International Conference on Higher Education for Sustainable Development

High-level Panel 1: Whole-institution Approach

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The Rise of Sustainability Science

- Importance of **Sustainability Science** is now widely recognized internationally in the 21st Century
- Increasing **challenges of global issues** such as climate change, biodiversity loss, and poverty in developing countries
- Need for an overarching perspective and **comprehensive approach** – these issues are difficult to tackle with individual subdivided academic disciplines
- Aim to derive long term, global solutions with focus on **regional and intergenerational equality**
- **Capacity development** through education is essential to solve the global issues through Sustainability Science

![Sustainability Science Journal (SSJ)](image)

**Increasing Number of Academic Papers on Sustainability Science** (Kajikawa et al., 2014)
What is Global Leadership in Sustainability Science Education?

- **A clear view of the complexity and severity** of global issues, while having a **positive outlook** for the future
- A comprehensive perspective on the complex relationships between humans and nature as a **social and ecological systems**
- The ability to integrate the findings of specialized research **to formulate solutions for complex problems**
- The ability to **coordinate and integrate** the opinions of different stakeholders
- **Strong leadership in prompting transformation** towards a sustainable society in the international community
Enhancing Education in Sustainability Science

- Sustainability science provides the scientific foundation for recognizing the need for societal transformation towards sustainability, and a framework for teaching about sustainability issues.

- At all levels of education, and particularly in developing countries, new methods for teaching science are needed in order to promote critical thinking and to develop problem-solving skills.

- The education agenda must incorporate the humanities and the study of ethics in the ESD curriculum, with a focus on equity, justice, cultural freedom and other human rights.

- The role of the research universities in promoting the application of sustainability science is crucial. We could recognize the positive increase in such programs.

- To overcome the fragmentation of traditional disciplines some universities are also introducing teaching modules that address complex problems such as climate change.

(UNU/IR3S/UNESCO Symposium on Sustainability Science held on 19 Sept. 2013)
Higher Education Sustainability Initiative (HESI)

Rio +20 Commitment to Sustainable Practices of Higher Education Institutions

Higher education institution signatories commit to:

1) **Teach sustainable development concepts**, ensuring that they form a part of the core curriculum across all disciplines.

2) **Encourage research** on sustainable development issues, to improve scientific understanding through exchanges of scientific and technological knowledge.

3) **Green their campuses** by: i) reducing the environmental footprint; ii) adopting sustainable procurement practices; iii) providing sustainable mobility options for students and faculty; iv) adopting effective programmes for waste minimization, recycling and reuse, and v) encouraging more sustainable lifestyles.

4) **Support sustainability efforts** in the communities in which they reside.
UNU’s Role and Commitment Beyond 2014

- Commitments to SDGs, Global Action Programme (GAP) on ESD, and other international sustainability frameworks and processes through:
  - Promotion of *sustainability science*
  - *Policy-relevant research*
  - *Capacity development* through leadership programs
  - *Networking* of higher education institutions and multi-stakeholders