

**Scientific and Technological Community Major Group statement at the UN
2024 HLPF**

*Science, technology and innovation: Triggering transformation and sustaining
science-driven solutions*

Monday 8 July, 16.30 – 18.00, Conference Room 4, UNHQ, New York

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This statement is delivered on behalf of the Scientific and Technological Community Major Group, co-ordinated by the International Science Council and the World Federation of Engineering Organizations. We bring together more than 250 national science academies and international disciplinary and scientific unions in natural, social, and human sciences, as well as more than 100 national engineering institutions representing more than 30 million engineers worldwide. I am the Secretary General of the International Union for Physical and Engineering Sciences in Medicine, IUPESM, a proud member of the International Science Council.

The scientific and technological community wishes to emphasize the following five key messages to support sustainable, resilient, and innovative solutions and partnerships to achieve the SDGs:

1. Major science-based assessments highlight concerning trends: progress on key SDGs has been exceedingly slow, with setbacks observed in crucial areas like poverty reduction, inequality, hunger, and environmental protection. We need a reset informed by science and multistakeholder knowledge to put back human development and the environment at the centre.
2. The scientific and technological community is mobilizing globally to work with policy-makers, local communities, Indigenous peoples and other relevant stakeholders to co-design and co-implement context-specific solutions. In our recent paper submitted for the 2024 HLPF we highlight case studies showcasing concrete examples of 'science in action' across sectors and geographies. There are many good initiatives to build on.

We show community-centred approaches in Asia that are enhancing resilience and long-term sustainability in the face of climate change and socio-economic vulnerabilities. In Latin America, evidence-based approaches and technology and innovation integration in education have significantly contributed to addressing educational disparities in rural areas, improving equity and access to education. In Africa, evidence-based decision-making and advanced medical technologies has led to improved distributive justice and maternal and newborn health outcomes, advancing SDG 3. Again in Africa, innovative scientific approaches

across disciplines have enabled to identify and overcome a key trade-off resulting from the conversion of wetlands into rice fields and the associated malaria rebound, effectively dismantling policy silos around SDG2 and SDG3 and leading to positive impacts for local populations.

These examples highlight the urgency with which the scientific and technological community is identifying solutions and the HLPF should provide a platform to share and learn from these successful real-world experiences.

3. However more needs to be done: more coordination, collaboration and multi-sectoral partnerships to deliver public goods are urgently needed, along with effective funding mechanisms to support them.

To foster new partnerships for co-producing knowledge and context-specific solutions, the ISC launched a global campaign and call to co-design and embark on Mission Science for Sustainability. These missions will be co-designed by novel collaborative consortia of scientists, policymakers, NGOs, communities, and the private sector, to deliver actionable knowledge and solutions to address sustainability challenges. The call for pilot missions received over 250 responses, most of which are based in the Global South. This showcases the scientific community's strong interest to deal with complex challenges in a collaborative manner.

4. AI technologies are seen as a crucial enabler to advance the SDG agenda with the potential to enhance food security and reduce global GHG emissions, amongst others. However, the capacity to leverage these technologies and develop them are very uneven: greater collaboration and coordination in AI strategies for science will be crucial to increase our collective capacity to use AI for the benefit of science, society, and addressing global challenges like climate change. Insufficient attention to the conditions for successful AI integration in research risks compromising scientific quality. We invite science leaders involved in AI integration to join forces in preparing for this transformative shift, vital for advancing the SDG agenda.
5. We need to do better with the wealth of knowledge and experience we have collectively. Strengthening science-policy-society interfaces at all levels is crucial for policy-makers and other stakeholders to access the latest science and identify tangible solutions within their particular contexts. This is key for facilitating the exchange of data, knowledge, technology, and best practices for all, enabling evidence-informed decision-making and enhancing the capacity of nations and organizations, especially from developing countries, to implement and achieve the SDGs.

Thank you.