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

Oct. 12-13, 2023
Co-organized by DESA, ECA, and EC/JRC
supported by the Global Solutions Summit and the International Research Center of Big Data
for Sustainable Development Goals (CBAS)

Conference Room 6, United Nations Economic Commission for Africa (ECA) Conference Centre,
Addis Ababa, Ethiopia (for virtual participation, please see details at the end of document)

Programme

Time		Programme
Thursday **Oct. 12** **2023**	9:00-9:30	Welcome tea/coffee
	9:30-10:00	**Opening Ceremony** Chair: Dr. Wei Liu, IATT STI4SDGs Coordinator and Sustainable Development Officer, Division for Sustainable Development Goals, UN DESA • Dr. Monica Ebele Idinoba, Principal Scientific Officer of the African Union Commission • Mr. Nassim Oulmane, OiC of TCND, United Nations Economic Commission for Africa (ECA) (tbc) • Mr. Jurgen Gafke, Senior Programme Officer, Division for Sustainable Development Goals, UN DESA • Mr. Laurent Bochereau, Minister-Counsellor, Delegation of the European Union to the African Union

	10:00-11:00	**Roundtable 1: Strengthening innovation ecosystems through mapping STI potentials and multi-stakeholder engagement: Case Studies and Champions** Moderator: Mr. Masheleni Hambani, UNESCO Liaison Office, Addis Ababa Keynote (Role of STI4SDG roadmaps for Coalition on Science, Technology, and Innovation for Africa's Development): Prof Chakanetsa Mavhunga, Visiting Professor, Dedan Kimathy University of Technology, Kenya/ Zimbabwe Speakers: • Prof. Walter Oyawa (virtual), Director General of NACOSTI, Nairobi, Kenya • Dr. George Owusu Essegbey, CEO of Technology Development and Transfer Centre of the Council of Science and Industrial Research, Accra-Ghana, former member of the UN SG's 10 Member Advisory Group to Support Technology Facilitation Mechanism • Dr. Solomon Benor Belay, Chief Executive Officer, Research and Community Engagement, Ministry of Education, Ethiopia Discussants • Prof. Sachin Chaturvedi, Director General, Research and Information System for Developing Countries (RIS), India • Dr. Wei Liu, IATT STI4SDGs Coordinator and Sustainable Development Officer, Division for Sustainable Development Goals, UN DESA Guiding questions: • What are the roles of STI for SDGs Roadmaps in increasing the development of national STI systems, mapping STI capacities and stakeholders, and facilitating evidence-informed policy making and better cooperation in crises? • How can STI4SDGs Roadmaps be designed and deployed as potential pathways to sustainable recovery and future resilience? • What needs to go into a roadmap to make implementation effective and success beyond meticulously designed policy documents? What practical experiences, success stories, and useful examples of failure can you share? How precisely could these "ingredients" help us bake roadmaps guaranteed to success? Why did the proceed or fail? If failed, what lessons and remedies? • How can the UN contribute to developing a more responsive STI4SDG ecosystem in your country through a roadmap approach and related capacity building? What do you think are the priority areas and key levers the UN should target? What resources and capacities (human, natural, financial, technological) already exist in your country that the UN can help build on/scale up/accelerate?

