Workshop on building capacity and scaling up STI actions and adoption of countries' STI4SDGs Roadmaps in Africa

Oct. 12-13, 2023

Roundtable 5: Mobilizing science and research funding for development
Transforming African science systems to promote sustainable development

Co-organizers: Future Africa and the International Science Council
Supported by DESA, World Food Forum, and UN MGCY

Friday, Oct. 13th, 9:00am-10:30am, CR6 UN ECA Conference Room, Addis Ababa, Ethiopia

Focus of the session

Science is recognized as a critical lever in accelerating the implementation of the SDGs. It is at the forefront of providing solutions by creating actionable knowledge and informing policies and practices that support the attainment of the SDGs. Unlocking the full potential of science for advancing sustainable development in the next decade requires a transformative approach in the way science is conducted, harnessed, assessed, and funded.

In its recent report Flipping the Science Model: A Roadmap to Science Missions for Sustainability, the International Science Council calls for doing science differently to deliver on the SDGs. The report describes and advocates for mission science for sustainability as an urgently needed new form of science to "put humanity and the planet back on a path towards long term sustainability". In addition to advancing novel theories, methods and concepts through mission-led science, the report also recognizes the importance of co-creating actionable knowledge and identifying solutions adaptable to both global and local contexts through inclusive and equitable partnerships. This engaged approach to doing science advances transdisciplinarity by fostering collaboration between multiple stakeholders to co-design and co-produce solutions drawing on knowledge, methods and approaches across scientific fields and disciplines. It's also critical for these transdisciplinary approaches to be holistic by exploring societal problems from a systems perspective, making sense of their complexity by focusing on wider, interactive systems of which they are a part.

The promotion of mission-led science combined with pluralistic and inclusive approaches to acquiring, generating and utilizing knowledge across multiple levels also requires a new model for scaling up investment in science. The ISC report calls on funders to not only scale up funding, but also redesign how they interact with the science ecosystem stakeholders to ensure innovative, inclusive and fit-for-purpose solutions for sustainability challenges of common and global concern. The proposed redesigned model intends to address incentives within existing funding mechanisms which often fail to understand and transform complex systems underlying sustainability challenges as well as enable the kind of science that is needed for the pressing and wicked problems ahead of us.

Within the global south, whilst external funding has increased opportunities for collaboration with scientists in other parts of the world, there are inherent inequalities and asymmetries in these funding mechanisms which tend to undermine the global south. These multi-layered inequalities and

asymmetries created by resource imbalances often perpetuate the predominance of Western-centric epistemologies and the concomitant devaluing of indigenous languages, theories and constructs.

In addition, to facilitate a truly systemic approach towards achieving the SDGs and addressing global and complex challenges, more emphasis needs to be put on nurturing and sustaining a culture of innovation and entrepreneurship, unlocking private capital to align UN Secretary-General's SDG Stimulus Plan, which are essential for creating new scientific solutions suited to Africa's challenges and closing the gap between research and real-world impact to drive social change, poverty reduction and inclusive development.

To address these challenges and fundamentally rebalance the global science, research and innovation ecosystems demands that we think beyond "equitable partnerships" concerns. This means that global collaborations in science have to be *transformative* – moving beyond equity in practical arrangements for joint enquiry, to redressing the multiple underlying layers of power imbalances in knowledge production in global science. The transformative science collaboration agenda also speaks to the importance of amplifying Africa's role, visibility and voice in global science.

Objectives

The session will aim to explore these crucial aspects of transforming African science systems and delve into how science and science systems in Africa need to evolve to accelerate equitable societal transformation towards sustainable development on the continent. Central to this mission are the development of transformative and equitable partnerships, the promotion of transdisciplinarity across all scientific disciplines and sectors, addressing global inequalities in science and research collaboration, and embracing innovation and entrepreneurship for realizing sustainable development goals, driving social progress, and enhancing resilience in the face of global challenges

Achieving this goal will require transformative approaches to conducting, harnessing, assessing, and funding science. Focussing on mission-led science for sustainability has the potential to realize the vision of science as a catalyst for sustainable development. The event will seek to present a model for implementing science missions for sustainability and convene a wide range of relevant stakeholders to discuss the possibility of testing the proposed model at the regional scale.

Questions

1. How can a 'mission science for sustainability' model align the aspirations, expectations and needs of multiple stakeholders to drive societal transformations for sustainability?
2. What innovative funding mechanisms to channel both public and private funds can be established and/or reframed and scaled up to drive innovative and inclusive solutions for sustainability on the continent?
3. How can the global science community and funders better understand and address the complexities and systemic challenges that underlie sustainability issues in Africa?
4. How do we facilitate transformative partnerships which promote equity and sustainability in science?

5. What concrete actions can be taken by different stakeholders to support and mainstream mission and transdisciplinary science as an ambitious but pragmatic framework for action to accelerate collective efforts in implementing the 2030 Agenda?
6. How can African science systems effectively nurture and support entrepreneurship and innovation to ensure that scientific research translates into impactful solutions addressing the continent's unique challenges, thereby advancing sustainable development and inclusive growth?

Moderation and Discussion Guidance

The moderator, speakers and discussants will be seated in the inner row of the table with microphone on each seat.

In short opening remarks, the moderator will begin the panel by introducing the subject with a few messages and highlighting the questions for discussion as contained in the session concept notes. The introduction should be limited to 3 minutes.

The moderator will introduce the speakers/keynotes/high-level respondents and guide a conversation among them. In a first round, speakers/keynotes/high-level respondents will make their remarks (maximum of 5 minutes each) which should be aimed at answering questions for discussion.

Speakers' remarks should be informal, focused and frank. They should avoid long descriptions of issues or policies, and not be excessively technical. Rather, they should identify the key challenges, lessons learnt and their policy implications. Most importantly, they are encouraged to present their top three recommendations for action by the United Nations system, governments, businesses, scientists, civil society, and others. They can also present one or two issues warranting further reflection.

If time permits, the moderator may ask follow-up questions and focus them on the special areas of expertise and experience of the speakers/high-level respondents. speakers/high-level respondents can also react to each other. The moderator will ensure equal time allocation and participation by all.

The moderator will then open the floor to discussants for comments and questions from the floor (maximum of two minutes each for the first intervention and one minute for each additional following intervention).

Interventions can take the form of comments, or questions to the panel or to identified speakers. The moderator can direct such questions accordingly.

The moderator may decide to allow a brief discussion after two or three interventions by discussants. He/she may ask speakers/high-level respondents to make remarks related to one another and to react to specific questions from the discussants.

The moderator will then open the floor to audience for comments and questions from the floor. Audience will need to first introduce herself or himself before making two minutes or less intervention. Time permits, questions posted in Zoom chat from the online participants can be read by the moderator and commented by the speakers/high-level respondents.

Some five minutes before concluding the session, the moderator will pass the floor back to the panellists for concluding remarks of one minute each. S/he should highlight a few key messages from the discussions at the end.