Background

Technology assessment (TA) is an interactive, communicative, and scientific process that aims to contribute to the formation of public and political opinion on the social aspects of science and technology, risks, and opportunities, providing effective, pragmatic, and sustainable options for policy action. In domains like energy and agriculture, the innovative use of TA can assist in identifying priorities and helping improve the cost-effectiveness, long-term impact, and environmental sustainability of technology policies and investments.

TA is currently not widely used in developing countries due to a lack of capabilities, institutions, and experience in this area. The need to enhance TA capacities to make appropriate technology choices has intensified as countries are faced with multiple challenges due to the rapid introduction of new technologies while seeking to achieve the SDGs and simultaneously respond to significant challenges like COVID-19. The UNCTAD project on technology assessment\(^3\) will support STI policymakers and other stakeholders in three countries (South Africa, Seychelles, and Zambia) to design and implement a technology assessment exercise in the energy and agricultural sectors and take action to utilize technologies as catalysts for sustainable development. Enhanced capacity would be demonstrated by identifying and characterizing the relevant technological trends and associated socio-economic and environmental implications in energy and/or agriculture and having an action plan for these technological

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1 The World Federation of Engineering Organizations (WFEO), [https://www.wfeo.org](https://www.wfeo.org)
2 The WOmen and Men in ENVironment and Artificial Intelligence NGO (WOMENVAI), [https://www.womenvai.org](https://www.womenvai.org)
3 [https://unctad.org/fr/node/32331](https://unctad.org/fr/node/32331)
sectors in each target country defined and adopted by various stakeholders. This project responds to the Economic and Social Council resolution E/RES/2018/29, which encourages countries to undertake technology assessment exercises as a process to encourage structured debate around new technologies and encourages CSTD and UNCTAD to explore the feasibility of such activities.

The objective of the Side Event

UNCTAD organizes this side event in cooperation with WFEO/WOMENVAI to share the UNCTAD Technology assessment (TA) methodology that investigates the likely economic, social, and environmental impacts of introducing new technologies. The investigation results can provide an evidence base to support the formulation of policy and practice related to introducing technologies that are new to a country. In addition, the UNCTAD TA Methodology could be a useful guide for organizations engaged in reviewing the usefulness of new and existing technologies in developing countries, especially in Least Developed Countries (LDCs), mainly in Africa.

Guiding questions

- How can the TA approach help governments in developing countries to enhance opportunities and minimize the risks associated with new and frontier technologies for sustainable development?
- How can the UNCTAD TA methodology help countries to examine the usefulness of new, emerging, and existing technologies in the context of their activities in Least Developed Countries (LDCs)?
- What is the role of the Civil Society, especially NGOs acting in the STEM areas, in helping developing countries and LDCs tackle multiple challenges associated with the introduction of new technologies while also targeting the Sustainable Development Goals (SDGs)?

Structure of the Event

UNCTAD will present its Technology Assessment Methodology, prepared under the UNCTAD Technology Assessment Project. This will be followed by a panel discussion. The panel will bring together representatives of two pilot countries taking part in the TA project, representatives of NGOs working in this area, and experts on TA working with the project. A Q&A will follow the panel.
SIDE EVENT PROGRAMME – TECHNOLOGY ASSESSMENT: HOW TO DO IT

30 March 2022, 16:45 to 18:00 (Geneva time zone)

Moderator: Ms. Liping ZHANG, Chief of STI Policy Section, Science, Technology and ICT Branch, Division on Technology and Logistics, UNCTAD

OPENING CEREMONY

16:45 – 17:00
Welcome Address

- Mr. Angel GONZALEZ-SANZ, Head, Science, Technology and ICT Branch, Division on Technology and Logistics, UNCTAD
- Ms. Yvette RAMOS, cofounder of WOMENVAI, WFEO representative in Geneva & President of Swiss Engineering, Geneva Chapter

SESSION I: ABOUT THE UNCTAD TECHNOLOGY ASSESSMENT METHODOLOGY

17:00 – 17:20
UNCTAD TA Methodological Framework: Where to Start and How to Go About It

- Dr. Miltos LADIKAS, Institute for Technology Assessment and Systems Analysis, Germany
- Dr. Andreas STAMM, German Development Institute, Deutsches Institut für Entwicklungspolitik (DIE), Germany

SESSION II: PANEL DISCUSSION

17:20 – 17:50
The potential of TA as a tool in the STI Toolbox

- Mr. Xavier ESTICO, Director General - Division of Science Technology and Innovation, Seychelles
- A representative from South Africa (FULL TITLE), South Africa, TBC
- Ms. Asma BRINI, Ph.D., Vice-President WOMENVAI, Tunisia
- Ms. Betty BONNARDEL, MBA, CEO Farmer Charlie, UK
- Ms. Aramide ABE, Global Program Lead, at GCA - Global Center for Adaptation, Nigeria

CLOSING

17:50 – 18:00
Wrap-up and final comments

- Ms. Liping ZHANG, Chief of STI Policy Section, Science, Technology and ICT Branch, Division on Technology and Logistics, UNCTAD