	11:00 – 12:30	**Roundtable 2: funding and institutional mechanisms for promoting mission-oriented technology deployment to solve specific problems** Moderator: Mr. Declan Kirrane, Chair of Science Summit at the UNGA Keynote (A concordance of relevant policy instruments and a roadmap to feed into future policy priorities for science and technology): Dr. Mario Cervantes (virtual), Senior Economist/Committee for Scientific and Technological Policy, Science and Technology Policy Division, Directorate for Science, Technology and Innovation, OECD Speakers: • Ms. Mmampei Chaba, Chief Director: Multilateral Cooperation and Africa; Department of Science and Technology, South Africa • Dr. Takehito Higuchi, Deputy Director, Paris Office, Japan Science and Technology Agency (JST) • Dr. Manuela Rehtanz (virtual), DLR-PT Germany, Germany • Dr. Robert Ridley, Vice Chancellor, Unicaf University (Former Director of TDR, WHO, Geneva), Malawi Discussants: • Mr. Laurent Bochereau, Minister-Counsellor, Delegation of the European Union to the African Union • Mr. Geoffrey Monari, Chief Executive Officer, Universities Fund Kenya, Nairobi, Kenya • Mr. Christos Arvanitidis (virtual), EU Biodiversity Research Infrastructure, Spain Guiding questions: • In line with UNGA's commitments, how can the global community finance and facilitate the transfer of environmentally sound technologies to developing countries? More specifically, who will transfer these technologies to whom and who needs to receive financing from whom in order to facilitate this transfer? How can developing countries incorporate these issues directly into their STI Roadmaps? • UNGA identifies several structural impediments blocking developing countries from benefiting from STI. These include impediments to scaling up the use of open science, affordable and open-source technology, and research and development. Are these the only impediments blocking developing countries from benefiting from STI? If other impediments exist, what are they and how can various funding mechanisms help to eliminate or mitigate them? How can developing countries incorporate these issues directly into their STI Roadmaps?

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	• What are the existing STI funding mechanisms that bring collaborative efforts of multiple countries together and connect individual funding entities? How could this workshop be a catalyst for a process that will lead to STI funding? What type of funding—seed, investment, grants, hybrid? What is the ask and what is the value proposition to funders? How should we proceed, and how much would it cost to build and implement an ecosystem based on STI4SDGs roadmapping? • How can we strengthen the linkages and enhance synergies between UN STI4SDGs activities and those of relevant funding entities? • How then to ensure participatory approaches, including of member States and other stakeholders in the process of setting up a voluntary fund for STI? How to include and build on the progress made by non-UN partners' events – the partners who will take an active role in the STI funding for roadmapping and roadmap implementation? • What timelines for deliveries or next steps do you put to your suggested solutions or propositions? What will success or failure look like?
12:30-14:00	Lunch

	14:00-15:00	**Roundtable 3**: **Designing, funding and implementing mission-oriented R&I policies and national STI roadmaps to address national sustainability challenges** Moderator: Mr. José Ramón López-Portillo Romano, Chairman, Q Element Ltd., Advisor to Mexico Government, member of the UN SG's 10 Member Group for the Technology Facilitation Mechanism Keynote: Mr. Samba Sowe, Principal Planner, Directorate of Development Planning, Ministry of Finance and Economic Affairs, Gambia Speakers: • Dr. Richard Osei Bofah, SDGs National Coordinator, Chief Analyst National Development Planning Commission, Ghana • Prof. Xu Zhengzhong, Associate Director and Professor of Economy Research Department, Chinese Academy of Governance, China • Dr. Abderazak Chahboune, Head of Division of the Coordination of Research University, Direction of Scientific Research and Innovation, Ministry of Higher Education, Scientific Research and Innovation, Morocco Discussants • Mr. Jurgen Gafke, Senior Programme Officer, Division for Sustainable Development Goals, UN DESA • Prof. Amos Tiereyangn Kabo-bah, Associate Professor, Dept of Civil and Environmental Engineering, University of Energy and Natural Resources, Ghana Guiding questions: 1. What experiences, challenges and innovative approaches can be shared in terms of: • National mission-oriented R&D policies and STI4SDGs roadmapping. How have these policies addressed national development priorities? What level of investment has been secured and what are the funding gaps? • Education and capacity development. Good examples of policies and programmes to advance primary, secondary and higher education. What programmes have been created particular towards improve knowledge and human capacity areas such as agriculture/food security, energy, water and sanitation. What can be done to improve access to higher education, particularly for girls and women?

