Evolution of the debate on sustainability science in the German science community, Lutz Möller, German National Commission for UNESCO

Interventions, discussion and proposals from participants

12:30 *Lunch break*

13:30

PANEL 2: Towards a social policy for sustainability

Chair: John Crowley, UNESCO

The sustainability science approach is essential for effective decision-making with regard to global sustainability, since social, environmental and cultural systems are closely linked. Prominent research programmes within economics, the environmental sciences and transition theory are explored through diverse case studies, revealing challenges and advancements for transdisciplinary research. New practice based on science-society-research partnerships, experiential learning in higher education and iterative and participatory modelling has become manifest.

Panel 2 overriding question: *How should social sciences evolve in order to achieve long-lasting effects and structural change?*

Keynote: John Crowley, UNESCO

Case studies:

- Adaptation, sustainability and climate change in past societies: The archaeological contribution, François Djindjian, French National Centre for Scientific Research
- Promoting social inclusion through sustainability science, Irakli Khodeli, UNESCO Office in Jakarta
- Permanent Delegation of a Member State to UNESCO (*to be specified*)

Interventions, discussion and proposals from participants

15:00

PANEL 3: “Anti-science” in sustainability and resilience

Chair: Mathieu Denis, International Social Science Council

There is no substitute for research by committed scientists. The freedom to observe the planet is not absolute. We also need to consider the anti-science sentiment that is attempting to block research alongside the disregard for science that is at the heart of the movement to reject the validity of global challenges. We must be careful and be mindful of the imperative to protect the living planet as we learn about it.

Panel 3 overriding question: *In our efforts to design appropriate governance for a transition to sustainability, how can the interlinkages between adaptability, vulnerability and resilience have a fundamental role? What kind of impact does the anti-science sentiment create in this regard?*

Keynote: Luiz Oosterbeek, International Council of Philosophy and Human Sciences

Case studies:

- Permanent Delegation of a Member State to UNESCO (*to be specified*)

Interventions, discussion and proposals from participants

16:30

Coffee/tea break

17:00 **PANEL 4: Urbanization and sustainability science**

Chair: Eduardo Brondizio, Indiana University (*via videolink*)

The formulation of a mode of urbanization/cities for urban sustainability science is essential to draw on differing disciplines such as sociology, land management, architecture, social and environmental justice, gender studies, urban geography, anthropology, spatial planning, economics and environmental science.

Panel 4 overriding question: *How can urbanization and cities be a catalyst for sustainability science?*

Keynote 1: Ingelore Scheunemann, Science and Society, CYTED Programme

Keynote 2: Eduardo Brondizio, Indiana University (*via videolink*)

Selected case studies focusing on Small Islands Developing States

Pedro Manuel Monreal Gonzalez, UNESCO

Interventions, discussion and proposals from participants

18:25 Wrap-up of Day 1

18:45 *Social reception*

DAY 2

(Facilitators and Rapporteurs: Pedro Manuel Monreal Gonzalez and Salvatore Aricò, UNESCO)

09:30 **PANEL 5: Sustainability science involvement in different sectors**

Chair: Maik Adomssent, Leuphana University Lüneburg

Sustainability research and education should draw from the three pillars of sustainable development: the environmental, economic, and social. To address the current paradox between economies and sustainability, we must find a way to balance the two and allow them to coexist. This balance may be possible not only by developing alternative approaches to issues specific to conventional economic sectors of society, based on conventional disciplines, but also by pursuing transdisciplinary research and education.

Panel 5 overriding question: *In which public policy fields is sustainability science fundamental? Are current approaches to research and education adequate to overcome possible disciplinary and sectoral barriers required to apply the sustainability science approach?*

Keynote 1: Maik Adomssent, Leuphana University Lüneburg

Keynote 2: Suzyrman Sibly, Universiti Sains Malaysia

Case study: Climate change education for sustainable development, Julia Heiss, UNESCO

Interventions, discussion and proposals from participants

11:00 *Coffee/tea break*

11:30

PANEL 6: Revolution and innovations in sustainability science and governance

Chair: Jan Monteverde Haakonsen, Research Council of Norway

Corporate governance and complexity of sustainability science calls for global cooperation, based mainly on joint coordination of strategies and adoption of the best decisions, through a participatory approach. The interrelation can take two directions: governance for sustainability and governance of sustainability. The importance of governance consists in its contribution to not only corporate prosperity, but also to responsibility and accountability.

Panel 6 overriding question: *What nexus and mutual benefits do exist between sustainability science and governance?*

Keynote: Benno Werlen, International Year of Global Understanding

Case studies:

- Sustainability science in Central and Eastern Europe (CEE), Tomasz Komorowski, Polish National Commission for UNESCO
- R&D in environmental impact assessment for sustainable development, Mohamed Saber, National Research Center, Egypt (*via videolink*)

Interventions, discussion and proposals from participants

13:00

Lunch break

14:00

CLOSING PANEL: Co-designing the development, and future, of sustainability science

Chair: Kazuhiko Takeuchi, United Nations University

Unsustainable tendencies in the co-evolution of human and natural systems have inspired the search for new approaches to understanding complex problems of environment and development. A key challenge of sustainability is to examine the range of possible future pathways of combined social and environmental systems under conditions of uncertainty and complexity. This requires scenario analysis, including new participatory and problem oriented approaches, providing a powerful tool for integrating knowledge, scanning the future in an organized way and internalizing human choice into sustainability science. Sustainability science acts as a tool to change our ways of thinking and behaving in our lives.

Closing panel overriding question: *What are the challenges and opportunities related to the future of sustainability science to be able to respond to the needs of society in light of the new sustainable development agenda?*

Keynote: Heide Hackmann, International Council for Science

Q&A session with representatives of Member States

15:30

Coffee/tea break

16:00

Presentation of Symposium conclusions and recommendations, Salvatore Aricò, UNESCO

Interventions, discussion and proposals from participants

17:00

Closing session

Address by Ms Flavia Schlegel, Assistant Director-General for Natural Sciences

Address by Mr Kazuki Fukuda, Director for International Strategic Planning, Ministry of Education, Culture, Sports, Science and Technology (Japan/MEXT)

17:30

Third meeting of the Steering Committee of the Project on "Broadening the Application of the Sustainability Science Approach" (closed session)