

**Introduction to Leveraging new technologies' impact through technology  
assessments**

**Investment, Enterprise and Development Commission**

**16 November 2022**

*Excellencies,*

*Ladies and gentlemen,*

I am pleased to introduce the background document prepared by the secretariat to facilitate the discussion by the Commission of the agenda item on leveraging new technologies' impact through technology assessments.

***Potential benefits and risks of STI***

- Although historically science, technology and innovation (STI) have been the fundamental drivers of long-term growth, improvement of living standards and support for sustainable development, the deployment of new technologies is also often associated with challenges for specific categories of workers, increases in inequality and new ethical dilemmas to which policy makers need to provide answers.
- UNCTAD's policy work in the area of frontier technologies has stressed the need to consider technological change and innovation as processes that are neither neutral nor automatic and to which policy must provide directionality if they are to work in favour of inclusive and sustainable development.
- To ensure an equitable, inclusive and sustainable application of STI, the positive and negative aspects have to be examined holistically, integrating inputs from various disciplines and stakeholders. For this,

adequate national-level policy instruments and mechanisms are of paramount importance.

- Developing countries are particularly in need of such structures given their greater vulnerability to the disruptions caused by STI and to various other forms of external shocks, including those derived from climate change.

### ***Technology assessment as a solution***

- Technology assessment (TA) is a policy instrument with great potential to contribute to the achievement of these objectives.
- TA is an established interdisciplinary methodology that analyses the opportunities and risks of emerging technologies.
- TA originated in the United States in the 1960s to inform policymakers on the legislation of general-purpose technologies, but it has evolved over time to treat multidisciplinary topics and incorporate multi-stakeholder participation.
- While this methodology spread rapidly to numerous developed countries, the developing world has been lagging behind due to a weaker STI environment, insufficient expertise and a dearth of financial resources.
- In this context, international cooperation can help bridge the gap between hubs of expertise on TA and developing countries that require capacity building, financial support and resources.

### ***UNCTAD TA project***

- Discussions among policy makers and academics in the context of the UN Commission on Science and Technology for Development have identified TA as an area in which middle- and low-income countries

should develop their capacity to manage the development, adoption and implementation of STI in order to address their socio-economic challenges and achieve the Sustainable Development Goals.

- Responding to these findings, UNCTAD has developed a pilot project to build TA capacity in several African countries. Following a call for expressions of interest Seychelles, South Africa and Zambia were identified as hosts for the project.
- Activities started in 2021, focusing on improving the availability of local expertise in TA by through the implementation of TA exercises dealing with the assessment of specific technologies applied in agriculture and/or energy.
- The project has already produced valuable outputs such as the UNCTAD TA methodology paper, which is the first attempt to give a coherent and comprehensive approach to TA that is centred on developing country contexts.
- The project also aims to spawn a culture of TA, as well as to develop institutional capacities and governance structures to ensure that these exercises will be performed continuously and will be embedded into the national STI policy practice.
- The three countries have made considerable progress and have taken ownership of the project by establishing steering committees and expert group that will define priorities of the TA, its goals and the question that it should answer, and perform the substantive analysis and reporting.
- The background note presents several questions that emerge from the experience gained in the project so far, for the consideration of member States and the sharing of experiences. Among them are questions related to the experiences that member States can share related to the

TA processes in developing countries, views and experiences about the role of TA in dealing with the consequences of rapid technological change on key areas of their economies, the role of international collaborations in building TA capacities, and the role that UNCTAD and other international actors can play in supporting TA exercises in developing countries.

- I thank you for your attention and I look forward to a rich discussion this morning.