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	• Strengthen partnership, including Public Private Partnership in the area of education and/or development and deployment of technology solutions. 2. Where do you see high impact technology solutions to advance the SDGs in your respective national context? What are the impediments to make the necessary technologies available and what next steps do you suggest overcoming these impediments?
15:00-15:15	Tea/coffee Break

		Roundtable 4: Localising the SDGs: mobilizing stakeholders to bridge the gap from the laboratories to farms, factories, and communities Moderator: Dr. Angela Sarcina, STI for SDGs Project Leader, Joint Research Centre, European Commission (EC/JRC) Keynote: Dr. Worku Sendek, CEO for Policy and Strategic Research, Ministry of Innovation and Technology, Ethiopia Speakers: • Ms Cynthia Alexander, Director of the Division of Science, Technology and Innovation, Ministry of Investment, Entrepreneurship and Industry, Seychelles • Dr Madhvee Madhou, Research Coordinator, Mauritius Research and Innovation Council, Mauritius • Ms. Florence Kavirindi, S&T officer at the Ministry of Higher Education, Technology and Innovation, Namibia • Mr. Felly Kalisa(virtual), STI Policy Analyst at the National Council for Science and Technology, Rwanda • Prof. Chomora Mikeka, Director of STI, Ministry of Education, Directorate of Science, Technology and Innovation, Malawi Discussants • Professor Dickson Andala, CEO, Kenya National Research Fund, Kenya • Mr. Leonidas Mushimiyimana, Juncao farmer representative, Rwanda Guiding questions: • How can the localization of SDGs help tailor strategies to address specific regional and municipal needs? What examples or case studies showcase successful efforts in localizing the SDGs? What lessons can be drawn from them? • How can we effectively identify and harness local Science, Technology, and Innovation (STI) potential to drive sustainable development? What strategies can be employed to bridge the gap between laboratory-developed innovations and real-world applications within local contexts? • What role do different stakeholders, such as governments, businesses, academia, civil society, and local communities, play in advancing sustainable development through STI? How can partnerships and collaborations among these stakeholders be fostered to maximize their impact? What are the best practices?
	15:15-17:00	

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	• Can you share examples of successful projects or initiatives that have effectively localized the SDGs and adopted place-specific solutions? What were the key factors that contributed to the success of these projects, and how can they be replicated or scaled up in other regions and cities? What challenges or barriers have been encountered in the process of scaling up localized solutions, and how can they be addressed?
18:30-	**Evening reception** hosted by the Africa-Europe Science Cooperation Platform (AERAP) and the Irish Embassy in Ethiopia at 6:30 p.m. on Thursday, 12 October 2023, Radisson Blu Hotel, Addis Ababa *(by invitation only)*

Friday Oct. 13, 2023	9:00-10:30	**Roundtable 5: Mobilizing science and research funding for development** Co-moderators: Dr. Farai Kapfudzaruwa, Research and Strategic Partnerships Manager, Future Africa and Ms. Megha Sud, Science Officer, International Science Council Keynote speakers: • Ms. Heide Hackmann (virtual), Executive Director, Future Africa and ISC Regional Focal Point for Africa, presenting the ISC proposed model. • Ms. Isabella Aboderin, Perivoli (virtual) Chair in Africa Research and Partnerships, University of Bristol: Presentation on the Global Charter for Transformative Research Collaboration Speakers: • Dr. George Owusu Essegbey, CEO of Technology Development and Transfer Centre of the Council of Science and Industrial Research, Accra-Ghana, former member of the UN SG's 10 Member Advisory Group to Support Technology Facilitation Mechanism • Dr. Madhvee Madhou, Research Coordinator, Mauritius Research and Innovation Council, Mauritius • Dr. Abderazak Chahboune, Head of Division of the Coordination of Research University, Direction of Scientific Research and Innovation, Ministry of Higher Education, Scientific Research and Innovation, Morocco Discussants: • Ms Cynthia Alexander, Director of the Division of Science, Technology and Innovation, Ministry of Investment, Entrepreneurship and Industry, Seychelles • Prof. Chomora Mikeka, Director of STI, Ministry of Education, Directorate of Science, Technology and Innovation, Malawi Ms. Megha Sud, ISC, moderating the discussion with the audience. Guiding questions: • How can a 'mission science for sustainability' model align the aspirations, expectations and needs of multiple stakeholders to drive societal transformations for sustainability? • 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? • How can the global science community and funders better understand and address the complexities and systemic challenges that underlie sustainability issues in Africa?

| | | • How do we facilitate transformative partnerships which promote equity and sustainability in science?
• 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?
• 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? |
| | 10:30-10:45 | Tea/coffee Break |

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Roundtable 6: Strengthening Capacities to Access and Use Relevant Open Data - Big Earth Data for SDGs

Moderator:
- Dr. Richard Osei Bofah, SDGs National Coordinator, Chief Analyst, National Development Planning Commission, Ghana, Accra, Ghana

Opening Remarks:
- Prof. Huadong Guo, Director General, International Research Center of Big Data for Sustainable Development Goals (CBAS)
- Dr. K. N. Gunalan (virtual), Senior Vice President of AECOM, Chair of WFEO UN Relations Committee, President of Atlas Initiative
- Ms. Megha Sud, Science Officer, International Science Council

Keynotes:
- "Big Earth Data to Accelerate Progress on SDGs (WIP)" by Prof. Huadong Guo, CBAS

Speakers:
- Prof. Amos Tiereyangn Kabo-bah, University of Energy and Natural Resources, Dept. of Civil and Environmental Engineering, Ghana
- Dr. Fasil Giorghis, Addis Ababa University, President of ICOMOS Ethiopia, Chair Holder of the Chair of Ura ad Architectural Heritage Conservation
- Prof. Li Jia, Distinguished Professor, CBAS
- Dr Moses Thiga, DSA Board member and Senior Lecturer Kabarak University, Nairobi, Kenya
- Prof. Zhengzhong Xu, Associate Director and Professor of Economy Research Department, Chinese Academy of Governance, China
- Dr. Oluwarotimi Williams Samuel, University of Derby, Senior Lecturer, Lead Investigator, School of Computing and Engineering, the UK

Discussants:
- Dr. Matiyas Fantaye, Addis Ababa Science and Technology University, the Secretary General of ICOMOS, Ethiopia
- Dr. Tibebu Assefa, Addis Ababa University, Treasurer of ICOMOS, Ethiopia
- Dr. Yong Xie, Director, International Affairs Office, University of Chinese Academy of Sciences, China (tbc)

Guiding questions:
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10:45-12:30

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	• Unlocking the Power of Big Earth Data: How can we harness the potential of Big Earth Data to enhance our understanding of geographic spatial dynamics, and what role does it play in advancing SDGs, particularly in African regions? • Remote Sensing Impact on Geo disaggregation: What concrete examples and success stories can we share about the impact of remote sensing and Earth observation data in improving geo disaggregation analyses and informing sustainable development decisions? • Bridging Data Gaps for Geospatial Insights: How can we address data gaps in geographic information and promote the effective sharing and application of remote sensing data to facilitate geospatial analysis for SDGs? • Collaboration for Solutions: What collaborative efforts, financial support, and partnerships are needed among African countries, international funders, and stakeholders to leverage Big Earth Data for more informed policy-making in the pursuit of SDGs? • What are the potential measures to better incorporate youth and diaspora communities into the STI mechanisms and strengthen their capacities with localized approach to space technology and utilization of Big Earth Data?
12:30-14:00	**Lunch**

	14:30-15:30	**Roundtable 7: Youth initiatives and stakeholder mapping in science, technology and innovation** Moderator: Ms Adetomi Soyinka, Regional Director Higher Education, SSA, British Council, Nigeria • Video demonstration by Mr. Leonidas Mushimiyimana, Juncao farmer representative, Rwanda • Presentation of youth consultation outcomes by Ms. Miracle Ndego, Fellow, Women Techsters, Ghana Speakers: • Dr. Wilhemina Quaye (Ms.), Director, Science and Technology Policy Research Institute of the Council for Scientific and Industrial Research (CSIR-STEPRI), Ghana • Ms. Harriet Kariuki, Head of Innovation, Equity Group Foundation, Kenya • Ms. Munira Twahir, Founder of Ari, Kenya • Mr. Isaac Sesi, Founder of Sesi Technologies, Ghana Discussants: • Prof. Yi Jin (Ms.), Deputy Dean, Academy of Global Cooperation and Governance - AGIG, University of International Business and Economics, Beijing, China • Mr. Kamau Gachigi, Executive Director, Gearbox Kenya, Kenya Guiding questions: • Can you share a specific instance where you or your organization benefited from a funding model or mechanism for deploying a science, technology, or innovation project? • When it comes to STI for sustainable development in Africa, what exciting ideas do you have for their application? What youth-led initiatives do you think matter most, and what are your personal priorities for getting young people involved in STI policy discussions? • How can we boost the active involvement of young people, especially those from marginalized communities, in STI projects and evaluations, even at the local level? • How can young people and youth groups, both close to home and around the world, partner with local, national, and regional governments and organizations to drive transformation and secure support for youth in STI? • In what ways can we mobilize young individuals to engage with technology, develop their careers, participate in global projects, strengthen roadmap implementation, and fuel innovation?

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	• In your experience, what aspects of existing funding models or mechanisms for science, technology, and innovation projects do you think need improvement?
15:30-15:45	Tea/coffee Break

	15:45 – 17:00	**Session 8: Closing and the way forward - regional networks and other mechanisms for promoting multi-stakeholder approach with localized STI4SDGs and bottom-up community inputs** *- Actions and partnerships to support Coalition on Science, Technology, and Innovation for Africa's Development* Moderator: Dr. Victor Konde, Scientific Affairs Officer, UN Economic Commission for Africa (ECA), member of the Technical Committee for the Coalition on Science, Technology, and Innovation for Africa's Development Speakers: • Prof. Ndirangu Kioni, Dedan Kimathi University of Technology, Kenya • Mr. Declan Kirrane, Chair of Science Summit at the UNGA • Prof. Guo Huadong, Director General, International Research Centre on Big Data for SDGs (CBAS), China • Dr Angela Sarcina, STI for SDGs Project Leader, Joint Research Centre, European Commission (EC/JRC) • Mr. Sibusiso Mpama, First Secretary, STI4SDG Focal Point and Member of Technical Advisory Committee, Coalition on Science, Technology, and Innovation for Africa's Development, Permanent Mission of the Republic of South Africa to the United Nations South Africa Mission, South Africa • Prof. Chakanetsa Mavhunga, Visiting Professor, Dedan Kimathy University of Technology, Kenya/ Zimbabwe Discussant: • Ms. Stephanie Rambler (virtual), Sustainable Development Officer, Division for Sustainable Development Goals, UN DESA (Global Sustainable Development Report, 2023) Guiding questions • What measures, arrangements and strategies should the Coalition consider maintaining stronger and action-oriented links with existing bodies of the diaspora? What common practices and approaches do the existing diaspora communities use to engage in STI-related work in Africa? How can these practices and approaches be enhanced and/or leveraged? • What criteria should be used to identify mega-R&D and technology projects in Africa, considering the wide differences in sizes of African economies and the concentrations of R&D and technology hubs in a few African countries? What mechanisms need to be put in place to identify and support these projects? • What steps should the Coalition take to ensure that local communities in Africa, particularly those that may be excluded, unconnected to modern

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	digital platforms and disadvantaged in many ways, are enabled to request technology solutions, and showcase grassroot innovations that could be applied at large scale to meet the SDGs and advance wellbeing? This is important considering more people in Africa live in rural areas. • Sustainability of the Coalition will largely depend on the key activities that showcase its impact and on support from its members and partners. What are some of the activities and initiatives should the Coalition undertake in the short term to raise awareness and its profile, attract partners, and achieve impact within its resources? Closing remarks • Dr. Wei Liu, IATT STI4SDGs Coordinator and Sustainable Development Officer, Division for Sustainable Development Goals, UN DESA

Virtual Participation Guide:

When: Oct 12, 2023 08:30 AM Nairobi through Oct. 13th 2023

Topic: Workshop on STI4SDGs Roadmaps and Actions in Africa, October 12-13, 2023
Register in advance for this webinar:
https://zoom.us/webinar/register/WN_zoR5-4AfQLSLOG8QPz1f8Q
Passcode: 395568

For the speakers joining online, please notify Nyu Wang(nyu.wang@un.org) and Adeladay Solomon (solomon6@un.org) before CoB Tuesday Oct. 10th 2023.